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Career anchors and job satisfaction: the role of psychological empowerment in the Indonesian public university context

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CAREER ANCHORS AND JOB SATISFACTION: THE ROLE OF PSYCHOLOGICAL EMPOWERMENT IN THE INDONESIAN PUBLIC UNIVERSITY CONTEXT

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CERTIFICATION

I, Meiliani, certify that this thesis submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of the School of Management, Operations and Marketing, the University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

M e i l i a n i
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ABSTRACT

The current study aims to examine the direct and indirect effects of psychological empowerment in the relationship between career anchors and job satisfaction within the context of public universities in Indonesia. Schein's (1978) single career anchors theory, Feldman and Bolino's (1996) multiple career anchors model, Spreitzer's (1975) psychological empowerment concept and Locke's (1976) job satisfaction model were used to form the framework for the study. Concurrent embedded mixed-methods (Creswell & Plano Clark 2011) were employed, in which both quantitative and qualitative data were gathered and analysed. Full-time academics from Indonesian public universities formed the sample for this study. Using web-based and paper-based surveys, data were gathered from 585 academics of 11 universities across three geographical regions (western, central and eastern) of Indonesia. Twenty academics participated in structured face-to-face interviews. Quantitative data were gathered using a survey questionnaire that comprised items from Igbaria and Baroudi's (1993) career anchor inventory, Sprietzer's (1995) psychological empowerment scale and Hackman and Oldham's (1975) general job satisfaction scale. Finally, Schein's (1990) protocol interview and two open-ended questions were used to collect qualitative data.

Exploratory factor analysis was employed to examine the factor structure underlying the three constructs. Twelve factors emerged from the quantitative data, with the analyses finding two new anchors, which were labelled *work dedication* and *balanced-lifestyle*. Overall, the other factors were the same as originally constructed from past research. The final factor clusters were used to determine the dominant career anchors using frequency count, and were also used in subsequent hierarchical multiple regression analysis when testing the proposed hypotheses. Thematic analysis was employed to identify themes from the qualitative data.

The data analyses revealed several significant results. First, the *economic security* and *service* anchors emerged as the most dominant career anchors. Second, the *needs-based* anchors category was the most preferred groups-based anchor among the respondents. Third, the study found that multiple career anchors existed amongst the participants. Finally, the study also found that all career anchor relationship pairs were grouped in complementary relationship pairing anchors. Statistically, the results indicate that *work dedication, managerial competence* and *pure challenge* predicted *job satisfaction*. Furthermore, *meaning* and *impact* predicted *job satisfaction*. *Meaning* mediated partially and significantly the effects of *work dedication, balanced-lifestyle, managerial competence* and *pure challenge* on *job satisfaction*; *impact* mediated partially and significantly the effects of both *work dedication and managerial competence* on *job satisfaction*. *Meaning* and *competence* moderated *balanced-lifestyle* and *job satisfaction* relationship; *impact* moderated *service* and *job satisfaction* relationship; *self-determination* moderated the *service, balanced-lifestyle* and *pure challenge* effect on *job satisfaction*. *Meaning* mediated and moderated the *balanced-lifestyle* effect on *job satisfaction*. Thematic analysis identified *academic atmosphere, academic freedom and creativity, work-family lifestyle, flexible working schedule, skill orientation, running a business, spiritual value* and *intangible recognition* as new anchors. *Personal integrity*, and *motivation and goal orientation* were found to reflect the psychological empowerment facets while *happiness* reflected the job satisfaction dimension. Organisational factors were identified as most influential themes in career development. Based on the findings, a modified framework was proposed.

The findings support and extend the existing knowledge in several ways. First, the new anchor categories, the dominant career anchors, the existence of multiple anchors and *complementary* anchors contribute to the value of the career anchors concept, and the prediction of a shift in anchor structures. Therefore, more studies are needed to help explicate the value of the career anchors concept as well as help in understanding the shift in career anchors structures. Second, findings from this study help extend the understanding of the concepts of career anchors, psychological empowerment and job satisfaction within a non-Western context, that is, public universities of Indonesia. Third, using data gathered from academics working in public universities adds to the understanding of the three concepts and the existing theories related to self-concept at the workplace. Fourth, the identification of new themes and the emergence of psychological empowerment and job satisfaction dimensions show that the qualitative study supports the quantitative analysis findings. Fifth, cultural values are evident throughout the results showing the need to take into consideration the role and effects of culture during future research on career anchors. Sixth, the identification of the spiritual values theme needs an in-depth exploration to see whether it adds to career anchors concept or is just a reflection of the influence of the participants' religious inclinations. Finally, the current study extends the career anchor, psychological empowerment and job satisfaction theories used by recommending a need to investigate more job outcomes, such as job stress and strain, disciplines, organisational commitment and job performance.

The current study also suggests several future research directions. Future researchers are encouraged to test the proposed modified framework. The emergence of a new career anchor and the identified themes need to be analysed in greater detail. To enable generalisability of this study across a variety of organisational contexts, it is recommended that future studies on career anchors are carried out across many public and private universities and across many geographical locations. Finally, the current study encourages researchers to test a comparative model by treating career anchors as mediators or moderators to find out what roles career anchors might play.

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1.1 Purpose of the study

The primary purpose of this study was to understand how Indonesian academics view career anchors and the extent of influence of psychological empowerment and job satisfaction has on their career development. Specifically, this study aimed to: (1) investigate the factor structures underlying the career anchors, psychological empowerment and job satisfaction scales and how this would apply in the Indonesian academic context; (2) determine whether the manifestation of the career anchors phenomenon for Indonesian academics can be classified as a single dominant career anchor or multiple dominant career anchors; (3) examine the relationships between career anchors, psychological empowerment and job satisfaction by testing the main effects and the mediation effects of psychological empowerment on the relationships between career anchors and job satisfaction; and (4) explore Indonesian academics' perceptions of their careers' internal development and how their perceptions influence the way they pursue their career anchors.

The concept of career anchor is defined according to Schein (1978, 1990, 1992, 2006a), Schein and Van Maanen (2013), and Feldman and Bolino (1996). Career anchors are measured using Igbaria and Baroudi's (1993) career anchor inventory and Schein's protocol interview. Job satisfaction is measured with the general job satisfaction measurement of Hackman and Oldham (1975) and validated by Igbaria and Baroudi (1993) while psychological empowerment is measured using Spreitzer (1995).

In the current study, terms used for the career anchor inventory variables are *managerial competence, technical competence, autonomy, service, entrepreneurial creativity, lifestyle, pure challenge, economic security* and *geographical stability*. Terms of the psychological empowerment facets are *meaning, impact, competence* and *self-determination*. Lastly, job satisfaction has one variable called *job satisfaction*.

1.2 Background of the study

The world of work is increasingly more complex and competitive. The competition is not only between organisations and employees, but between and within employees. This has an impact on both organisational behaviours and employees' attitudes. Organisational management will aim to retain high-quality employees, while employees will look for organisations that can satisfy their personal values and needs. In response, organisations have focused on issues, such as restructuring career paths, creating meaningful work strategies, or developing appropriate reward programs to attract talented highly skilled employees; individuals are more concerned with how to develop their internal career goals while coping with the demands of an unpredictable career (Coetzee & Roythorne-Jacobs 2007). In another sense, this change will influence how employees view their relationship with their employers (the so-called psychological contract) (Rousseau 1996; Lumley 2009). This new psychological contract 'has been subjected to an increase in exchange-base demands, such as flexibility, mobility, self-reliance, value-added performance, trust and openness and greater responsibility that both parties look for' (Lumley 2009, p. 2).

The change indicates that individual employees who still engage with the concept of the traditional career would experience challenges in their workplace, including those who work as civil servants. Employees who look for a stable job, a hierarchical path to promotion, low job demands and a structured salary will find it hard to identify organisations that want to recruit them. Moreover, those who find themselves depending strongly on organisations will face 'a wall' blocking their career progress. More and more organisations now use a merit-based system in which rewards or benefits are paid to talented and high-performing employees. Employees' only possible attitude in this career environment is to manage their own internal career motivation (Schein & van Maanen 2013).

Employees at work, therefore, have to assess their own interests, competencies, skills and values to improve their chances for career progression. Individuals' interests/motives, skills/talents and values/attitudes form their occupational self-concept, known as 'career anchor' (Schein 1978, 1996, 2006a; Schein & van Maanen 2013). The anchor will be reflected in their career choices. Self-perceived talents or

competencies, motives and values interact, both among themselves and with the organisational and business environments to produce an individual self-image. Career anchors not only serve as a guide to choose a career but also influence an individual's decision to move from one organisation to another (Schein 1987a; Igbaria & Baroudi 1993). Individuals therefore should understand their own occupational self-concepts and organisational roles comprehensively in pursuing their internal goals (Baruch 2006).

In line with the dramatic changes in the social, economic and technological environment, individuals will develop different career anchors in the same occupation to achieve work satisfaction (Schein 1990; Feldman & Bolino 1996; Baruch 2004b, 2006). They will have different reasons for entering the occupation, different motivations, and different criteria for success (Gunz & Heslin 2005). In certain cases, career anchors chosen may not be congruent with the internal self-concept. Byrd's (2001) study revealed that individuals pursue certain dominant career anchors because of family influences and social pressures. If these are incongruent with the individual's self-concept, the individuals feel dissatisfaction at work. Understanding one's career anchors is important because the fit between individuals' career anchors and the work environment will increase their level of job satisfaction (Hsu et al. 2003; Schein 2006a; Coetzee, Schneider & Tladinyane 2007; Collins 2007; Mays 2007). Hence, it becomes critical for organisations to make individuals feel psychologically empowered with their work environment.

It is suggested that organisations provide positive support to employees by giving them autonomy, flexibility and freedom to perform their tasks. Individuals 'who feel a strong sense of control and energy with respect to their jobs' (Castro, Perinan & Bueno 2008, p. 1857) will engage with the work and be psychologically happy in the workplace. As individuals anchor their careers, it is believed that this can give a sense of power to individuals in terms of meaningful work, competence, self-efficacy and impact in the workplace. Therefore, perceived feelings of empowerment can increase individuals' job satisfaction levels (Spreitzer, Kizilos & Nason, 1997; Eylon & Bamberger 2000; Patah et al. 2009). Conversely, lack of support from organisations may affect individuals' involvement in organisations and cause dissatisfaction and may indirectly influence organisational effectiveness. Thus, the significant point for this complex workplace situation is how individuals view their internal careers in order to be empowered, as this

associated with positive attitudinal outcomes in the workplace. Specifically, the career anchor concept can help individuals to identify their self-concept both in both the past and future careers (Schein 2006a), and to perceive their degree of job satisfaction (Smith 2005) and level of empowerment (Collins 2007).

1.3 Career development of academics in the Indonesian public university context

1.3.1 Overview of Indonesia

Indonesia, officially the Republic of Indonesia, is the largest archipelago in the world. Located in Southeast Asia, it consists of 13,700 inhabited islands, including the five large islands of Sumatera, Java, Kalimantan, Sulawesi and Papua, and 6,000 uninhabited islands (Upton 2012). Although this country has 726 dialects (Lewis 2009), its official language is *Bahasa Indonesia* (Indonesian language). The majority of people embrace Islam as their religion, while Buddhism, Christianity, Catholicism, Hinduism and Kong Hu Chu are among the minority groups. Indonesia has 500 ethnic groups that spread throughout the islands (Welch 2012), each of which is unique in terms of attitudes, clothes, food, songs, rituals, traditional architecture and dance (Chapter 6, Sub-section 6.5 has a more detailed discussion).

Indonesia's rich traditional cultures have influenced not only social life but also governmental style, necessitating a striving for consensus (Magnis-Suseno 1997; French, Pidada & Victor 2005). This is highlighted in Pekerti and Sendjaya's (2010, p. 762) study called 'group and family collectivism'. However, there is a high power distance between leaders and subordinates in an organisational setting (Gupta et al. 2002; House et al. 2004; Pekerti & Sendjaya 2010). In the government context, this takes the forms of formalised, centralised and bureaucratic systems based on the dominant cultures involved in government. Even though autonomy and decentralisation have been applied at all levels of governmental administration, in practice the centralised administration is still dominant in all aspects of government life, including the public higher education sector.

1.3.2 Public higher education systems in Indonesia

The public higher education sector in Indonesia in 2011 consisted of 98 institutions (*Direktorat Jenderal Pendidikan Tinggi* 2013). They are categorised into three groups: large universities (>10,000 students), middle-sized universities (5,000-10,000 students) and small tertiary institutions (<5,000 students) (*Direktorat Jenderal Pendidikan Tinggi* 2013). There are five types of higher degree institutions: (1) universities that consist of 'many faculties covering comprehensive disciplines'; (2) institutes that have 'many faculties in a single field of study', such as technology and agriculture; (3) academies that offer 'a range of courses below the bachelor's degree'; (4) polytechnics that provide 'a range of vocational courses below the bachelor's degree'; and (5) colleges that offer vocational education in one discipline at 'a single faculty institution' (UNESCO 2006, p. 35).

The public higher education institutions (hereafter referred to as universities) are under the control of the Directorate General of Higher Education (hereafter referred to as the DGHE), or in Indonesian, *Direktorat Jenderal Pendidikan Tinggi* (hereafter referred to as *Dikti*). Unlike Indonesia' private universities which are market-orientated with autonomous and flexible curriculum, limited terms employment contracts for some academics, and own performance evaluation criteria remuneration, its public universities are similar in many ways to traditional government systems, with characteristics, such as 'highly formalised decision-making structure, little mobility, high level of job security, a uniform pay system, less transparency, and specific pension schemes' (Demmke 2005, p. 10). The central government has still significant control over administration and management including funding (Buchori & Malik 2004; Welch 2012), promotion, recruitment, curriculum and the national entrance test. This leads to inefficiency and poor initiative in developing education based on market demand (Buchori & Malik 2004; Nizam 2006).

In an effort to improve the quality of education and their ability to compete in the educational environment, particularly with private institutions, public tertiary institutions have been given more power to operate education. Private higher education institutions primarily have a business orientation to the teaching and learning process. Despite the fast-growing number of private universities, similar to the situation in other developing economies, such as in Latin America (Rhoads & Torres 2006), public

universities in Indonesia still maintain their traditional approach. While the model of considering universities as businesses seems unpopular, it should be taken into consideration (Nizam 2006). There is no doubt that Indonesian public universities need to undertake this transformation and reformation to be part of the global educational market. In line with Indonesia's regional autonomy policy, the Indonesian higher education system is currently transitioning to a semi-autonomy model that includes a market demand-oriented approach.

Despite demonstrations and rejections of change, the education laws and the models offered to the society have already changed many times. The first higher education reform was the establishment of an autonomous mode of operation in 1999 with the Higher Education Law or *Undang-Undang Perguruan Tinggi* (hereafter referred to as *UU PT*) number 22 in 1999 (*Direktorat Jenderal Pendidikan Tinggi* 2013). Some strategies were applied during 1999-2009 that mirrored the established university system in the West (Table 1.1). In the face of limited funding, lack of quality of working conditions and low academic qualifications, the government allowed universities to implement full tuition fee-paying, develop their own curricula, apply contract-based recruitment, generate income, build industrial collaboration linkages and hire talented professors. Only seven of the more reputable universities adopted the model, including the University of Indonesia, Bandung Institute of Technology, Gadjah Mada University, Bogor Agricultural University, Airlangga University, the University of North Sumatera and Indonesia University of Education. The government changed the status of those universities to a new status, named 'state owned legal entity' or *Badan Hukum Milik Negara* (hereafter referred to as *BHMN*) institutions (Welch 2012; Kusumadewi & Cahyadi 2013).

Because the BHMN was interpreted as commercialisation in education that would lead to higher tuition fees, the law was rejected by the various parties. Debate and criticism had raised tensions between the government and third parties, such as students, parents, politicians and non-profit organisations. On the one hand, many people were afraid that they could not afford to pay the tuition fees and other costs that were associated with education. On the other hand, elite politicians and those universities with low capacity and resources worried about not being able to compete in the educational market. Thus,

the law was rescinded by the House of Representative as a certified body about 10 years later.

Table 1.1: A comparison of higher education features between Indonesia and the West

Factors	Indonesia		Netherlands	U.S.	U.K.	Australia
	Traditional	Legal entity				
Power	Centralisation: Bureaucratic; unitary; public service	Decentralisation: market-oriented + semi-autonomous	Business like	Decentralisat-ion	Business like and vocation, more entrepreneurial	Autonomous + government legislation
Finance	Full government funding	Proportional state support, autonomy, self-generated funding	N/A	State and federal support	Financial freedom	Government support
System	Focus on teaching	Research and entrepreneurship	Research and vocation	Research-oriented	Research-oriented	Research + entrepreneur-ship
	Bachelor's (S1) 4-5yrs, Master's (S2) 2-3 yrs, Doctorate (S3) 3-4 yrs	S1=3.5-4 yrs, S2=2-3 yrs, S3=3-4 yrs	S1=4-5 yrs before 2002 and 3 yrs; after 2000, S2=1.5-2 yrs; S3=4 yrs	S1=4yrs, S2=2yrs; S3=3yrs	S1=3-4yrs, S2=1-2yrs: S3=3yrs	S1=3 yrs, Honours=1 yr, S2=1-2 yrs, S3=3-4 yrs
	By coursework+ final project	By coursework+ final project	By coursework + final paper	By coursework +final project	By coursework+ final major project	By coursework & by Research
	Low fee-paying	Full fee-paying	N/A	Full fee-paying	N/A	Low fee-paying
	National entrance examination	National + university entrance test	N/A	N/A	N/A	Success in previous levels
	University--> faculty--> department	University--> faculty--> department/ school	N/A	University--> faculty--> department	University--> faculty--> department	University--> faculty--> school
	Full-time students	Full-time students	N/A	Full- and part-time students	N/A	Full- and part-time students
Academic year	September to July	September to July	September to June	August to May	September to July	March to December
Curricu-lum	National standard	Create own curriculum/ program/etc.	Create own courses and curriculum	Create own courses and curriculum	Create own courses and curriculum	Create own curriculum/ program/etc.
Others	No rules	Industrial collaboration, visiting scholars, exchange lecturers and students, international students	Industrial collaboration, visiting scholars, international students	Industrial collaboration, visiting scholars, international students	Industrial collaboration, international students	Industrial collaboration, visiting scholars, international students
	Control of personal habits (mandatory wearing of shoes on campus and in class)	Control of personal habits (mandatory wearing of shoes on campus and in class)	N/A	N/A	N/A	N/A

Source: Buchori & Malik 2004; Nizam 2006; Bot 2010; Lissoni, et al. 2011; Scott 2011; Kusumadewi & Cahyadi 2013; Katers n.d.; www.euroeducation.com
N/A = not available

A series of amendments in the new legislation were enacted to accommodate political and societal voices. The Law on Educational Legal Entity or *Undang-Undang Badan Hukum Pendidikan* (hereafter referred to as *UU BHP*) was legalised at the end of 2008

(Kusumadewi & Cahyadi 2013). The law gave each university the freedom to manage its sources of funding. While not all public universities had fully implemented the model, in 2010 all universities were planned to operate under the public entity status, which was renamed *Perguruan Tinggi Pemerintah* (or *PTP*), as set out by the *Dikti*. This status was similar to the traditional system in which all educational activities were controlled and evaluated by the central government. Because of the pros and the cons from the third parties, (Chan 2013), both modes failed before developing into an effective system.

In 2012, the *UU BHP* was re-enacted as the Higher Education Law, with amendments concerning financial management. The new regulation, Government Regulation or *Peraturan Pemerintah* (hereafter referred to as *PP*) number 74, required universities to follow the rules applicable to the Public Service Agency or *Badan Layanan Umum* (hereafter referred to as *BLU*) in 2012 (*Direktorat Jenderal Pendidikan Tinggi* 2013). Universities now had to get their financial plan approved by the Ministry of Education and Culture, although human resource management was left entirely to the universities concerned. The system was an embryonic form to establish the public university legal entity or *PTN Badan Hukum* (hereafter referred to as *PTN BH*), which was similar to the *BHMN* discussed earlier. The *UU PT* number 22 was legalised in 2012, and – after a controversial debate (Chan, 2013) - the *PTN BH* mode was enacted in March 2013. The seven top universities were automatically transferred to the new status. In October 2013, the government transferred the University of Indonesia, Bogor Agricultural University, Gadjah Mada University and Bandung Institute of Technology to the *PT BH* mode (Pikiran Rakyat 2013). However, the government also offers the *PT BLU* mode to other universities who find it hard to employ the *PT BH* mode.

All levels of courses are designed for coursework combined with final projects. There are no programs by research, as in Australian universities. The system is a combination of the higher degree systems in countries, such as the U.S., the U.K. and the Netherlands (Bot 2010; Lissoni et al. 2011; Scott 2011; Katers n.d.). On average, most universities offer four to five-year undergraduate degree by coursework with a project report (or *skiptie*) at the end of the program. However, in the last decade some top universities, such as the University of Indonesia, have offered undergraduate courses lasting three to three-and-a-half years. Master's students usually complete their studies

within two to three years, including the production of a mini-thesis in the final semester. Similarly, doctoral students must write a thesis in the final year of a three-to-five year program. Table 1.1 sets out some other features.

Although the latest education law has been officially introduced, many academics still doubt whether it can be implemented, especially concerning finances and transparency. In addition, a number of universities, with the exception of the seven universities mentioned earlier, are still reluctant to abandon their traditional status, as they perceive that resources for universities of the new status are of inadequate quality.

1.3.3 Academic career promotion policy

It has been noted that from the start of the transformation until 2012, the government had moved from organising its civil servants according to traditional bureaucratic systems to a performance-based system (Turner & Podge 2007). In particular, the career promotion system had been firmly anchored in the bureaucratic procedures and central control (Idrus 1999), which had resulted in the persistence of traits, such as inflexibility, low levels of innovation, less performance orientation and less autonomy. This does not appear to be what is required by the legal entity mode, in which academics are free to exercise their capabilities in pursuing their careers.

Full-time academics at the public universities are categorised as civil servants, or *Pegawai Negeri Sipil (PNS*), and employed by the central government, similar to academics in Estonia (European Commission 2008) and the Netherlands (European University Institute 2014). Like government employees at public agencies, they are provided with 'high level job security, a uniform pay system and a specific pension scheme' (Demmke 2005, p. 10). Academics receive some benefits, such as a monthly salary, a pension and lifetime employment status, along with benefits, such as a rice allowance and tax subsidies. This condition is different from academics in the Netherlands, for instance, where academics are recruited based on contract. There are no differences in terms of the benefits and provisions between academics who achieve high and low performances (Turner et al. 2009). The only factor that makes the difference is the academic ranks and levels systems, which is regulated by the central government. This system does not seem to motivate academics to achieve high performance and attain high-quality outcomes.

With respect to the promotion system, Indonesian's higher education formally applies a 'moving up in the hierarchical structure' stage (Schein 2006a) through promotion in academic levels (*kenaikan golongan*) and academic ranks (*kenaikan fungsional*). No research career development system is introduced, like the one in Australia, for example (The higher education academy 2009). In terms of the academic levels (or *kenaikan golongan*), every two years, civil servants automatically receive an incremental increase to a higher level and an increase in salary. However, the increase from one level to the next is not related to work performances, rather it is taken for granted. A series of classification levels based on the *PP* number 99 in 2000 is III/a/b/c/d, IV/a/b/c/d/e. As of 2005, to improve academic performance, the *Dikti* took the initiative to add to the terms of academic ranks promotion, while the academic levels policy remained as in the traditional mode. When a master's degree was introduced as a minimum requirement to be an academic, a person who is accepted as an academic will be appointed at level III/b. This is absolutely in contrast to the merit-based system applied in Sweden (European Commission 2008), for instance.

Aligning with the academic level, academics apply for promotion based on the functional area (*jabatan fungsional*) ranks ranging from assistant lecturer (or *asisten ahli*) to professor (or *guru besar*) (see Appendix 1). As in Government Regulation 99/2000, promotion is valid only in a department of the faculty in a university where the academic was recruited and in a linearity of specialisation, not as is the case in some other countries, such as Australia or the U.S. where promotion is across field of study, faculty and university (European University Institute 2014). A number of credit points must be collected and are examined based on the three aspects for all ranks (so-called three pillars of higher education, or in Indonesian, *Tri Dharma Perguruan Tinggi*: teaching, research and community services (*Dikti* 2009). All criteria are assessed by internal reviewers within a university. It is almost the same as that in the Netherlands in which teaching and research are the main criteria for all positions, and in Malaysia, with the exception of professor level specified into teaching and supervision, research and innovation, consultation, publication and service to the community and the university and assessed by external examiners (Sidek et al. 2012). Nevertheless, academics receive their salaries based on the levels and ranks they achieve.

Promotion between academic levels and academic ranks are two different things but related to one another. Unlike the system in Australia, for example, where a senior lecturer position is definitely at level C or a lecturer is B, Indonesian academics have different condition. Academics who are in a classification level of III/b are definitely in an assistant lecturer rank but those in an assistant lecturer may be at level III/c. However, for lecturer, the minimum requirement is III/c, and for senior lecturer IV/a.

To support the legal entity mode, some career promotional requirements have been significantly altered. The *Dikti* has formally and strictly applied 'in-line specialisation in formal education levels' and publication (*Dikti* 2009). In other words, an academic's educational background must be in one field of study from undergraduate to postgraduate. Teaching, research and publication should reflect this specialisation (*Dikti* 2009; Soeparna 2011). Starting in 2012, a senior lecturer (*lektor kepala*) rank requires a minimum degree of doctorate and one article written as a first author and published in an accredited national or international journal. As in Germany (European Commission 2008), the professor title applies for the lifetime. However, to retain the remuneration until pension, a professor is required to publish at least one international publication per year beside criteria of teaching, research and service (*Suara Merdeka* 2013).

In addition, *PP* number 47 in 2009 requires every academic to produce an academic certification (*Direktorat Jenderal Pendidikan Tinggi* 2013) as evident of their competence as academics and precondition for remuneration. Academics are required to carry out the three pillars of higher education to remain eligible for remuneration. In addition to requiring academics to self-evaluate their academic achievement in the form of a portfolio, since 2012, the Dikti has been requiring tests of English language proficiency and academic potential test (*Direktorat Jenderal Pendidikan Tinggi* 2013), although these requirements do not stipulate a minimum result. No references in other countries applying this method are found, although Australian academics have the opportunity to reflect on their career development plans, often through discussions with their supervisors.

Academics are permitted to work in managerial positions (*jabatan struktural*). The structural positions, such as head of school/department, dean or rector, are based on an election process and not as a promotion. This is somewhat similar to the system in the

Philippines (Custodio 2000). There is a significant difference in rewards between the levels. Recent observation shows that academics who hold doctoral degrees are significantly more likely to hold various managerial positions. However, there is no published study to show the reasons behind this observation.

The promotion system is believed to improve the quality of academics, as they compete by improving their skills and knowledge. However, lifelong tenure without the possibility of punishment or impeachment contributes to a lower quality of academic staff (Gunawan 1999). While concurrent employment is technically not permitted, most talented academics at all ranks have part-time or full-time careers outside of their universities (Idrus 1999), such as at local government agencies, private companies, private universities or family businesses (Welch 2012). It is assumed that academics look for an increase in income, a chance for promotion and self-development or administrative work (Isaac 1998; La Lopa, Beck & Ghiselli 2009). Therefore, higher education institutions need to know how to retain and empower academics, especially those who are highly skilled (Lewis 1999).

A revised policy on promotions, introduced in 2005 as a way to develop the quality of academics' careers, has forced a shift in the way academics look at their career paths. Unlike the traditional career development system, this system gives more freedom to academics in arranging their own career life at universities. Although the academic levels system is still applied, functional promotions are assessed heavily on merit, in which performance criteria assessments become a central point (Directorate General of Higher Education 2003; *Dikti* 2009).

This policy has forced academics to consider whether their careers fit with their own talents, needs and motivation as internal drivers with their universities' needs. However, the new policy has come under strong criticism. As Welch (2012) pointed out, the policy has changed but the civil servants' mindset can hardly be expected to alter in a short time. Some argue about the differences of university sizes and resources, the feelings of disempowerment and dissatisfaction, lack of supportive work climate and lack of resources. It has been identified that financial matters do not significantly contribute to these perceptions. It is rather the issue of how to fulfil individual and organisational needs through empowerment. The new policy of the career promotion is

in accordance with the new understanding of the importance of internal motivation as career progress. This leads to two questions: how do academics view their careers' values and attitudes toward the institutions?, and how do organisations provide a psychologically safe work environment by providing autonomy and freedom? It is argued that academics should understand their own self-concept of occupational internal careers and self-efficacy by considering positive attitudinal outcomes for achieving their career goals.

1.4 Problem statement

The understanding of the modern career concept has moved away from the traditional lifetime career development concept. Emerging organisations can no longer fully offer and guarantee long-term or whole-life employment (Cappellan & Janssens 2005; Collins 2007). Linear career progression has been replaced by a contemporary understanding of career in which individuals are encouraged to be less dependent on organisations and actively look for opportunities to develop own career (Frese & Fay 2001; Raabe, Frase & Beehr 2007) and develop multidirectional career paths (Baruch 2004; Inkson 2004; Cappellan & Janssens 2005). As a result, individuals must understand their self-occupational concept well enough so that they will choose a career that reflects their self-image (Dessler 2000). Schein's occupational self-concept consists of talents, needs and values – known as career anchors – that can help individuals identify their personal careers and career-related value (Schein & van Maanen 2013). Employees' awareness of career anchors and their own resulting willingness to move from one organisation to another have forced organisations to provide a psychologically safe environment at work, as they compete for skilled and talented employees (Schein 2006a).

Psychological empowerment and job satisfaction are viewed as career attitudinal outcomes in which individuals feel satisfied about their work and jobs. Individuals now choose jobs and organisations that let them engage their career anchors leading to a feeling of empowerment, and thus of job satisfaction. This new career development and its relation to empowerment and job satisfaction is the focus of the current study.

Although some studies have examined the concept of career anchors (e.g., Hsu et al. 2003; Bester & Mouten 2006; Coetzee et al. 2007; Danziger, Rachman-Moore & Valency 2008; Chapman 2009; Singh, Bhattacharjee & Kodwani 2009) and its relation to job satisfaction (e.g., Igbaria & Baroudi 1993; McMurtrey et al. 2002; Dazinger & Valency 2006; Steele & Francis-Smythe 2008), little research has been done in the area of education. Career anchors that have been studied have examined U.S. schools' principals (Puryear 1996), Singaporean teachers (Tan & Quek 2001), Netherlands secondary school students (Klapwijk & Rommes 2009), university business students in Australia (including students from Australia, Malaysia, South Africa, the U.K. and the U.S.) (Marshall & Bonner 2003) and primary and secondary school teachers in China. So far, only two studies have been conducted on academics' career anchors. One was related to turnover of hospitality and tourism academics in the U.S. (La Lopa, Beck & Ghiselli 2009), and the other on academic executives in the Philippines (Custodio 2000).

Similarly, psychological empowerment has been studied and linked to the job satisfaction of private and public service employees (e.g., Collins 2007; Dickson & Lorenz 2009; Patah et al. 2009; Wang & Lee 2009; Dehkordi et al. 2011; Schermuly, Schermuly & Meyer 2011; Chung et al. 2012). It has been examined as a mediator in the relationship between leadership and psychological climate, and various other attitudinal outcomes (e.g., Liden, Wayne & Sparrowe 2000; Carless 2004; George & Hancer 2004; Collins 2007; Castro, Perinan & Bueno 2008; Chang, Shih & Lin 2010; Givens 2011; Zhu et al. 2012). However, there are no published studies of the relationship between career anchors, psychological empowerment and job satisfaction. Most studies have been conducted on samples other than academics in higher education institutions. To the best of researcher's knowledge, there has been no study so far published on Indonesian academics' career anchors, psychological empowerment and job satisfaction. The present research, therefore, examined:

The relationship between career anchors and job satisfaction and the effects of psychological environment in the Indonesian public higher education context.

To address this research problem, this study was designed to explore the following six issues:

1. The relevance of the career anchor inventory, the psychological empowerment scale and the job satisfaction scales in the Indonesian academics context.
2. The single and multiple dominant career anchors of Indonesian academics.
3. The talents-based, needs-based and values-based anchors of Indonesian academics.
4. How do career anchors predict psychological empowerment and job satisfaction?
5. How do Indonesian academics' perceptions of their career development influence the way they pursue their career anchors?

1.5 Significance of the study

As there have been no studies on career anchors and psychological empowerment of academics conducted in Indonesia, this study assists in explaining how Indonesian academic staff view their internal careers and their feelings of empowerment, and how these affect their level of job satisfaction. The findings of this study provide a better understanding for managing academics' career development programs and, designing an empowerment strategy to achieve higher levels of job satisfaction. This study also contributes to filling the gap in the general career anchor literature concerning public sector academics, as the current literature is limited to addressing career anchors of managers, professionals and employees in the private sector.

The career anchor, psychological empowerment and job satisfaction theories and models that have been applied and developed in the U.S. may not reflect individuals' careers and attitudinal outcomes in situations beyond American borders (Feldman & Bolino 1996; Budhwar & Baruch 2003; Webber & Ladkin 2009; Chang, Shih & Lin 2010). Hofstede (1991) put forward an argument as to why many western theories might not be applied to other national contexts, and Ituma and Simpson's (2007) study in Nigeria claimed that there are significant differences in career anchors held in the U.S. and Nigeria. However, studies of psychological empowerment in Malaysia (Ghani

et al. 2009) and Germany (Schermuly, Schermuly & Meyer 2011), for instance, validated the theory and the results were the same as the original concept. Therefore, there is a need to explore more studies in non-western countries.

1.6 Outline of the study

The thesis is structured as follows:

Chapter One presents the purposes, research questions, significance and contribution of the study. It gives an overview of Indonesian public higher education systems and describes the career promotion policy for academics. It also defines some key terms used in the current study.

Chapter Two reviews the relevant research literature on career anchors, psychological empowerment and job satisfaction. It explains the framework of career anchors according to Schein's concept and Feldman and Bolino's perspective, the concept of psychological empowerment and the relationship to job satisfaction. It then discusses previous empirical studies on career anchors. The chapter presents the dimensions of each of the three concepts, and describes an octagonal model that measures the strength of the relationships of multiple anchors. The review concludes by introducing a research framework and model for the current study and generates a number of proposed hypotheses.

Chapter Three discusses the research methodology applied in this study. It introduces the research design and a mixed-methods approach. The development of the instruments used in this present study is also discussed. It presents data collection and data analysis process. The validity and reliability analyses are presented, and the statistical tools of factor analysis, Spearman's rank correlation coefficients, and hierarchical regression analysis are used for quantitative analysis. Thematic analysis will be used for the qualitative analysis. It will also briefly explain the demographic role in the analysis.

Chapter Four presents the results of the statistical analysis. It will summarise the results of the testing of the career anchor concept and the analysis of the relationship

between career anchors and work outcomes. The empirical findings will then be linked to the interview results

Chapter Five describes the interviews' results on career events that lead to the choice of career anchors. It also summarises the respondents' views on career development issues through open-ended questions. It discusses how the academics view their career history, and link their responses to extent literature on career anchors and outcomes. The chapter concludes by integrating the qualitative and quantitative results.

Chapter Six summarises and discusses the findings. The implications for theory, methodology and managerial practice are discussed. It then draws conclusions.

Chapter Seven presents the limitations of the current study and makes recommendations for future studies.

Key terms

Higher education institutions include universities, institutes and polytechnics. **Higher education institution** and **university** are used interchangeably.

Universities represent university, institute and polytechnics

Academics mean individual academics, who work full time as civil servants, hold academic ranks from assistant lecturer to professors. **Academics** and **lecturers** are used interchangeably regardless the ranks.

Respondents and **participants** have the same meaning, which are individuals who participate in a survey. A term of respondents is used for samples of a survey questionnaire while a term of participants is used for interview samples.

Organisations and **institutions**: Organisations are used to refer private sector entities while institutions are used for the government units, agencies, and departments, such as universities.

Chapter 2
Literature Review and Conceptual Framework

2.1 Introduction

The previous chapter introduced the need for conducting this study. It presented the purposes and background of the study. An overview of Indonesia, the higher education system and the career promotion system of Indonesian academics were outlined. The chapter also described the research problem, some issues and the significance of the study.

This chapter reviews the literature related to the current study. It demonstrates career meaning, including the concept of internal and external careers. The theory of career anchor developed by Schein (1977a, 1996, 2006) that serves as a basis for this study is discussed. It also describes the career anchor categories, multiple career anchors, and studies on career anchors conducted by Schein and other researchers. The chapter highlights Feldman and Bolino's (1996) reframing of the career anchor concept, including their propositions of complementary and mutually exclusive anchor categories and the proposed model of the octagonal diagram. The next sections discuss the literature on psychological empowerment and job satisfaction, linking them to the career anchors. It also explains the relationships between the career anchors, psychological empowerment, job satisfaction and demographic data. Finally, the chapter presents the conceptual framework, the research model and the proposed hypotheses.

2.2 Understanding of career: internal and external career perspectives

The word 'career' is generally viewed from either an organisational or an individual approach (see Greenhause, Callanan & Godshalan 2000). In the organisational approach, a career is a structure of an organisation where everything that is done refers to physical appearances. For instance, a series of formal education, and a work journey from a low level position to top level management are an organisational approach. The individual approach refers to a series of individual work activities. For instance, a person is said to have a career if she or he has a profession (e.g., physicians, lawyers)

that involves a steady advancement or substantial achievement in social status (e.g., professor, high social class) and a structured occupational life (e.g., teachers, guidance counsellors (Greenhause, Callanan & Godshalan 2000; Schein 2006a). Greenhause, Callanan & Godshalan (2000, p. 9) defined a career as 'the pattern of work-related experiences that span the course of a person's life'. They argued that the definition accommodates objective situations (e.g., job position, job duties) and subjective interpretations (e.g., aspirations, values, needs and feelings) that fit the current changes in the workplace. If the pattern is regarded as the steps and phases of an individual occupation, she or he has a career (Schein 2006a, p. 1).

In the literature, authors set forth the differences between the traditional and contemporary career concepts. The traditional understanding of career has been referred to a series of job roles arranged within a single organisation through a hierarchical promotion and a linear progression occupied by an individual throughout her or his occupational lifetime (Super & Bohn 1971; van Maanen & Baley 1984; Schein 1993; Cherrington 1995; Hall 1996; Inkson 2004). Ituma and Simpson (2007, p. 979) in their study of the career anchors of information system's employees referred the traditional career to 'salary, status and secure career ladders within a single organisation…', while Coetze and Roythorne-Jacobs (2007) referred to it as functional and managerial career development. The traditional career path is a flat hierarchy with regular and rigid systems (Demmek 2005).

By contrast, the contemporary career notion fits to workplace demand in which it is more business-orientated. Schein (1996), and Adamson, Doherty and Viney (1998) argued that only individuals with certain anchors pursue hierarchical promotion in the workplace. Similarly, Cappellan and Janssens (2005) pointed out that an upward-mobility career progression is not appropriate in the current organisational career system (Dickmann & Muller-Camen 2006). The reason according to Baruch (2006, p. 125) is that 'the organizational system is now a model of all change, all dynamic, total fluidity'. In the international context, managers and academics now have to move further to in the work-role process (Arnolds 1997, p. 176). Particularly, Schein (1977a, p. 488) emphasised that a career refers to 'a set of stages or a path through time that reflects an individual's needs, motives and aspirations in relation to work and society's

expectations of what kinds of activities will result in monetary and status rewards for the career occupant'.

Because a career today is more challenging, stressful, unpredictable, vulnerable and multidirectional (Baruch 2006, p. 125), individuals need to have a professional communication with the organisation to make better career choices (Brousseau et al. 1996; Hall 1996; Steele & Francis-Smythe 2006). To do so, individuals should take responsibility for managing their own careers, and be willing to go beyond the boundaries of a single organisation (Hall 2002; Baruch 2006; Steele & Francis-Smythe 2006; Smith 2005; Coetzee 2008). Schein (1990, pp. 35-36) stressed that 'it is unrealistic to expect managers and organizations to understand employees well enough to make valid career decisions for them…people must learn to manage their own careers'. In this case, individuals should have their self-plan of career progression as well as increase their skills, knowledge and abilities while fulfilling their commitment to their organisations (Dessler 2000; Dumitrescu 2009).

In a number of studies on careers, researchers have put forward the differences between an external career (or a structure of an organisation) and an internal career (or a property of an individual). The external career refers to the interaction between individuals and organisations or society in various jobs (Greenhause, Callanan & Godshalan 2000, p. 8), and is often referred to in terms of career stages. Career stages refers to the external roles defined by organisational policies, such as the number of formal positions held by individuals in their career stages or career paths (Derr & Laurent 1989; Nicholson 1996; Schein 2006a; Ituma & Simpson 2007). More specifically, Schein (2006a, p. 3) emphasised that 'career stages in the externally defined career are the sequence of roles and statuses defined by a particular occupation or organization as the way to progress through the career'. Career stages can entail 'moving up' in the hierarchical organisational structure, 'moving laterally' across disciplines, and 'moving in' towards the centre of the organisation (Schein 2006a, p. 2). It depends on a person to choose the movement that is based on an anchor they perceive. This implies that an individual should understand her or his internal motivation to climb stages in an occupation.

Conversely, the internal career deals more with the psychological side and refers to a self-development within a career, career motivation and career orientation (Derr &

Laurent 1989; Sparrow & Hiltrop 1996; Chapman 2009). At the same time, internal career refers to those activities designed to help individuals develop a clearer self-concept around their own occupational activities, as a set of plans that make sense to the individual. A limited number of studies discuss the internal career concept (e.g., Super & Bond 1971; Holland 1973; Schein 1978). Schein (1978) in particular has developed the internal career concept, called a career anchor, which has since been widely used in a number of studies (e.g., Custodio 2000; Chang et al. 2011). This study used Schein's career anchor concept as the basis for the current study and is discussed in the following sub-sections.

2.3 Introducing the career anchors theory

The theory of the career anchor was conceptualised in a longitudinal study conducted by Schein (1977a). The study, which began in 1961, used samples of his 44 alumni of masters' programs at the Massachusetts Institute of Technology's (MIT) School of Management (Schein 1977a, p. 19). The participants were first interviewed using a protocol interview developed by Schein himself. The aim was to investigate the participants' values and attitudes towards their careers as managers. After 12 years, those participants were invited to be interviewed and took a survey related to their actual career history. The results showed a clear pattern of each participant's career experiences. Schein (2006a, p. 3) suggested that a series of educational levels and actual work experiences teach an individual to identify her or his 'self-concept of what [they] are good at and not good at, want and do not want, and value or do not value'. Schein then labelled this self-concept as the 'career anchor' (Schein 2006b, p. 3).

The self-concept can be thought of as individuals' reactions to their work experiences, as expressed by core values in three components (Schein 2006a, p. 3):

(1) Skills and competencies [or talents-based]: You need to learn from each experience what you are good at; that learning comes both from your own assessment and from the feedback you receive from others;

(2) Motives [or needs-based:] You need to learn from each experience what it is you really desire; early in life we think we know what we want, what our career aspirations are, but with each experience we discover that there are things we like or don't like, that some of our aspirations are unrealistic, and that we develop new ambitions; and

(3) Values [or values-based]: You need to learn from each experience what it is you value in the context of what your occupation or organization considers important, what your colleagues value, and how the kind of organizational climate you encounter fits with those values.

Because talents, needs and values are tied together, the self-concept allows individuals to discover their competencies, help them to determine their needs for careers and motives and drives them to seek career stability. It is important to realise that this self-concept is developed through several work experiences (Arthur & Rousseau 1996; Schein, 1996, 2006a). It means that one's career anchor cannot be identified in an early career stage (Schein n.d.). However, the first five years of one's career are critical for individuals to learn about themselves, their work environment and their occupation.

The career anchor, therefore, 'is that a combination of perceived areas of competence, motives and values that you discover you would not give up if you faced a career decision that might not allow you to fulfil it' (Schein & van Maanen 2013, p. 1). It is significant because it affects an individual's career choice and decisions to move from one job to another, shape personal goals in life and define what he or she desires from the world of work (Schein 1996, 2006a; Marks & Houston 2002; Zaleska & Menezes 2007). It also encompasses how an individual would describe a successful career and determines the individual's views of the future (Schein 1980, 1987b, 1990; DeLong 1982; Beck & La Lopa 2001). A measure of career anchors enables an organisation and an individual to find a match between the organisation's and individual needs.

2.3.1 Dimensions of career anchors

Based on the longitudinal study discussed earlier, Schein (1977b) initially identified five career anchor categories derived from the self-concept. The five categories are *managerial competence, technical/functional competence, autonomy, security/stability* and *entrepreneurial creativity*. Delong's (1982) follow-up study added three more anchor categories. The *identity* anchor and the *service* anchor emerged from female respondents referring to status and prestige, and to helping others, respectively. *Variety* was identified through the respondents who preferred variety of work. However, Schein (1987a, p. 159) renamed *identity* as *lifestyle* and *variety* as *pure challenge* after further investigation.

In a subsequent study, DeLong (1982) also proposed that the *security/stability* anchor could be split into the *economic security* and *geographical stability* anchors. He argued that the *security* anchor 'played an important role in career decision-making to either remain in a particular geographical location or retain long term benefits' (DeLong 1982, p. 60). Igbaria and Baroudi (1993) empirically tested the validity and reliability of Schein's anchor categories, including the *security/stability* anchor, and the results confirmed the separation of the *security/stability* anchor. Some later studies have also confirmed the split (e.g., Custodio 2000; Ramakhrisna & Potosky 2004; Chang & Lin 2008).

Besides the *security/stability* anchor, the *entrepreneurial creativity* anchor has also been split into two anchors. Two studies conducted by Marshall and Bonner (2003) and Dazinger, Rahman-Moore and Valency (2008) examined found that *entrepreneurial creativity* could be separated into two dimensions, as the *entrepreneurship* anchor and the *creativity* anchor. Marshall and Bonner (2003) in their study of graduate students registered in management courses in Malaysia, South Africa, the U.K., the U.S. and Western Australia found the strong alphas for the two factors (*entrepreneurship* = 0.75 and *creativity* = 0.85). Three items and two items of the respective anchors had strong correlation. Dazinger, Rahman-Moore and Valency (2008, p. 7) in examining the career anchor constructs using an Israeli sample claimed that although the construct validity of the two anchors is modest, the two factors gave 'a better fit than Schein's eight-construct model'. However, the reason for the inappropriate item wording that caused low validity needs a strong justification especially when they claimed that the sample is not a cultural issue because the Israeli population constitutes 'a microcosm (*Maduradam*) of Western Europe and North America' (Dazinger, Rahman-Moore and Valency (2008, p. 17) that causes the low validity. The separation of this anchor needs further investigation for the validity and reliability check.

Hence, the nine career anchors that have been confirmed and tested for validity and reliability (Igbaria & Baroudi 1993) are presented in the current study. The anchor categories and their characteristics are shown in Table 2.1.

Table 2.1: Career anchor dimensions and their characteristics

Categories	Items
Managerial competence	The process of supervising, influencing, leading and controlling people at all level is…
	To be in charge of a whole organisation is…
	To rise to a high position in general management is…
Technical competence	Remaining in my specialized area as opposed to being promoted out of my area of expertise is…
	Remaining in my area of expertise throughout
	I will accept a management position only if it is my area of expertise.
Service	I want a career in which I can be committed and devoted to an important cause.
	Being able to use my skills and talents in the service of an important cause is…
	Using my skill to make the world a better place to live and work in is …
Autonomy	The chance to do things my own way and not to be constrained by the rules of an organization is…
	A career that is free from organization restrictions
	I do not want to be constrained by either an organization or the business world.
Economic security	An employer who will provide security through guaranteed work, benefits, a good retirement program, etc. is…
	An organization that will give me long-run stability is…
Geographical stability	Remaining in one geographical area rather than moving because of a promotion is…
	It is more important for me to remain in my present geographical location than to receive a promotion or new job assignment in another location.
Pure challenge	Working on problems that are almost insoluble is…
	The only real challenge in my career has been confronting and solving tough problems, no matter what area they were in.
	I feel successful only if I am constantly challenged by a tough problem or a competitive situation.
Lifestyle	Developing a career that permits me to continue to pursue my own lifestyle is…
	A career is worthwhile only if it enables me to lead my life in my own way.
	Choosing and maintaining a certain lifestyle is more important than career success.
Entrepreneurial creativity	Building a new business enterprise is…
	I am always on the look out for ideas that would permit me to start and build own enterprise.
	I have always wanted to start and build up a business of my own.

Source: Igbaria and Baroudi (1993, pp. 53-54)

2.3.2 Explaining multiple career anchors

Schein's (1987a, p. 161) early work demonstrated the existence of multiple career anchors. He found that one-third of the sample groups held more than one anchor, and the anchors were correlated to each other. A group of MIT senior executives tended to have a combination of the *managerial competence* and *technical competence* anchors as their true anchors; a group of female bank vice presidents had the *security, managerial competence, technical competence* and *service* anchors; and a data processing professional group was more likely to have the *security/stability*, *technical competence*, *managerial competence* and *entrepreneurial creativity* anchors. Another indication of multiple anchors comes from the groups that fell into the anchor category of 'ambiguity': alumnae, high-potential women, and strategy and management consultants. For these groups, Schein (1987b) assumed that the respondents held two or more career anchors because of inadequate work experiences. The results of Schein's study shows that, in fact, individuals can perceive their dominant career anchors differently from the study options and thus having multiple career anchors is a career option.

Schein's (2006a) description of the career anchor categories also indicated that an individual can have more than one anchor. He also noticed that because in a forced-choice situation, a person may have a combination of several anchors to satisfy herself or himself. On the one hand, Schein hypothesised that the *service* career anchor would appear in those who were working in the public sector. On the other hand, he claimed that individuals with the *security/stability* anchor were more suited to working in the government sector. He said that '…government and civil service jobs are often attractive to these people' (as security/stability-anchored people) (p. 17), and to these people, they prefer a tenure system that can be 'found in schools and universities' (p. 18). This means that a civil servant can have the *service* and *security/stability* anchors at the same time.

In a very recent study, Schein and van Maanen (2013) also implicitly recognised the existence of multiple career anchors. They highlighted the shift of career anchors, and brought the single eight anchor categories into four groups. In contrast, Feldman and Bolino (1996) explicitly supported the existence of multiple career anchors asserting that an individual can have main and secondary anchors to face the changes in their life

situations. Feldman and Bolino (1996) then reframed Schein's single career anchors model. Sub-section 2.4 discusses these aspects in detail.

2.3.3 Factor structures underlying the career anchors

The stability of one's career anchors depends on the current situation and conditions in the workplace. In studying the career anchors of his students, Schein (1978) concluded that an individual did not change his or her career anchors and only had one dominant career anchor dimension. However, in his later research, Schein (1996) predicted that the structure of the career anchors would shift in the 21st century due to a change in the technological environment, 'market conditions and career advancement' or 'social settings' (Chang et al. 2011, pp. 104 & 114). Arthur, Inkson and Pringle (1999, cited in Suutari & Taka 2004) stressed that career anchors might not be significant in terms of 'where they are going, but they can interpret well the pattern of their previous career episodes and use this pattern as a basis for fresh choice' (p. 835). To anticipate the shift, both individuals and organisations need to understand it.

As mentioned in Sub-section 2.3, the concept of the career anchor is based on a series of studies conducted by Schein and his students on managerial positions. Not all respondents in the 15 managerial groups anchored on the *managerial competence* anchor. Only three out of seven in the group of managers were dominant in *managerial competence*. It was not unexpected, however. The reason is that, Schein (1987b) had predicted that only those individuals who were clearly about to reach a general management position were likely to be anchored on the *managerial competence* anchor. For the rest of the groups, instead of having *managerial competence* as their primary anchor, the senior executives and aerospace manager groups had the highest percentage in the *technical/functional competence* anchor; physicians in management had the *autonomy* anchor; and the middle manager group had the *autonomy* and *managerial competence* anchors. This suggests that individuals will choose their career anchors according to their job responsibilities, not their positions.

Previous empirical studies examining the idea that career anchors can shift has generated some evidence. For instance, among the information system personnel, the *technical competence* anchor that should be inherent to them has been shown to alter to *managerial competence* (Chang et al. 2011), *geographical stability* (Ramakhrisna &

Potoskty 2004) and *service* (Igbaria & Baroudi 1993). *Lifestyle* and *service* become the dominant anchors held by individuals in industrialised countries, such as the U.S. (e.g., Igbaria, Meredith & Smith 1995). In developing countries, the *stability/security* anchor is chosen by the majority of information technology individuals in Nigeria (Ituma & Simpson 2007) and of higher education students in South Africa (Coetzee & Schreuder 2011).

Furthermore, the concept of multiple career anchors suggested by Feldman and Bolino (1996) is another indication that the career anchor concept has shifted. It suggests that the work environment can change individuals' career anchors.

The shifting of career anchors is clearly seen in the emergence of new career anchor categories. Chang et al. (2011) claimed that as a result of changes in career anchors, new anchors would emerge among information systems' employees in the middle or later career stages. Several new anchors can be identified from the review of previous studies, for instance, power (Schein 1990), identity (Klapwijk & Rommes 2009), being marketable (Ituma & Simpson 2007) and salary (Puryear 1996). Baruch (2004b) in his review of career transition suggested the employability and spiritual purpose anchors. Three possible reasons for the emergence of new career anchors are (1) the transformation of career values at the workplace including changes in technology and work environment; (2) social environment influences; and (3) the variability in the samples' background, such as types of job, gender, age or location.

Individuals react differently to changes in the work and social environment (which may have an impact on their career anchors). Schein (2006b, p. 292) reflected back to his initial interview work and emphasised that:

> Motivation to change does not arise until the change target feels secure enough to accept the disconfirming data because the new things to be learned begin to be feasible. The change target feels 'psychologically safe' if he or she can accept a new attitude or value without complete loss of self.

Once an individual feels psychologically safe, he or she can accept new information, either through identification with others or scanning the environment for new solutions. The more ambiguous the situation, the more an individual will rely on the perceptions and judgments of others. Psychologically, this clinical identification may contribute to

the choice of an individual's career anchor. Schein (2006b, p. 293) also highlighted that mature individuals will form self-management around their motivation, talent and values (reflected on career anchors) that serve to guide their career decision. He emphasised that a career anchor links to the individuals' career choices. This may also indicate that individuals need feelings of empowerment to satisfy themselves in the workplace.

2.3.4 Review of studies on career anchors

Despite some criticism of Schein's career anchor concept, his model provides an understanding of individuals' internal careers and their work environment. A literature review using ProQuest, ScienceDirect, BusinessSources, Elsevier, InformaWorld, EBSCO and unpublished theses, shows that the career anchor concept has been applied in various fields. Studies have been done in the field of hospitality (e.g., Ross 1995; Beck & La Lopa 2001; Weber & Ladkin 2009), information technology (e.g., Jiang & Klein 2000; Chang et al. 2007; Ituma & Simpson 2007; Chang & Lin 2008; Dumitrescu 2009; Chang et al. 2011), business, (e.g., Suutari & Taka 2004; Wong 2007; Messarra, Mourad & Harake 2009; Kilimnik et al. 2011), research and development (e.g., Igbaria, Kassicieh & Silver 1999), manufacturing (e.g., Smith 2005), police/military (e.g., Steele 2006; Mays 2007), entrepreneurship (Feldman & Bolino 2000; Dazinger & Valency 2006), engineering (e.g., Singh, Bhattacharjee & Kodwani 2009) and accounting (e.g., Hardin, Stocks & Graves 2001).

Schein's career anchor concept has also been studied in the education field focusing on educators, school teachers and principals (e.g., DeLong 1982; Puryear 1996; Tan & Quek 2001). Other studies have examined the career anchors of students (e.g., Klapwijk & Rommes 2000; Marshall & Bonner 2003; Wong, Fiedler & Liu 2007; Coetzee & Schreuder 2011). Only two studies have examined the career anchors of academics in the higher education sector, and these were reviewed in the current study. The two studies ranked *lifestyle* in first place. In a study by La Lopa, Beck and Ghiselli (2009), *autonomy* ranked second while in a study by Custodio (2000), it was ranked fourth. La Lopa, Beck and Ghiselli studied the relationship between bio data and career anchors on the turnover of 337 academics who were members on the Council of Hotel, Restaurant and Institutional Education in the U.S. Of the total respondents, more than 57 percent of educators held a doctoral degree, 31.1 percent had a title of associate professor and 30.7

percent were assistant professors. They found that the balancing career and family anchor (or *lifestyle* anchor) was the most important career anchor. They highlighted assistant and associate professors' intention to leave if the head of department could not satisfy them in balancing career and family life. The results suggested forcing academics to increase their teaching workload due to the increase of new students needed to be reconsidered. Further, the finding also reported that the professors did not tend to have the *lifestyle* anchor but the authors did not provide reasons and/or further information why this finding was raised.

La Lopa, Beck and Ghiselli (2009) also paid attention to *autonomy* as the second important dominant career anchor. The emergence of this anchor was surprising since most samples were satisfied with their work environment. They argued that autonomy and satisfaction were not correlated but that academics would quit for better rewards. It seems that the first and second order of career anchors complement each other (mean scores: 4.40 and 4.23) and confirm Feldman and Bolino's (1996) premise of multiple career anchors. The study, however, used Beck, La Lopa and Hu's (2003) instrument, adapted from Schein's career orientation inventory, called Important versus Satisfaction with Career Anchor Needs, and made some changes in the career anchors' terminology, such as 'be a position of leadership' (for *managerial competence*) and 'servicing needs of others' (for *service*). Therefore, it raises questions about the extent to which the findings can be generalised and compared with other studies.

Custodio (2000) conducted a survey study of career anchors of academic executives in four state universities and colleges in the Philippines. The results of the study showed that the *lifestyle* anchor was the most dominant career anchor among academic executives, and that the least importance anchor was the *organisational stability* anchor. The study also showed that statistically the second-order factor analysis clustered two factors: Factor 1 (*autonomy*, *geographical security*, *entrepreneurial creativity*, *technical competence* and *organisational stability*) and Factor 2 (*lifestyle, sense of service* and *managerial competence*). As in Schein's (1990) study, the dominance of the *lifestyle* anchor in this study also could be caused by the fact that the sample was more than 50 percent female. Interestingly, however, the output of the first- and second-order factor analysis of Factor 1 placed *economic security* as the least important anchor. This contradicts Schein's claim that the *security/stability* anchor would be common in those

working in the civil service. It is also surprising that no academics clung to *pure challenge* as their dominant anchor. For this, Custodio argued that their respondents might view challenges in academic work 'as a natural thing' (p. 8) – routine work and easy to do. Although this study falls into the category of academics in the public sector in the Philippines, it is uncertain whether the findings can be generalised to academics and public employees in other countries.

In summary, it can be said that the dominant career anchors occur in various professions. The variations found in the research could be due to the sample types, the methodology and instruments used, or the specific location of the studies. La Lopa, Beck and Ghiselli (2009) employed a different instrument from that suggested by Schein. While La Lopa, Beck and Ghiselli conducted the study in the private sector, only Custodio's (2000) study in the Philippines studied the public education sector. More empirical studies, therefore, are certainly required to further develop an understanding of career anchors among academics in the non-western public sector.

Previous studies have used a variety of terminology, based on Schein's original terminology, to represent the nature of their findings. For example, *general managerial competence, lifestyle integration, challenge, entrepreneurship, service and dedication to a cause, sense of service, technical/functional competence, autonomy and independence, job security, organisational stability, geographic security, organisational security, creativity* and *security-job tenure*. The present researcher used nine career anchor dimensions and terms as mentioned in Sub-section 1.1. The rationale for using the nine categories is provided in Chapter 3, Sub-section 3.4.1.

2.4 Redefining the career anchor concept

2.4.1 Feldman and Bolino's concept of career anchors

The first researchers who criticised Schein's career anchor concept (1990; 2006a) were Feldman and Bolino (1996). In disagreeing with Schein's concept that each individual has one dominant career anchor, Feldman and Bolino, after 25 years of first concept published, claimed that, it is possible for individuals to have multiple career anchors consisting of both major and secondary career anchors due to changes in the work environment (Kniveton 2004; Suutari & Taka 2004; Ituma & Simpson 2007). Multiple

career anchors may satisfy multiple career goals (Chapman 2009). They criticised both theoretical and methodological perspectives arguing that because Schein's studies used small sample sizes, the validity and reliability of data were questionable. They also pointed out that on the one hand Schein indicated that an individual can only have a single true career anchor; but on the other hand Schein asserted that because of the life situation, an individual was allowed to have more than one career anchor. Moreover, Schein's speculation on the shift of career anchors' structures had distorted his own claim that basically individuals did not change their career anchors. The differences between career anchor concept developed by Schein's (1978; 2006a) and Feldman and Bolino's (1996) models of career anchors are presented in Table 2.2

Table 2.2: A summary of the differences between Schein's and Feldman and Bolino's career anchor concepts

Schein's concept	Feldman & Bolino's concept
An individual can only have a single dominant career anchor	An individual can have multiple dominant career anchors
Career anchors integrate an individual's talents, needs and values	Career anchors can be differentiated in talents, needs and/or values groups and can be complementary or mutually inconsistent
An individual's career anchor is stable and durable throughout her/his life	Not all career anchors are stable
Any relationship between career anchors and age, gender, marital status, or job tenure is implicit.	Explicit speculation on the relationship between career anchors and demographic background

Source: Feldman & Bolino (1996, pp. 89-102)

Although Schein still believed in his single career anchor, his recent study with van Maanen showed that a person groups her or his career anchor categories (Schein & van Maanen 2013). Further, despite the criticism, some recent studies have observed multiple career anchors according to Schein's concept (e.g., Marshall & Bonner 2003; Suutari & Taka 2004; Orozco-Atienza 2005; Smith 2005; Ituma & Simpson 2007; Klapwijk & Rommes 2009). Specifically, Tan and Quek (2001) found that 33 percent of educators held more than one anchor, and Ramakhrisna and Potosky identified 46 percent of information system's employees doing the same. These findings are discussed in the following sub-section.

2.4.2 Regrouping career anchor dimensions

In relation to the career anchor dimensions, Feldman and Bolino (1996) regrouped Schein's career anchor dimensions. They argued that Schein's model of career anchors and its nine anchor dimensions could be grouped into three components:

1. *talents-based* anchors consisting of *managerial competence*, *technical competence* and *entrepreneurial creativity*;
2. *needs-based* anchors consisting of *economic security, geographical stability, autonomy* and *lifestyle*; and
3. *values-based* anchors consisting of *service* and *pure challenge*.

In a recent analysis of the anchor categories, Schein and van Maanen (2013, p. 9) classified the career anchor categories into groups based on 'the anchor functions and its impact on career decision making'. They outlined four groups: (1) competent, including *technical competence* and *managerial competence*; (2) Motives or needs consisting of *autonomy*, *security/stability*, *entrepreneurial creativity* and *service*; (3) neither values nor motives, in which they placed *pure challenge*; and (4) not specific to a career, in which they placed *lifestyle*. They specifically argued that because the *pure challenge* anchor was a combination of 'personality characteristics and problem-solving style' (p. 14), the anchor could not reflect either values or motives. The *lifestyle* anchor also could not be grouped because the anchor was 'an integration of career and family issues' (p. 15). The classifications of multiple groups-based anchors according to Schein and van Maanen (2013) and Feldman and Bolino (1996) are presented in Table 2.3.

Even though Schein and van Maanen did not openly claim that individuals were now more likely to have multiple anchors, the groupings of career categories indicate the word 'multiple'. Because the notion offered by Schein and van Maanen was still in the early stages, with no further discussion except the regrouped categories, Feldman and Bolino's (1996) refinement of career anchors was therefore used as a basis for the multiple career anchors analysis in the current study.

Table 2.3: Multiple groups-based career anchors

Feldman & Bolino's regroup		**Schein's regroup**		
Categories	Multiple groups	Multiple groups	Categories	Notes
Technical competence	Talents-based	Competent	Technical competence	-
Managerial competence			Managerial competence	
Entrepreneurial creativity				
Economic security	Needs-based	Needs or Motives	Security/stability	
Geographical stability			Autonomy	
Autonomy			Entrepreneurial creativity	
			Service	
Lifestyle		-	Lifestyle	Integration of career and family issues
Service	Values-based	-	Pure challenge	Neither Values nor Motives
Pure challenge				

Sources: Feldman & Bolino (1996, p. 96); Schein & van Maanen (2013, pp. 9-15)

Feldman and Bolino (1996) stated that it was possible for individuals to have two or more career anchor categories. They argued that the reason behind an individual having multiple anchor categories was the career anchor concept itself. The concept allows an individual to hold an anchor category incorporating her or his talents and values or needs. It means that one can have *talents-based* and *needs-based* or *values-based* anchors. Multiple career anchors appeared because (1) Schein's typology included career anchors that did not solely address career issues; for example, individuals could hold more than one dominant career anchor, one *talents-based* and another *needs-based*; and (2) individuals might have high levels of personal ambivalence because of two equally attractive goals (Feldman & Bolino 1996, p. 99). Their argument is also supported by the current economic situation, in which an individual is likely to have multiple jobs (Yarnall 1998; Byrd 2001). Thus, many individuals may be trying to combine multiple career goals and personal interests into some types of viable career track in relation to career satisfaction (Kniveton 2004; Baruch 2006; Mays 2007).

Limited empirical research was found to examine the multiple groups-based anchors concept. One study conducted by Kniveton (2004) indicated the existence of the multiple anchors. Using the interview method, the study examined managers' career

anchors in the U.K., and the results showed that younger participants anchored on *talents-based* anchors while older people held *needs-based* anchors. However, the study grouped the data on an individual basis. An identified single dominant career anchor was categorised as *talents-based, needs-based* and *values-based* anchors. No overall results could be compared between the three multiple groups-based anchors to understand multiple anchors as a whole. The study also used a different group of samples from that used in the current study sample of academics. Thus, it is uncertain whether the findings support the idea of multiple groups-based anchors.

2.4.3 Career anchor relationship pairs

The cluster of career anchors' structures also attracts further attention from the perspective of the magnitude of the relationships between anchors. Feldman and Bolino (1996) applied factor analysis to measure the independency of each factor and argued that individuals with multiple career anchors can be classified as having career anchors that are either *complementary* (e.g., *technical competence* and *pure challenge*) or *mutually exclusive* (e.g., *security* and *entrepreneurial creativity*). They stated that 'some career orientations are fairly similar to each other while others are quite orthogonal' (Feldman & Bolino 1996, p. 105). The *security, service* and *lifestyle* anchors would group together while the *entrepreneurial creativity* anchor would be opposed to the *security* anchor. They hypothesised that individuals in a private sector research and development laboratory might have both the *technical competence* and *pure challenge* anchors, whereas staff researchers from a government service might have the *technical competence* and *security/stability* anchors. Feldman and Bolino took further examination by drawing the anchor pairs to an octagonal diagram, as shown in Figure 2.1.

Although Schein believed that an individual has only one true career anchor, he recognised that an individual would have another anchor in fulfilling a feeling of satisfaction. Schein (1980) then made a prediction of the orthogonal relationships between the anchors. The pairs were different from those proposed by Feldman and Bolino. Schein paired *managerial competence* in opposition to *technical competence*, *pure challenge* to *lifestyle*, *service* to *entrepreneurial creativity* and *security/stability* to *autonomy*. No complementary relationship pairs were presented. However, Chapman (2009) argued that individuals could not be categorised as having *mutually exclusive*

anchors since most people were more concerned with combining *complementary* anchors as proposed by Feldman and Bolino. Nevertheless, further examination is needed to determine the relationship between multiple career anchors, whether the anchors are *complementary* or *mutually exclusive* (Feldman & Bolino 1996), or whether of congruent or contradictory dimensions (Suutari & Taka 2004; Barclay 2009). In addition, Chapman (2009) recommended using statistical analysis to identify the two types of anchor relationships in a pair.

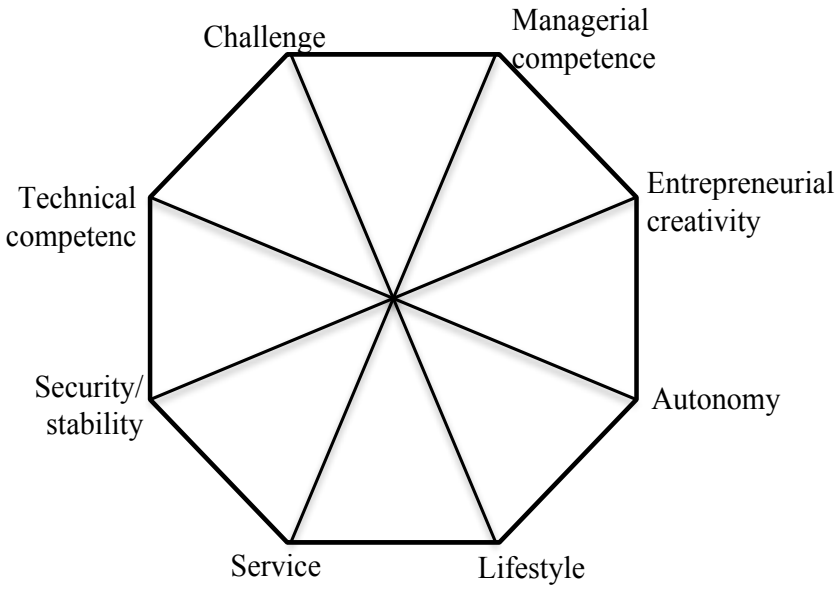

Figure 2.1: Octagonal diagram

Source: Feldman & Bolino (1996, p. 106)

Three key points can be drawn from the above discussion. First, recent studies have demonstrated that the existence of multiple career anchors, either based on Schein's single career anchor, or the *needs-based, talents-based, values-based* grouping, or the *complementary or mutually exclusive* anchors. It means that Schein's (1978; 1980) initial claim stating that a person can only hold one stable career anchor can be rejected. Second, it points to the need to test the validity of the concept of groups of anchors. Third, it highlighted that further empirical studies are needed to confirm claims of multiple career anchors and their relationships. The current study took these issues into account for further investigation.

2.5 Job satisfaction and career anchors

Job satisfaction has widely been studied by scholars in the organisational behaviour area (Martin & Roodt 2008; Lumley 2009). Job satisfaction is generally related to individuals' attitudes or reaction regarding their job (Robbins 2005). Menon (1999) and Spector (2008) stated that individuals feel satisfied in their jobs when their perceived needs are fulfilled and they receive respect from their organisations while job dissatisfaction occurs when individuals' perception of their work is discouraged and their objectives are not accomplished.

Job satisfaction can be described as the result of an interaction between individuals' emotional responses and organisational environment in the workplace. Ivancevich and Konopaske (2010) said that fit between individuals and organisations results in a level of job satisfaction. Instead of referring to the cognitive work satisfaction that values extrinsic aspects, like payment, pension or work hours, job satisfaction generally reflects an affective work orientation and attitude toward individuals and employer (Martin & Roodt 2008). The affective orientation results in organisational effectiveness (Saari & Judge 2004). Affective work involves individuals' emotional feelings toward the content of (the) work (for which) they are responsible. Collins (2007, p. 17) added the function of job satisfaction to a social exchange by stressing that 'identifying the factors that impact job satisfaction can benefit society' and 'by understanding the antecedents to job satisfaction' individuals can increase the self-efficacy of their organisations. Individuals will enjoy their work when it fits their abilities and values, resulting in positive work attitudes such as job satisfaction (Robbins 2005).

Job satisfaction also refers to 'a pleasure or positive emotional state resulting from the appraisal of one's job or job experience' (Locke 1976, p. 1304). Locke's concept was that satisfaction is a reaction to the results of the overall evaluation of one's job, whether the job meets one's values and the values meet one's needs. For instance, when an individual values competition, she or he will be happy when a task assignment or a position provides a situation that allows her or him to compete with others.

Job satisfaction can be measured from two forms. Extrinsic job satisfaction results from organisation facets, such as culture, relationships, policies, procedures, salary and organisational support, while intrinsic job satisfaction results from job facets, such as

tasks, the nature of the work itself and the degree to which one finds it interesting (Levi 2006, pp. 30-31). The relationship between the intrinsic and extrinsic factors is clear. For example, an individual might be satisfied with the tasks but not with the relations to colleagues. Job satisfaction in the current study refers to the intrinsic factors that measure individuals' tasks, values and needs.

Conceptually, the job satisfaction model constructed by Locke reflects the outcome of career anchors. A career anchor is an intrinsic motivation as if an individual works away from the areas of her or his competencies, motives/needs and values she or he will feel dissatisfied because they feel that 'this is not really me' (Schein 2006a, p. 2; Schein & van Maanen 2013, p. 1). Locke's concept is a basis for the understanding of job satisfaction used by other scholars (e.g., Robbins & Coulter 1996; Susskind et al. 2000) and has been used in the current study.

Hence, it can be said that higher job satisfaction contributes to individuals' decisions to move from one to another organisation. Individuals with lower levels of satisfaction, or who are completely dissatisfied, will leave their jobs. These types of individuals usually have strong career decision-making skills that lead them to choose their careers based on their own career preferences and orientations as reflected in their career anchors and their economic and social context (Schreuder & Theron 1997; Byrd 2001; Lumley 2007). The congruence between individuals' motivational career goals and environmental context can influence the job satisfaction level (Spector 1997).

Schein (1990) recognised the impact of interaction between an internal motivation toward individuals' careers and work environment on job satisfaction. He emphasised that the fit of one's career anchors and work environment could contribute positively to career-related outcomes, such as high job satisfaction (Feldman & Bolino 1996; Ellison & Schreuder 2000; Baruch 2004b; Levi 2006; Dazinger, Rahman-Moore & Valency 2008). Conversely, the major negative outcomes from a mismatch, according to Schein (1978, p. 107), were turnover, complacency/demotivation and 'dead wood' because of being forced to stay (Igbaria, Kassicieh & Silver, 1999). Unfortunately, Schein's assumption has not been empirically tested for validity. Dissatisfaction can also be influenced by multiple career anchors (Feldman & Bolino 1996; Tan & Quek 2001), age and workload (Puryear 1996), economic conditions and political situations (Godfrey

2005; Ituma & Simpson 2007; La Lopa, Beck & Ghiselli 2009; Singh, Battacharjee & Kodwani 2009), and changing jobs, work and employers (Elfering, Semmer & Kaelin 2000; Dorman & Zapf 2001). Recent studies have used these variables in examining the influences of career anchors in various samples and locations other than those examined in the current study, and support Schein's proposition. In addition, Bowling, Beehr and Lepisto (2006, p. 316) stressed that the 'work environment also affects job satisfaction'.

Furthermore, Feldman and Bolino (1996) claimed that the mutually exclusive career anchors for individuals would increase risk in their work environment. They proposed that those individuals who held *complementary* anchors would have positive career outcomes. Because the proposition has not yet been tested, more empirical studies are needed to confirm the claim.

Feldman and Bolino (2000) also emphasised the relationship between their career anchors typologies and career outcomes. They stated that *talents-based, needs-based* or *values-based* anchors influenced *job satisfaction* and other career outcomes (p. 97). They found that career anchors did affect *job satisfaction*, life satisfaction, psychological well-being, skill utilisation and career planning towards the individual's career motivation (Schein 1990; Feldman & Bolino 2000). However, their research used a sample of self-employed workers, and thus, it does not add much value to the current study.

Some other prior studies have also revealed the association between career anchors and job satisfaction. Igbaria and Baroudi (1993) reported that, with the exception of the *security/stability* and *service* anchors, other career anchors had a statistically significant correlation with career satisfaction, but this correlation was rather weak and inconclusive. Similarly, career anchors related to job satisfaction have been found in a study of school principals (Puryear 1996), school educators (Tan & Quek 2001), information technology employees (McMurtrey et al. 2002), entrepreneurs (Dazinger & Valency 2006), and police staff (Steele & Francis-Smythe 2008).

Not only were the samples not academics in higher education institutions (as in the current study), but reviews have pointed out that each of the studies used different measurements. Tan and Quek used the Michigan Organizational Assessment

Questionnaire and Feldman and Bolino used Hackman and Oldham's (1975) overall job satisfaction scale. The present researcher has also taken into account Igbaria and Baroudi's (1993, p. 44) suggestion of exploring the relationship between career anchors and job satisfaction as a job outcome in which understanding of the cause-effect of two variables was 'one more step in making' the career development process manageable.

2.6 Psychological empowerment and job satisfaction

The word 'empowerment' has become popular, albeit controversial, as a means to stimulate and manage change in organisations (Conger & Kanungo 1998) and to increase employees' satisfaction and performance in the workplace. In leadership, empowerment has been viewed as sharing of authority and control (Bandura 1997); in the structural approach, empowerment refers to an involvement in making decision (Menon 2001); and in the motivational approach, empowerment is seen as enhancing self-efficacy (Conger & Kanungo 1998). Self-efficacy is a central of concept of empowerment in which individuals believe in her or his capabilities to perform their work (Bandura 1997). It directs individuals' behaviours from inside to produce, succeed and achieve work outcomes. Because the empowerment state is generated from individuals' internal desire, and because it drives individuals to shape work roles (Thomas & Velthouse 1990), it can be argued that the three approaches reflect personal intrinsic motivation (Beach 1996). From a psychological perspective, Menon (2001) posited that empowerment implies that the individual has a sense of autonomy over her or his work. It can mediate empowering acts and individual outcomes, such as job satisfaction. The feelings of empowerment or disempowerment of individuals are also influenced by actual managers' behaviours, work condition and individual factors (Collins 2007) leading to the level of job satisfaction.

In the workplace, typically, employees as individuals want to engage in, and have self-efficacy in their work environment. They want to feel a strong personal efficacy and control rather than just share power (Conger & Kanungo 1998). Conger and Kanungo (1998), and Quinn and Spreitzer (1997) emphasised that psychological state plays an important role in empowering individuals to be effective and creative in achieving organisations' goals. Unfortunately, as claimed by Collins (2007), literature on psychological empowerment is limited, most studies cite the framework of Conger and

Kanungo (1988), Zimmerman (1990), Thomas and Velthouse (1990), Spritzer (1995) or Menon (2001) in studying psychological empowerment.

As discussed earlier, the framework of psychological empowerment is derived from the work of Thomas and Velthouse (1990) and Conger and Kanungo (1998), who advanced the notion of self-efficacy by introducing a proactive behaviour orientation (Spreitzer 1997; Lee & Koh 2001; Bordin, Bartram & Casimir 2007). This gives an opportunity to individuals to use their power in the form of self-efficacy and autonomy to perform tasks (Spreitzer 1995; Menon & Kotze 2007). Along with changes in the work environment that promote self-development, the understanding of empowerment is more concerned with the intrinsic motivation of work-role tasks to increase individuals' power (Spreitzer 1995; Kraimer, Seibert & Liden 1999). The notion of empowerment is more a psychological mind-set as Quinn and Spreitzer's (1997, p. 41) claim that 'empowerment' is not something that management does to employees, but rather a mind-set that employees have about their role in the organisation. Some scholars have defined psychological empowerment as ability to contribute ideas (Kemp & Dwyer 2001), a subjective state of mind (Potterfield 1999), a cognitive state of mind (Menon 1999) and the intrinsic motivation of work-role tasks (Spreitzer 1995).

Thomas and Velthouse (1990) were the first scholars to outline a psychological approach to empowerment. They introduced four approaches to examine the empowerment at the individual level (Thomas & Velthouse 1990, pp. 672-673): (1) meaningfulness is associated with the values of tasks and activities; (2) impact is related to ability to 'make a difference' to the organisation's performance by making a contribution; (3) competence concerns an individual's ability to perform tasks; and (4) choice is 'causal responsibility for (the individual's own) action'. This approach is widely accepted by researchers. However, Thomas and Velthouse's methods tended to be mainly limited to the cognitive aspect, even though they also included the positive affective cognition aspect to a lesser degree.

Spreitzer (1995) applied and operationalised the empowerment concept developed by Thomas and Velthouse (1990) to assess the empowerment from the intrinsic task motivation perspective. She developed a similar four-facet scale replacing *meaningfulness* with *meaning* and *choice* with *self-determination* (Spreitzer 1995, pp.

1450-1451). *Meaning* was developed according to Tymon's (1988) study, *self-determination* used Hackman and Oldham's (1975) autonomy scale, *competence* was built on Jones' (1986) self-efficacy measure, and *impact* was established using a helplessness scale studied by Ashforth (1989). The results showed that *meaning, competence, self-determination* and *impact* cognitions are strong intrinsic task motivations. Spreitzer, therefore, referred to psychological empowerment 'as a motivational construct manifested in four dimensions: *meaning, competence, self-determination* and *impact*' (p. 1444). The characteristics of each of these facets are presented in Table 2.4.

Table 2.4: Psychological empowerment dimensions and their description

Dimensions	Description
Meaning	A fit between the requirements of a work role and own belief, values and behaviours.
Competence	An individual's belief in his or her capability to perform activities with skill.
Self-determination	An individual's sense of having choice in initiating and regulating actions.
Impact	The degree to which an individual can influence strategic, administrative, or operating outcomes at work.

Source: Spreitzer (1995, pp. 1443-1444)

The psychological empowerment scale then was validated and the results were reliable and valid (further discussion on the scale appears in Chapter Three, Sub-section 3.4.1). Spreitzer argued that an overall construct of the four facets would measure the degree of empowerment feelings, as Thomas and Velthouse (1990) claimed for their multifaceted construct of empowerment. In other words, one needs to look at all dimensions, not just one or two dimensions. Because the current study was based on ideas deriving from internal career motivation, Spreitzer's psychological empowerment conceptual framework was employed.

Psychologically, the feeling of empowerment is essential because it enhances the value of work and increases the level of job satisfaction (Spreitzer 1996, 1997; Spreitzer, Kizilos & Nason 1997; Bordin, Bartram & Casimir 2007; Zhu 2008; Dhladhla 2011). A high feeling of psychological empowerment will increase organisational self-efficacy since employees experiencing 'a high level of self-determination or choice in

performing a task are more likely to feel empowered and initiate action in an effort to control or impact outcomes' (George & Hancer 2004; Collins 2007, p. 25). Thomas and Tymon (1994, p. 2) asserted that 'because the task assessments generate intrinsic rewards associated with the job, they should be positively related to job satisfaction'. Spreitzer, Kizilos and Nelson (1997) argued that once individuals feel their work is meaningful, they feel satisfied with the work. Moreover, job satisfaction is the first anticipated outcome of psychological empowerment in achieving organisational goals (Spreitzer 1997).

Some studies have examined the relationship of these two constructs in various areas, with varied findings. For example, Spreitzer, Kizilos and Nason (1997) found no evidence of a significant relationship between the facet of *self-determination* and *job satisfaction*, while Dickson and Lorenz (2009) found a negative relationship. George and Hancer's (2004) study showed that psychological empowerment had a modest significant influence on job satisfaction in service organisations but they only measured three dimensions of empowerment (*meaningfulness, competence* and *influence*). This fails to accommodate the multifaceted concept of empowerment. Dickson and Lorenz (2009) found a positive influence on *job satisfaction* by *meaning* and *impact*, while Wang and Lee (2009) found that only *impact* had no influence. In Schermuly, Schermuly and Meyer's (2011) study, the results showed that the two strongest predictors of an outcome, including *job satisfaction*, were *competence* and *meaning*. Other researchers have found a strong correlation of between the four cognitions (i.e., *meaning, impact, competence* and *self-determination*) and *job satisfaction* (e.g., Chan 2003; Carless 2004; George & Hancer 2004; Hechanova, Alampay & Franco 2006; Meyerson & Kline 2007; Uner & Turan 2010; Chung 2012).

The variability of findings can be due to several reasons. Although all studies reviewed used the same measurement for psychological empowerment, the backgrounds of the samples differed, which can lead to different perceptions and attitudinal outcomes. For instance, Dickson and Lorenz (2009) used students as nonstandard part-time employees in their study in the U.S. while Schermuly, Schermuly and Meyer (2011) used vice principals of primary schools. Carless (2004) conducted her study on customer service employees at a service organisation in Australia. Although Carless's study is in the public sector, the sample does not include academics. Moreover, each study uses

different instruments of job satisfaction, such as Dickson and Lorenz used the managerial job satisfaction questionnaire developed by Celluci and DeVries (1978), while Spreitzer, Kizilos and Nason (1997) applied the job satisfaction scale developed by Smith, Kendall and Hulin (1969). This present study explored the relationship between psychological empowerment and job satisfaction on academics in the Indonesian public higher education context. Psychological empowerment was measured by using Spreitzer's (1995) four dimensions.

2.7 Linking career anchors, psychological empowerment and job satisfaction

There is a strong argument from Martin (2008) and Igbaria and Guimareas (1999) that job satisfaction is an individual's positive reaction derived from various facets of career experiences in organisations. Individuals will be satisfied with their jobs when their needs, beliefs and values are engaged in the workplace. As Schein (2006a, pp. 5-6) emphasised, when individuals know their career anchors, they empower themselves to confront career choices and decisions, and thus feel satisfied with their jobs. It is argued that individuals can apply their anchors to reach higher job satisfaction levels through higher levels of empowerment in the workplace.

The relationship between career anchors and job satisfaction has been recognised in some studies (e.g., Feldman & Bolino 2000; Hardin, Stocks & Graves 2001; Dazinger & Valency 2006; Steele & Francis-Smythe 2008). Studies have shown that having more than one career anchor and/or a mismatch between career anchors and work-roles lead to dissatisfaction whereas having one, or having a good match between career anchors and work-roles leads to greater satisfaction. There is an indication that when individuals' career anchors are engaged with their work-roles, they have feelings of empowerment, which lead to a feeling of satisfaction in the workplace. Carless (2004) noted that when employees worked in accordance with their beliefs, attitudes and behaviours (which were represented by career anchors), they would perform tasks more effectively and achieve higher levels of job satisfaction. Conversely, feelings of dissatisfaction may be due to the absence of empowerment in applying individuals' values, needs and abilities to their career (Ding & Lin 2006). As Schein (2006a, p. 49) determined, 'employee empowerment has taken on almost fad status'. This indicates

that individuals' occupational concept may influence and interact with empowerment and satisfaction. Furthermore, studies have strongly highlighted the mediating role of psychological empowerment between individuals' behaviours and organisational attitudes (e.g., Chang, Shih & Lin 2010). It is, therefore, argued that psychological empowerment may mediate the relationship between career anchors and job satisfaction.

Some previous studies have treated psychological empowerment as a mediating variable in various topics. Liden, Wayne and Sparrow (2000) found that the *meaning* and *competence* dimensions mediated the relationship between job characteristics and *job satisfaction* (p. 419). Carless's (2004) study found that *self-determination* did not predict the relationship between psychological climate and *job satisfaction*. Chang, Shih and Lin (2010) found that psychological empowerment partially mediated the relationship between organisational empowerment and job satisfaction.

Other scholars measure psychological empowerment as a mediator of the relationship between types of leadership behaviours and various work outcomes (e.g., Zhu, May & Avolio 2004; Collins 2007; Castro, Perinan & Bueno 2008; Dhladhla 2011; Lee & Kim 2013). Some studies used psychological empowerment as a mediator between work environment and emotional exhaustion and intention to stay (e.g., Lee, Weaver & Hrostowki 2011).

There have been no studies on career anchors that examine psychological empowerment as a mediating variable in a relationship between career anchors and job satisfaction. The current study, therefore, addresses this gap.

2.8 The role of demographic data

Demographic variables influence the career anchors chosen, the feelings of empowerment and the degree of job satisfaction. Although Schein (1978) did not clearly state the influences of demographic variables on career anchors (Feldman & Bolino 1996), the studies with his students found some indications of the effect of gender, education and work experiences. Some previous studies also showed the selected

demographic data on career anchor, psychological empowerment and job satisfaction as discussed below.

Gender

Schein (1977b) noted that the *lifestyle* and *service* anchors emerged from the responses of female samples. Some empirical studies conducted on the various samples different from the current study's respondents have found that gender is related to career anchors (Feldman & Bolino 2000; Marshall & Bonner 2003; Singh, Bhattacharjee & Kodwani 2009; Weber & Ladkin 2009). Ituma and Simpson (2007) found that females oriented to *being balanced* (*lifestyle* anchor) and males reported *being-in-charge* (*pure challenge* anchor). Dazinger and Valency (2006) also reported that *lifestyle* was female preferred anchor, while Weber and Ladkin (2009) found that males valued *entrepreneurial creativity* and *pure challenge*. In relation to psychological empowerment, gender was found to influence and control individuals' empowerment (e.g., Spreitzer 1996; Hechanova, Alampay & Franco 2006; Dickson & Lorenz 2009). Females scored higher on *self-determination* in Wang and Zang's (2012) teacher sample. Feldman and Bolino (2000) reported that female self-employed respondents scored higher on *job satisfaction*. Thus, gender may influence career anchors, psychological empowerment and job satisfaction.

Education

Schein (1977b) highlighted that highly intellectual individuals tended to hold *autonomy* as their career anchor, while less-intellectuals preferred *entrepreneurial creativity*. The holding of higher degrees has been found to be related to *technical competence* and *pure challenge* (Singh, Bhattacharjee & Kodwani 2009). However, Feldman and Bolino (2000), and Ituma and Simpson (2007) reported that educational levels were not correlated with career anchors. Spreitzer (1996) suggested that education level might be related to psychological empowerment because well-educated workers felt competent to perform tasks but simultaneously felt dissatisfaction with part-time jobs (Dickson & Lorenz 2009). The various results suggest that education may influence career anchors, psychological empowerment and job satisfaction.

Work experiences

Schein (2006a) stated that in order to find their career anchors, individuals need at least five years of experience in the workplace. However, other studies have demonstrated that this period could be from three to five years (Puryear 1996, p. 12), or from eight to 10 years (Singh, Bhattacharjee & Kodwani 2009, p. 51). Hardin, Stocks and Graves (2001), in studying accountants' anchors, found that work experiences did not influence career anchors, while May (2007) found the opposite. Although limited research was found to study the relationships of work experience and the three variables, the current study argues that work experience influences individuals in deciding their career anchors, achieving job satisfaction and empowering their competency and values.

Age

A relationship between age groups and career anchors has been found in different groups of samples. Age was a predictor of *technical competence* for Australian and American respondents in a study done by Marshall and Bonner (2003). Older employees held the *being-in-charge* and *being balanced* anchors (Ituma & Simpson 2007). Older hospitality and tourism faculty who held the *job security, geographical location* and *managerial competence* anchors had the lowest turnover intentions (La Lopa, Beck & Ghiselli 2009). However, Feldman and Bolino (2000) and Singh, Bhatttacharjee and Kodwani (2009) found that age made no difference in career anchors. Kniveton (2004) reported that younger participants held *talents-based* anchors, while older group oriented to *needs-based* anchors. Related to psychological empowerment, Kanter (1977) found that older middle managers felt less empowered, while Wang and Zang (2012) found that teachers who had been in the field for 21-25 years scored higher on *self-determination*. Although no studies were reviewed on job satisfaction, studies of both career anchors and psychological empowerment show that they are related to age. Thus, age was included as a factor in the present analysis.

Institution size

The researcher has not found any studies examining institution size in relation to career anchors, psychological empowerment, or job satisfaction. It is predicted that the institution size variable is likely to be associated with the career anchors, psychological empowerment and job satisfaction construct.

Demographic factors have been treated as control variables in many studies (e.g., (Spreizter, Kizilos & Nason 1997; Tan & Quek 2001; Dickson & Lorenz 2009). Bhattacherjee (2012, p. 12) claimed that '…other extraneous variables that are not pertinent to explaining a given dependent variable, but may have some impact on the dependent variable…must be controlled for'. The demographic variables in the current study, therefore, were examined to minimise any possible specious effects on the dependent variables, as Wook and Won (2013, p. 380) pointed out that the variables examined 'may have systematic relationships with the participants' psychological resource capacities'.

2.9 Conceptual framework and research model

The concept of career anchors has been developing since the concept was first published (see Sub-sections 2.3, 2.4 and 2.5). Originally, the career anchor concept was developed from the perspective of single dominant career anchor (Schein 1977a), which individuals would not give up if they 'faced a career decision that might not allow them to fulfil it' (Schein and van Maanen 2013, p. 1). Career anchor is one's self-occupational concept consisting of talents, motives and values and is formed through at least five years of work experience. From nine anchor categories that he introduced, Schein, himself, however, also indicated that individuals could have several anchors before the stability of their career anchor emerged (Schein 2006a). Individual anchors, therefore, might complement each other. By contrast, Schein further noted that one anchor might oppose another one, such as *managerial competence* as opposed to *technical competence*. Feldman and Bolino (1996), subsequently, critiqued Schein's premise and proposed the multiple career anchors concept for individuals facing changes in the work environment. They regrouped Schein's nine categories into three multiple groups-based anchors and proposed *complementary* and *mutually exclusive* anchors (see Sub-section 2.4.2). Schein and van Maanen (2013) recently categorised career anchor categories into competence, motives or needs and neither values nor motives (see Table 2.3). On the one hand, Schein's single career anchor concept has been studied widely by researchers (e.g., Weber & Ladkin 2009; Chang et al. 2011); on the other hand, several studies have found the existence of multiple career anchors (e.g., Smith 2005; Ituma & Simpson 2007). Despite the argument of single or multiple

dominant anchors, both Schein and Feldman and Bolino agreed that congruence between one's career anchors and job environment would lead to higher job satisfaction.

Because career anchor refers to an intrinsic motivation, when individuals have decided their true anchors, they will empower themselves in the workplace. As discussed earlier in Sub-section 2.6, empowerment psychologically is a feeling of autonomy over one's work and of self-efficacy in the workplace – a concept introduced by Thomas and Velthouse (1990) and Conger and Kanungo (1998). It reflects individuals' intrinsic motivation to provide energy to set and keep work-roles. Psychological state is an important condition in empowering individuals to perform and achieve organisations' goals as well as one's own satisfaction. Deriving from the intrinsic motivation of work-role tasks, Spreitzer (1995) translated the psychological empowerment concept into four facets: *meaning, impact, competence* and *self-development* (see Table 2.4) and stressed that all those facets should be measured. Feeling meaningful at work by applying talents, needs and values (or career anchors) and making contribution to the organisation will enhance job satisfaction. As Schein (1990) stated, the absence of individual empathy with content of work caused job dissatisfaction. It shows that fit between career anchors and work-role will strengthen feelings of empowerment and impact on job satisfaction levels. The empowerment can, therefore, mediate empowering action and individuals' satisfaction.

As discussed in Sub-section 2.8, the decision to choose dominant career anchors and the feelings of empowerment and satisfaction can be affected by individuals' demographic background, such as gender, age, education, work experience and size of institution. The relationship between career anchors, psychological empowerment, job satisfaction and demographic variables is shown in Figure 2.2.

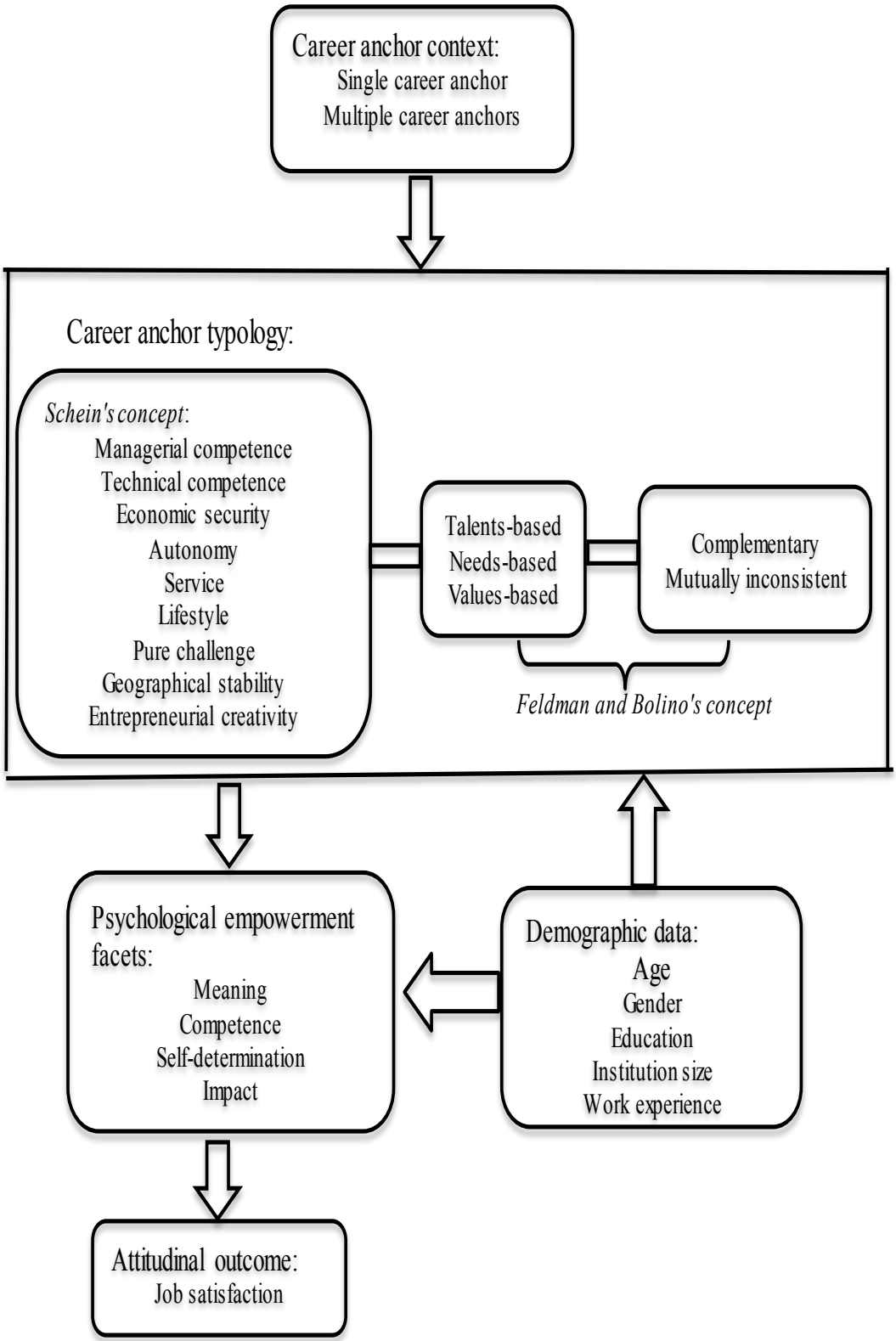

Figure 2.2: Conceptual framework

The current study aimed to investigate whether the career anchors of academics influenced psychological empowerment and job satisfaction (see Figure 2.3). The concept of career anchors reviewed in Sub-sections 2.5, 2.6 and 2.7 stated that individuals' dominant career anchors influenced their perceptions of how they should behave and be empowered in the workplace; when individuals are empowered in line with their career anchors, they can achieve the degree of job satisfaction (shown as solid line arrow →). Every individual, therefore, should observe and understand her or his career journey before deciding what kind of career they wish to pursue throughout their life, including their perception of empowerment and satisfaction in the workplace (shown as dotted line arrows - - →). The dominant career anchors were examined using a survey questionnaire and protocol interviews.

Career anchors and psychological empowerment were investigated individually in the relationship among the three constructs. Career anchor was introduced as a predictor variable (or an independent variable), and psychological empowerment was used as a mediator variable (or an intervening variable) in the hypothesis testing to select a criterion variable (or a dependent variable). The relationships between career anchors, psychological empowerment and job satisfaction can be illustrated in the research model (Figure 2.3) below.

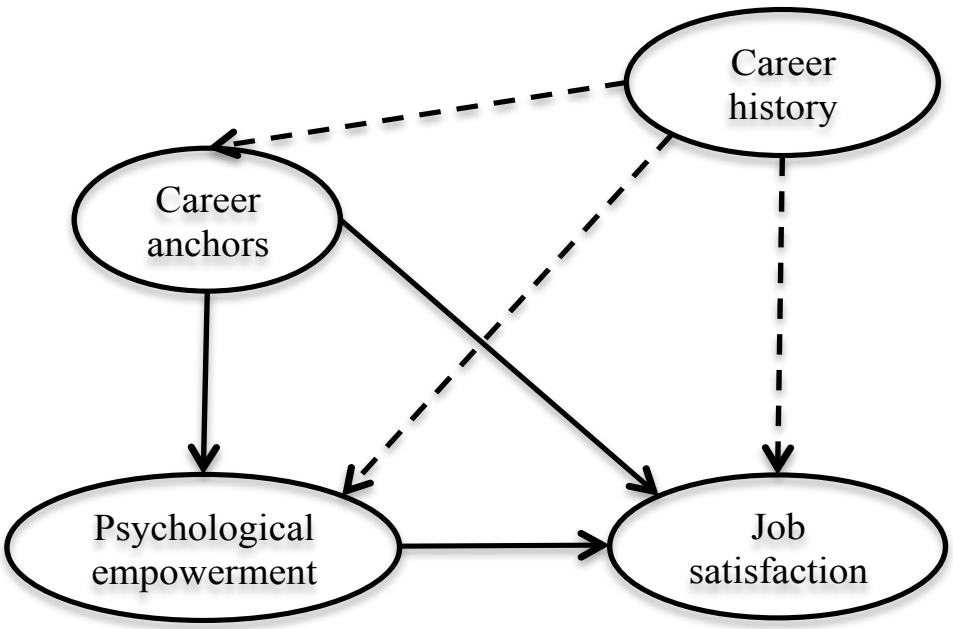

Figure 2.3: Research model

2.10 Hypothesis testing

A hypothesis is defined as a specific prediction of phenomena that can be tested in a study. It is generally used in quantitative studies to make predictions about an expected relationship between the variables. It tests between independent variables and dependent variables. The hypothesis can be stated in terms of null and alternative hypotheses. According to Sekaran and Bougie (2013, p. 84), a null hypothesis (H_0) is defined as 'a hypothesis set up to be rejected in order to support an alternate hypothesis' (H_A). The null hypothesis is expressed 'in terms of there being no significant relationships between two variables or no differences between groups'. On the contrary, the alternative hypothesis refers to a significant relationship between two variables or to differences that exist between groups, and it uses directional statements (e.g., higher, lower, positive, negative, more or less) or nondirectional statements (e.g., there is a relationship between variables X and Y) (Creswell 2009). Whether a study uses null or alternative hypotheses, and directional or nondirectional statements, depends on the theoretical basis and nature of the study. It has been strongly suggested in other studies that dominant career anchors exist, that the anchors influence job satisfaction and that job satisfaction is a primary outcome of psychological empowerment. Similarly, previous studies have shown either a positive or negative prediction on the three variables examined here (see Sub-sections 2.5, 2.6 and 2.7). The current study uses alternative hypotheses that employ both nondirectional and directional statements.

The patterns of the dominant career anchors have varied in previous studies. Custodio (2000) reported that the highest rank order of academic executives was *lifestyle integration* (*lifestyle* category), and the lowest rank was *organisational stability* (*economic security* category). La Lopa, Beck and Ghiselli (2009) found that the most preferred anchor for educators was *balancing career and family* (*lifestyle* category), and the lowest was building a new business or enterprise (*entrepreneurial creativity* category). None had the *pure challenge* anchor. Some other studies showed various dominant career anchors; for example, *pure challenge* for executives (e.g., Singh, Battacharjee & Kodwani 2009) and *being stable* for management information system employees (e.g., Ituma & Simpson 2007). One study done by Kniveton (2004) examined multiple groups-based anchors reported that younger participants tended to

hold *talents-based* anchors and older samples oriented to *needs-based* anchors. The proposed hypotheses for the current study, therefore, were:

Hypothesis 1: Indonesian academics score differently on a single dominant career anchor or multiple dominant career anchors.

Hypothesis 2: Indonesian academics score differently on talents-based, needs-based and values-based anchors.

Schein (1992, 2006a) and Feldman and Bolino (1996, 2000) determined that individuals whose their career anchors fit with their job environment would have positive job satisfaction. By contrast, incongruence between the two variables would lessen the feeling of job satisfaction. Individuals feel satisfied when they feel their work is meaningful when their talents, skills and needs are applied at work (Spreitzer 1997). According to Spreitzer (1995, 1997) and Spreitzer et al. (1997), feeling empowered psychologically is important to achieve higher levels of satisfaction at work, and job satisfaction is the first outcome of psychological empowerment.

Research has indicated that there is a relationship between career anchors, job satisfaction and psychological empowerment. For example, Igbaria and Baroudi's (1993) study showed that *managerial competence*, *technical competence*, *entrepreneurship, pure challenge, autonomy* and *lifestyle* had a relationship with *job satisfaction*, although the relationship was weak for the information systems respondents they surveyed. Tan and Quek (2001) reported that *security* and *service* were related positively to extrinsic and intrinsic satisfaction respectively, while a negative relationship was found between *managerial competence* and extrinsic satisfaction, and between *autonomy* and intrinsic satisfaction in a sample of educators. Some studies found no relationship between career anchors and job satisfaction (e.g., Steele & Francis-Smythe 2008), while others found that career anchors were significant predictors of job satisfaction (e.g., Levi 2006).

Some studies showed a significant relationship between empowerment and job satisfaction (e.g., Dickson & Lorenz 2009), while the others revealed no significant correlation (e.g., Meyerson & Kline 2008). Some did report a partial mediating effect of empowerment (e.g., Carless 2004; Chang Shih & Lin 2010; Dhladhla 2011), while

others found *self-determination* contributed to job satisfaction (Chiang & Jang 2008); *meaning, self-determination* and *competence* predicted *job satisfaction* (Dehkordi et al. 2011); or *competence* was the strongest predictor of *job satisfaction* (Schermuly, Schermuly & Meyer 2011). However, no studies have investigated the relationship between career anchors, psychological empowerment and job satisfaction, and the three variables' predictive power in the Indonesian context. The study, therefore, proposed a further series of hypotheses:

Hypothesis 3a*:* Indonesian academics' perceptions of career anchor subscales are positively related to job satisfaction.

Hypothesis 3b: Indonesian academics' career anchor subscales are positively related to psychological empowerment.

Hypothesis 3c: Indonesian academics' perceptions of psychological empowerment facets are positively related to job satisfaction.

Hypothesis 3d: The mediating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction.

Career anchors were examined in the current study from the perspective of a single dominant career anchor as developed by Schein and multiple career anchors as proposed by Feldman and Bolino (1996). Moreover, the study statistically controls for relevant demographic characteristics of the sample, as described above.

Summary

This chapter discussed the theoretical framework used in the current study and reviewed the relevant literature and empirical studies. It presented the traditional and modern perspective of career, including the differences between external and internal career orientation. It discussed the development of the career anchor concept, the career anchor categories and the additions to the merging and separation of the existing career anchor categories. The reconceptualisation of the career anchors, multiple career anchors, the relationship of career anchor pairs and the octagonal diagram were also discussed. The chapter then discussed the job satisfaction model and its relation to career anchors, followed by the discussion of the psychological empowerment concept and its facets, and described how the three constructs related to each other. It then reviewed the

previous empirical studies and the role of demographic variables. The chapter concluded by presenting the conceptual model, the proposed research model and the proposed hypotheses.

The next chapter will discuss the methodology applied to the current study. It will present the approach, the research design, the sampling technique and sample, the construct validity and reliability, and the data analysis design.

Chapter 3
Research Methodology

3.1 Introduction

Chapter One presented the purposes of the study, the research problem and its issues. It also described the Indonesian higher education system and academics' career promotion policy. Chapter Two reviewed the literature on career anchors, psychological empowerment and job satisfaction. Schein's career anchor concept (1978, 1990, 2006a) and the reconceptualisation of career anchors according to Feldman and Bolino (1996) were discussed in detail. The chapter explained the nine single career anchor categories and the multiple-groups-based anchors categories (*talents-based, needs-based,* and *values-based* anchors). The other two proposed anchors – *complementary* and *mutually exclusive* career anchors – and their connection with the octagonal diagram were described. Previous studies on the topic were reviewed. The information gained from the literature then was used to form the research framework for the current study. The chapter also presented the proposed research model, followed by the proposed hypotheses to be tested in this study.

This chapter, Chapter Three, begins with a discussion about the methodology used in the current study. It explains the mixed-methods approach as the currently emerging method in research. The chapter provides the various models that fall under this approach in terms of timing, weighting and mixing of quantitative and qualitative data collections. It presents the research design chosen for the current study discussing the survey questionnaire, interview and open-ended questions. The development of research instruments – the career anchors inventory, the psychological empowerment scale and the job satisfaction scale – and the interview protocol are also described. The details of the sampling and data collection procedures are explained. The chapter discusses the importance of validity measurement and reliability analyses of the instrument used. The results of the pilot study are reported. The last sub-section presents the data analysis design, including the tools used for quantitative and qualitative analysis.

3.2 Methodological approach

A research approach is needed in designing a study to provide guidance about all aspects of the study (Creswell 2009). Research can be conducted using a qualitative approach, a quantitative approach, or an integration of those two approaches, known as mixed-methods research (Bryman 2006). The quantitative approach describes phenomena in nature, explores possible causal association between phenomena including demographic data (Cooper & Schindler 2003; Creswell 2009), tests theories and applies statistical procedures to draw conclusion (Zikmund et al. 2008). Quantitative researchers attempt to make generalisation from their findings, and the study can usually be replicated (Babbie 2004; Creswell 2009). Survey and experimental methods are predominant in this type of research (Creswell 2009). In contrast, the qualitative approach is useful to researchers who are interested in exploring 'individual meaning and the importance of rendering the complexity of situation' (Creswell 2007, 2009, p. 4). The research is used to study social phenomena, environments and people's behaviours (Ticehurst & Veal 2000; Huck 2002; Patton 2002; Murray 2003; Mason 2006). The approach forces researchers to interpret the meaning of the words gathered through interviews or open-ended questions. Strategies, such as ethnography (Creswell 2007), grounded theory (Strauss & Corbin 1998; Charmaz 2006), case study (Stake 1995; Yin 2006) and narrative research (Clandinin & Connelly 2000) are used to conduct a qualitative study.

The emerging mixed-methods approach is designed for researchers who collect data using a combination of the qualitative and quantitative approaches (Yin 2006). Teddlie and Tashakkori (2009) assert the usefulness of 'mixed methods as a vehicle for improving the quality of inferences that are drawn for the quantitative and qualitative methods'. This approach emphasises 'the overall strength of a study [that] is greater than either quantitative or qualitative research' (Creswell 2009, p. 4). For example, quantitative methods tend to use statistical analysis, whereas qualitative methods are done with text analysis, and the mixed methods combine the two types of analysis tools. A summary of the characteristics of the three methods is presented in Table 3.1.

Table 3.1: Characteristics of quantitative, mixed and qualitative methods

Quantitative methods	Mixed-methods	Qualitative methods
Pre-determined	Both pre-determined and emerging methods	Emerging methods
Instrument-based questions	Both open- and closed-ended questions	Open-ended questions
Performance data, attitude data, observational data, and census data	Multiple forms of data drawing on all possibilities	Interview data, document data, and audio-visual data
Statistical analysis	Statistical and text analysis	Text and image analysis
Statistical interpretation	Across databases interpretation	Themes, patterns interpretation

Adopted from: Creswell (2009, p. 15)

The three methods also have their own characteristics of research designs. A quantitative design tests a theory by developing a series of hypotheses and collecting data to decide whether the hypothesis is supported or rejected. Data are usually gathered using a questionnaire that examines attitudes, then analysed using statistical tools and hypothesis testing procedures (Sekaran 2010). In contrast, a qualitative design employs an interview strategy and explores issues related to individual attitudes (Ghauri & Gronhaug 2005). Information can be collected through a story using a narrative approach in which individuals recount their experiences related to the topic researched (Strauss & Corbin 1998).

A mixed-methods design is chosen by researchers because of the strength of quantitative and qualitative approaches when they are combined to provide a deeper understanding. According to Creswell (2009), if the variable is unknown, researchers can explore the phenomenon to determine the variables, and then the variables are studied using a larger sample. However, if the variables are known, researchers can conduct a survey first, followed by interviews with a small number of participants to obtain more specific data. Open-ended questions can also be added to the research instrument. The selection of approaches used depends on the nature of the study, however. The current study was designed to employ the mixed-methods approach to extend an understanding of the present topic researched.

Mixed-methods research is a powerful tool for multidimensional research strategies (Mason 2006). The weaknesses of one method may be covered by other methods. The limitations of qualitative methods, such as bias in interpretation of data and small sample size, can be complemented by the strengths of quantitative methods, which use large sample sizes and statistical tools to analyse the data (Murray 2003). The results of quantitative and qualitative data analyses can be used side by side to validate one another. In the same way, interviews can be used to support statistical results (Creswell & Plano Clarke 2007).

Career anchors can be studied using either qualitative or quantitative methods, or a combination of these two methods. Schein (1977b) himself initially used the structured-interview method to identify individuals' career anchors. Since then, the career anchor inventory has been recommended to use a survey combined with the interview strategy (Schein 1990, 2006a; Schein & van Maanen 2013). In evaluating Schein's methodological approach to studying the career anchors, Feldman and Bolino (1996) reaffirmed the importance of the use of interviews in combination with the career orientation inventory. Previous empirical studies have selected the method that fit their studies' purposes, including qualitative research (e.g., Suutari & Taka 2004), quantitative studies (e.g., Tan & Quek 2001; La Lopa, Beck & Ghiselli 2009) and mixed-methods (e.g., Feldman & Bolino 1996; Ituma & Simpson 2007). The current study explores individuals' behaviours and attitudes in the work environment and investigates the relationship among the variables studied. Hence, this study was designed to employ mixed-methods to attract the advantages of both the qualitative and quantitative methods (Creswell 2009).

3.3 Research design

Research design is a strategy to plan all research procedures for solving research problems (Babbie 2004; Sekaran 2010; Zikmund 2010), including data collection methods and procedures, measurement and data analysis (Cooper & Schindler 2006). More specifically, Cooper and Schindler (2006, p. 139) determined that a study design at least includes: the degree of the research question, the data collection method, the power to produce effects, the purpose of the study, the time dimension, the topical scope, the research environment and the participants' perceptions of research activity.

Sekaran and van Maanen (2013) and Cavana, Delahaye and Sekaran (2001), however, have recommended that researchers focus only on six factors, which they described in somewhat different terms as: the study purpose, the types of investigation, the extent of researcher interference, the study setting, the unit of analysis and the time horizon. Zikmund (2010) explicitly said that sampling is not included in the design, and that survey research is a basic research design. He stated that the objective of the study, the source of information, the research technique and the schedule and cost of research should be carefully considered.

In addition to the components of research design mentioned earlier, there are several important factors that have to be considered when designing data collection using a mixed-methods design. According to Creswell (2009), a good plan of data collection should consider four aspects: timing (sequentially or concurrently), weighting (priority given to either quantitative or qualitative, or equal priority to both), mixing (connecting or integrating the two types of data), and embedding (one form of data is embedded in a larger study). Creswell (2009, pp. 208-216) and Creswell and Plano Clark (2011, pp. 181-183) suggested six designs based on Teddlie and Tashakkori's (2009) data collection procedures. The designs consist of three forms of sequential designs (sequential explanatory-, sequential exploratory- and sequential transformative designs) and three forms of concurrent designs (concurrent triangulation-, concurrent embedded- and concurrent transformative designs).

In the concurrent-triangulation design and the concurrent-embedded design, both quantitative and qualitative data are collected simultaneously. The concurrent-triangulation design (also known as convergent design) is applied to examine a comparative study so as to decide whether the results can be considered confirmation, differences, or cross-validation (Morgan 1998). Generally, while the two methods receive equal emphasis, they use different data collection methods. The mixed-methods design is evident in the interpretation or discussion section when both types of data are integrated side-by-side, named 'integrating' mixed-data. Results of statistical analysis are presented, followed by quotations of participants' opinions whether they support the quantitative analysis results or not.

Unlike the concurrent-triangulation design, in which data analysis merges the two databases, the concurrent-embedded strategy is divided into dominant and supportive methods. In other words, the main method (either quantitative or qualitative) guides the study, and the secondary method (either qualitative or quantitative) acts as supporting data. As a supporting role, the questions are different from the other methods developed. For example, quantitative methods focus questions on the expected outcomes of a relationship between variables using a questionnaire, whereas qualitative methods explore the experiences of individuals in these variables through the interview. The mixing of methods occurs with the integration of these two types of data in the form of comparison or parallel analysis. Theoretical perspectives can be used, especially for the primary method. Due to the different weighting on the two types of data, the results are also unbalanced, especially when comparing the results. This is a drawback of this design. As in the sequential-transformative design, the concurrent-transformative design applies a specific theory. The concurrent-triangulation or embedded approaches, and the mixing methods of integrating, connecting or embedding data can be used.

There are no fixed rules for designing research. Generally, research design consists of, at least, the type of investigation, the data collection method, the researcher's control variables, the unit of analysis, the time frame, the sampling design, the measurement of instrument and the data analysis (Cooper & Emory 1995; Babbie 2004; Sekaran 2010; Sekaran & Bougie 2013). As reviewed in Chapter 2, research on career anchors, psychological empowerment and job satisfaction have been done in most parts of the world employing quantitative methods- (e.g., Custodio 2000; La Lopa, Beck & Ghiselli 2009), qualitative methods- (e.g., Suutari & Taka 2004; Chang et al. 2011), and mixed methods- (e.g., Hardin, Stocks & Graves 2001; Ituma & Simpson 2007) strategies, which contributed significantly to the theories they used, and to the study objectives. Due to the nature of this study, the current study was carried out using the mixed-methods approach and employing the concurrent-embedded mixed-methods procedure and design. As suggested by Creswell (2009, p. 216):

> When time is a problem, I encourage students to think about an embedded model of design. This model emphasizes a major primary form of data (e.g., surveys), and it can include a minor secondary form of data collection (e.g., a few interviews with some of the participants who completed the surveys).

The concurrent-embedded design was employed to solve the research problems in the context of the current study. According to Creswell and Plano Clark (2011, p. 179), each of the six designs gives space to readers and reviewers to make a quality decision. The emphasis of the current study was a quantitative approach, while a qualitative method was used to gather supporting data. Based on the characteristics of concurrent mixed-methods, the survey was carried out first, followed by collection of qualitative interview data. This study is unique because the interviews were conducted primarily to identify the dominant career anchors, following the original source by Schein (1978, 2006a), who used an interview protocol in his study. It was noted from previous studies that a number of standard interview questions not only would not rule out the identification of themes as they emerged but could also be used to support the analysis associated with, for instance, job outcomes (e.g., Hardin, Stocks & Graves 2001), social construct (e.g., Ituma & Simpson 2007) and career stages (e.g., Chang et al. 2011). Two new open-ended questions, another form of qualitative data, were also created and attached to the survey intending to capture perspectives from different angles. Sub-sections 3.3.1.1 and 3.3.1.2 discussed the use of the survey, the interview and the open-ended questions.

The two types of data collection were conducted at the same time. Data gathered were analysed separately, in which survey data as a primary source were analysed using statistical tools, while the interview (and open-ended questions) data as a secondary source were analysed using theme analysis. Quotations were extracted to support identified themes. The integration of data and discussion of the results were done by comparing one results to the other or residing the results side-by-side (or parallel) of two data sources (Teddlie & Tashakkori 2009). Creswell (2009, p. 212) emphasised that this method 'enables the study to be reduced in scope and manageable for the time and resources available'. To overcome the disadvantages, it was suggested to compare the present results to the results of previous studies.

The current study, therefore, was categorised as a field survey employing a cross-sectional study (at one point in time). Unlike a longitudinal study, which uses the same people over a long-term period, a cross-sectional study is a form of survey data collection methods that examines individuals within selected groups or targeted population at one specific point in time (Tolmie, Muijs & McAteer 2011, Zikmund et al.

2013). The data-gathering period can be days, weeks or months (Sekaran & Bougie 2013). The cross-sectional design saves time and captures data concisely without fear that respondents would change their minds over time. The present research design for each strategy was developed in the following sub-section.

3.3.1 Survey research

Survey research aims to gather data first-hand. According to Zikmund et al. (2013, p. 185), '…surveys attempt to describe what is happening or to learn the reasons'. The survey provides data that are related to individuals' thoughts, behaviours and preferences in the area studied (Babbie 2004, Creswell 2009, Bhattacherjee 2012), and the data can be both quantitative and qualitative (Sekaran & Bougie 2013). Depending on the research design, a survey can be done through either interviews (qualitative) or questionnaires (quantitative) (Gay & Dhiel 2004; Ghauri & Gronhaug 2005; Creswell 2009), or a combination of both strategies (Creswell 2009; Bhattacherjee 2012). Zikmund et al. (2013) noted that the types of data may vary depending on the purpose of the research. As previously explained, this study was designed to use the mixed-methods approach using survey questionnaires, interviews and open-ended questions.

3.3.1.1 Survey questionnaire

A questionnaire is a means for a survey 'consisting of a set of questions (items) intended to capture responses from respondents in a standard manner' (Bhattacherjee 2012, p. 74) and in the form of numeric data (Creswell 2009). There are two types of self-administered survey instruments: paper-based and web-based questionnaires. Paper-based questionnaires can be delivered via the postal system, an in-person drop-off, or hand-delivery to workplaces (Sekaran 2010). The mail survey also provides confidentiality, anonymity and flexibility in when respondents answer the questions, reaches a wide range of geographical locations, gains a large number of respondents, reduces bias, is less time-consuming and provides standard wording (Babbie 2004; Sekaran 2010; Bhattacherjee 2012; Zikmund et al. 2013). Cooper and Schindler (2006) added some other advantages, including requiring minimal staff time to process the results, allowing participants to think about questions and allowing researchers to contact otherwise-inaccessible participants. In addition, a follow-up notification strategy as a reminder is strength of the survey method. The questionnaires are usually returned using self-addressed stamped envelopes provided with the questionnaires (Creswell

2009). This method is, however, considered expensive due to the costs incurred. It is not only for the printing, but also for shipping and postage costs involved (Cooper & Schindler 2006). A complex and long questionnaire may reduce the response rate. Although a bias factor cannot be avoided, this method is still considered the best way to gather data with respondent anonymity and coverage of a large geographical area (Sekaran 2010).

Where the postal system is unreliable, an in-person drop-off or hand-delivery method becomes a preferred choice. The in-person drop-off (Zikmund et al. 2008, p. 219) or the drop-off/pick-up (Riley & Kiger 2002) method can be done in classrooms or other institutional settings. In addition to saving money on postage and shipping, this method is believed to increase the response rate (Allred & Ross-Davis 2010). Unlike mail surveys, the drop-off method allows researchers to meet respondents directly to provide information about the purpose of the survey and the importance of respondents' participation (Sekaran & Bougie 2013).

This verbal communication followed by an arrangement to collect completed questionnaires can be expected to improve the rate of return. Although researchers have to spend money for printing and travelling, the better rate of return can justify this expense. Additionally, the cost of a follow-up notice can be excluded. Moreover, when questionnaires are distributed to respondents, the researchers can use this opportunity to discuss the possibility of participation in face-to-face interviews with participants.

The second strategy is a web-based survey or a computer-delivered survey (Cooper & Schindler 2006). The strategy covers an almost limitless geographical area via internet and email surveys, participation in which is by emails to prospective respondents (Frickers 2008). Once a soft-copy of the questionnaire is uploaded to a website, and a procedure for storing completed questionnaires automatically is set up, researchers send an initial email to the selected email lists inviting the members to participate in the survey and providing a link to the survey. Alternatively, researchers email to a mutual link requesting assistance with the research survey, which is attached to the emails.

Some strengths of electronic surveys are the ability to use more complex questionnaires, the speed of distribution and data collection, the ability to conduct numerous surveys

over time, the ability to use the visual stimuli, the possibility of improved respondent anonymity (Cooper & Schindler 2006) and comprehensiveness – can force respondents to provide a valid response for all questions. Although accurate emailing lists are a prerequisite that often takes some effort, the method is still less expensive than the pre- and post-notification, delivery and printing of paper-based surveys (Ganassali 2008). However, online surveys also have some limitations: the constraints inherent in computer security systems, the time required to identify and recruit a sample, the high cost of survey conversion, the need for respondents to have computer-literacy skills, and the need for compatible software (Frickers 2011; Zikmund et al. 2013). Nevertheless, Couper (2011, p. 26) emphasised that mail and electronic surveys are 'the most effective' for a short survey.

The rate of return of the surveys is a crucial concern (Couper 2011). The response rate can be increased by cross-checking whether questionnaires are easy to read, offering clear response directions and encouraging respondents to respond (Sekaran 2010). Encouragement may take the form of follow-ups notifications, the inclusion of self-addressed, stamped envelopes (for postal surveys) and tangible incentives (e.g., money, vouchers, bottles of wine). Although a deadline date notice could annoy some respondents, it may encourage respondents to respond to the survey sooner.

The method used in research depends on the objectives of the studies and the situation and condition of locations surveyed. It can use just a hard copy questionnaire, an online survey or mixed-strategies (both a hard copy and an internet surveys). Previous studies on career anchors, psychological empowerment and job satisfaction have used mail surveys (e.g., Custodio 2000; Hsu et al. 2003; Carless 2004; Mays 2007; Singh, Bhattacharjee & Kodwani 2009; Chang, Shih & Lin 2010), online surveys (e.g., Levi 2006; Meyerson & Kline 2007; Dickson & Lorenz 2009; Weber & Ladkin 2009), and in-person drop-off surveys (e.g., Marshall & Bonner 2003; Steele 2008). Because the current study would involve visits to targeted universities (for interview purpose), the researcher chose to use self-administered questionnaires that would be dropped off and picked up personally. Online and email referral methods were also employed to increase the response rate. The researcher dropped the questionnaires off to the potential respondents and made an arrangement to pick up the completed surveys. The web-based survey was done by storing a soft copy of a research questionnaire in the link specified

and the referral email strategy attached the questionnaire to the selected email addresses. The potential respondents were notified through emails. All participants were voluntary.

3.3.1.2 Interview

Interviews are a data collection technique to gather information directly from individuals through an interaction between researchers (interviewers) and participants (interviewees) (Cooper & Schindler 2006; Creswell & Plano Clark 2011). During the interaction, a participant is asked to provide information about people, experiences, cultures, organisations, and the like. The advantages of the interview method are gaining historical information, controlling questions line-by-line and the ability to use it with unobserved participants (Creswell 2009). Conversely, in addition to its being time-consuming and subject to response bias and offering low anonymity, this method makes it difficult to gain a balanced perspective from respondents. However, it is believed that its strengths can compensate for its negatives.

Interviews can be conducted in structured (standardised open-ended interview), unstructured (informal conversational interview), or semi-structured (general interview-guide approach) format (Goulding 2002; Patton 2002; Sekaran 2010). In the structured interviewed, according to Teddlie and Tashakkori (2009), the questions are rigorously worded beforehand and presented in the same order to all participants. It is usually conducted using protocol questions. Although this strategy is not as flexible as the other two methods, data gathered from the structured interview can be quantified for easy comparison with statistical results.

By contrast, in the unstructured and semi-structured interviews, researchers can elaborate issues in more detail even while participants have a feeling of control during the interview process. There is no strictness in either the wording of questions or how they are delivered (Sekaran & Bougie 2013). Problems arise when participants lack knowledge about the questions asked and the interviewers do not understand the participants' responses. Overall, to overcome the disadvantages of the three strategies, open-ended questions are suggested to encourage participants to express their opinions freely.

Interviews can be conducted either using verbal interviews (e.g., via face-to-face, telephone, focus groups and internet) or written interviews (e.g., via emails or paper-based correspondence) (Creswell & Plano Clark 2011). A face-to-face, or personal interview gains a clearer indication of participants' actual opinions than focus groups, in which participants can be influenced others in the group. Moreover, the interviewer has an opportunity to clarify unclear responses (Zikmund et al. 2013). A telephone interview is growing in popularity because it can cover large areas. However, this method can be costly in terms of time as well as money if interviewees' responses are too long. Participants can also stop the conversation at any time. Despite some participants preferring being interviewed by email, the telephone method can gain sensitive information. Emails can be sent around the world, saving time and travel costs. However, participants' access to computers and the compatibility of the software used become issues. Additionally, the lack of non-verbal communication can create miscommunication due to cultural differences. Nevertheless, whatever strategy is chosen, interviewers may still have the opportunity to broaden the questions in the form of face-to-face and telephone communication (Zikmund et al. 2008, 2013; Zikmund 2010). Researchers generally recommend a documentation procedure of voice recording, note-taking and transcription (Creswell 2009).

One form of interview technique is the interview protocol. Creswell (2009) stated that researchers can use an interview protocol for asking questions and recording the interviews, especially when a structured interview technique is employed. The protocol generally contains 'an icebreaker question at the beginning, followed by 4-5' sub-questions and 'probes for 4-5 questions' (Creswell 2009, p. 183; Cavana, Delahaye & Sekaran 2001, p. 144) to participants to elaborate their responses. The interview protocol assists interviewers in 'staying on the track'. The use of the protocol depends on the research purpose and approach to solving the research problems.

As discussed in the research design, the interviews in the current study were intended to investigate the dominant career anchors using the interview protocol developed by Schein (1990; 1996; 2006a). The questions in the protocol are designed to identify the dominant career anchors of an individual through their discussion of their work history and formal education in predicting future career. Schein's interview protocol provided

main and subsequent questions and allowed for follow-up responses where clarification or more in-depth discussion was called for (Patton 2002, p. 372).

Hence, the current study used a method called a structured interview (also known as a standardised open-ended interview). Schein (1990) suggested using the interview protocol in accordance with the career orientation inventory in examining individuals' career anchors. He argued that questionnaires contained forced-choice questions, making the identification of dominant career anchors only an approximation. The emergence of more than one dominant career anchors shows a need for interviews to elicit further explanation (Smith 2005, p. 46). Some past studies (e.g., Suutari & Taka 2004; Ituma & Simpson 2007; Klapwijk & Rommes 2009; Chang et al. 2011) used interviews to assess career anchors of their samples. Schein (1978) himself used interviews in his initial study. For the purposes of this present study, the researcher employed a person-to-person structured-interview approach using Schein's interview protocol.

Employing open-ended questions was intended to capture respondents' perceptions 'without predetermining those (perceptions) through prior selection of questionnaire categories' (Patton 2002, p. 21). Bhattacherjee (2012, p. 41) stressed that even though researchers use a highly structured survey questionnaire, open-ended questions are often included 'to collect qualitative data that may generate unexpected insights not otherwise available from structured quantitative data alone'. It can be said that this strategy gives a chance for participants to express their opinions freely, particularly for those who are reluctant to answer verbally. In line with the embedded-concurrent design, the current study also used open-ended questions, the results of which were used to support the discussion of the quantitative results and the interview findings.

3.3.2 Sampling selection and sample size

Before selecting a sample, the researcher needs to determine the target population. Population refers to a group of people, organisations, or other units of analysis that share the same characteristics and are under examination (Zikmund 2003; Teddlie & Tashakkori 2009; Sekaran 2010). The population in the current study was all Indonesian academics who were in full employment in the civil service (called *Pegawai Negeri*

Sipil) and had been working more than five years at public higher education institutions. The individual academics were the unit of analysis (Sekaran & Bougie 2013).

Sampling in the mixed methods design involves a combination of a 'well-established qualitative (Qual) and Quantitative (Quant) techniques in creative ways to answer the research questions' (Teddlie & Tashakkori 2009, p. 169). Sampling itself is defined as a process to draw samples from a larger population in a research project (Sekaran 2010). It is intended to assist 'researchers to estimate some unknown characteristics of the population' (Zikmund et al. 2013, p. 385). Even though Teddlie and Tashakkori (2009) suggested four forms of sampling (probability-, purposive-, convenience-, and mixed-methods sampling strategies), there are two major types to draw a sample in relation to paper-based surveys that have been accepted widely by researchers in social science: probability and non-probability samplings (Ghauri & Gronhaug 2005; Zikmund et al. 2008). Probability sampling is used if researchers want to make generalisations about a wider community from a selected sample, usually by random sampling. This technique is mostly used in quantitative research (Teddlie & Tashakkori 2009). In contrast, non-probability sampling should be used when the total number of the population is unknown (Cooper & Emory 1995). Purposive and convenience samplings are two non-probability techniques often used by qualitative researchers.

There are limited references in the literature to mixed-methods sampling strategies. According to Creswell and Plano Clark (2011), the only reference is the five sampling categories proposed by Teddlie and Tashakkori (2009). Basic mixed-methods sampling, sequential mixed-methods sampling, parallel mixed-methods sampling, multilevel mixed-methods sampling and sampling using multiple mixed-methods sampling are not new strategies, but rather a combination of traditional strategies which are already well known. The first four strategies combine both probability and purposive sampling methods and their designs. The last strategy is a combination of the other four strategies. For example, a study that uses multilevel mixed-methods sampling can use parallel mixed-methods sampling at one stage and sequential mixed-methods sampling at another. The sampling methods used in the current study are discussed below.

One of the variants of probability random sampling is multistage area sampling. It refers to two or more stages of area cluster sampling (Zikmund 2003; Sekaran & Bougie 2013;

Zikmun et al. 2013). According to Creswell and Plano Clark (2011, p. 393), multistage area sampling is defined as 'progressively smaller areas [that] are selected in each stage'. Because of the cost-effectiveness advantage, it is worthwhile when the population to be sampled is scattered throughout a large geographical area. It incorporates characteristics of simple random sampling, area cluster sampling and for certain cases including proportional sampling. In simple random sampling, each member of the population has an equal chance of being selected, and this is the most commonly used because it is easy to apply. Area or geographical cluster sampling is applied when researchers choose smaller and smaller geographical areas gradually and randomly until they find an area that is to be listed. Probability proportionate to size sampling is used if the sample size is not divided equally among the cluster areas. The probability of any cluster that is to be chosen is proportional to the cluster size. However, when the sampling is related to the interview technique, each cluster can have the same number of interviews and the same probability of being involved (Levy & Lemeshow 2011).

One of the non-probability sampling techniques often used is purposive sampling. Purposive sampling selects samples based on specific criteria or characteristics relevant to the study (Sekaran 2010; Creswell & Plano Clark 2011). According to Zikmund (2003, p. 392), the sample is 'guaranteed to meet a specific objective', even though the representativeness of the sample is still questionable. However, the purposive sampling method is more suitable for use in selecting interview participants. Hence, random sampling, multistage area cluster sampling, and purposive non-probability sampling techniques were applied in the current study.

As the desired population was academics, higher education institutions were considered for the sampling purposes. These samples were selected because they are professional educational institutions and provide various characteristics that enable the present researcher to choose respondents based on the criteria set up. In addition, the present researcher is an academic at one public university and a member of the Higher Education Board in Indonesia, which gave the researcher access to lists of academics for emailing purposes.

Both quantitative and qualitative samplings were used in the current study.

3.3.2.1 Quantitative sampling design

Sampling was carried out in two stages:

(a) *University sample*: The present researcher decided to survey three out of the five forms of public universities. Universities, institutes and polytechnics were chosen because those institutions offer a wide range of courses. The variety of subjects ensured in turn a variety in academics' demographic data, which were needed for data analysis.

For a paper-based survey, considering the distances in Indonesia over which respondents were spread, a proportional multistage area cluster sampling technique was used to select potential universities. Cluster sampling was applied because the researcher could not find a published list of universities (Cho & Faerman 2010). First, universities were classified into the western, central and eastern regions, following the geographical divisions of the Indonesian government administration**.** Second, in each region, universities were grouped by island and were chosen using the probability proportionate to size sampling method because of the diversity of the universities' sizes. Each island could have one large and two small universities, or two large, three medium-sized and one small university, or other combinations. It was planned to survey a minimum of two universities per region. University participation was voluntary. The criteria for the universities were: (1) more than one faculty was accredited by the Directorate General of Higher Education of Indonesia; and (2) the university's self-evaluation was reported regularly to the Directorate General of Higher Education of Indonesia. These two requirements could be accessed through the website of the Directorate General of Higher Education.

For a web-based survey, internet sampling was used (Zikmund et al. 2013), although Couper (2011) claimed that the web survey does not link to any sampling methods. It is assumed that the internet sampling was done simply by posting the soft copy survey to a selected internet domain. The website chosen was accessible and easy for everyone.

(b) *Respondents' sample*: The target sample was chosen for the following reasons: (1) academics are professionals in their areas of expertise and have higher degree certificates; (2) career development in the civil service offers structural and/or functional area positions and specific academic ranks as academics climb the career ladder; (3) dynamic changes are occurring not only at the organisational level but also at

the individual level; in other words, academics must be more active and productive, and balance both organisational and individual needs. Criteria for the sample were that respondents held at least a higher degree qualification, taught at public universities and had full-employment status as civil servants, with a minimum of five years of work experience. Individuals with higher degrees and a minimum of five years' experience are considered to be skilful and mature in making career decisions.

Random sampling was applied to both the paper-based and the web-based surveys. Each individual academic had an equal chance to be selected for the current study. The researcher randomly selected academics who were at the universities when the survey took place. In contrast to the paper-based surveys, in the web-based survey the researcher simply sent an email to selected email lists and email addresses, individually inviting the members to participate in the survey.

In terms of sample size, it has been suggested that the ideal sample size should be between 30 and 500 (Sekaran 2010), or 10 to 50 (Dooley 1995). For a correlation study, a minimum of 30 responses is needed (Gay & Diehl 1996), while for factor analysis purposes, a minimum of 300 responses is considered necessary (Tabachnick & Fidell 2007). However, there is no fixed rule about how big a sample should be. According to Hussey and Hussey (1997), the number in the sample depends on the particular research area. Previous research can be taken as guidance.

Research on career anchors has applied various sample sizes within a single organisation. Schein and his students used samples ranging from 14 to 44 graduates. Past empirical studies reviewed on career anchors and job satisfaction have used various sample sizes: for example, La Lopa, Beck and Ghisseli (2009) used 337 educators, Ituma and Simpson's (2007) sample was 336 information technology employees, Feldman and Bolino (2000) surveyed 153 self-employed employees, Custodio (2000) used 114 academic executives, and Igbaria and Baroudi (1993) used 396 employees. It was noted that previous research on psychological empowerment and job satisfaction reviewed for the current study used a relatively large sample size. For instance, Dehkordi et al. (2011) used 156 university employees, Dickson and Lorenz (2009) researched 262 undergraduate students and Spreitzer, Kiloz and Nason (1997) used 393

mid-level employees. Following a suggestion by Tabachnick and Fidell (2007), the current study aimed to select 300 academics as its sample.

3.3.2.2 Qualitative sampling design

To select interview participants, the current study employed the purposive sampling method, as one of the most common non-probability sampling strategies used in the qualitative studies (Ghauri & Gronhauge 2005; Given 2008). The purposive sampling selects a sample that represents the population in accordance with the criteria that have been determined in the quantitative sampling design. This technique depends on the researchers' judgment (Patton 2002; Sekaran 2010), and thus is subject to weaknesses, such as bias and difficulty to claim that the sample is representative. However, its strengths are a wide range of sampling groups, from homogeneous sampling to expert sampling.

Although the selected sample may not be fully representative of the population, this is not necessarily a weakness, especially in a mixed-methods study. This is because the qualitative research is intended to obtain in-depth and extensive information about the attitude or phenomenon being studied. According to Creswell and Plano Clark (2011, p, 174):

> The qualitative idea is not to generalize from the sample (as in quantitative research) but to develop an in-depth understanding of a few people – the larger number of people, the less detail that typically can emerge from any one individual.

Academics were selected to be interviewed in accordance with the objectives of the study. The researcher determined that one-third of those interviewed were academics who held managerial positions (e.g., vice-rector, dean, vice-dean, head of department and head of unit). In addition to responding to the interview questions, it is assumed the number of academics was sufficient to provide information about the existing career development policy. The rest were non-managerial persons (academics whose functional tasks were in teaching and research). In line with the university sample design, the number of participants was proportional to the number of higher education institutions in the three geographic regions of Indonesia. All participation was voluntary.

There is no rule for the number of interviews (Patton 2002). It depends on the purpose of research. One or two interviews may be enough for the narrative technique, and 20 to 30 participants for grounded theory (Creswell 2007). Generally, empirical studies can be carried out using samples between four and 20 people (Creswell & Plano Clark 2011). According to Teddlie and Tashakkori (2009), the sample size in the mixed-methods approach is a trade-off: if a study emphasises its quantitative aspects, the qualitative sample should be smaller. Given (2008) noted that one well-placed articulate informant will often provide more valuable information than many from a larger sample. Past empirical studies have used various numbers of interview participants. Studies on career anchors and their relationships to job satisfaction showed, for example, 10 participants in Chang's et al. (2011) study, 22 managers in Suutari and Taka's (2004) study and 30 workers in Ituma and Simpson's (2007) study. Unfortunately, the present researcher did not find any studies on psychological empowerment and job satisfaction employing the qualitative approach. Hence, this current study considered 20 participants randomly selected at universities visited.

3.4 Research instruments

3.4.1 Instrument development

Three well-published survey instruments were employed for collecting data in the current study.

Career anchors inventory

To measure individuals' career anchors, most studies (e.g., Dazinger, Rahman-Moore & Valency 2008) used the 41-item career orientation inventory developed by Schein and DeLong. This tool is chosen because it examines internal factors (needs) and external factors (life changes), and addresses psychological factors (career direction strategies), whereas other instruments are 'skill-based or based on opinions about the organization' (Mays 2007, p. 38). In a study of career anchors, Igbaria and Baroudi (1993) suggested using a short form of the career orientation inventory, which they termed the career anchor inventory. This was used in the current study.

The short form of the career anchor inventory was developed based on two studies of information system employees and 41 items of career anchor orientation developed by

Schein (1985). Study 1 aimed to investigate the structure and content underlying the career anchors using Sample 1, and then tested the validity and reliability of the results using Sample 2. By employing factor analysis, Sample 1 produced 25 items and formed nine categories of career anchors. The only category difference from the eight categories of Schein was the *security/stability* anchor, which was split into the *economic security* category and the *geographical stability* category. The other seven categories remained as the original: managerial competence, *technical competence*, *autonomy*, *entrepreneurial creativity*, *pure challenge, lifestyle* and *service*. The nine anchor categories had Cronbach's alphas of between 0.62 and 0.93, which were evident that the items have high internal consistency on average. Study 2 was conducted a year and half later to retest the validity and reliability of the career anchors. By employing confirmatory factor analysis, the results were consistent with Study 1.

The career anchor inventory used a five-point Likert scale format divided into two sets. The first group, items 1 to 15, was related to career orientations, ranging from 1 = 'of no importance' to 5 = 'centrally important'. The other group was items 16 to 25 in which each of the items was related to career preferences, ranging from 1 = 'not at all true' to 5 = 'completely true'. Each of the nine anchors was represented by three items, except for *economic security* and *geographical stability*, which were represented by two items each (Appendix 2).

The short form of the career anchor inventory has been tested for psychometrics properties, and there is a strong 'evidence for its construct validity' (Igbaria & Baroudi 1993, p. 143). Especially for the two anchors that *economic security* and *geographical stability* are two differences anchors by their own characteristics as explain in Chapter 2, Sub-section 2.3.1. Igbaria and Baroudi also noted that the instrument was intended to reduce the burden for respondents in filling out the questionnaire by keeping the statements to a minimum. Instead of using Schein's 41-item career orientation inventory, which has not been tested for validity and reliability, the current study employed the shorter career anchor inventory developed by Igbaria and Baroudi (1993) because of the logical reasons above.

Psychological empowerment

Psychological empowerment was measured by the psychological empowerment scale developed by Spreitzer (1995). Spreitzer developed and validated 12 items to examine the four facets of psychological empowerment: *meaning, competence, self-determination* and *impact* (Appendix 3). Each dimension is measured by three items using a five-point Likert scale, ranging from 1= strongly disagree to 5 = strongly agree. Spreitzer tested the discriminant and convergent validity of the scale in two samples and established satisfactory construct validity. A second-order confirmatory factor analysis showed a good fit of psychological empowerment in the industrial sample while a moderate fit was found in the insurance sample. It was clearly shown that each of the four facets loaded on its factor (Spreitzer 1995, p. 1457). Cronbach's alphas were satisfactory ranging from 0.73 to 0.85.

In addition to the reliability and validity of the psychological empowerment scale established in various studies (e.g., Kraimer, Seibert & Liden 1999; Chang & Jang 2008), the scale has 'the work context in mind' (Cho & Faerman 2010). The scale built by Spreitzer is the most comprehensive investigation of the empowerment scale as asserted by Arneson and Egberg (2006). The psychological empowerment scale was, therefore, adopted in the current study

Job satisfaction

This study used the overall job satisfaction items developed by Hackman and Oldham (1975) and retested by Igbaria and Baroudi (1993) to measure employees' perceptions in relation to the job satisfaction dimension. The use of this scale can be justified by the validity of the items, which represent psychological states of experienced meaningfulness, feelings of responsibility and knowledge of results.

Igbaria and Baroudi (1993) tested the instrument to measure career satisfaction and job satisfaction. The result clearly distinguished a cluster of relevant items under the heading of career satisfaction, leaving three of the general job satisfaction items for one cluster. The scaling of the items ranged from 1 = strongly disagree to 5 = strongly agree. The alpha of these items was quite high at 0.84. The scale had been used in previous studies, such as by Feldman and Bolino (2000), and Chang, Shih and Lin (2010), and

showed acceptable alphas. For the purpose of the current study, the researcher used these items to measure overall job satisfaction (see Appendix 4).

For the purposes of the current study, all three instruments were measure using a six-point Likert scale to both avoid a neutral answer and give more precision (Allen & Seaman 2007). The neutral choice can be seen as an easy option when a respondent is unsure, and rather than the expression of a true neutral opinion. From the literature review, it was found that many studies used an even scale of six points on the career anchor inventory (e.g., Custodio 2000; Tan & Quek 2001; Marshall & Bonner 2003; Smith 2005; Mays 2007; Dazinger & Valency 2009; and Coetzee & Schreuder 2011), compared to the other two instruments, which used odd scales of five and seven points (e.g., Spreitzer, Janaz & Quinn 1999; Carless 2004; Chiang & Jang 2008).

In addition, there was one open-ended question at the end of each of the set statements (Appendix 5). The questions, which were optional, asked respondents to comment on their views of their working life, their career preferences, their feelings about their current job and their feelings about intrinsic task motivation. Sekaran (2003, p. 213) pointed out that 'the end of the questionnaire could include an open-ended question allowing respondents to comment on any aspect they choose'.

Another two open-ended questions were added to the questionnaire. The questions asked about: (1) factors influencing individual academics' career motivation; and (2) the institutional support, and were placed between the questionnaire items and the demographic questions. This type of question lets respondents provide more information related to attitudes, feelings and understanding relevant to the research topic (Creswell & Plano Clark 2011). The data gathered were analysed in accordance with the interview and statistical results. These two open-ended questions were also intended for triangulation purposes, so that unclear responses by respondents in the interviews could be cross-checked with the written answers.

3.4.2 Demographic profiles

Demographic information is needed not only to filter out the respondents based on predetermined criteria, but also to conduct the data analysis. The demographic data used in the current study for screening the respondents were: (1) employment status (only

full-time civil servants); (2) education (a minimum of bachelor's degree); (3) type of university (public higher education institutions); and (4) work experience (no less than five years' work experience).

There were five demographic variables that were entered into the analysis model. First, gender indicated female or male; Second, educational level was grouped into the bachelor's degree, master's degree and doctoral degree; Third, work experience that was classified into 5-10 years, 11-20 years and 21 years and above; Fourth, institution size was divided based on the total number of students developed by the Directorate General of Higher Education, which are small universities (<5,000), medium-sized universities (5,000-10,000) and large universities (>10,000), and fifth, age was grouped into ≤ 25 years, 26-45 years, and ≥ 46 years.

The rest of the questions were used to support the analysis. Among them were years to complete the bachelor's degree, degree major, place where highest education level was completed, academic rank, managerial position, marital status, ethnicity and religion. Specialisation was grouped following the disciplines formulated by the Directorate General of Higher Education accessed in 2013 (http://evaluasi.dikti.go.id/dok/rumpunilmu).

Both forms of the questionnaire (paper-based and web-based) included a participant information sheet that had been approved by the Human Resource Ethics Committee of the University of Wollongong. The questionnaire was presented in Indonesian for the fieldwork (Appendix 5).

3.4.3 Schein's interview protocol

Schein's interview protocol was adapted to the current study. The questions in the protocol (Appendix 6) were used to find out the job history of the sample, and what they really wanted from their work, not only in their past career but in their present situation and future career. Schein (2006a, pp. 28-33) developed four main questions as icebreakers, with two subsequent questions and some probes in each question, to investigate the participants' career anchors. The questions asked about education from high school to higher degree, included area of specialisation, first job after graduation and experiences at work, next job, and the reasons behind the change, lessons learned

from the new job and a history of work experiences, including work satisfaction, ambitions, major competencies and career pattern.

The current study adapted this standard structured-interview protocol questions to identify the dominant career anchors. The interview protocol was presented in English and Indonesian versions (Appendix 6).

3.4.4 Issues on culture related to translated instruments

Translation and interpretation become a major problem when scales developed in the West are translated into an Eastern culture (Hofstede 1991; Feldman & Bolino 2000; Bryant & Son 2001). Although some researchers doubt the applicability of the career anchor inventory when the instrument is used in locations other than western countries, Schein (n.d.) stressed that the career anchor concept has been used worldwide, by saying 'the booklet [questionnaire and its instruction] has been translated into many other languages and is used in Europe, Latin America and Asia, specifically Japan' (p. 5). Furthermore, Fock et al. (2011) emphasised that there were differences in the interpretation of psychological empowerment between individuals with a high collectivistic culture and those with a low collectivistic culture. Feldman and Bolino (2000) and Schein (2010) emphasised that each organisation and individual has their own culture, which affect the two parties' attitudes in the workplace. These findings show that culture may influence individuals in giving responses in a study.

In practice, the cultural issues can be minimised. Mays (2007) suggested conducting a pilot study to accommodate the national settings. Forward translation - that is, where the document is translated from English by a native speaker of the target language or an expert bilingual panel convened by an editor can be used (WHO 2013). Fock et al. (2011) and Brislin (1980) suggested using a back-translation procedure, where the translated document is retranslated into English, while Ituma and Simpson (2007) conducted interviews and then revised the original instrument based on the results for use as a survey questionnaire. Because of the Nigerian cultural context, Ituma and Simpson (2007) also used face validity to examine the validity of their qualitative study by employing two independent researchers.

The three scales have been applied into some studies using languages other than English with satisfactory reliability. For example, the career anchor inventory has been translated into Hebrew (Dazinger & Valency 2006; Dazinger, Rahman-Moore & Valency 2008); the psychological empowerment scale has been translated into Swedish with alphas of 0.77-0.90 (Hocwalder & Brucefors 2005), Turkish with alphas of 0.81-0.88 (Uner & Turan 2010), German with alphas of 0.76-0.82 (Schermuly, Schermuly & Meyer 2011), and Chinese with alphas of 0.64-0.83 (Fock, et al. 2011). The job satisfaction scale had been used in German with an alpha score of 0.76 (Schermuluy, Schermuly & Meyer 2011).

All three instruments and the interview protocol used in the current study were translated into *bahasa Indonesia* (Indonesian language) for fieldwork purposes. To minimise the cultural issues and to increase the validity and reliability, the researcher combined the forward and backward translation methods, following Ituma and Simpson's (2007) approach.

Four steps were undertaken to ensure the validity of the questionnaire and the interview protocol. Given the present research has bilingual skills (English and Indonesian), the researcher translated the career anchor inventory, the psychological empowerment scale and the job satisfaction scale, including the open-ended questions and demographic data used in the current study. Second, the three scales and the protocol were tested for face validity by four experts in the fields of management, psychology, Indonesian (language) and science. The experts had educational backgrounds from overseas and had the academic rank of senior lecturer or above. They received two versions of the questionnaires (English and Indonesian). While they did not comment on the translated interview protocol, changes were made to the translated questionnaire based on their feedback. Table 3.2 shows the feedback on the questionnaire.

Third, the revised questionnaire was then sent to the Indonesian Laboratory (*Lembaga Bahasa Indonesia*) at the University of Bengkulu, Indonesia, for the final check. Some minor revisions, such as capital letters, punctuation, and spaces were made. The final revision was ready for a pilot study as a final test of the translated questionnaire. Last, returned questionnaires from the actual respondents were tested for the validity and

reliability. For the interviews, after identifying themes, the backward-translation strategy was applied.

Table 3.2: Suggested revisions to the questionnaire

Original words	Translation	Revision	Addition	
English	Indonesian	Indonesian	English	Indonesian
Organisation	*Organisasi*	-	/Institution	*/Institusi*
To be in charge	*Bertanggung jawab*	*Terlibat*	-	-
Business enterprise	*Bisnis*	*Usaha (bisnis)*	-	-
Independence	*Kebebasan*	*Tidak tergantung*	-	-
My impact	*Dampak saya*	*Keberadaan saya berdampak*	-	-
Department	*Departemen*	-	/Work unit	*/Unit kerja*
On demographic data: religion	*Bagian informasi demografi: agama*	-	Kong Hu Chu	*Kong Hu Chu*

3.5 Data collection method

Upon receiving approval from the Human Resource Ethics Committee at the University of Wollongong involving participant information sheet, letters of consent from participating institutions, survey questionnaire and interview protocol, the researcher engaged in the fieldwork. A pilot study was first carried out in Indonesia.

3.5.1 Pre-testing the survey instrument

The purpose of pre-testing (or piloting) a questionnaire is to find out 'errors in the design and improper control of extraneous or environmental conditions' (Cooper & Schindler 2006, p. 281) that can be revised before administering the questionnaire to the actual respondents. Moreover, according to Ticehurst and Veal (2000) and Zikmund (2010), a pilot study is useful for: (1) testing questionnaire wording, sequencing and layout; (2) estimating response rate and time needed to complete the questionnaire; (3) testing the analysis procedure; and (4) gaining familiarity with respondents. This present pilot study followed the four points above.

The present scales then were piloted with 30 participants who were only from Indonesia at the 12th Malaysia-Indonesia International Conference on Economics, Management and Accounting on 13th October 2011 in Bengkulu, Indonesia. The participants, academics from various universities across geographical areas in Indonesia, had

different demographic backgrounds in terms of formal education, specialisation, academic rank, ethnicity and religion. The questionnaires were then distributed to participants, who voluntarily completed them and had the opportunity to give feedback. The time required to complete a questionnaire was 15-25 minutes. No feedback was received. Participants only ticked the forced-choice questions and some demographic questions.

Because the purposes of the pilot study were not met which were no comments, another pilot testing was run a week later to a new group consisting of 20 academics from various fields (agriculture, politics, management, engineering, physics and law) at the University of Bengkulu, Indonesia. Some minor corrections had been suggested, such as making margins consistent and correcting minor typos. These corrections were made, the final questionnaire was then ready to administer to the actual respondents.

3.5.2 Data Collection procedures

There are three procedures that can be selected in conjunction with mixed-methods (Creswell 2009, pp. 14-15). The procedures are: (1) Sequential mixed-methods: the results of one method are extended over the other method. The procedure can be done with a combination of interviews first (qualitative research) and continued with a survey (quantitative research) or vice versa; (2) Concurrent mixed-methods: the quantitative and qualitative data collection occur simultaneously, and their analyses are combined, and the results are integrated at the interpretation stage; and (3) Transformative mixed-methods: a theoretical lens is applied as an overarching perspective within a design that includes the quantitative and qualitative data. Teddlie and Tashakkiro (2009, pp. 238-239) proposed six data collection strategies, which could be combined: observation, unobtrusive measures, focus groups, interviews, questionnaires and tests.

Interestingly, while Creswell and Plano Clark (2011) argued that there is no reference to refer to except the one that is drafted by Teddlie and Tashakkiro (2009), Couter (2011) provided a mixed strategy only for a survey study by stating that the incorporation of internet and mail surveys is as a part of the mixed mode strategy. The two strategies can be conducted in the concurrent or sequential mixed methods designs. Zikmund et al. (2013, p. 229) wrote that ‘a mixed mode survey can employ any combination of two or more survey methods’. Because the mixed-methods strategy is still relative new

(Creswell & Plano Clark 2011), this study used guidelines on those procedures that were prevalent and recognised widely.

The data collection procedures in the current study were as follows. Unlike Feldman and Bolino's (1996) study that conducted interviews first and then distributed the survey questionnaire, the current study distributed the survey first. The procedure chosen was adapted from the method designed by Schein (1990) for a workshop in his book '*Career anchors: trainer's manual*' by stating that 'after all participants have completed their inventories, then assemble into dyads for the interviewing process' (p. 5). He stated that after completing the career anchor inventory, all respondents got together for the interviewing process. Research problems were developed based on the literature review, and hypotheses were generated from the conceptual reviews. He argued that the way in discovering one's career anchor could be applied to any purposes and settings. Hence, the current study conducted the data collection by simultaneously sending the self-administrated questionnaire (paper-based and web-based) out to the respondents to be completed and conducting interviews with randomly selected participants.

The fieldwork was undertaken in two steps as follows:

a. Self-administrated questionnaire

As discussed earlier, this study used the short form of the career anchor inventory (Igbaria & Baroudi 1993), the psychological empowerment scale (Spreitzer 1995) and the job satisfaction scale (Igbaria & Baroudi 1993). In addition, the quantitative instrument also included open-ended questions and demographic information. All statements used a six-point Likert scale while the demographic data were in open-ended and closed-ended formats. Questionnaires were prepared in both an electronic and a paper-based format, and distributed as follows.

1. *Paper-based survey*. The researcher visited the targeted universities. At each prospective university, the researcher gained permission to run the survey and discussed the administration of the questionnaire. The hard copy of the questionnaire was sent out to respondents at the selected schools/departments. The respondents volunteered to fill out the questionnaire, then returned the completed questionnaire directly to the

researcher at a face-to-face appointment. These ways are considered the best method to achieve a greater response rate. Duplication of the respondents was minimised by asking them on the information sheet only to complete the questionnaire once.

2. *Web-based survey*. A set of questionnaires was sent out using two strategies. First, the survey was delivered to all respondents via selected email lists where academics registered, such as a group of Indonesian academics and the Indonesian Students Association in Australia. The researcher sent a letter in advance, introducing the research project and providing a link to the survey questionnaire itself to the coordinator of each email list. After receiving approved, a questionnaire was sent to the coordinator to deliver to the email list. However, for the referral email, the present researcher sent the questionnaire as an attachment via an email directly and individually to the email accounts listed on the researcher's list. The survey allowed the respondents three months to complete the questionnaire. The researcher sent a reminder notice each month to respondents. It was assumed that within three months, the researcher would get a reasonable response rate of at least 50 percent. In addition, because the survey was voluntary, the respondents could withdraw at any time.

b. Interview

The researcher conducted an in-depth structured interview with the participants at each university, employing the concurrent-embedded strategy as discussed in Sub-section 3.3. The participants were all academics, comprised of both those who held managerial positions (e.g., vice rector, vice dean, head of departments/schools) and those who performed functional tasks (teaching, research and community service). As for the survey questionnaire, the criteria for the interviewees were full-time employment, civil servants status, and more than five years' work experience. During the interview, with permission from the participants, the interview was audio recorded and the researcher took notes to ensure all data were covered. For analysis purposes, the interview was transcribed. The interview itself was conducted after the administration of the survey questionnaire to the respondents during one visit.

3.5.3 Testing validity and reliability in measurement

A good measurement is characterised by having a degree of validity (accuracy) and reliability (consistency) (Cooper & Schindler 2006; Bhattacherjee 2012; Zikmund et al.

2013). In relation to the research design, triangulation validation was used (Cavana, Delahaye & Sekaran 2001), in which the respondents' answers to the questionnaire could be validated in the interview. In this approach, researchers administer the survey questionnaire to larger numbers of individuals, and interview a selection of them to gather their views concerning the topic researched. There are several different approaches to validity and reliability testing in both the quantitative and qualitative methods (Creswell & Plano Clark 2011), as discussed below.

Quantitative validity and reliability check

Validity refers to the accuracy of a research instrument to measure what it is purported to measure. It means that 'the scores received from participants are meaningful indicators of the construct being measured' (Cooper & Schindler 2006, p. 210). In contrast, reliability measures the internal consistency of an instrument in measuring a concept (Sekaran 2010; Zikmund et al. 2013). Sekaran (2010, p. 171) argued that 'validity and reliability attest to the scientific rigor applied to the research study'. The results of testing a given study's result could be that the results are valid and reliable, reliable but not valid or neither valid nor reliable.

Internal validity was the main concern for the current study. Internal validity is intended to determine whether a cause-effect relationship among variables exists (Creswell & Plano Clark 2011). Construct validity was therefore established to examine the validity of the career anchor inventory, the psychological empowerment scale and the job satisfaction scale. Unlike content validity or face validity, which measures the content of the items using a group of experts, and criterion-related validity that examines whether the measures correlate with some external measures, construct validity attests to 'how well the results obtained from the use of the measure fit the theories which around the test is designed' in a predictive way (Sekaran & Bougie 2013, p. 227).

Construct validity takes two forms: discriminant and convergent validity. Discriminant validity is assessed when two variables are differentiated, while convergent validity is established 'when the scores obtained with two different instruments measuring the same construct are highly correlated' (Sekaran & Bougie 2013, p. 227). Construct validity is the strongest validation in measuring 'individual differences of hypothesized constructs' (Westen & Rosenthal 2003, p. 608). Limited construct validity can cause a

problem in interpreting the data. Igbaria and Baroudi (1993) noted how crucial construct validity is in a study by stating that convergent validity should be tested along with discriminant validity to show how accurate the instrument is. The current study, therefore, decided to measure the discriminant and convergent validity of the career anchor inventory, the psychological empowerment scale and the job satisfaction scale.

Factor analysis was used to establish the construct validity of the three instruments. According to Sekaran and Bougie (2013, p. 227), factor analysis refers to a multivariate analysis 'that confirms the dimensions of the concept that have been operationally defined', including the identification of the items that are 'most appropriate for each dimension'. In contrast to the validity examination of the career anchor inventory and the job satisfaction scale in which some previous studies used exploratory factor analysis (e.g., Igbaria & Baroudi 1993; Custodio 2000; Ituma & Simpson 2007), the majority of previous studies that used the psychological empowerment scale employed confirmatory factor analysis (e.g., Spreitzer 1995; Chiang & Jang 2008; Dhladhla 2011). It is assumed that not only did those studies follow Spreitzer's procedures in testing validity, but the validity of the instrument was also very well established. Exploratory factor analysis was employed in the current study to discover the nature of constructs based on data influencing a set of responses, rather than confirmatory factor analysis which is aimed at testing a specified set of constructs that influence responses in a predicted way (deCoster 1998).

To measure the consistency of scales, internal consistency reliability was employed. This measures the 'consistency between different items of the same construct' (Bhattacherjee 2012, p. 57). The reliability of a measurement can be seen when the items and the subsets of the items are highly correlated. The most common test used for testing internal reliability is Cronbach's alpha coefficient (Sekaran & Bougie 2013) developed by Lee Cronbach in 1951, ranging from 0.00 (completely unreliable) to 1.00 (perfectly reliable). There is no rule to determining the minimum alpha score that can be said to be reliable. An alpha score of 0.8 (Osborn, Christensen & Gunter 2001) or 0.7 (Nunnaly & Bernstein 1994) can be used as a reference. Likewise, Tolmie, Muijs and McAteer (2011) suggested that alphas between 0.6 and 0.9 covered a range from adequate to good.

The majority of previous studies, including those using the original scales (Igbaria & Baroudi 1993; Spreitzer 1995; Custodio 2000; Feldman & Bolino 2000; Myerson & Kline 2008; Dickson & Lorenz 2009), employed Cronbach's alpha to analyse the reliability of the three instruments used. The current study therefore used Cronbach's alpha coefficient to measure the reliabilities of the career anchor inventory, the job satisfactory scale, and the psychological empowerment scale. A minimum alpha score of 0.6 was used as evidence of reliability, as suggested by Nunnaly (1967). A package of SPSS (Statistical Package for Social Science) software version 19.0 for Windows was used to analyse the internal reliability.

Qualitative validity and reliability check

Unlike the quantitative data, which used statistical analysis to measure validity and reliability, the qualitative data were tested using several procedures. Although whether validity or reliability is more important on the qualitative research has been debated, Creswell and Miller (2007, cited in Creswell & Plano Clark 2011) suggested three types of validity procedure. Member-checking approach is done by giving the summary of findings to the key participants for feedback purposes, while the disconfirming-evidence approach confirms the accuracy of data by establishing evidence. The third approach is triangulation, in which researchers construct evidence for codes or themes from multiple sources or individuals. Creswell and Miller also mention another approach that is similar to the peer review. Researchers can ask graduate students or faculty who are familiar with the research topic or independent external auditors or individuals who are not related to the project, to use their own criteria in reviewing the analysis results.

Although Cooper and Schindler (2006) found that consistency was not expected in the qualitative studies, this does not mean that reliability is irrelevant. Gibbs (2007) provided procedures to show the importance of transcript checking to ensure there are no salient errors, no deviation of codes' definition and no alteration of codes' meaning, and cross-checking of codes. Creswell (2009) encouraged qualitative researchers to use Gibbs' procedures. He also recommended one procedure called 'intercoder agreement' (p. 191). The procedure needs researchers to find another person for cross-check purposes. As a reference, Miles and Huberman (1994) recommended a minimum of 80 percent coding consistency as a good level. Therefore, the current study employed Gibbs's (2007) and Creswell's (2009) procedures for qualitative reliability analysis.

As discussed in Sub-section 3.4.3, the interview protocol was translated into *bahasa Indonesia* (the official language of Indonesia). Two experts in this area - one expert who graduated from an overseas university and a domestic graduate with English-language background – were then asked to provide peer review in the form of face validity. Both experts held at least a doctoral degree. The experts were given the English and Indonesian versions of the interview protocol and asked to check the wording. Finally, before using it in the actual survey, the translated and revised interview questions were sent to the *bahasa Indonesia* laboratory, accredited the by Indonesian government.

3.6 Data analysis design

As discussed in Sub-section 3.2, the current study applied the concurrent-embedded approach, in which the primary data obtained from the quantitative study and the qualitative data are treated as supporting information. Although data collection is done separately, the data analysis and results are combined to compare the similarities and the differences. Creswell (2009) argued that there is no fixed rule to analyse data from the quantitative and qualitative approaches. Thus, in conjunction with the study design, the current study analysed the quantitative and the qualitative data separately. Then the results of both methods were combined for comparison. In other words, the qualitative results were quantified by calculating how many times the themes occurred, and compared with the quantitative results.

At the stage of data analysis, the interpretation of results and the discussion were presented separately. This is because the weight of the two methods do not allow for a combination. However, the results were integrated to complement each other where they should be for an in-depth understanding.

3.6.1 Statistical analysis design

In conducting the statistical design for analysis, the current study referred to three sources. First, the researcher consulted the Statistical Consulting Centre of the University of Wollongong. Second, the researcher referred to the statistical literature (e.g., Baron & Kenny 1986; Miles & Shevlin 2001; Dancey & Reidy 2004; Tabachnick & Fidell 2007; Creswell 2009; Hair et al. 2010; Creswell & Plano Clark 2011; Siegel 2011; Tolmie, Muijs & McAteer 2011; Soper 2012; Sekaran & Bougie 2013; Zikmund

et al. 2013). Third, previous empirical research in the same area was used as a reference in designing the analysis (e.g., Spreitzer 1995; Custodio 2000; Schein 2006a; Ituma & Simpson 2007; Meyerson & Kline 2008; Wang & Lee 2009).

In this study, the data gathered were classified into two groups: the quantitative and qualitative analysis. As discussed earlier, the quantitative data were analysed first. This study was designed to find out academics' dominant carer anchors and to test the proposed hypotheses using statistical tools. The SPSS software package version 19.0 for Windows was used in analysing the data (Fiddler et al. 2011; Levin, Fox & Forde 2013). The qualitative results were used to support the quantitative findings.

Dominant single career anchor was identified through the highest frequency measured by the highest mean value attained (Issue 2). Schein and van Maanen (2013 p. 17) suggested that the 'highest score' (of individuals) 'could be considered as their career anchors'. Because this study used the six-point Likert scale, a mean value of 3.00 and above was used as a threshold value to simplify the analysis (Owuor 2001; Hopkins 2002). Following the measurement of single career anchors, multiple career anchors were determined by more than one of the highest mean values simultaneously with a cut-off value of 3.00.

Dominant multiple groups-based anchors were also examined by the highest frequency (Issue 3). Feldman and Bolino's (1996) multiple career anchor categories were measured by deriving Schein's single career anchor typology. The researcher grouped the single anchor categories into *talents-based, needs-based* and *values-based* anchors. Respondents who had the combination of the three groups were regrouped into a new multiple groups-based anchors category. For instance, in Schein's concept, one respondent has the dominant anchors of *managerial competence* and *technical competence*; those anchor categories are then grouped as the *talents-based* anchors. Another respondent had *service* and *autonomy*. Because *service* is a *values-based* anchor and *autonomy* is a *needs-based* anchor, those anchors are classified into a new multiple groups-based anchors category. In this study, the frequency of multiple groups-based anchors was summed and ordered to indicate the highest frequency.

The dominant career anchors were then examined for their relationships to identify *complementary* and *mutually exclusive* anchors by pairing the anchors (Feldman & Bolino 1996). A bivariate Pearson's correlation matrix analysis was employed to pairs of anchor categories, and only the significant correlation values were analysed further. Pearson's correlations measure the degree of the relationships between variables (Tabachnick & Fidell 2007; Siegel 2011; Bhattacherjee 2012). It is possible to have two variables that are strongly related. A positive sign (+) indicates *complementary* anchors, while a negative sign (-) indicates *mutually exclusive* anchors. Based on relationship pair anchors, an octagonal diagram was drawn, with orthogonal anchor relationship pairs placed opposite one another and similar anchors clustered together.

Nonparametric statistics was used to test the distribution of the career anchors. A chi-square test for goodness-of-fit (χ^2) was employed to test the frequency distribution of single career anchors, as conceptualised by Schein (1978) (H1), and multiple groups-based career anchors, as reframed by Feldman and Bolino (1996) (H2). The chi-square test for goodness-of-fit was used to assess whether the obtained frequencies differred significantly from the expected frequencies (Dancey & Reidy 2004). Hence, the goodness-of-fit test was employed to compare a set of sample frequency distribution of the current study with a hypothesised distribution.

Hierarchical multiple regression analysis (HMRA) was employed to examine a series of proposed hypotheses. Hierarchical analysis is 'theoretical or for testing explicit hypotheses' (Tabachnick & Fidell 2007, p. 143). In this study, it was used to test whether career anchors (Hypothesis 3a) and psychological empowerment (Hypothesis 3b) predicted job satisfaction and whether career anchors predicted psychological empowerment (Hypothesis 3c) (Steele 2008; Hair et al. 2010; Siegel 2011). The statistical tool was also used to investigate the mediation effects of psychological empowerment in the career anchors and job satisfaction relationships (Hypothesis 3d). Career anchors were measured individually in the forms of nine anchor categories (*managerial competence*, *technical competence*, *autonomy*, *entrepreneurial creativity*, *service, lifestyle, pure challenge, economic security* and *geographical stability*) and psychological empowerment was examined individually based on the four facets (*meaning, competence, self-determination* and *impact*).

There are reasons for the use of HMRA as opposed to the popular structural equation modelling (SEM) that has drawn researchers in the areas other than the study of career anchors. Unlike structural equation modelling, in which the computer software controls the variables examined (Hair et al. 2010), in HMRA, the researcher determines the order of variables entered into the computer. The researcher can see 'what happens to the influence of one variable once others have been introduced' (Tolmie, Muijs & McAteer 2011, p. 108). Moreover, HMRA is a powerful tool with some important capabilities: it (1) predicts the effects of predictors (independent variables/X) on criterion variables (dependent variables/Y) and controls for demographic variables (Steele 2008), so that the effects occur free from demographic influences (Dencey & Reidy 2004); (2) offers a better fit for the examination of the interactions of variables; (3) measures the direction and size of the effects of each variable on the dependent variables, as well as providing R2 values that can tell the degree to which a set of variables fits and explains the dependent variables (Neuman 1997); and (4) has also been used by some recent researchers in examining career anchors and psychological empowerment topics and their relation to other attitudinal outcomes (e.g., Meyerson & Kline 2008; Steele & Francis-Smythe 2008; Dekhordi et al. 2011).

In examining the mediators' roles, the researcher referred to the procedures of Judd and Kenny (1981), Baron and Kenny (1986), and Kenny, Kashy and Bolger (1998). Four steps must be undertaken sequentially to regress: (1) the predictor (X) on the criterion (Y), (2) the predictor (X) on the mediator (Med), (3) the mediator (Med) on the criterion (Y) when X and Med are the predictors; and to establish (4) the degree of the relationship between the predictor (X) and the criterion (Y). When the influence of X on Y controlling for Med is zero, a full mediation occurs. However, when the effect reduces after Med is introduced, a partial mediation occurs.

Prior to testing the mediation, Pearson's bivariate correlations should be performed. This test must show significant correlations between the predictor and the criterion, between the predictors and the mediators, and between the mediators and the criterion. The mediation operating in this study began with entering demographic data as control variables, followed by career anchors and psychological empowerment in the independent blocks. Job satisfaction was entered in the dependent block.

The significance of the mediation effect was tested using Sobel's test. Sobel's calculation can be done using free online software created by Daniel Soper (2012), available at http://www.danielsoper.com/statcalc3/calc.aspx?id=31. The calculation requires information on the beta coefficient (ßA) and standard error (SE_A) to examine the relationship between predictor variables and mediating variables, and on the beta coefficient (ßB) and standard error (SE_B) to examine the relationship between the mediating variables and the criterion variables. To measure the strength of the relationships, the standardised effect size of Cohen's f^2 was used. According to Allen and Bennet (2010) the f^2 effect size in HMRA is measured by a formula:

$$f^2 = R^2_{AB} - R^2_A / 1 - R^2_{AB} \text{..... (Eq.1)}$$

where R^2_{AB} is R square in the regression model.

Cohen's (1988, 1992) criteria for the f^2 are:

0.02 is considered a small effect
0.15 is considered a medium-sized effect
0.35 is considered a large effect

Selected demographic data were considered as extraneous variables. Bhattacherjee (2012, p. 12) claimed that '…other extraneous variables that are not pertinent to explaining a given dependent variable, but may have some impact on the dependent variables, must be controlled for'. Similarly, according to Creswell (2009), control variables are important in the quantitative study because they have the potential to affect the criterion. By controlling the demographic variables, the effects that occur are purely from the results of variables studied. As discussed in Chapter 2, demographic data, such as gender, educational level, work experience, institution size and age have been identified as influencing the relationship between career anchors and job outcomes, and between psychological empowerment and attitudinal outcomes. These five variables of demographic data, therefore, were treated as control variables.

3.6.2 Thematic analysis

Thematic analysis was employed to analyse the qualitative data that were gathered through the interviews and the two open-ended questions (Miles & Huberman 1994; Braun & Clarke 2006; Fereday & Muir-Cochrane 2006). Thematic analysis is a form of

qualitative analysis that concentrates on behaviour patterns. It is done by identifying themes that emerge during the textual data analysis. The emergence of themes should be limited to those that reflect the data. Although Howitt and Cramer (2008) said that the identification of themes is not easy, some procedures to facilitate it have been introduced. Aronson (1994), Howitt and Cramer (2008), and Braun and Clarke (2006) suggested similar steps. Braun and Clarke's (2006, p. 35) six phases were adapted for the present analysis because they defined the procedure concisely.

First, the researcher familiarises her- or himself with the data: in the case of this study, the audiotaped data are transcribed in Indonesian, then translated into English. Second, the researcher generates the initial codes from interesting features and collates data relevant to each code. Third, the researcher searches for themes: prospective themes are developed, and similar data are grouped into each corresponding theme; when no themes are found, new themes are created. Fourth, the researcher reviews the themes: the emerging themes are examined to evaluate the meaning. Fifth, the researcher defines and names the themes: the identified themes are re-examined, including their meaning, using related references; at the end, each theme is named and given a clear definition. Sixth, the researcher produces the report: the final name of each theme is written down along with its meaning. At least one quotation from a participant supports each identified theme.

It is generally recommended that researchers carry out their data collection themselves (for example, conduct their own in-depth interviews) and do their own data transcription (Howitt & Crames 2008; Siegel 2011). In the current study, the researcher conducted the interviews by herself and carried out all steps in identifying themes, both in responses from the interviews and from the open-ended questions. After identifying career anchors from the interview, the researcher analysed the responses to the two open-ended questions. The responses were translated into English manually. Then, responses for each question were systematically assessed for thematically similar words and phrases and grouped into themes (thereafter macro) and sub-themes (thereafter micro) (Muchiri & Cooksey 2009). Finally, the answers from the open-ended question of each section of the scales were used to support the discussion of the data analysis.

Finally, following the thematic analysis, the association of all results with the concepts of career anchor, psychological empowerment and job satisfaction were discussed, along with and the results of the survey questionnaires.

Summary

This chapter has discussed the methods and procedures with regards to the mixed-methods approach used in the current study. It has described the study approaches and research design. The survey questionnaire and interview, has described including the administration of the surveys, the mixed-methods sampling strategies and the sample size were discussed. The development of the career anchor inventory, the psychological empowerment scale and the job satisfaction scale, as well as the testing of validity and reliability, were discussed. The interview protocol designed by Schein and how to test its validity and reliability were also presented. Cultural differences had been anticipated by describing how these were dealt with. The pilot study was also described and the results were reported. The mixed-methods data collection procedures for the paper-based and web-based surveys, and the interviews were explained in detail. The chapter ended by the discussion of data analysis design, the statistical tools used for the quantitative analysis and thematic analysis used for the qualitative analysis.

The following chapter presents the quantitative findings. It will describe the response rate and the demographic information. The chapter will discuss findings related to research issues and test the proposed hypothesis.

Chapter 4
Results of Quantitative Analysis

4.1 Introduction

Chapter One presented the purpose of the study, the reasons for conducting the research, the problem statement and its issues, and the significance of the study. Chapter Two conceptualised the framework of the study and reviewed theoretical contributions and empirical studies related to the variables studied. It also formulated hypotheses to be tested in this study. Chapter Three provided the research method of the study. It discussed the study approaches, the sampling, the data collection procedure and the data analysis design. The chapter included the discussion of the instruments construction and cultural issues.

This chapter reports the findings of the survey questionnaire of this study. It discusses response rates in terms of the number of online and hard copy questionnaires returned by the respondents. It presents information regarding the demographic characteristics of the respondents. It also reports on the construct validity and internal reliability of the career anchor inventory, psychological empowerment scale and job satisfaction scale. Analysis of the data begins with an examination of the dominant career anchor from the single career anchor point of view. It then discusses the multiple career anchor concept according to Feldman and Bolino (1996), including *complementary* and *mutually exclusive* categories that show the relationship pairs between career anchors. Finally, the chapter proposes answers to the research questions, the research model and tests the hypotheses, including the testing of mediating and moderating variables.

4.2 Data screening and response rate

Data gathered from the fieldwork using both a web-based survey and a paper-based survey received an initial screening. The data screening is intended to verify that no variable was missing and to set up the validated questionnaire for data analysis. First, the researcher filtered the questionnaires returned manually to determine that they met the sample criteria. Then, the demographic data were handled separately, as discussed in Sub-section 4.3. The surveys were then screened for missing responses by conducting a

missing values analysis. Following the preliminary data screening, the questionnaires were counted to determine response rates. The rate of return was established to determine the total valid number of questionnaires for analysis. The period of data collection for both methods was undertaken between 25 October 2011 and 31 January 2012. The next two sub-sections give a detailed discussion of each survey method.

4.2.1 Paper-based survey

The paper-based survey using self-administrated questionnaires was distributed to the potential respondents using an in-person drop-off strategy (Riley & Kiger 2002). By applying proportional multi-stage cluster sampling, the researcher targeted six universities in three administrative regions in Indonesia (see Appendix 7): three public universities (universities A, B and C) in the West, one state institution (university E) in the Central region and one (university F) in the East. At each of the three western institutions, the researcher randomly handed the surveys to the respondents, and then collected them over the following five days. Of the 415 questionnaires distributed, 121 declined to respond, 294 were returned and 27 were eliminated as invalid or not meeting the criteria, leaving a final number of 267 valid questionnaires. At the other three universities, the researcher dropped the questionnaires off to a person-in-charge and collected them within two weeks. A total of 105 surveys were delivered to three persons-in-charge, and 32 targeted respondents declined to respond the survey. Of the 73 responses, 13 were deleted as invalid or not meeting the criteria. Thus, there were 60 valid questionnaires for data analysis.

The researcher also approached the respondents individually in six other universities (universities H, I, K, L, M and N). A total of 180 questionnaires were sent out to persons-in-charge, 102 of which were returned. After five questionnaires were eliminated because the academics were on probation status, 97 were usable for further analysis.

Thus, the final sample size, in terms of participating institutions, was 11 public higher education institutions. These included seven in the West, three in the Central region and one in the East (Appendix 7).

To sum up, of the 700-targeted respondents who received questionnaires, 236 respondents (33.71%) declined to participate in the survey. The most common reasons for nearly three-quarters of them were loss of the questionnaires and unwillingness to receive follow-up communications. Of the 464 questionnaires returned, 419 (90.30%) were included in the data analysis. The other 45 questionnaires (9.70%) were excluded because respondents were on probation status (4.96%) and had less than five years' work experience (4.74%).

An examination of missing values of the three scales was also assessed in this method. All items were answered by the respondents (Appendix 8). Therefore, 419 questionnaires were valid for data analysis, giving a response rate of 66.29 percent (see Table 4.1).

4.2.2 Web-based survey

As discussed in Chapter Three, the emailing lists and referral email strategies were used to gather data for the current study using a web–based questionnaire. This questionnaire was uploaded to http://bit.ly/qisGD5. Three email lists were targeted for participation:

(1) Indonesian academic email list: a closed list that all Indonesian academics from both public and private institutions can join following approval from the administrator;

(2) Indonesian Students Association email lists in Australia: members of this group have a wide range of job titles, including many in the academic sector. Of the seven email lists in seven states in which contacts were made, only four could be contacted. Of these four, two responded. One was disregarded because there was no further response from its administrator after having a short communication, and another used the referral email via a contact person, rather than the web-based survey; and

(3) Faculty and Schools' email lists at three-targeted universities (see Appendix 7): after having permission from one university (university D) that the researcher visited, the survey questionnaire was distributed via the faculty's email list. At the other two universities (universities G and J), the contact persons voluntarily attached the survey to their internal email lists.

Another strategy used was to recruit and refer via individual email accounts. The researcher emailed prospective academics randomly, sending them the participant information sheet and asking them in the email to follow the link on the sheet to participate in the survey.

A total of 207 randomly selected academics participated in the survey: 139 respondents from the website and 68 from referral emails. For the on-line survey, 101 (72.66%) of 139 responses (67.15%) were valid for analysis. The other 38 questionnaires (27.34%) were taken out because they were from private sector academics, who were not eligible for this study. The remaining 68 questionnaires (32.85%) were those that had been sent out to the respondents individually through personal email addresses. All respondents responded to the survey using the link given on the information sheet. However, only 65 responses (95.59%) were valid for analysis. The exclusion of the three questionnaires (4.41%) was due to the respondents' probation status, which made them ineligible. Hence, the total usable questionnaires for data analysis from the web-based survey were 166 questionnaires, a return rate of 80.19 percent (see Table 4.1).

Furthermore, a careful investigation was done to find out whether there were any missing values in answering the scales. No respondents skipped the items on the responses (see Appendix 8). Hence, the final number of useful of surveys, both internet and hard copy surveys, was 585 questionnaires, a response rate of 87.57 percent. The details of the sample size and the rate of return are shown in Table 4.1.

Table 4.1: Sample size and response rate

Survey methods		**Distribution**		**Decline**		**Return**		**Deletion**		**Validity**	
		Σ*	**%****	**Σ***	**%****	**Σ***	**%****	**Σ***	**%****	**Σ***	**%****
Paper-based	Drop-off	415	59.29	121	17.29	294	70.84	27	9.18	267	90.82
	Person-in-charge	285	40.71	115	16.43	170	59.65	18	10.59	152	89.41
	Total	700	100.00	236	33.71	**464**	**66.29**	45	9.70	419	90.30
Web-based	Online survey	139	67.15	0	0	139	100.00	38	27.34	101	75.66
	Referral emails	68	32.85	0	0	68	100.00	3	4.41	65	95.59
	Total	207	100.00	0	0	**207**	**100.00**	41	31.75	166	80.19
Total of final survey		907	100	236	26.02	**671**	**73.65**	86	12.87	585	87.57

*Frequency for sample size ** Percentage for frequency

The response rate of this study was acceptable and comparable and much higher than most literature studies. Igbaria and Baroudi (1993), for example, had a final response rate of 36.90 percent, Coetzee and Schreuder (2011) was 7 percent, Chang, Shih and Lin

(2010) was 66.70 percent, Dickson & Lorentz (2009) was 13 percent, Weber and Ladkin (2009) was 15 percent, Ituma & Simpson (2007) was 67.20 percent, Levy (2006) was 82.66 percent, Hsu et al. (2003) was 31 percent, Custodio (2000) was 98.28 percent and Feldman and Bolino (2000) was 18 percent.

Overall, it can be said that, both the web-based and the paper-based survey methods were applicable methods to collect data. However, the referral emails strategy was the most effective way to get the highest response rate.

4.3 Demographic findings

Demographic background information

On the questionnaires, the respondents were requested to identify a number of demographic profiles for background information and data analysis. After comparison with the sample criteria in Sub-sections 4.2.1 and 4.2.2, 12.87 percent of the responses were discarded from the analysis. The preliminary screening indicated that 38 respondents (5.69%) were dropped from further analysis because they were employed by private universities, 26 respondents (3.89%) were probationary and 22 (3.29%) had less than five years' work experience. Hence, the final effective sample comprised 585 full-time, experienced academics from state higher education institutions.

Respondents' demographic information gathered for the background of this study (Appendix 9) included the year of first graduation and the discipline, academic rank, managerial position, location of the highest degree attained, marital status, religion and ethnic group. While most variables have some missing values for at least some respondents, managerial position had a complete set of responses. Only 158 respondents (27.01%) held a managerial or structural position, the other 427 respondents (72.99%) clearly identified themselves as lecturers. Ninety-seven respondents (16.58%) did not provide a date of first graduation, and one respondent (0.17%) did not indicate a discipline or major. Four respondents (0.68%) did not indicate marital status, 18 respondents (3.08%) did not indicate religion and 160 respondents (27.35%) did not indicate ethnicity. Since the missing values were only 7.98 percent on average and not included in the further data analysis, it was concluded that those missing figures would not affect the analysis as a whole.

Of the total 585 respondents, 250 (42.74%) received their first degrees during or before 1990, followed by 159 (27.18%) between 1991 and 2000. The largest groups of academics, 129 (22.05%), majored in the plant sciences (e.g., agronomy, socioeconomic agriculture, horticulture, and pest and diseases), followed by 83 (14.19%) in economics (e.g., management, accounting, and economics development). Of the total academic respondents, 434 (74.16%) completed their highest degrees in domestic universities and 151 (25.84%) overseas (for example, in Australia, France, Germany, Japan, the U.K. and the U.S.). Most respondents (442, or 75.56%), indicated Islam as their religion, and 519 respondents (88.72%) were married. Approximately half of the respondents (273, or 46.67%), held a senior lecturer (*lektor kepala*) position, which is one step below professor (*guru besar*), (the highest academic rank); 193 respondents (32.99%) held the position of assistant lecturer (*lektor*). As mentioned earlier, only 158 respondents (27.01%) held managerial positions, with the majority (87, or 14.87%) being academics, or assigned as heads of school/department. Finally, 176 (30.09%) referred to themselves as Javanese; followed by 66 (11.28%) as Malay. It can be said that respondents' backgrounds were of sufficient diversity to avoid a homogeneous sample.

Characteristics of selected demographic variables

The selected demographic variables considered for further analysis were gender, education, age, institution size and work experience. For the purposes of analysis, all variables were coded. Gender was denoted as 1 for female and 2 for male; educational level was denoted as 1 for a bachelor's degree, 2 for a master's degree from an Indonesian university, 3 for a master's degree from a foreign university, 4 for a doctoral degree from an Indonesian university, and 5 for a doctoral degree from a foreign university; work experience was denoted as 1 for five to10 years, 2 for 11 to 20 years, and 3 for over 20 years; Institution size was grouped based on *Dikti*'s categorisation (*Direktorat Jenderal Pendidikan Tinggi* 2013) and denoted as 1 for a small university, 2 for a medium-sized university and 3 for a large university; and age group was denoted as 1 for up to 25 years, 2 for 26 to 35 years, 3 for 36 to 45 years, 4 for 46 to 55 years, and 5 for 56 years and over. Table 4.2 presents the frequency and percentage of respondents' demographic characteristics.

Table 4.2: Respondents' selected demographic characteristics

Description	∑*	%**
Gender		
Female	195	33.33
Male	390	66.67
T o t a l	585	100.00
Educational level		
Bachelor's degree	50	8.55
Master's degree from Indonesian university	305	52.14
Master's degree from foreign university	64	10.94
Doctoral degree from Indonesian university	78	13.33
Doctoral degree from foreign university	88	15.04
T o t a l	585	100.00
Work experience (in years)		
5 to 10	175	29.91
11 to 20	163	27.86
21 and over	247	42.22
T o t a l	585	100.00
Institution size		
Small (fewer than 5,000 students)	41	7.01
Medium (5,000 to 10,000 students)	247	42.22
Large (over 10,000 students)	297	50.77
T o t a l	585	100.00
Age (in years)		
25 and less	16	2.74
26 to 35	108	18.46
36 to 45	171	29.23
46 to 55	255	43.59
56 and over	35	5.98
T o t a l	585	100.00

*Frequency **Percentage

Table 4.2 shows that the sample consisted of 195 females (33.33%) and 390 males (66.67%). The gender imbalance reflects the composition of the total number of academics at public higher degree education institutions in Indonesia which is 36.43 percent for female academics and 63.57 percent for male academics as per a 2010 report published at http://evaluasi.dikti.go.id.

More than half the respondents (305, or 52.14%), held a master's degree from an Indonesian tertiary education institution compared to only 64 (10.94%) respondents who held their master's degree from an overseas university. Conversely, the number of doctorates from foreign universities (88, or 15.04%) was only slightly higher than the number from in-country universities (78, or 13.33%). Overall, as most respondents held a postgraduate degree, they were well qualified to provide information for the study.

Related to work experience, the highest number of respondents (247, or 42.22%) had worked for more than 21 years at their current higher education institution. The other two groups were: 175 respondents (29.91%) had worked five to 10 years and 163 respondents (27.86%) had worked 11 to 20 years at their current institution. These figures indicate that the respondents were mature enough to determine their career orientation. Schein (1990) pointed out that individuals need at least five years' work experience to guide their career choice.

Most respondents (297, or 50.77%) worked at large universities, and 247 respondents (42.22%) at medium-sized institutions. More than 90 percent of respondents felt that they had had good opportunities to develop their own careers due to the size of the institutions.

The largest segment of respondents (255, or 43.59%) were in the age range of 46 to 55 years old, followed by 171 respondents (29.23%) in the age group of 36 to 45 years old and 108 respondents (18.46%) in the age group of 26 to 35 years old. Consistent with data on work experience, the respondents' age groups showed that they were in the establishment and maintenance stages of their career life cycle (Super 1990), and thus appropriate in the sample.

To facilitate the analysis, two variables were regrouped. Education was reclassified into three groups: bachelor's degree, master's degree, and doctoral degree. Age was regrouped into three new groups: 25 years and below, 26 to 45 years and 46 years and above to correspond to the career life cycle periods that Super (1990, p. 237) identified as exploration, establishment and maintenance and decline. All selected demographic variables, including the new regrouped variables, were then tested for their significant distributions and the results are presented in Table 4.3.

The chi-square tests for goodness-of-fit outputs provide the significant distribution of the variables. Although the study consisted of more men than women, the statistical chi-square test for goodness-of-fit suggested a significant difference in the distribution ($\chi^2_{[1]}=65.000$; $\rho<0.001$). The chi-square test also showed a significant difference in educational levels ($\chi^2_{[2]}=267.395$; $\rho<0.001$). Similarly, the significant differences were statistically found in the work experience distribution ($\chi^2_{[2]}=21.169$; $\rho<0.001$) and the

institution size distribution (χ^2=188.841; ρ<0.001). Finally, there was evidence to suggest a significant difference in the sample distribution of age ranges ($\chi^2_{[2]}$=246.799; ρ<0.001). At the 0.05 level of significance, all selected demographic variables revealed that the demographic distribution of respondents statistically approached the sampling distribution. Hence, the key demographic variables were valid for the study.

Table 4.3: Chi-square test for key demographic variables

Description	Chi-square of goodness-of-fit test			
	Observed N	Expected N	Test of statistics	
Gender			χ^2 = 65.000[1)] ρ<.001[2)] df = 1	[1)]0 cells (.0%) have expected frequencies < 5. [2)]ρ<.05 is significant.
Female	195	292.5		
Male	390	292.5		
T o t a l	585	-		
Educational level			χ^2 = 267.395[1)] ρ<.001[2)] df = 2	
Bachelor's degree	50	195.0		
Master's degree	369	195.0		
Doctoral degree	166	195.0		
T o t a l	585	-		
Work experience (in years)			χ^2 = 21.169[1)] ρ<.001[2)] df = 2	
5 to 10	175	195.0		
11 to 20	163	195.0		
21 and above	247	195.0		
T o t a l	585	-		
Institution size			χ^2 = 188.841[1)] ρ<.001[2)] df = 2	
Small (fewer than 5,000 students)	41	195.0		
Medium (5,000 to 10,000 students)	247	195.0		
Large (over 10,000 students)	297	195.0		
T o t a l	585	-		
Age (in years)			χ^2 = 246.799[1)] ρ<.001[2)] df = 2	
25 and less	16	195.0		
26 to 45	279	195.0		
46 and above	290	195.0		
T o t a l	585	-		

4.4 Construct validity of survey questionnaire

A construct validity assessment is established to define factors underlying the constructs in the interpretable structures (Meyer & Page 2000; Cavana, Delahaye & Sekaran 2001; Dancey & Reidy 2004; Bhattacherjee 2012). Each of the three scales used in the current study was tested for the construct validity through convergent and discriminant validity (Ghauri & Gronhaug 2005; Sekaran 2010). Convergent validity appears when variables within a single construct are highly correlated, while discriminant validity is satisfied

when variables between a single construct discriminate variables from other constructs and have low correlation (Meyer & Page 2000; Zikmund et al. 2010; Bhattacherjee 2012). As discussed in Chapter Three, exploratory factor analysis was performed to measure the construct validity of the career anchor inventory, psychological empowerment scale and job satisfaction scale. According to Hair et al. (2010), besides summarising meaningful variables, factor analysis also assesses interrelationships between variables in a data set.

Prior to factoring the constructs, the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO-MSA) and Barlett's test of sphericity were run to measure the factorability of the data or appropriateness of factor analysis. Using the satisfactory criterion of 0.60 and higher suggested by the Kaiser measure (Kline 1997), the distribution of the career anchor inventory (0.729), the psychological empowerment scale (0.808) and the job satisfaction scale (0.658) were satisfied. The Barlett's test of sphericity indicated that all the p-values for three scales were at the significance level of ≤ 0.05 ($\rho<0.001$), showing that an identity matrix was not a concern. Hence, the results suggest that the data were acceptable and suitable for a factor analysis.

Extracting factors were therefore computed. The factor analysis applied the principal component analysis method to determine the linear relationship of factors and the orthogonal with varimax rotation to ensure that the factors were linearly uncorrelated. The criterion of eigenvalues greater than 1 and the scree plots were used to determine the significant relationship of the extracted factors, and factor loadings at a minimum level of 0.60 (≥ 0.60) for convergent validity, and 0.30 and below (≤ 0.30) for discriminant validity were considered (Kline 1997; Hair et al. 2010; Zikmund et al. 2010; Bhattacherjee 2012). The scree plots are illustrated in Appendix 10 and the factor analysis outputs are summarised in Table 4.4.

Correlations between all variables were then explored further by employing a bivariate correlation matrix. The correlation *r*-values within the constructs should be higher than the scores between the constructs, following Igbaria and Baroudi's (1993, p. 39) rule of thumb -when they analysed the correlations of a short-form of career anchor inventory- and no values are above 0.70 (Dancey & Reidy 2004). The correlation matrix in Appendix 10 presents the outputs, mean and standard deviation of the factors examined.

Table 4.4: Factors extracted and factor loadings

Variables	Factors							Statistical test
	1	2	3	4	5	6	7	
Career Anchors:								KMO = .729, χ^2= 5213.425, ρ<.001, df = 300; 7 factors were extracted from eigenvalues > 1; Cumulative variance explained 64.529%.
Technical competence 1	**.673**	-.122	.245	.215	-.155	.043	.040	
Technical competence 2	**.728**	-.102	.197	.204	-.106	.052	.009	
Technical competence 3	**.681**	-.032	.288	.250	-.171	-.014	-.035	
Geographical stability 1	**.687**	.101	-.032	-.194	.143	.100	-.015	
Geographical stability 2	**.696**	.195	-.040	-.205	.215	.056	-.005	
Autonomy 1	-.263	**.698**	-.038	.024	-.075	.079	.001	
Autonomy 2	-.224	**.642**	-.012	.012	-.037	.160	.046	
Autonomy 3	-.297	**.711**	.092	.077	.038	.018	-.081	
Lifestyle 1	.275	**.627**	.005	-.001	.081	.023	.189	
Lifestyle 2	*.236*	**.706**	-.031	.062	.011	.109	.089	
Lifestyle 3	.237	**.690**	.037	-.001	.004	.015	.036	
Entrepreneurial creativity 1	.186	-.060	**.799**	-.098	.062	-.002	.024	
Entrepreneurial creativity 2	.098	-.026	**.872**	.030	.035	.128	.027	
Entrepreneurial creativity 3	.059	.161	**.842**	-.094	.075	.076	-.018	
Service 1	.069	-.025	-.021	**.813**	.084	.035	.100	
Service 2	.073	-.027	-.042	**.779**	.154	.157	.034	
Service 3	-.021	.197	-.090	**.656**	.116	.007	.007	
Managerial competence 1	.152	-.033	.076	.189	**.753**	-.021	.040	
Managerial competence 2	-.125	.132	-.031	.006	**.801**	.040	.049	
Managerial competence 3	-.020	-.083	.116	.163	**.749**	.096	-.027	
Pure challenge 1	-.072	.101	-.006	-.030	.002	**.751**	.101	
Pure challenge 2	.070	.079	.043	.055	.077	**.782**	.061	
Pure challenge 3	.185	.049	.183	.198	.035	**.712**	-.042	
Economic security 1	.006	.072	.042	.055	.037	.064	**.931**	
Economic security 2	-.016	.102	-.010	.082	.020	.073	**.920**	
Total variance explained (%)	15.637	13.069	9.237	7.954	6.736	6.299	5.597	
Psychological empowerment:								KMO = .808, χ^2 = 3535.549, ρ<.001, df = 66; 4 factors were extracted from eigenvalues > 1; Cumulative variance explained 76.633%.
Meaning 1	**.873**	.159	.155	.117				
Meaning 2	**.857**	.083	.280	.099				
Meaning 3	**.866**	.119	.175	.142				
Impact 1	.158	**.858**	.105	.117				
Impact 2	.108	**.835**	.008	.249				
Impact 3	.076	**.906**	.044	.074				
Competence 1	.252	.033	**.840**	.057				
Competence 2	.223	.013	**.889**	.073				
Competence 3	.098	.109	**.711**	.244				
Self-determination 1	.281	.193	.172	**.704**				
Self-determination 2	.080	.126	.091	**.852**				
Self-determination 3	.035	.117	.112	**.840**				
Total variance explained (%)	37.492	17.228	12.144	9.769				
Job satisfaction*:								KMO = .658, χ^2 = 499.520, ρ<.001, df = 3; 1 factor was extracted from eigenvalues >1; Cumulative variance explained 64.507%.
Job satisfaction 1	**.888**							
Job satisfaction 2	**.887**							
Job satisfaction 3	**.600**							
Total variance explained (%)	64.507							

* No rotated component matrix performed.

Factors extracted in Table 4.4 presents the correlated and uncorrelated factors. All items strongly loaded onto their own factors except items on Factor 1 and Factor 2 of the career anchor inventory indicating that cross-loadings existed. Five constructs of the career anchor inventory, four constructs of psychological empowerment and one construct of job satisfaction were consistent with the original constructs. According to the definition given in Sub-section 4.4, convergent and discriminant validity were observed for the measurement model. The two cases in which there was an indication of cross-loadings will be discussed in Sub-section 4.6.

Career anchor inventory

Table 4.4 clearly shows that the five constructs highly correlated between the items. *Entrepreneurial creativity* (Factor 3), *service* (Factor 4), *managerial competence* (Factor 5), *pure challenge* (Factor 6) and *economic security* (Factor 7), converged as in the original constructs. These anchors had factor loadings of 0.799-0.872; 0.565-0.813; 0.749-0.80; 0.712-0.782; and 0.920-0.931 respectively, which accounted for 9.24 percent, 7.95 percent, 6.74 percent, 6.30 percent, and 5.60 percent of the total variance. Conversely, the emergence of cross-loadings on Factor 1 and Factor 2 determined that between the items, they were statistically indistinguishable. Items on *technical competence* were not discriminated from items on *geographical stability*, so these two constructs were merged into one new construct. Similarly, the merging of the *autonomy* and *lifestyle* anchors into another new construct showed a low correlation between these items. The combined total variance for the seven factors accounted for 64.53 percent.

Moreover, the correlation matrix also demonstrated that all correlation coefficients were low (Appendix 11). All 21-career anchor variables had correlations between 0.025 and 0.279, below the standard coefficient of 0.7. This confirmed the discriminant validity. In addition, the mean values ranged from the lowest of 3.772 on Factor 1 to the highest of 5.184 on *economic security*.

Thus, both factor loadings and correlation matrix coefficients demonstrated the construct validity of the career anchor inventory. Furthermore, the detailed discussion of the factors extracted is presented separately as it will answer the most crucial issue of the research questions.

Psychological empowerment scale

The psychological empowerment scale was also valid for the current study. All 12 items for the four factors had high factor loadings and remained consistent with the original constructs developed by Spreitzer (1995). No cross-loadings emerged. Three items on meaning had a high correlation between the items with factor loadings ranging from 0.857 to 0.873 and accounted for 37.49 percent of the total variance. Three items on impact were also highly loaded between the items with item three having the highest loading. The values ranged from 0.835 to 0.906, giving the second highest total variance and explained 17.23 percent of the total variance. Similarly, the remaining two constructs had high correlations with loadings above 0.70; three items on *competence* had loadings of 0.711-0.889 and explained 12.14 percent of the total variance, and three other items on *self-determination* had loadings 0.704-0.852 and explained 9.77 percent of the total variance. These loadings are somewhat similar to those in previous studies of Ghani, Raja Hussin and Jusoff (2009), for instance. It can be concluded that the items of each construct are statistically indistinguishable.

Moreover, the correlation matrix shows that all six-factor loadings had low r-values (0.171 to 0.456), below the requirement of 0.70. The low correlation values also provided evidence for the discriminant validity. The respondents ranked higher on all four facets, with the highest mean on competence (5.363) and the lowest mean on impact (4.077). The convergent and discriminant validity was, therefore, confirmed.

Job satisfaction scale

Factor analysis outputs for job satisfaction were confirmed, but not fully performed. There was no factor loading for the rotated component matrix result because only one factor was extracted. The three items remained together in one factor reflecting the original scale of job satisfaction recommended by Igbaria and Baroudi (1993). The factor loadings showed higher correlations even though item three scored only 0.60 (0.888, 0.887 and 0.600) and they accounted cumulatively for 64.51 percent of the total variance. Convergent validity was confirmed. The correlation matrix table also showed a low *r*-value of 0.226, meeting the discriminant validity criterion. The respondents scored high on *job satisfaction* with an average of 4.421. It was, therefore, concluded that both convergent and discriminant validity were confirmed.

4.5 Internal consistency of instruments

The reliability of the instruments was examined using the internal consistency measurement. Reliability determines the consistency and stability of a scale when it measures a concept under different locations and samples (Hair et al. 2010) by examining the goodness of fit of the scales (Sekaran & Bougie 2013). In this study, Cronbach's alpha coefficient (Ghauri & Gronhaug 2005; Allen & Bennett 2010; Zikmund et al. 2013) was used to test the reliability of the career anchor inventory, the psychological empowerment scale and the general job satisfaction scale. It has been suggested to use an alpha value of 0.8 or above (Churchill 1979; Osborne, Christensen & Gunter 2001). The current study, however, adopted a minimum alpha of 0.6 as suggested by Nunnaly (1978). The results of reliability analysis are presented in Table 4.5.

Table 4.5: Reliability of the measurement scales

Variables	Alpha score	Alpha if item deleted	Item deleted	Item number in scales
Career anchor inventory:				
Factor 1	0.76	-	-	5, 12, 20, 14, 18
Factor 2	0.80	-	-	2, 7, 21, 10, 19,24
Entrepreneurial creativity	0.83	-	-	11, 17,25
Service	0.71	0.77	22	9, 15, 22
Managerial competence	0.71	-	-	1, 6, 13
Pure challenge	0.65	-	-	4, 16, 23
Economic security	0.87	-	-	3, 8
Psychological empowerment scale:				
Meaning	0.89	-	-	1, 2, 3
Impact	0.87	-	-	10, 11,12
Competence	0.80	-	-	4, 5, 6
Self-determination	0.78	-	-	7, 8, 9
Job satisfaction scale:				
Job satisfaction	0.71	-	-	1, 2, 3

Career anchor inventory

After running the factor analysis on a short form of the career anchor inventory introduced by Igbaria and Baroudi (1993) for the current study, the career anchor categories were grouped to become seven factors. The alpha coefficients showed that the seven constructs were high and within the acceptable level. The alpha scores for six constructs (Factor 1, Factor 2, *entrepreneurial creativity, service, managerial*

competence and *economic security*) were high, ranging from 0.71 to 0.87 while one construct (*pure challenge*) received a moderate alpha coefficient (α=0.65). A detailed examination of the items indicated that it was possible to improve the alpha coefficient of the *service* anchor from 0.71 to 0.77 by removing item 3. The item is 'a career in which I can be committed and devoted to a cause'. It is assumed that the respondents probably found the wording ambiguous. Since the increase was only marginal and the first alpha score was already at an acceptable level, the three items were, therefore, retained for further data analysis. In none of the other coefficients could reliability be enhanced by deleting items.

The alpha coefficients varied somewhat from those found in previous studies. First, the two new anchors (Factor 1 and Factor 2) have not been reported before, so no comparison can be made. Second, two career anchors (*service* and *managerial competence*) clearly showed that the alphas for the current study (α=0.71) were lower than the alphas (α=0.81 and 0.83) found in the study by Igbaria and Baroudi (1993), and the alphas (α =0.83 and 0.84) by Custodio (2000); only *economic security* had an alpha score (α=0.87) that exceeded the original scale (α=0.82) and Custodio's study (2000) (α=0.82). In particular, the alpha for *entrepreneurial creativity* (α=0.83) was slightly lower than the alpha (α=0.84) in Custodio's study (2000) and slightly higher than the one (α=0.82) in the original study. Third, *pure challenge* received the lowest alpha order for both the current study (α=0.65) and in the original study (α=0.62) by Igbaria and Baroudi (1993). Since the previous study had used all three items under *pure challenge*, the three items were, therefore, held for data analysis.

Psychological empowerment scale

The reliability calculation of four variables produced high alpha coefficients. The alpha scores ranged from 0.78 to 0.89. No removal of items was suggested to increase the alphas. When a comparison was made to the original study conducted by Spreitzer (1995), the alpha score of *meaning* (α=0.89) was slightly higher than Spreitzer's (α=0.87) while Cronbach's alpha score for *impact* (α=0.87) was slightly lower than Spreitzer's (α=0.88). The reliability of *competence* (α=0.80) was also lower than Spreitzer's (α=0.81). The alpha score for *self-determination* (α=0.78) was the lowest, and similar to that reported in the study by Spreitzer (1995) but the alpha was high at

0.81. The present findings were higher than the alpha score found in Collins's (2007) study (α=0.62) for *meaning*, although lower than the one in Chang and Jang's (α=0.82) study. Even though there was a variation in the alpha scores, all alpha coefficients in the current study were found to be acceptable and reliable. Thus, the 12 items of psychological empowerment were maintained for further data analysis.

Job satisfaction scale

The internal consistency value for job satisfaction was also high. The alpha score was 0.71 and none of the three items needed to be eliminated from the analysis to raise the alpha. Although the alpha was lower than the original score (α=0.84) introduced by Igbaria and Baroudi (1993), the score was above the minimum standard of 0.60.

Hence, the three scales used in this study were shown to have a satisfactory internal consistency. The career anchor inventory now consisted of seven variables with 25 items, the psychological empowerment scale comprised four variables with 12 items and the job satisfaction scale included one variable with three items.

4.6 Dimensionality of career anchors, psychological empowerment and job satisfaction

This section answers Issue 1 of the research questions in Chapter One.

Issue 1: The relevance of the career anchor inventory, psychological empowerment scale and job satisfaction scale in the Indonesian context.

This question analyses all items underlying each variable of each scale using factor analysis that was designed to analyse these structures (see Sub-section 4.4). Some outputs related to this issue are discussed in this Sub-section. However, because the issue aims to analyse the scales' items, no hypothesis testing is performed.

Career anchor inventory

Exploratory factor analysis extracted seven factors from nine factors of the career anchor categories (see Table 4.4). Five factors (*entrepreneurial creativity, service, managerial competence, pure challenge* and *economic security*) were the same as the original factor structures, while the two new factors emerged during the investigation.

Further investigation was, therefore, carried out to examine the factors underlying the constructs. Seven factors, included Factor 1 and Factor 2 as the new anchors, had been extracted with eigenvalues greater than 1 and together accounted for 64.53 percent of the total variance.

Table 4.4 indicates that Factor 1 consisted of two items of the *geographical stability* anchor and three items of the *technical competence* anchor. Those five items then merged into one new single career anchor with factor loadings from 0.673 to 0.728. Three items of the original *technical competence* anchor had loaded higher on the two items of the original *geographical stability* anchor. Factor 1 accounted for 15.64 percent of the variance.

The high loading of *technical competence* on *geographical stability* may suggest that the two anchors are related to each other. It seems that these individuals are unlikely to move to other places; they strongly show loyalty to their current institutions. As Schein (2006) pointed out, they prefer to remain in a single organisation and work in their area of expertise. They feel satisfied when they can use their skills at the current workplace even though another location is promising. In addition, these people only accept a technical managerial position that permits them to grow in their specific technical and functional fields instead of a general managerial promotion. They prefer to work independently on self-determined goals, free from supervision, asking only for autonomy and fair access to resources, such as facilities and budgets. These individuals appreciate their capabilities in technical work, are already settled in one geographic area and strongly reject promotion or other types of rewards from other institutions.

These people want their pay to reflect their skills, although money is not their top priority. They expect to be paid on the basis of educational qualifications and work experience with a professor getting paid more than a faculty member with merely a doctorate degree (Schein 2006), for example. They are also concerned abot equity between the earnings of individuals with the same skills and at thw levels. Even though they would not move to other organisations/institutions, under-payment (when compared to another individual within the same organisation or other institutions) would be seen as unfair treatment. However, up-grading skills through training or education can also be seen as compensation for low financial benefits and generates

staff loyalty to organisations/institutions where they work. Further, non-financial payment is more appreciated in terms of recognition.

In short, these hard workers - as they call themselves - bind themselves psychologically and emotionally to one workplace with strong attachment to their job titles. Therefore, they do not distinguish these five items nor the two career anchors of which they are a factor. This may also be due to the nature of wording of the items in the scale. This new anchor is, therefore, named '*work dedication*'.

The other new anchor emerged from the merging of *autonomy* and *lifestyle*, with factor loadings ranging from 0.627 to 0.711. Three items of *lifestyle* were loaded higher on the three items of *autonomy*, which accounted for 13.07 percent of the variance. This merging suggested that individuals want autonomy to manage their work and the chance to apply their own styles. Job autonomy is required to enable them to express and implement their skills in order to achieve work goals. Free from supervision, but still within the rules of the organisations/institutions, is needed by these people.

At the same time, because of the changing social values in real life, this type of individual wants to integrate their family life and career lives. This does not mean that their personal life is more important than their career, but, for example when a married person enters the world of work, taking care of their spouse and children becomes as important as building a career. Doing personal activities are also important for social life. So, it takes a balance between a career and family or personal life (e.g., personal needs) in developing a career. Thus, they require flexibility in work.

In relation to advancement, a promotion will be accepted if the new job gives greater autonomy in managing work and personal lifestyle. Being a researcher is better than receiving a managerial position at a university because researchers have more flexible hours and places of work whereas administrative academics might be expected to follow 'office hours' and always be present in the office, for instance (Schein 2006). Researchers can set their own time either for work or family. They also will not accept a promotion to move to another location as it would disturb the stability of the family situation, such as the removal of children from their existing school and adjustment to a new school in the new location.

In other words, people with this anchor are more concerned with the reality of the standard of living by seeking autonomy and flexibility at work to balance their work and family life situation. The anchor is, therefore, labelled as '*balanced-lifestyle*'.

The remaining five anchors represent the original categories. *Entrepreneurial creativity*, *service*, *managerial competence*, and *pure challenge* each originally had three items, and *economic security* had two original items. Hence, the emergence of the two new career anchors that have not been reported previously represents a shift of career anchor structures, particularly for Indonesian academics.

Psychological empowerment scale

The psychological empowerment scale corresponds well to the Indonesian academic responses. No new factors appeared and the four facets were consistent with the original constructs introduced by Spreitzer (1995). The factor loadings showed high correlations between the items for the four variables' loadings, ranging from 0.704 to 0.906 (see Sub-section 4.4).

Some previous studies have examined factor structures underlying the psychological empowerment construct, with varying results. Hocwalder and Brucefors (2005), for example, found four factors from their Swedish nurse respondents. In Hancer's (2005) and Dimitriades's (2005) studies, three factors were extracted with *self-determination* and *impact* merged into one factor while Col (2008, cited in Unar & Turan 2010) incorporated *meaning* and *competence* into one factor, with the two other remaining the same as their original dimensions.

Job satisfaction scale

The job satisfaction scale was also shown to apply to Indonesian academics. The only job satisfaction variable resulted in one factor with its three original items. Two out of the three items had high factor loadings (0.888 and 0.887) and the third had a 0.600 loading. The total variance explained was 64.51 percent. Although one item had a low loading, the three items grouped together and were correlated. Igbaria and Baroudi (1993) found the three items grouped in a single factor, determined that they explained 75.90 percent of the total variance.

Thus, even though two new factors emerge on the career anchor inventory, the three scales used were satisfactory. It, therefore, is appropriate to measure Indonesian academics' attitudes in terms of career anchors, psychological empowerment and job satisfaction.

4.7 Dominant career anchors

The career anchor concept developed by Schein (1978, 1990) is the focus of this study. The next Sub-sections present the answer to the issues of the research questions and the results of hypothesis testing. It begins to determine whether there is a dominant career anchor.

4.7.1 Single dominant career anchor

This sub-section answers Issue 2 of the research questions in Chapter One.

Issue 2: The single or multiple dominant career anchors of Indonesian academics.

Hypothesis 1: Indonesian academics score differently on the single dominant career anchor or multiple dominant career anchors.

As discussed in Chapter Three, the dominant career anchor was measured by the highest frequency from among the seven career anchors scored by the respondents. The dominant single career anchor was defined as the highest frequency among the seven career anchors assessed by averaging the scores for each anchor. When there was more than one highest mean value, and the values were above the threshold value of 3.00, the scores were grouped as multiple career anchors. The total number of respondents anchored on each career anchor was arranged in descending order, from highest to lowest in order to show the rank order of career anchors. Then, a chi-square test for goodness-of-fit was performed to test the hypothesis of the different scores between the numbers of Indonesian academics' career anchors (see Sub-section 3.6.1). The frequencies and percentages of the career anchors, and the chi-square test results are shown in Table 4.6.

Table 4.6 shows the dominant career anchor of academics in public universities in Indonesia and their significant distribution. It clearly indicates that the highest frequency was *economic security* and it became the dominant career anchor in terms of

a single career anchor. Nearly half the respondents (42.39%) oriented to this anchor. The *service* anchor, as predicted for civil servants (Schein 1990), was ranked second with 86 respondents (14.70%). It can also be seen that multiple career anchors existed among 166 respondents (28.38%) and was the second most preferred anchor. Multiple anchors existed consisting of 60 respondents (10.26%) had two anchors, 83 respondents (14.19%) academics had three anchors, 14 respondents (2.39%) had four anchors, and nine (1.54%) had five anchors. This is a crucial finding and needs critical analysis.

Table 4.6: Career anchor order and chi-square test of single career anchors

Career anchors			**Goodness-of-fit test**	
Variables	**∑***	**%****		
Economic security	**248**	**42.39**	χ^2 = 758.521[1)] ρ<.001[2)] df = 7	[1)]0 cells (.0%) have expected frequencies < 5; Minimum expected cell frequency is 73.1; [2)]ρ<.05 is significant.
Service	86	14.70		
Managerial competence	27	4.62		
Entrepreneurial creativity	24	4.10		
Work dedication	18	3.08		
Pure challenge	12	2.05		
Balanced-lifestyle	4	0.68		
Multiple career anchors	***166***	***28.38***		
T o t a l	585	100.00		

*Frequency **Percentage

The table also shows the rank order of career anchors of academics according to Schein's career anchor concept. The order is *economic security, service, managerial competence, entrepreneurial creativity, work dedication, pure challenge* and *balanced-lifestyle*. The differences of the frequencies were tested in hypothesis 1.

Table 4.6 also provides the chi-square for the goodness-of-fit test results. There was evidence through the chi-square test for frequency to suggest a statistically significant difference between the career anchor scores ($\chi^2_{[7]}$=65.000; ρ<0.001) at alpha 0.05. The hypothesis 1 was, therefore, supported.

4.7.2 Multiple groups-based dominant career anchors

This sub-section responds to Issue 3 of the research question in Chapter One.

Issue 3: The talents-based, needs-based and values-based anchors of Indonesian academics.

Hypothesis 2: Indonesian academics score differently on the talents-based, needs-based and values-based anchors.

As indicated in the study design, the multiple career anchors framework proposed by Feldman and Bolino (1996) was assessed. Two new factors emerged in the previous factor analysis (see Table 4.4), which affected the composition of the career anchor group categories developed by Feldman and Bolino (1996). *Work dedication* was excluded from *talents-based* (for *technical competence*) and *needs-based* (for *geographical stability*) anchors. They then formed a new group comprised *talents-based* and *needs-based* anchors. By contrast, the *balanced-lifestyle* anchor remained in the *needs-based* anchor group as in Feldman and Bolino's original grouping.

The shift demonstrated that those who oriented to *talents-based* and *needs-based* anchors would exercise their skills at the workplace based on competencies they gained from formal education. At the same time they needed a stable work environment and geographical location to succeed. This group of anchors is, therefore, grouped as '*commitment-based* anchors'.

The final multiple groups-based career anchors categories from the study were:

Talents-based anchors : *Managerial competence* and *Entrepreneurial creativity.*
Needs-based anchors : *Economic security, Autonomy* and *Lifestyle*.
Values-based anchors : *Service* and *Pure challenge.*
Commitment-based anchors : *Technical competence* and *Geographical stability.*

Thus, hypothesis 2 was reformulated to become:

Hypothesis 2a: Indonesian academics score differently on the talents-based, needs-based, values-based and commitment-based anchors.

The same strategies as in the assessment of single dominant career anchor were also applied to the multiple groups-based anchors in the investigation. The results are presented in Table 4.7.

Table 4.7 shows that the highest frequency was the *needs-based* anchor group, with 253 respondents (43.25%). It was followed by the *values-based* anchor group, with 102 respondents (17.44%). Surprisingly, the multiple career anchors also occurred in this multiple groups-based anchors and ranked the second highest, with 154 respondents (26.32%). The existence of this anchor is exceptional and needs serious attention in the study of career anchors.

Table 4.7: Career anchor order and chi-square test of multiple groups-based anchors

Multiple groups-based anchors			**Goodness-of-fit test**	
Variables	∑*	%**		
Needs-based	**253**	**43.25**	χ^2 = 283.932[1)] ρ<.001[2)] df = 4	[1)]0 cells (.0%) have expected frequencies < 5; Minimum expected cell frequency is 117.0; [2)]ρ<.05 is significant.
Values-based	102	17.44		
Talents-based	56	9.57		
Commitment-based	20	3.42		
Multiple-based	*154*	*26.32*		
T o t a l	585	100.00		

*Frequency **Percentage

Pearson's chi-square test was computed to test hypothesis 2. The result showed that there was a statistically significant difference between the scores on *talents-based, needs-based, values-based* and *commitment-based* anchors, or multiple groups-based anchors anchored by the respondents ($\chi^2_{[4]}$=283.932, ρ<0.001) at the significant level of 5 percent. Hypothesis 2 was, therefore, supported.

Following the recommendation of Feldman and Bolino (1996), the current study investigated the relationships between career anchors to find out which anchors are paired as *complementary* and *mutually exclusive* (Ituma & Simpson 2007; Danziger, Rahman-Moore & Valency 2008; Chapman 2009). The understanding of the magnitude of the relationships between the anchors gives meaningfulness for individuals (Feldman & Bolino 1996) and affects career outcomes (Chapman 2009), such as job satisfaction.

As discussed in Sub-section 3.6.1 of Chapter Three, the bivariate inter-correlation matrix was, therefore, employed to find out the relationship between the anchors to identify *complementary* and *mutually exclusive* anchors. The magnitudes of the correlation (*r*) used Dancey and Reidy's (2004) suggestion. They consisted of: [a]

perfect (r = +/- 1), [b] strong (r = +/- 0.9 to 0.7), [c] moderate (r = +/- 0.6 to 0.4), and [d] weak (r = +/- 0.3 to 0.1). The negative symbol (-) represented the orthogonal relationships for the *mutually exclusive* anchor pairs, while the positive symbol (+) represented the *complementary* anchor pairs. Moreover, the relationships of career anchors were grouped based on the significant values. The same strength of significant values was paired or matched from row to column. Only the significant results were analysed denoted by * (at alpha 1%) and ** (at alpha 5%). Moreover, *mutually exclusive* relationships were denoted by >< and *complementary* relationships were denoted by ~. The summary of the outputs and the relationships of anchors formed are shown in Table 4.8, while the bivariate correlation matrix output is presented in Appendix 12.

Table 4.8: *Mutually exclusive* and *complementary* career anchor relationships

Types of anchor	Number of anchors		
	5 anchors	**3 anchors**	**2 anchors**
Mutually exclusive	-	-	-
Complementary	PC~WD~BLS~EN~SV (ρ<.000; r = .144, .202, .170, .168)**	ES~SV~PC (ρ<.001; r = .161, .136, .142)**	EN~WD (ρ=.000; r = .279)**
			SV~WD (ρ=.005; r = .117)**
			SV~BLS (ρ=.036; r = .087)*
			MC~EN (ρ=.030; r = .090)**
			MC~SV (ρ=.000; r = .222)**
			PC~MC (ρ=.003; r = .122)**
			ES~BLS (ρ=.000; r = .161)*

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 4.8 shows that nine of the 20 positive correlation relationships of career anchors in conjunction with the matrix were found to be significant relationships, indicating that complementary anchor pairs existed. Of the nine relationships, 22.05 percent of the sample had seven pairs of anchors (*entrepreneurial creativity* and *work dedication, service* and *work dedication, service* and *balanced-lifestyle, managerial competence* and *entrepreneurial creativity, managerial competence* and *service, pure challenge* and *managerial competence, economic security* and *balanced-lifestyle*), 5.47 percent of academics had one set of three anchors (*economic security, service* and *pure challenge*)

and 0.68 percent had one set of five anchors (*pure challenge, work dedication, balanced-lifestyle, entrepreneurial creativity* and *service*). However, it is clearly seen that there was no pair of career anchors with a negative significant correlation of (see Appendix 12). It means that there was no evidence of a pair of the *mutually exclusive* anchors. The magnitude of significant *r* correlations for the complementary relationships proposed was considered weak for (r = 0.087 to 0.279). All *complementary* relationships of career anchors identified confirmed Chapman's (2009) claim that individuals focus on the *complementary* anchor relationships. As a consequence, an octagonal model as suggested by Feldman and Bolino (1996) was not presented, since the model needs at least one orthogonal anchor pair.

4.8 Testing of the research model

Issue 4: How do career anchors predict psychological empowerment and job satisfaction?

This section tested the model and hypotheses proposed in Chapter Two (Hypotheses 3a, 3b, 3c and 3d). The study aimed to test the mediating effects of psychological empowerment facets in the relationship between career anchors and job satisfaction.

Mediation is performed when researchers want to explain how (or why) a relationship between the predictor and the dependent variable exists (also termed as criterion) (Baron & Kenny 1986; Hair et al. 2010; Sekaran & Bougie 2013). The mediator can be run when one of the relationships between predictor and criterion variables is significant (Baron & Kenny 1986; Hair et al. 2010). The relationships can be in the form of one-way arrows (known as direct effect), or a relationship that involves a series of direct effects with multiple arrows, i.e., between the predictor and the mediator, between the mediator and the criterion, and between predictor and criterion if the mediator is controlled for (known as indirect effects) (Hair et al. 2010). As described in Chapter Three, if the mediator completely explains the relationship between the predictor and criterion, it is then referred as full mediation. However, if it only partially explains the relationship, it is called partial mediation (Hair et al. 2010).

Up until this analysis was performed, the researcher has not found any studies testing psychological empowerment as a mediator in the relationship between career anchors

and job satisfaction. However, some studies investigated the mediator in other topics, such as in leadership (e.g., Dhladhla 2011) and organisational empowerment (e.g., Chang, Shih & Lin 2010). Thus, the current study continued to use the mediating model designed in Chapter Two.

Hierarchical multiple regression analysis was employed (Frazier, Tix & Barron 2004; Tabachnick & Fidell 2007) to examine the main effects of career anchors and psychological empowerment on job satisfaction, and to test the mediating facets of psychological empowerment on the relationships between career anchor subscales and job satisfaction (George & Hancer 2004; Steele 2008; Wang & Lee 2009; Wook & Won 2013). The statistical model of the test is illustrated in Figure 4.1.

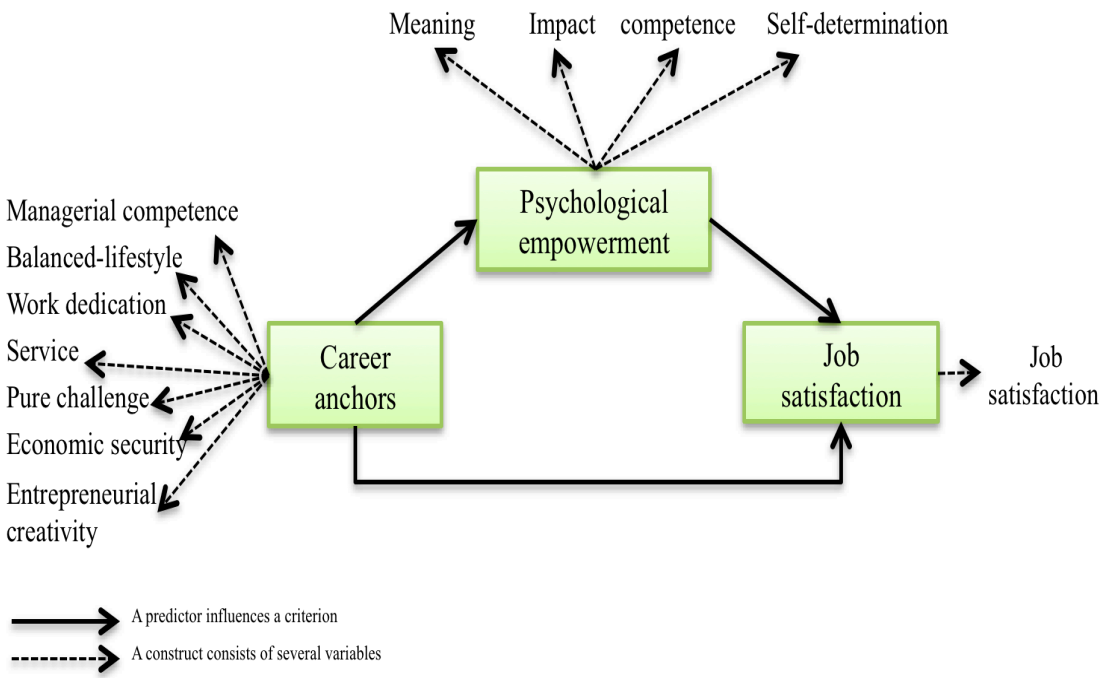

Figure 4.1: Research model for testing the mediation effect of psychological empowerment in the career anchors and job satisfaction relationships

The set of independent variables, therefore, would be entered into HMRA in a sequential order. Demographic data were entered at step 1 in each HMRA operation and treated as control variables. Career anchors and psychological empowerment were entered accordingly based on the purpose of the research model. In summarising and presenting the outputs and the tables, some main terms and their symbols were used for all of the testing models: R^2 (R square) is the percentage of variance explained by

regression model, AdjR² (Adjusted R square) is to adjust for a bias in R-square, ΔR² (R square change) is the improvement in R² when the next predictors are added, ΔF (F-change) means that the improvement of prediction is found to be significant when variables are added in that step, ß (ß coefficient) is a raw regression coefficient, before the data are standardised, β (beta coefficient) is a regression power coefficient, Sig. (significance) or ρ-value refers to the probability of statistical outputs, t_{val} (t-values is the individual regression coefficient), part (semi-partial correlation) refers to joint variance after introducing certain variables and df (degree of freedom) measures how many values statistically vary in computing. The words 'block' and 'set' have the same meaning and are used interchangeably.

All data used for HMRA were computed for standardised scores. This is because standardised scores are designed for comparison and combination between the outputs across a series of the tests (Hair et al. 2010) and reduction of multicollinearity to the minimum values (Cohen et al. 2003). Furthermore, for the purposes of data analysis, two demographic data of gender and institution size were transformed. A careful inspection of demographic data on univariate analysis showed that gender (-0.709) and institution size (-0.640) had negatively skewed distribution. Transformation was then taken to 'increase the meaning of relationships' (Hair et al. 2010, p. 85). Data on gender and institution size were transformed using base-10 logs (Log_{10}) to diminish the extreme skewed values and to intensify the homogeneity variance assumption. Log_{10} gives the natural numbers (Osborne 2002). Nominal variables of demographic background were coded as dummy variables for the research model analysis by creating κ – 1 variables and representing by 0 and 1 (Miles & Shevlin 2001). The SPSS version 19.0 for Windows was employed to operate the transformation and dummy coding processes.

4.8.1 Testing of assumptions of hierarchical multiple regression analysis

Prior to running the statistical operation of HMRA, some requirements should be met. The classical requirements underlying HMRA are normality, linearity, homoscedasticity, outlier and multicollinearity (Ghauri & Gronhaug 2005; Tabachnick & Fidell 2007; Hair et al. 2010). Data for HMRA should be normally distributed, linear relationship between independent variables or predictors and dependent variables or criterion variables, and display homogeneous variance. Data also have to be free of

outliers and multicollinearity. Normality, linearity and homoscedasticity are tested using normal Q-Q plots while the last two assumptions can be detected via the Mahalanobis distance, tolerance (Tol) and variance inflation factor (VIF) values of the HMRA outputs. Means, standard deviations and correlation scores between the variables are also computed (see Table 4.6). Multicolinearity exists: (1) when the Mahalanobis values are greater than chi-square (χ^2) statistics, (2) when tolerance is lower than 0.1 and VIF is greater than 10, and (3) when the correlation r coefficients score is 0.7 and above (Dancey & Reidy 2004).

An examination of normal Q-Q plots for this study's data indicated a normal distribution for all data. Therefore, a group of scatter data fell around the diagonal lines forming a positive correlation on the graphs (Appendix 13). The normal Q-Q plot graphs also showed a straight-line relationship between the predictor and the criterion variables to meet the linearity assumption. Because the plots were reported to approach normal distribution, homogeneity of variances was assumed. The next step was to test the research model.

4.8.2 Testing the main effects of career anchors and psychological empowerment on job satisfaction

4.8.2.1: The relationship between career anchors and job satisfaction

The hypothesis to be tested is:

Hypothesis 3a: Indonesian academic's perceptions of career anchor subscales are positively related to job satisfaction.

Hierarchical multiple regression analysis was carried out to test the main effect of the career anchor block on predicting job satisfaction. Two additional requirements, outliers and multicollinearity assumptions, should be checked first before interpreting the HMRA outputs. Multivariate outliers among the cases were not problematic because the Mahalanobis distance value (11.979) (Appendix 14) was well below the critical $\chi^2_{[12]}$ of 32.909 at alpha 0.1 percent. High tolerance values (0.362 to 0.942) indicated that no strong linear relationship among the independent variables was found. Similarly, the values of VIF (1.062 to 2.763) revealed that multicollinearity could not be assumed (VIF>10). The correlation r-values between variables (0.007 to 0.391) also did not

exceed 0.7. These findings, therefore, support the other testing assumptions for regression analysis mentioned in Sub-section 4.8.1. The model testing results are summarised in Table 4.9.

Table 4.9: Summary of regression outputs for the effects of career anchors on job satisfaction

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig.Δ F*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demogra-phic data	.012	.004	.012	1.417	5,579	.216						
2	Career anchors	.250	.234	.238	25.895	7,572	<.001	Work dedication	.325	8.244	<.001	.089	1.062-2.763 & .362 - .942
								Balanced-lifestyle	-.094	-2.496	.013	.008	
								Managerial competence	.189	5.017	<.001	.033	
								Pure challenge	.182	4.666	<.001	.029	
Overall F test: F_{val} = 15.873; df = 12, 572; ρ* <.001								a) > 10 or b) < .01 = multicollinearity presented					
*< .05 = significant								Effect size [f^2] = .333					

1) ß=β → ß regression coefficient equal to beta coefficient

A set of demographic data was entered first into the model at the first step. Only 1.2 percent (R^2) of the variance in the demographic block (gender, education, work experience, age and institution size) was accounted for by the variance in job satisfaction. The proportion of demographic block variance statistically did not give a significant result in predicting *job satisfaction* (ΔR^2=0.012, $\Delta F_{[5, 579]}$=1.417, ρ=0.216).

Next, the predictor of the career anchors block was entered into the first regression model at the second step. As a result, the R square change increased from 0.012 to 0.238. Career anchors, therefore, accounted for an additional 23.8 percent of the variance in *job satisfaction* above and beyond the 1.2 percent explained by the demographic set. The cumulative increase in the career anchors set was found to contribute significantly to the prediction of *job satisfaction* (ΔR^2=0.238, $\Delta F_{[5, 579]}$=25.895, ρ<0.001). With all predictor variable blocks entered, the 12 predictors significantly explained 25 percent of the variance in *job satisfaction* (R^2=0.250, AdjR^2=0.234, $F_{[12, 572]}$=15.873, ρ<0.001). The joint effect of magnitude, using the formula discussed in Chapter Three (Eq. 1), was considered to be a medium-sized effect (f^2=0.333).

A single regression test showed that three anchor variables were significantly and positively related to job satisfaction while another anchor showed a significant and negative relationship. The negative value showed an opposite direction in which predictors increased and criterion variable decreased. *Work dedication* (t_{val}=8.224, ρ<0.001, $part_r$=0.298), *balanced-lifestyle* (t_{val}=-2.496, ρ=0.013, $part_r$=-0.090), *managerial competence* (t_{val}=5.017, ρ<0.001, $part_r$=0.182) and *pure challenge* (t_{val}=4.666, ρ<0.001, $part_r$=0.169) were found to be significant in the explanation of the unique variance proportion in job satisfaction. Squared semi-partial (part) correlation (sr^2) values indicated that these significant variables accounted for 8.88 percent, 0.81 percent, 3.31 percent and 2.86 percent respectively of the variance in *job satisfaction*. The level of *job satisfaction* increased when the career orientation of Indonesian academics was *work dedication, managerial competence* and *pure challenge*. However, the level of *job satisfaction* decreased when they held *balanced-lifestyle* as an anchor. Only four career anchors were significant predictors of *job satisfaction*. Hypothesis 3a was, therefore, partially supported.

4.8.2.2 The relationship between career anchors and psychological empowerment

The hypothesis to be tested is:

Hypothesis 3b: Indonesian academics' perceptions of career anchor subscales are positively related to psychological empowerment.

This section examines the contribution of the career anchor block to the explanation of the four facets of psychological empowerment. The career anchor set was regressed to each of the psychological empowerment facets. The requirements of freedom from outliers and multicollinearity in this model testing were to be identified first. The multivariate outlier assumption has been met through an examination of the Mahalanobis distance value (11.979) (Appendix 14) that was less than $\chi^2_{statistics(12)}$ of 32.909 at alpha 0.1 percent. There was a strong linear relationship among the independent variables, indicating support for the high tolerance values (0.362 to 0.942). Similarly, the VIF values revealed that the assumption of no multicollinearity was satisfied. All values between 1.062 and 2.763 were below 10. No requirements for the regression analysis were violated. The next step was a series of tests on the main effects of the career anchor block on *meaning, impact, competence* and *self-determination*.

Effects of the career anchor set on meaning

Hierarchical multiple regression analysis was employed to test the main effects of the career anchor block on predicting *meaning.* The results are reported in Table 4.10.

Table 4.10: Summary of regression outputs for the effects of career anchor on *meaning*

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig.Δ F*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demogra-phic data	.046	.038	.046	5.555	5,579	<.001	Gender	-.107	-2.857	.004	-.102	
								Institution size	.109	2.743	.006	.098	
2	Career anchors	.276	.261	.230	25.954	7,572	<.001	Work dedication	.259	6.677	<.001	.238	1.062 - 2.763 & .362-.942
								Balanced-lifestyle	-.089	-2.402	.017	-.085	
								Entrepreneurial creativity	.163	4.303	<.001	.153	
								Service	.204	5.371	<.001	.191	
								Managerial competence	.139	3.758	<.001	.134	
								Pure challenge	.075	1.972	.049	.070	
Overall F test: F_{val} = 18.153; df = 12, 572; ρ* <.001								a) > 10 or b) < .01 = multicollinearity presented					
*< .05 = significant								Effect size [f^2] = .381					

1) ß=β → ß regression coefficient equal to beta coefficient

To test the first facet of psychological empowerment, the demographic data set was entered at the first step. Model 1 explained 4.6 percent of the variance in *meaning*. The demographic block statistically significantly contributed to the prediction of *meaning* (ΔR^2=0.046, $\Delta F_{[5, 579]}$=5.555, ρ<0.001). Individually, only gender (t_{val}=-2.857, ρ=0.004, $part_r$=-0.102) and institution size (t_{val}=2.743, ρ=0.006, $part_r$=0.098) had a statistically significant effect in the explanation of the variance in *meaning*. Gender was predictive of a decrease in *meaning,* whereas institution size predicted an increase in *meaning.*

The predictor of career anchor block was then entered into the first regression model at the second step. The R square change increased from 0.046 to 0.230. The career anchor set accounted for an additional 23 percent of the variance in *meaning* over and beyond the 4.6 percent already accounted for by the demographic set. The career anchor set contributed significantly to the prediction of *meaning* (ΔR^2=0.230, $\Delta F_{[7, 572]}$=25.954, ρ<0.001). In an overall model, the 12 predictors explained nearly 28 percent of the variance in *meaning* (R^2=0.276, AdjR^2=0.261, $F_{[12, 572]}$=18.153, ρ<0.001). The total effect, using the formula discussed in Chapter 3 (Eq. 1), was large (f^2=0.381).

A single regression test demonstrated that six career anchor dimensions had significant relationships with meaning. Five career anchor dimensions had positive significant relationships and one dimension had a negative significant relationship. *Work dedication* (t_{val}=6.677, ρ<0.001, $part_r$=0.238), *balanced-lifestyle* (t_{val}=-2.402, ρ=0.017, $part_r$=-0.085), *entrepreneurial creativity* (t_{val}=4.303, ρ<0.001, $part_r$=0.153), *service* (t_{val}=5.371, ρ<0.001, $part_r$=0.191), *managerial competence* (t_{val}=3.758, ρ<0.001, $part_r$=0.134) and *pure challenge* (t_{val}=1.972, ρ=0.049, $part_r$=0.070) established significant effects in the explanation of the unique variance proportion in *meaning*. Squared semi-partial correlation (sr^2) values indicated that these significant variables accounted for 5.66 percent, 0.73 percent, 2.34 percent, 3.65 percent, 1.80 percent and 4.9 percent respectively of the variance in *meaning*. *Meaning* increased when academics scored higher on *work dedication*, *entrepreneurial creativity*, *service, managerial competence* and *pure challenge*. However, *meaning* decreased when they anchored on *balanced-lifestyle*.

Effects of the career anchor set on impact

Hierarchical multiple regression analysis was computed to test the main effect of the career anchor block on predicting *impact*. Table 4.11 shows the summary of regression testing results.

Table 4.11: Summary of regression outputs on the effects of career anchors on *impact*

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig.ΔF*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demographic data	.040	.031	.040	4.770	5,579	<.001	Work experience	.137	2.228	.026	.082	1.062-2.763 & .362-.942
2	Career anchors	.221	.205	.182	19.043	7,572	<.001	Work dedication	.200	4.962	<.001	.183	
								Entrepreneurial creativity	.102	2.582	.010	.095	
								Managerial competence	.306	7.967	<.001	.294	
Overall F test: F_{val} = 13.530; df = 12, 572; ρ*<.001								a) > 10 or b) <.01 = multicollinearity presented					
* < .05 = significant								Effect size [f^2] = .284					

1) ß=β → ß regression coefficient equal to beta coefficient

To assess the second facet of psychological empowerment, the demographic data set was entered into the regression model at the first step. Model 1 explained only 4 percent of the variance in *impact*. The demographic block statistically significantly contributed to the prediction of *impact* (ΔR^2=0.040, $\Delta F_{(5,\ 579)}$=4.770, ρ<0.001). Individually, only

work experience (t_{val}=2.228, ρ=0.026, $part_r$=0.082) had a statistically positive significant contribution in the explanation of the variance in *impact.* Work experience predicted an increase in *impact*.

The predictor of career anchor block was entered into the first regression model at the second step. The R square change increased from 0.040 to 0.182 which means that career anchors accounted for an additional 18.2 percent of the variance in *impact*, above and beyond the 4 percent previously accounted for by the demographic set. The incremental increase on the career anchor set was significant (ΔR^2=0.182, $\Delta F_{[7, 572]}$=19.043, ρ<0.001). Simultaneously, the 12 predictors explained about 22 percent of the variance in *impact* (R^2=0.221, AdjR^2=0.205, $F_{[12, 572]}$=13.530, ρ<0.001). The total effect, using the formula discussed in Chapter Three (Eq. 1), was considered a medium-sized effect (f^2=0.284).

A single regression test indicated that *work dedication* (t_{val}=4.962, ρ<0.001, $part_r$=0.183), *entrepreneurial creativity* (t_{val}=2.582, ρ=0.010, $part_r$=0.095) and *managerial competence* (t_{val}=7.967, ρ<0.001, $part_r$=0.294) established positive significant effects in the explanation of the unique variance proportion in *impact*. Squared semi-partial correlation (sr^2) values indicated that these significant variables accounted for 3.35 percent, 0.90 percent and 8.64 percent respectively of the variance in *impact*. *Impact* intensified when Indonesian academics possessed *work dedication, entrepreneurial creativity* and *managerial competence*.

Effects of the career anchor set on competence

Hierarchical multiple regression analysis was operated to test the main effects of the career anchor block on predicting *competence.* The summary of regression results is reported in Table 4.12.

To examine the third facet of psychological empowerment, the demographic data set was entered into the regression model at the first step. Model 1 explained 6.30 percent of the variance in *competence*. The demographic block statistically significantly contributed to the prediction of *competence* (ΔR^2=0.063, $\Delta F_{[5, 579]}$=7.833, ρ<0.001). However, only educational level (t_{val}=3.683, ρ<0.001, $part_r$=0.141) was statistically

significant in the explanation of the variance in *competence*. Educational level was predictive of an increase in *competence*.

Table 4.12: Summary of regression outputs for the effects of career anchors on *competence*

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	$AdjR^2$	ΔR^2	ΔF	df	sig.Δ F*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demographic data	.063	.055	.063	7.833	5,579	<.001	Education	.159	3.683	<.001	.141	1.062-2.763 & .362 - .942
2	Career anchors	.157	.139	.094	9.071	7,572	<.001	Entrepreneurial creativity	.128	3.131	.002	.120	
								Service	.202	4.914	<.001	.189	
								Managerial competence	.113	2.82	.005	.108	
Overall F test: F_{val} = 8.874; df = 12, 572; ρ* <.001								a) > 10 or b) <.01 = multicollinearity presented					
* < .05 = significant								Effect size [f^2] = .186					

1) ß=β → ß regression coefficient equal to beta coefficient

The predictor of career anchor block was entered into the first regression model at the second step. The R square change increased from 0.063 to 0.094. Career anchors accounted for an additional 9.4 percent of the variance in *competence,* over and above the 6.3 percent previously accounted for by the demographic set. The career anchor set contributed significantly to the prediction of *competence* (ΔR^2=0.094, $\Delta F_{(7, 572)}$=9.071, ρ<0.001). Simultaneously, the 12 predictors explained about 16 percent of the variance in *competence* (R^2=0.157, $AdjR^2$=0.139, $F_{(12, 572)}$=8.874, ρ<0.001). The total effect, using the formula discussed in Chapter Three (Eq. 1), was considered a medium-sized effect (f^2=0.186).

A single regression test showed that *entrepreneurial creativity* (t_{val}=3.131, ρ=0.002, $part_r$=0.120), *service* (t_{val}=4.914, ρ<0.001, $part_r$=0.189) and *managerial competence* (t_{val}=2.820, ρ=0.005, $part_r$=0.108), all established positively significant effects in the explanation of the unique variance proportion in *competence*. Squared semi-partial correlation (sr^2) values indicated that these significant variables accounted for 1.44 percent, 3.57 percent and 1.17 percent respectively of the variance in *competence*. *Competence* rose when Indonesian academics perceived *entrepreneurial creativity, service* and *managerial competence* to be important.

Effects of the career anchor set on self-determination

Hierarchical multiple regression analysis was performed to test the main effect of the career anchor block on predicting *self-determination*. The model testing results are presented in Table 4.13.

Table 4.13: Summary of regression outputs for the effects of career anchors on *self-determination*

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig.Δ F*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demographic data	.026	.018	.026	3.087	5, 579	.009	Institution size	.083	2.047	.041	.074	1.062 - 2.763 & .362 - .942
2	Career anchors	.249	.233	.033	24.229	7, 572	<.001	Work dedication	.184	4.645	<.001	.168	
								Balanced-lifestyle	.307	8.136	<.001	.295	
								Entrepreneurial creativity	.174	4.499	<.001	.163	
								Service	.121	3.112	.002	.113	
								Managerial competence	.100	2.647	.008	.096	
Overall F test: F_{val} = 15.781; df = 12, 572; ρ* <.001								a) > 10 or b) <.01 = multicollinearity presented					
* < .05 = significant								Effect size [f^2] = .332					

1) ß=β → ß regression coefficient equal to beta coefficient

Finally, in investigating the last facet of psychological empowerment, the predictor variable of the demographic data set was introduced into the regression model at the first step. The model explained 2.6 percent of the variance in *self-determination*. The demographic block statistically significantly contributed to the prediction of *self-determination* (ΔR^2=0.026, $\Delta F_{[5,\ 579]}$=3.087, ρ<0.009). However, only institution size (t_{val}=2.047, ρ=0.041, $part_r$=0.074) was statistically significant in the explanation of the variance in *self-determination*. Thus, institution size predicted an increase in *self-determination.*

The predictor of career anchor block was entered into the model at the second step. The R square change increased from 0.026 to 0.333. The career anchor set accounted for an additional 33.3 percent of the variance in *self-determination* above and beyond the 2.6 percent previously accounted for by the demographic set. The career anchor set contributed significantly to the prediction of *self-determination* (ΔR^2=0.223, $\Delta F_{(7,\ 572)}$=24.229, ρ<0.001). In an overall model, the 12 predictors explained 25 percent of the variance in *self-determination* (R^2=0.249, AdjR^2=0.233, $F_{(12,\ 572)}$=15.781, ρ<0.001). The

total effect, using the formula discussed in Chapter Three (Eq. 1), was moderate (f^2=0.332).

A single regression test pointed out that *work dedication* (t_{val}=4.645, ρ<0.001, $part_r$=0.238), *balanced-lifestyle* (t_{val}=8.136, ρ<0.001, $part_r$=0.295), *entrepreneurial creativity* (t_{val}=4.499, ρ<0.001, $part_r$=0.163), *service* (t_{val}=3.112, ρ=0.002, $part_r$=0.113) and *managerial competence* (t_{val}=2.647, ρ=0.008, $part_r$=0.094) established positive significant effects in the explanation of the unique variance proportion in *self-determination*. Squared semi-partial correlation (sr^2) values indicated that these significant variables accounted for 2.82 percent, 8.70 percent, 2.66 percent, 1.28 percent and 0.92 percent respectively of the variance in *self-determination. Self-determination* strengthened when Indonesian academics held *work dedication, balanced-lifestyle, entrepreneurial creativity, service* and *managerial competence* to be important. Thus, academics' perceptions of career anchors were both positively and negatively related to the three facets of psychological empowerment. Hypothesis 3b was, therefore, partially supported.

4.8.2.3 The relationship between psychological empowerment and job satisfaction

The hypothesis to be tested is:

Hypothesis 3c: Indonesian academics' perceptions of psychological empowerment facets are positively related to job satisfaction.

Hierarchical multiple regression analysis was also employed to test the hypothesis of the main effect of the psychological empowerment facets on predicting job satisfaction. As in the previous testing, prior to interpreting the HMRA outputs, the outliers and multicollinearity assumptions must be assessed. No violation of the two assumptions was detected (Appendix 14). The Mahalanobis value (8.985) was smaller than the critical $\chi^2_{[9]}$ of 27.877 at alpha 0.1 percent. High tolerance values (0.365 to 0.912), low VIF values (1.097 to 2.742), and low correlation *r* scores (0.171 to 0.456) suggested that the collinearity diagnosis was well established. These findings, and those findings in Sub-section 4.8.1 met the multiple regression analysis requirements. Table 4.14 displays the summary of the statistical test results for psychological empowerment and job satisfaction.

Table 4.14: Summary of regression outputs for the effects of psychological empowerment on job satisfaction

Step	Variable block	Regression model						Sub-varia-bles	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	Sig. ΔF*		ß= β[1)]	t_{val}	ρ*	Part	
1	Demogra-phic data	.012	.004	.012	1.417	5,579	.216						1.097-2.742 & .365 - .912
2	Psychologi-cal Empower-ment	.499	.249	.237	45.319	4,575	<.001	Meaning	.372	8.458	<.001	.089	
								Impact	.177	4.412	<.001	.008	
Overall F test: F_{val} = 17.696; df = 16, 568; ρ* <.001								a) > 10 or b) <.01 = multicollinearity presented					
*< .05 = significant								Effect size [f^2] = .332					

1) ß=β → ß regression coefficient equal to beta coefficient

The first predictor variable set entered into the regression model at the first step was the demographic set. The demographic block (gender, education, work experience, age and institution size) jointly accounted for 1.2 percent of the variance in *job satisfaction*. This proportion had no statistically significant effect on the prediction of the *job satisfaction* variable (ΔR^2=0.012, $\Delta F_{[5, 579]}$=1.417, ρ=0.216).

The predictor of the psychological empowerment block was introduced into the first regression model at the second step. The R square change increased from 0.012 to 0.237. Psychological empowerment accounted for an additional 23.7 percent of the variance in *job satisfaction* over and beyond the 1.2 percent already accounted for by the demographic block. The psychological empowerment set had a significant effect on *job satisfaction* (ΔR^2=0.237, $\Delta F_{[4, 575]}$=45.319, ρ<0.001) at a 5 percent significance level. When all variable blocks were entered simultaneously, the nine predictors explained approximately 25 percent of the variance in *job satisfaction* (R^2=0.249, AdjR^2=0.237, $F_{[9, 575]}$=21.170, ρ<0.001). The joint effect of the overall model, using the formula discussed in Chapter Three (Eq. 1), was medium (f^2=0.332).

A single regression test showed that two dimensions of psychological empowerment revealed significant results. *Meaning* (t_{val}=8.458, ρ<0.001, $part_r$=0.306) and *impact* (t_{val}=4.418, ρ<0.001, $part_r$=0.160) were found to be significant in the explanation of the unique variance proportion in *job satisfaction*. Squared semi-partial correlation (sr^2) values indicated that these significant variables accounted for 9.36 percent and 2.56 percent respectively of the variance in *job satisfaction*. The level of *job satisfaction* went up when academics' perception of *meaning* and *impact* increased. Because only

two facets of psychological empowerment affected job satisfaction, hypothesis 3c was, therefore, partially supported.

4.8.2.4 Joint relationship between career anchors, psychological empowerment, and job satisfaction

The researcher extended the analysis to assess the joint effects (Muchiri & Cooksey 2011) of career anchors and psychological empowerment on job satisfaction when demographic data was controlled. Hierarchical multiple regression analysis was conducted to regress the joint effects between predictors of career anchors and psychological empowerment on the criterion of job satisfaction. As with the two previous tests, outliers and multicollinearity assumptions were first checked. The data were free of multivariate outliers because the Mahalanobis distance value (15.973) (Appendix 14) did not exceed the critical $\chi^2_{[16]}$ of 39.252 at alpha 0.1 percent. Tolerance values showed a weak relationship among the predictors (0.365 to 0.912) and VIF values were less than 10 (1.097 to 2.742). It was concluded that multicollinearity was not an issue. Given satisfactory results for all assumptions including some that were mentioned previously in Sub-section 4.8.1, the joint effect could be performed. The model testing results are presented in Table 4.15.

Table 4.15: Summary of regression outputs for the joint effects of career anchors and psychological empowerment and job satisfaction

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig. ΔF*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demographic data	.012	.004	.012	1.417	5,579	.216						
2	Career anchors and Psychological empowerment	.333	.314	.321	24.804	11,568	<.001	Work dedication	.241	6.005	<.001	.206	1.069 - 2.807 & .356 - .935
								Balanced-lifestyle	-.082	-2.115	.035	-.073	
								Managerial competence	.113	2.986	.003	.102	
								Pure challenge	.159	4.300	<.001	.147	
								Meaning	.242	5.309	<.001	.182	
								Impact	.095	2.358	.019	.081	
								Competence	.096	2.272	.023	.078	
Overall F test: F_{val} = 17.696; df = 16, 568; ρ* <.001								a) > 10 or b) < .01 = multicollinearity presented					
* < .05 = significant								Effect size [f^2] = .499					

1) ß=β → ß regression coefficient equal to beta coefficient

The predictors of career anchors and psychological empowerment blocks were entered into the first regression model at the second step. The R square change increased from

0.012 to 0.321. Career anchors and psychological empowerment accounted for an additional 32.10 percent of the variance in job satisfaction. There was a statistically significant effect of career anchors and the psychological empowerment set on job satisfaction (ΔR^2=0.321, $\Delta F_{[11,\ 568]}$=24.804, ρ<0.001) over and above the 1.20 percent accounted for by the demographic set. With all variables blocks entered, the 16 predictors significantly explained 33.30 percent of the variance in job satisfaction (R^2=0.333, AdjR^2=0.314, $F_{[16,\ 568]}$=17.696, ρ<0.001). Using the formula discussed in Chapter 3 (Eq. 1), the joint effect could be described as large (f^2=0.499).

A single regression test found positive and negative associations of the predictors. The career anchor categories of *work dedication* (t_{val}=6.005, ρ<0.001, $part_r$=0.206), *balanced-lifestyle* (t_{val}=-2.115, ρ=0.035, $part_r$=-0.073), *managerial competence* (t_{val}=2.986, ρ=0.003, $part_r$=0.102), and *pure challenge* (t_{val}=4.300, ρ<0.001, $part_r$=0.147), and the psychological empowerment facets of *meaning* (t_{val}=5.309, ρ<0.001, $part_r$=0.182), *impact* (t_{val}=2.358, ρ=0.019, $part_r$=0.081) and *competence* (t_{val}=2.272, ρ=0.023, $part_r$=0.078) established significant effects in the explanation of the unique variance proportion in *job satisfaction*. Squared semi-partial correlation (sr^2) values indicated that these significant variables accounted for 4.24 percent, 0.53 percent, 1.04 percent, 2.16 percent, 3.31 percent, 0.66 percent and 2.86 percent respectively of the variance in *job satisfaction*. The level of *job satisfaction* increased when academics oriented to *work dedication, managerial competence* and *pure challenge* whereas the level of *job satisfaction* decreased when they possessed *balanced-lifestyle*. Further, the level of *job satisfaction* also increased when those academics considered *meaning, impact* and *competence* that to be important. Thus, there was a significant effect of joining the four dimensions of career anchors and three psychological empowerment facets in predicting job satisfaction.

4.8.3 Testing of the mediation of psychological empowerment in the career anchors and job satisfaction relationship

The hypothesis to be tested was:

Hypothesis 3d: The mediating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction.

Since there were more than one significant relationships between the predictors and criterion variables, test of mediating variables in the current study was carried out (Baron & Kenny 1986). Baron and Kenny pointed out that the reason to test mediation is 'to understand the mechanism through which the initial variable affects the outcome'. To test the mediating variables of the psychological empowerment facets, the researcher followed the four steps suggested by Kenny, Kashy and Bolger (1998), Baron and Kenny (1986) and Judd and Kenny (1981) as follows:

Step 1: Regress that the predictor (X) is significantly correlated with the criterion (Y).

Step 2: Regress that the predictor (X) is significantly correlated with the mediator (M).

Step 3:Regress that the mediator (M) is significantly correlated with the criterion (Y), when the predictor (X) is controlled (using X and M as predictors).

Step 4: Establish that the strength of the predictor (X) and criterion (Y) relationship is significantly reduced when the mediator (M) is introduced to the model. The mediation is complete when the effect of X on Y controlling for M is zero; A partial mediator appears when the effect of X on Y significantly reduces after M is introduced.

All steps are computed as follows.

Step 1: Effects of the career anchors on the explanation of job satisfaction

Testing the effect of the career anchors on job satisfaction was described in Sub-section 4.8.2.1. Only four out of seven career anchors were significant: *work dedication, balanced-lifestyle, managerial competence* and *pure challenge*. According to Kenny, Kashy and Bolger (1998), some experts stress the importance of steps 2 and 3 compared to step 1, and others believe that step 1 is not important because there are multiple mediators with inconsistent effects (MacKinnon 2000). Despite some debate, Kenny (2012) suggested that step 1 could be implied if steps 2 and 3 are significant. The current study followed Kenny's suggestion to include step 1 in the analysis.

Step 2: Effects of the career anchors on the explanation of psychological empowerment

Step 2 has been carried out in Sub-section 4.8.2.2. As described, the career anchor block was tested against each of the four psychological empowerment facets. The *work dedication, balanced-lifestyle, managerial competence* and *pure challenge* anchors, and the *meaning, impact* and *competence* facets were statistically significant. Because more

than one significant relationships were found, the test of mediation could be carried out (Baron & Kenny 1986; Muchiri & Cooksey 2009).

Step 3: Testing of the psychological empowerment facets as the mediators in the effect of career anchors on the explanation of job satisfaction

Before determining whether the psychological empowerment facets completely or partially mediate the relationship between career anchors and job satisfaction, step 3 of Baron and Kenny's (1986) procedure must be computed. Hierarchical multiple regression analysis was employed to test step 3, and the outputs are summarised in Table 4.16.

Table 4.16: Regression outputs for the effects of career anchors and psychological empowerment on job satisfaction

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig.Δ F*		ß=β[1)]	t_{val}	ρ*	Part	
1	Demographic data	.012	.004	.012	1.417	5,579	.216						1.069-2.807 & .356 - .935
2	Career anchors	.250	.234	.238	25.895	7,572	<.001	Work dedication	.241	6.005	<.001	.206	
								Balanced-lifestyle	-.082	-2.115	.035	-.073	
								Managerial competence	.113	2.986	.003	.102	
								Pure challenge	.159	4.300	<.001	.147	
3	Psychological empowerment	.333	.314	.083	17.626	4,568	<.001	Meaning	.242	5.309	<.001	.182	
								Impact	.095	2.358	.019	.081	
								Competence	.096	2.272	.023	.078	
Overall F test: F_{val} = 17.696; df = 16, 568; ρ* <.001								a) > 10 or b) <.01 = multicollinearity presented					
* < .05 = significant								Effect size [f^2] = .499					

1) ß= β → ß regression coefficient equal to beta coefficient

Even though only some career anchors (*work dedication, balanced-lifestyle, managerial competence* and *pure challenge*) predicted all four facets of the psychological empowerment (step 1 and step 2), only *meaning, impact* and *competence* remained significant as predictors of *job satisfaction* (ρ<0.001, ρ=0.019, ρ=0.023) when career anchor variables were controlled for (step 3). A careful investigation showed that meaning (β=0.242) mediated the relationship between *work dedication* (β=0.241), *balanced-lifestyle* (β=-0.082), *managerial competence* (β=0.113) and *pure challenge* (β=0.159), and *job satisfaction*; *impact* (β=0.095) mediated the relationship between *work dedication* and *managerial competence* on the explanation of *job satisfaction*, and

finally; *competence* (β=0.096) mediated the relationship between *managerial competence* and *job satisfaction*. The combination effect was large (f^2=0.499).

Step 4: Establishing mediation effects

A detailed investigation was calculated to find out the strength of the mediation effect in the results from step 3. The mediation effect was examined by comparing the initial standardised beta coefficient for the significant career anchor dimensions when predicting job satisfaction (denoted with *) and the new beta weight coefficient for the significant career anchor variables after the significant of the facets of psychological empowerment were entered (denoted with **) (Miles & Shevlin 2001). The significant mediation effect was then calculated using the Sobel test. This present study used the free online calculator of the Sobel test provided by Soper (2012) at http://www.danielsoper.com/statcalc3/calc.aspx?id=31. The test needs information on unstandardised beta coefficients (ß) and standard error (SE) values both before (A) and after (B) mediation variables are introduced (Preacher 2012). The data were included in Sub-sections 4.8.2.2 and 4.8.3. Because all data in this study have been transformed into z-score, both unstandardised values and standardised betas give the same values. Cavana, Delahaye and Sekaran (2001, p. 434) indicated that 'if you transformed the data to z-scores prior to your regression analysis, you would get the beta coefficients as your unstandardised coefficients'. The mediation effect was computed as follows.

Mediation effect 1*: *Assessment of the significance of the mediation effect of *meaning* ***in the relationship between*** *work dedication* ***and*** *job satisfaction*

After controlling for *meaning*, the effect of *work dedication* appeared to be smaller. The amount of mediation that could be attributed to the indirect effect was 0.084 (0.325 – 0.241) (Appendix 15, Figure A). It means that *meaning* only partly accounted for the relationship between *work dedication* and *job satisfaction*. Thus, there was support for partial mediation.

The reduction in beta values was then tested in the raw unstandardised beta for the significant partial mediation effect. The Sobel test was used to calculate the regression coefficients of beta A (0.259) and beta B (0.242), and the standard error A (0.039) and B (0.044). The result was significant with the ρ-value was less than 0.05

($Sobel_{stats}$=4.236; ρ<0.001). *Meaning*, therefore, was a statistically significant partial mediator of the effect of *work dedication* on *job satisfaction*.

Mediation effect 2*: *Assessment of the significance of the mediation effect of *impact* ***in the relationship between*** *work dedication* ***and*** *job satisfaction*

After *impact* was entered into the model, the strength of the *work dedication* effect reduced by 0.084 (0.325 – 0.241) (Appendix 15, Figure B). *Impact* did not fully mediate the relationship between *work dedication* and *job satisfaction*. Thus, there was support for partial mediation.

The regression coefficients of beta A (0.200) and beta B (0.095) and the standard error A (0.040) and B (0.040) were calculated. The ρ-value was less than 0.05 ($Sobel_{stats}$=2.145; ρ=0.032). *Impact*, therefore, was a statistically significant partial mediator of the effect of *work dedication* on *job satisfaction*.

Mediation effect 3*: *Assessment of the significance of the mediation effect of *meaning* ***in the relationship between*** *balanced-lifestyle* ***and*** *job satisfaction*

After controlling for *meaning*, the effect of *balanced-lifestyle* on *job satisfaction* decreased by -0.082. The amount of mediation was -0.012 (-0.094 – [-0.082]) (Appendix 15, Figure C). *Meaning* only partly accounted for the relationship between *balanced-lifestyle* and *job satisfaction*. Thus, there was support for partial mediation.

The decrease of the coefficients of beta A (-0.089) and beta B (0.242), and the standard error A (0.037) and B (0.046) were then calculated. A significant result was found, in which the Sobel statistic was -2.187 and the ρ-value was 0.029 (ρ<0.05). *Meaning*, therefore, was a statistically significant partial mediator of the effect of *balanced-lifestyle* on *job satisfaction*.

Mediation effect 4*: *Assessment of the significance of the mediation effect of *meaning* ***in the relationship between*** *managerial competence* ***and*** *job satisfaction*

After *meaning* was controlled for, the effect of *managerial competence* was smaller than the direct effect. The amount of mediation was 0.076 (0.189 – 0.113) (Appendix 15, Figure D). This supports observation that *impact* only partly accounted for the

relationship between *managerial competence* and *job satisfaction*. Thus, there was support for partial mediation.

The regression coefficients of beta A (0.139) and beta B (0.242), and the standard error A (0.037) and B (0.046) were computed. The resulting Sobel statistic was 3.057, and the ρ-value was 0.002 ($\rho<0.05$). *Meaning*, therefore, was a statistically significant partial mediator of the effect of *managerial competence* on *job satisfaction*.

***Mediation effect 5*: *Assessment of the significance of the mediation effect of** impact **in the relationship between** managerial competence **and** job satisfaction*

The effect of *managerial competence* diminished after *impact* was controlled for. The amount of mediation was 0.076 (0.189 – 0.113) (Appendix 15, Figure E). *Impact* only partly accounted for the relationship between *managerial competence* and *job satisfaction*. Thus, there was support for partial mediation.

The raw coefficients of beta A (0.306) and beta B (0.095), and the standard error A (0.038) and B (0.040) were then computed. The calculation produced 2.278 for the Sobel statistic, and 0.023 for the ρ-value ($\rho<0.05$). *Impact,* therefore, was a statistically significant partial mediator of the effect of *managerial competence* on *job satisfaction*.

***Mediation effect 6*: *Assessment of the significance of the mediation effect of** competence **in the relationship between** managerial competence **and** job satisfaction*

After introducing *competence* into the model, the effect of *managerial competence* on *job satisfaction* became smaller. The amount of mediation was 0.076 (0.189 – 0.113), the same as that for *meaning* (Appendix 15, Figure F). *Competence* only partly accounted for the relationship between *managerial competence* and *job satisfaction*. Thus, there was support for partial mediation.

The regression coefficients of beta A (0.113) and beta B (0.096), and the standard error A (0.040) and B (0.042) were computed. The results showed that the Sobel statistic was 1.777 and the ρ-value was 0.076. Because the ρ-value was greater than 0.05, *competence*, therefore, was a statistically non-significant partial mediator of the effect of *managerial competence* on *job satisfaction*.

***Mediation effect 7*: *Assessment of the significance of the mediation effect of** meaning **in the relationship between** pure challenge **and** job satisfaction*

The effect of *pure challenge* became smaller when *meaning* was added to the model. The amount of mediation was 0.023 (0.182 – 0.159) (Appendix 15, Figure G). *Meaning* only partly accounted for the relationship between *pure challenge* and *job satisfaction*. Thus, there was support for partial mediation.

The regression coefficients of beta A (0.075) and beta B (0.242) and the standard error A (0.038) and B (0.046) were computed. The output reported that the Sobel statistic was 1.848 and the ρ-value was 0.006 ($\rho<0.05$). *Meaning*, therefore, was a statistically significant partial mediator of the effect of *pure challenge* on *job satisfaction*.

To sum up, after testing the significance of the mediating effect, *competence* was no longer considered to be a mediator. *Meaning* mediated significantly and partially the *relationships between work dedication, managerial competence, pure challenge* and *balanced-lifestyle*, and *job satisfaction*; *impact* mediated significantly and partially the relationships between *work dedication* and *managerial competence* and *job satisfaction*. The significant effects were low. The remaining mediating variables of *self-determination* and the predictors of *service, economic security* and *entrepreneurial creativity* were not significant in the explanation of *job satisfaction*. Because the results were unexpected in which the correlation was low, the researcher decided to carry out moderation testing (Baron & Kenny 1986). Kim, Kaye and Wright (2001, p. 69) suggested that moderating effects are presented 'when there is an unexpected weak relationship between predictor and dependent variable'.

4.8.4 The moderating effects of psychological empowerment

Testing of the moderating effect was carried out to extend the analysis. Theoretically, data analysis can be extended to analyse interactions or moderating effects (Mackinnon 2011; Sekaran & Bougie 2013). Baron and Kenny (1986) and Kraemer et al. (2002) recommended that if the mediators interact with the predictors to cause the criterion variables, tests of the moderating effect should be run. Mackinnon (2011, p. 417) concluded that moderator effects are present 'if the interaction term explains a statistically significant amount of variance in the dependent variable'. In other words, unlike tests of mediation effects that explain the relationship between two other

variables, a moderator test is conducted to determine when (or under what conditions) a predictor variable affects a dependent variable (Baron & Kenny 1986). The moderator affects the strength (enhancing or reducing the strength) or direction (positive or negative) of the two variables' relationship. However, 'unless the moderating variable is present, the theorized relationship between the other two variables considered will not be performed' (Sekaran & Bougie 2013, p. 76). Baron and Kenny (1980, p. 1178) also stressed that an indication to test moderators was 'when there is an unexpectedly weak or inconsistent relation between a predictor and a criterion variable.' Due to the low relation and inconsistency results on the mediation test in the current study, the moderation test was performed.

As with the mediation effects, this study has not found prior studies that examined the moderation of psychological empowerment on career anchors and their relationships to job outcomes. However, there are some studies in relation to other variables, such as leadership and attitudinal outcomes (e.g., Given 2008; Pieterse et al. 2010). Because the current study is a starting point in the area of career anchors, it analysed these two types of effects separately to see if the facets of psychological empowerment also act as moderators or a combination of mediators and moderators. The results were expected to contribute to the theory and the practice of the career anchor framework.

The current study, therefore, tested whether the psychological empowerment facets also moderated the relationship between career anchors and job satisfaction. A statistical model for the moderation testing is illustrated in Figure 4.2.

A new hypothesis was, therefore, formulated:

Hypothesis 3e: The moderating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction.

Hierarchical multiple regression analysis was employed to test the interaction effect (Miles & Shelvin 2001) of psychological empowerment on career anchors in the explanation of job satisfaction. Variable blocks were entered in order sequentially. The key terms and their symbols that had been used in the main effects and mediation

testing for interpreting the outputs (see Sub-section 4.8.1) were also used in the moderation testing.

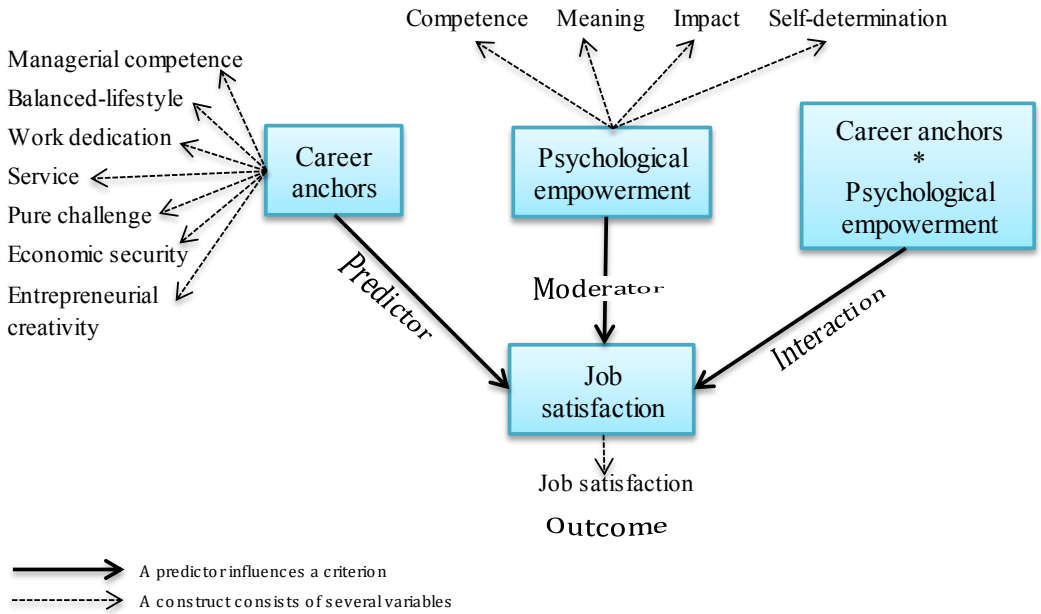

Figure 4.2: Research model for testing the moderating effects of the relationship between career anchors, psychological empowerment and job satisfaction

To conduct a test for moderating effects, new variables were created (Miles & Shevlin 2001). Each of the four facets of psychological empowerment (*meaning, impact, competence* and *self-determination*) was multiplied by each of the seven career anchor dimensions (*work dedication, balanced-lifestyle, entrepreneurial creativity, service, managerial competence, pure challenge* and *economic security*). The 28 new variables were entered into the regression model after the steps of demographic data, career anchors and psychological empowerment blocks.

Hierarchical multiple regression analysis was carried out to test the effects of the 28 moderators on the zero-order correlations between the career anchors block and job satisfaction. In addition to the assumptions in Sub-section 4.8.1, outliers and multicollinearity requirements were checked first. No multivariate outliers were observed because the Mahalanobis distance value (8.895) (see Appendix 15) was less than the critical chi-square value ($\chi^2_{[44]}$ of 78.750) at alpha 0.1 percent. High tolerance values (0.210 to 0.830) indicated that no strong linear relationship among the

independent variables was found. Similarly, the VIF values revealed that multicollinearity could not be assumed. All values were between 1.196 and 4.758. These findings, therefore, supported the other testing assumptions (i.e., normality, linearity and homoscedasticity) for regression analysis discussed in Sub-section 4.8.1. The results are reported in Table 4.17.

Table 4.17: Summary of regression outputs for the effects of demographic data, career anchors, psychological empowerment, job satisfaction and moderators

Step	Variable block	Regression model						Sub-variables	Partial F test				VIF[a)] & Tol.[b)]
		R^2	Adj R^2	ΔR^2	ΔF	df	sig. ΔF*		β	t_{val}	ρ*	Part	
1	Demographic data	.012	.004	.012	1.412	5,579	.218						1.196 - 4.758 & .210 - 830
2	Career anchors	.250	.234	.237	25.806	7,572	<.001	Work dedication	.192	4.181	<.001	.138	
								Managerial competence	.098	2.384	.017	.079	
								Pure challenge	.147	3.865	<.001	.128	
3	Psychological empowerment	.333	.314	.083	17.637	4,568	<.001	Meaning	.240	5.163	<.001	.171	
								Impact	.083	2.030	.043	.067	
								Competence	.125	2.745	.006	.091	
4	Moderation	.410	.362	.077	2.520	28,540	<.001	Balanced-lifestyle* Meaning	.106	2.354	.019	.078	
								Service*Impact	.088	1.998	.046	.066	
								Balanced-lifestyle* Competence	-.235	-4.643	<.001	-.154	
								Balanced-lifestyle* Self-determination	.124	2.801	.005	.093	
								Service* Self-determination	-.134	-2.979	.003	-.099	
								Pure challenge* Self-determination	.120	2.782	.006	.092	
Overall F test:		F_{val} = 8.506 df = 44, 540 ρ* < .001						a) > 10 or b) <0.01 = multicollinearity presented					
* < .05 = significant								Effect size [f²] = .695					

The demographic data set was entered into the regression model at the first step. The demographic block (gender, education, work experience, age and institution size) collectively explained only 0.4 percent of the variance in *job satisfaction*. The variance proportion was statistically non-significant (ΔR^2=0.004, $\Delta F_{[5, 579]}$=1.412, ρ=0.218).

The predictors of career anchor and psychological empowerment blocks were entered into the regression model at the second step. The R square change increased from 0.012 to 0.237. Career anchors and psychological empowerment accounted for an additional 24 percent of the variance in job satisfaction. There was a statistically significant effect of career anchors and psychological empowerment sets on job satisfaction (ΔR^2=0.237, $\Delta F_{[7, 572]}$=25.810, ρ<0.001) over and beyond the 1.20 percent explained by the demographic set.

Next, the interpretation at the third step was identical to that in Sub-section 4.8.3 Step 3. The combined variance of the career anchors and psychological empowerment blocks accounted for 8.3 percent of the variance in job satisfaction. The career anchors and psychological empowerment sets had a statistically significant effect on job satisfaction (ΔR^2=0.083, $\Delta F_{[4,\ 568]}$=17.840, ρ<0.001) above and beyond that explained by the demographic set.

Lastly, the interpretation of the statistical results was made for the moderating effect at the fourth step. The 28 moderation variables were entered into the regression model. The moderation block collectively explained 7.7 percent of the variance in job satisfaction above and beyond the variance already accounted for by the previous blocks. The proportion had a statistically significant relationship with job satisfaction (ΔR^2=0.077, $\Delta F_{[4,\ 568]}$=2.520, ρ<0.001). Overall, the predictor blocks explained 41 percent more than the main effect in the variability of job satisfaction (R^2=0.410, $F_{[44,\ 450]}$=8.506, ρ<0.001). Using the formula discussed in Chapter Three (Eq. 1), the interaction effect was considered large (f^2=0.695).

However, of the 28 variables, only six moderator pairs were significant predictors of job satisfaction. The significant interaction occurred positively between *balanced-lifestyle* and *meaning* (t_{val}=2.354, ρ<0.019, $part_r$=0.078) and *self-determination* (t_{val}=2.801, ρ=0.005, $part_r$=0.093), but negatively with *competence* (t_{val}=-4.643, ρ<0.001, $part_r$=-0.154). A positive and significant interaction was also found for *service* and *impact* (t_{val}=1.998, ρ=0.046, $part_r$=0.066), and for *pure challenge* and *self-determination* (t_{val}=2.782, ρ=0.006, $part_r$=0.092). Last, a negative and significant interaction emerged for *service* and *self-determination* (t_{val}=-2.979, ρ=0.003, $part_r$=0.099). The negative values showed the opposite directions of the relationships in which when the predictor increased, the criterion variable decreased.

To interpret the data, the significant moderation variables were plotted (Tabachnick & Fidell 2007) into low (red line) and high (green dotted line) levels of the psychological empowerment facets. Dummy variables were coded 0 for below mean and 1 for above mean for each significant interaction (Cohen & Cohen 1983). The results are shown in a series of figures as follows.

a. *Moderating effect of* *meaning* *on the* *balanced-lifestyle* *and* *job satisfaction* *relationship*

The interaction effect of *meaning, balanced-lifestyle* and *job satisfaction* is shown in Figure 4.3. Figure 4.3 shows that the relationship between *balanced-lifestyle* and *job satisfaction* depended on the level of *meaning*. At a high level of *meaning* (green dotted line), the *balanced-lifestyle* tendency was positively related to *job satisfaction*. By contrast, at a low level of *meaning* (red line), the *balanced-lifestyle* tendency was negative towards job satisfaction. When academics tended to hold *balanced-lifestyle*, a high *meaning* level could slightly increase *job satisfaction* whereas a low level could decrease *job satisfaction*.

Figure 4.3: Interaction effect of *meaning* on *balanced-lifestyle* and *job satisfaction*

b. *Moderating effect of* *impact* *on the* *service* *and* *job satisfaction* *relationship*

The interaction effect of *impact, service* and *job satisfaction* is shown in Figure 4.4.

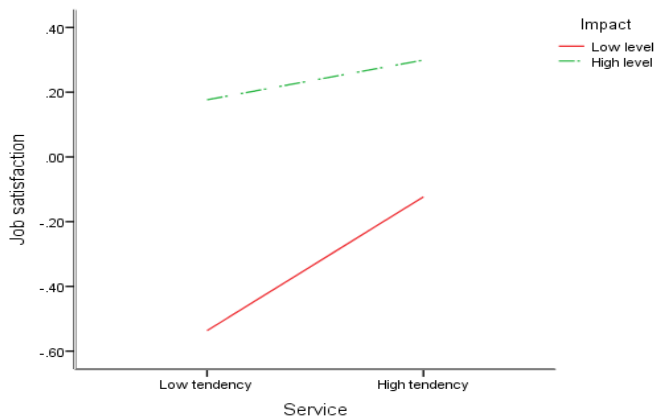

Figure 4.4: Interaction effect of *service* on *impact*

The two lines in Figure 4.4 clearly indicate that an increase in *impact* affects the relationship between *service* and *job satisfaction*. At both a high (green dotted line) and a low (red line) level of *impact*, the *service* tendency was positively related to *job satisfaction*. When academics' orientation to *service* was stronger, their *job satisfaction* increased slightly at a high level of *impact* and went up sharply at a low level.

c. *Moderating effect of* *competence* *on the* *balanced-lifestyle* *and* *job satisfaction* *relationship*

The interaction effect of *competence, balanced-lifestyle* and *job satisfaction* is shown in Figure 4.5.

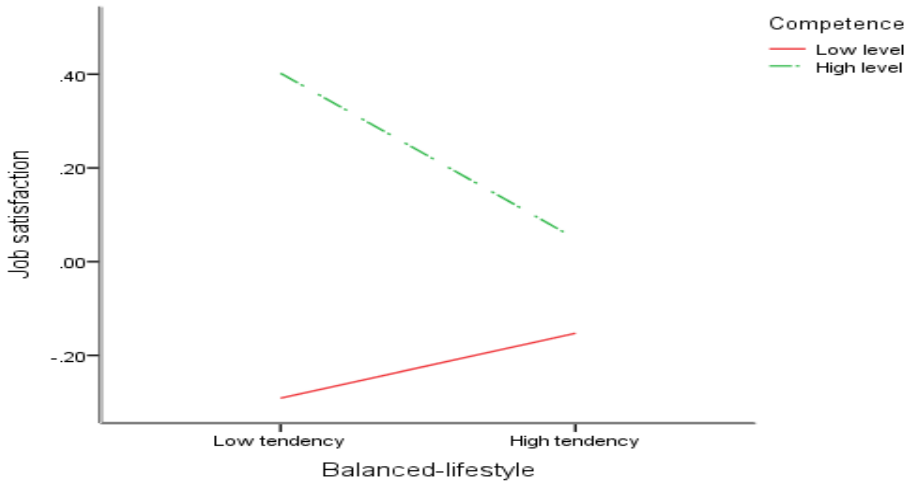

Figure 4.5: Interaction effect of *balanced-lifestyle* on *competence*

Figure 4.5 shows that *competence* was associated with the relationship between *balanced-lifestyle* and *job satisfaction*. In contrast to the role of *meaning,* the two lines indicated that a high level of *competence* reduced *job satisfaction* sharply when associated with *balanced-lifestyle*, while a low level of *competence* enhanced *job satisfaction*. When feeling of *competence* was above the average level (green dotted line), *job satisfaction* for academics who tended to cling to the *balanced-lifestyle* anchor was lower. However, when *competence* was below the average level (red line), academics with the *balanced-lifestyle* anchor had higher *job satisfaction*.

d. *Moderating effect of* *self-determination* ***on the*** *balanced-lifestyle* ***and*** *job satisfaction* ***relationship***

The interaction effect of *self-determination, balanced-lifestyle* and *job satisfaction* is shown in Figure 4.6.

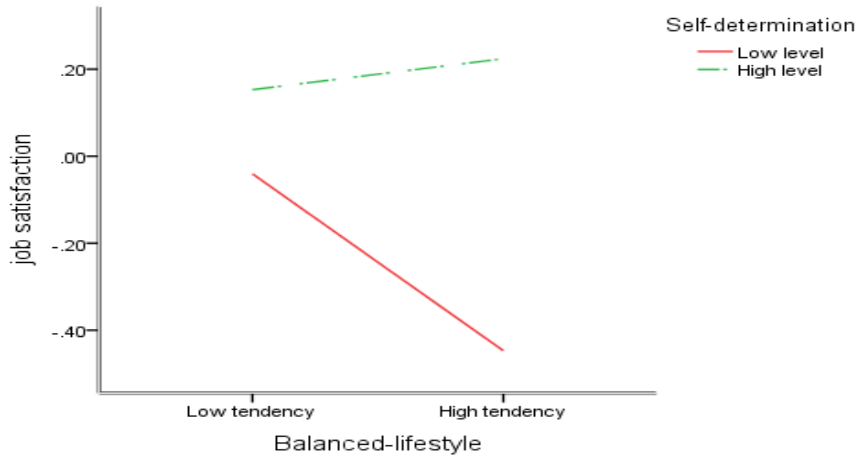

Figure 4.6: Interaction effect of *balanced-lifestyle* on *self-determination*

Figure 4.6 shows two lines in the opposite directions of the *balanced-lifestyle* and *job satisfaction* relationship. At a high level of *self-determination* (green dotted line), *balanced-lifestyle* was positively related to *job satisfaction* whereas at a low *self-determination* level (red line), the anchor was negatively related to *job satisfaction*. When academics were more oriented to *balanced-lifestyle*, a high level of *self-determination* slightly raised their *job satisfaction*; however, a low level of *self-determination* reduced their *job satisfaction* dramatically.

e. *Moderating effect of* *self-determination* ***on the*** *service* ***and*** *job satisfaction* ***relationship***

The interaction effect of *self-determination, service* and *job satisfaction* is shown in Figure 4.7. Figure 4.7 shows a positive relationship between *self-determination* and *job satisfaction*. Both at a high (green dotted line) and at a low (red line) levels of *self-determination*, the *service* and *job satisfaction* relationship was positive. When academics tended to be strongly anchored to *service*, a high level of *self-determination* contributed slightly to the moderating effect of *service* on *job satisfaction*, while a low level of *self-determination* raised the positive impact of *service* on *job satisfaction*.

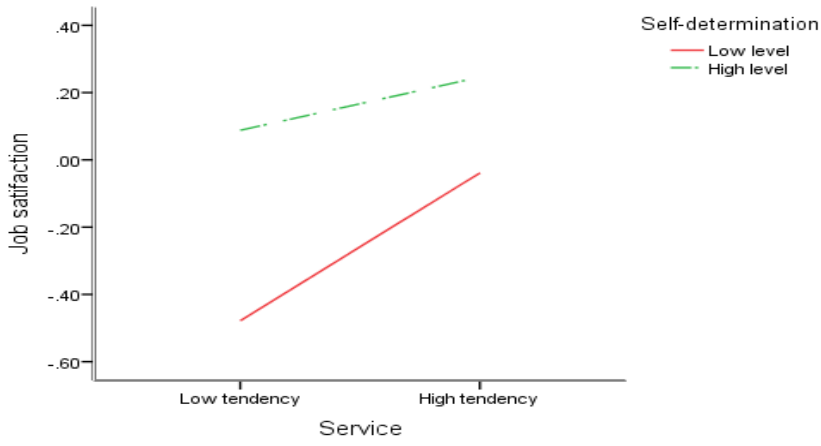

Figure 4.7: Interaction effect of *service* on *self-determination*

f. *Moderating effect of* *self-determination* ***on the*** *pure challenge* ***and*** *job satisfaction* ***relationship***

The interaction effect of *self-determination, pure challenge* and *job satisfaction* is shown in Figure 4.8.

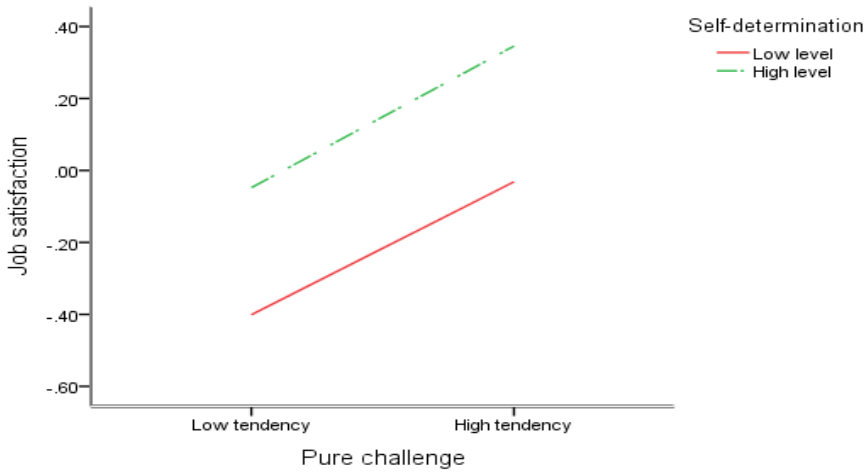

Figure 4.8: Interaction effect of *pure challenge* on *self-determination*

Figure 4.8 shows a positive relationship between *pure challenge* and *job satisfaction* regardless of the levels of *self-determination*, either high (green dotted line) or low (red line). The two levels of *self-determination* effectively intensified the *job satisfaction* of academics who tended strongly to perceive *pure challenge* as important.

Hence, the four facets of psychological empowerment moderated the relationship between the three categories of career anchors and job satisfaction. Hypothesis 4 was, therefore, partially supported.

Summary of the model tests

In summary, a series of HMRA tests were performed to examine the effects of career anchors and psychological empowerment on predicting the job satisfaction of academics in Indonesian public universities. The results showed that the hypothesis (H3a) that **Indonesian academics' perceptions of career anchor subscales are positively related to job satisfaction** was partially accepted. It suggested that of the seven anchors, only *work dedication, managerial competence* and *pure challenge* significantly and positively predicted *job satisfaction*, while *balanced-lifestyle* had significant and negative influence.

The next hypothesis (H3b) that **Indonesian academics' career anchor subscales are positively related to psychological empowerment** was also partially accepted. In a series of tests of career anchors on each of the psychological empowerment facets, the results were shown as follows. *Work dedication, service, managerial competence* and *pure challenge* had significant and positive effects on *meaning*, but a negative effect on *balanced-lifestyle*. *Work dedication* and *managerial competence* had significant and positive effects on *impact*. *Service* and *managerial competence* significantly and positively predicted *competence*. Lastly, *work dedication, balanced-lifestyle, service* and *managerial competence* were significantly and positively related to *self-determination*.

Similar results were also shown in testing the next hypothesis (H3c) that **Indonesian academics' perceptions of psychological empowerment facets are positively related to job satisfaction**. The hypothesis was only partially supported because only two out of the four facets were related to job satisfaction. *Meaning* and *impact* had a significant and positive effect on *job satisfaction*.

Testing the hypothesis (H3d) that **the mediating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction** was partially supported but had weak relationships.

Because the relationships between career anchors and job satisfaction were low when mediators were introduced and because more than one significant mediating effect was found, the moderating test was performed. The additional hypothesis (H3e) for moderation was **the moderating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction** was partially supported. The summary of the two tests is presented in Table 4.18.

Table 4.18: The roles of psychological empowerment facets on the relationship between career anchors and job satisfaction

Variables	Mediators	Moderators	Mediator + Moderator
Work dedication	Meaning, Impact	-	
Managerial competence	Meaning, Impact		-
Pure challenge	Meaning	Self-determination	-
Service	-	Impact, Self-determination	-
Balanced-lifestyle	-	Competence, Self-determination	Meaning

Table 4.18 presents the four facets of psychological empowerment as mediators and moderators. *Meaning* mediated partially and significantly the effects of the predictors *work dedication, managerial competence* and *pure challenge* on the criterion of *job satisfaction*. *Impact* mediated partially and significantly the effects of the predictors *work dedication* and *managerial competence* on the criterion of *job satisfaction*. *Self-determination* moderated the relationship between the predictors of *balanced-lifestyle*, *service* and *pure challenge* and the criterion of *job satisfaction*.

The facets of *impact* moderated the relationship between the predictor of *service* and the criterion of *job satisfaction*; *competence* moderated the relationship between the predictor of *balanced-lifestyle* and the criterion of *job satisfaction*; m*eaning* served as the mediating and moderating variables for the relationship between *balanced-lifestyle* and *job satisfaction*. A closer examination of the interaction effects revealed that when *balanced-lifestyle* tended to be high, high levels of *meaning, competence* and *self-determination* increased *job satisfaction*; however, with a low level for *balanced-lifestyle*, the facets reduced *job satisfaction*. When *service* increased, both high and low levels of *impact* and *self-determination* raised *job satisfaction* level. Similarly, when

pure challenge increased, both high and low levels of *self-determination* also increased *job satisfaction*. Looked at from the strength of the contribution given, both the direct effect (between career anchors and job satisfaction) and the indirect effects (when mediating and moderating variables were entered) had weak contributions. It was assumed, therefore, that there may have been motivating factors, other than those investigated in the study, such as academic freedom and academic atmosphere, with a strong and significant influence on academics' career development.

Based on the findings from the quantitative analysis, a modified research model is presented and shown in Figure 4.9. Quantitative analysis showed that career anchors directly affect job satisfaction and psychological empowerment, and also partially affect the relationship between the two variables. Statistically, it found seven career anchors include two new anchors. Five categories were in line with the original model, while two new anchors were *work dedication* (previously *technical competence* and *geographical stability*) and *balanced-lifestyle* (previously *autonomy* and *lifestyle*). Consequently, multiple groups based anchors and their composition changed: *talents-based* anchors comprise *managerial competence* and *entrepreneurial creativity*, *needs-based* anchors include *balanced-lifestyle* and *economic security*, *values-based* anchors remain the same as the original: *pure challenge* and *service,* and *commitment-based* anchor, which is a new group consists of *work dedication*. Four facets of psychological empowerment (i.e., *meaning, impact, competence* and *self-determination*) and job satisfaction remained the same as the original ones.

The identification of two new anchors and the roles of psychological empowerment facets as the mediators, the moderators and the mediators and moderators showed that cultural differences existed in the present subject research. The cultural values attached to academics' attitudes were believed to affect academics' perceptions of their internal career motivation and the level of job satisfaction in the workplace. Culture, either at the individual level or organisational level, which was a component of the external careers, affects individuals in choosing a career. Ethnic differences between one place to other places show difference in the understanding of something. Indonesians who embrace leaders should be men or do not criticise the leadership, (Moffat 2012), for instance, will be different attitudes and behaviours in the workplace from those who uphold individualism or freedom of speech, as in the western countries, where the concept of

career anchors was introduced. This will affect individuals in deciding upon a career. Therefore, cultural values were entered into the model for further investigation. Sub-section 6.5 discusses cultural values in more detail.

Summary

This chapter reports the findings from fieldwork and the results from the research model. Employing the web-based and the paper-based surveys, the study received 585 valid questionnaires giving a high response rate of 87.57 percent. Exploratory factor analysis outputs showed that the convergent and discriminant validity of the career anchor inventory, the psychological empowerment scale and the job satisfaction had significant correlation coefficients within variables in each item. Cronbach's alpha coefficients of three scales showed acceptable internal consistency values of the items and suggested that no item should be removed.

Of the three scales, only the career anchor inventory highlighted a shift in the structures: four anchor categories merged into two new anchors termed *work dedication* and *balanced-lifestyle*. As a consequence of the merging, a new multiple groups-based anchor was formed and named *commitment-based* anchors.

The most dominant career anchor of Indonesian academics was *economic security*. It was also found that multiple anchors existed among academics in which *needs-based* anchors were at the highest rank of multiple groups-based anchors. The study also found that no academics held *mutually exclusive* anchors, suggesting all relationship-pair anchors were *complementary*. Statistically, there was a direct relationship effect between several career anchors and job satisfaction relationship, between several career anchors and the psychological empowerment facets and between two psychological empowerment facets and job satisfaction. Psychological empowerment partially and significantly mediated and moderated the relationships between career anchors and job satisfaction: *meaning* and *impact* played as mediators while *self-determination*, *impact* and *competence* were as moderators. *Meaning*, the only psychological empowerment facet, played its role as mediator and moderator. Table 4.19 presents the issues, hypotheses and results of the analysis.

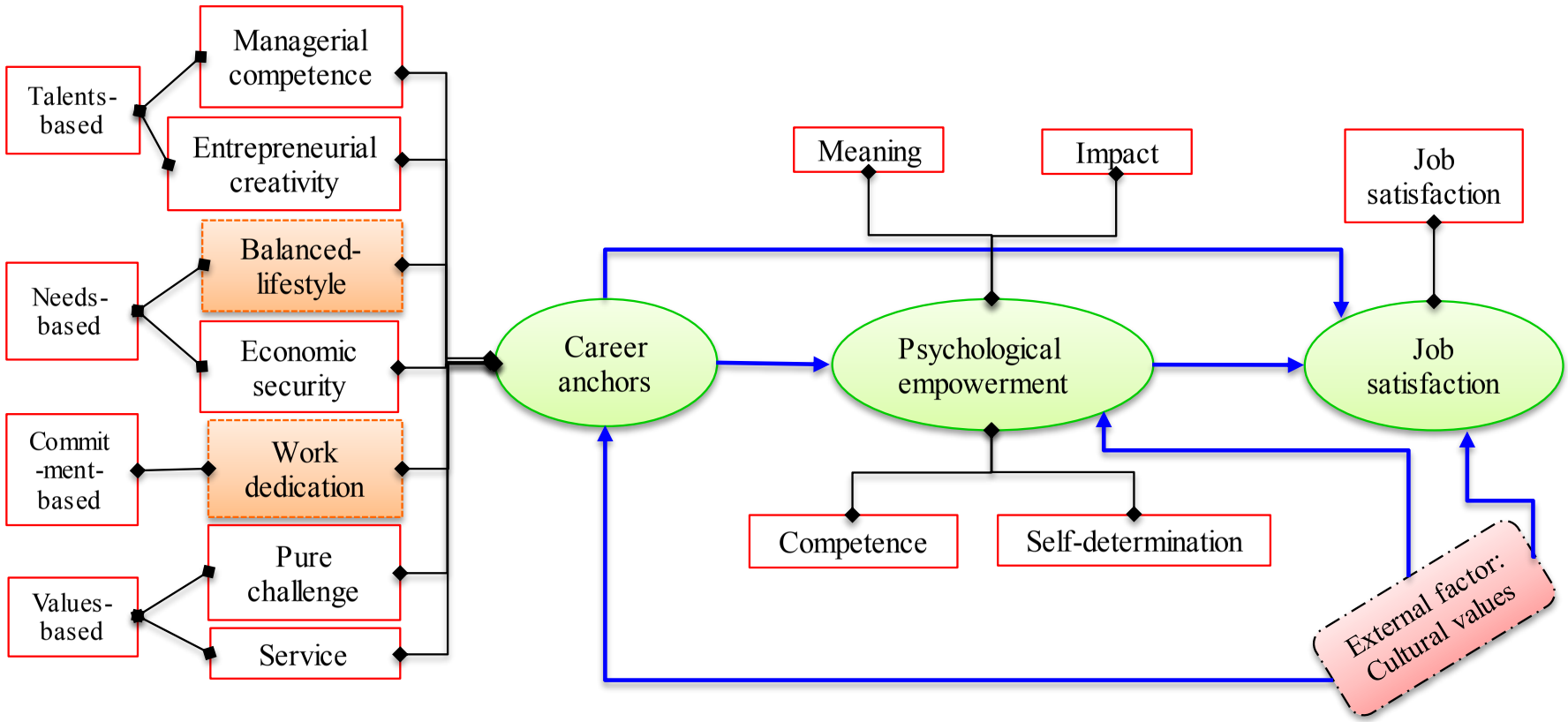

Figure 4.9: Modified research framework for quantitative analysis of the relationships between career anchors, psychological empowerment and job satisfaction

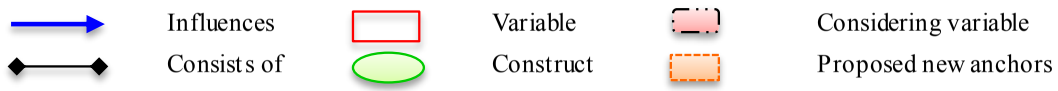

Table 4.19: Summary of quantitative analysis results

No	Issues	Hypotheses	Results	Notes
1	The relevance of the career anchor inventory, the psychological empowerment scale and the job satisfaction scales in the Indonesian academics context.	No hypothesis stated	Career anchor inventory: of nine categories, four anchors merged into two new anchors: 1) work dedication (merging of technical competence and geographical stability) and 2) balanced-lifestyle (merging of autonomy and lifestyle) forming committment-based as a new category of multiple groups-based anchors. The 25 items remained the same as the original.	Examining the structure of each scale.
			The psychological empowerment and job satisfaction scales examination resulted in the same factors and items as the original ones.	
2	The single and multiple dominant career anchors of Indonesian academics.	(H1) --> Indonesian academics score differently on a single dominant career anchor or multiple dominant career anchors.	Supported.	The highest rank was economic security
3	The talents-based, needs-based and values-based anchors of Indonesian academics.	(H2) --> Indonesian academics score differently on the talents-based, needs-based and values-based anchors.		The highest rank was needs-based.
		(H2a) --> Indonesian academics score differently on the talents-based, needs-based, values-based and commitment-based anchors.	Supported.	A new hypothesis was formulated due to a new multiple groups-based anchor emerged as a result of new scale structures.
4	How do career anchors predict psychological empowerment and job satisfaction?	(H3a) --> Indonesian academics' perceptions of career anchor subscales are positively related to job satisfaction.	Partially supported. Of the seven career anchors, only four had significant relationship: work dedication, managerial competence and pure challenge had positive and significant relationship on job satisfcation, while balanced-lifestyle had negative effect.	
		(H3b) --> Indonesian academics' career anchor subscales are positively related to psychological empowerment.	Partially supported. Five out of seven anchors had significant relationships. Work dedication, service, managerial competence and pure challenge had positive and significant relation to meaning, but negative effect on balanced-lifestyle.	
			Work dedication and managerial competence had positive and significant effects on impact.	
			Service and managerial competence predicted positively competence.	
			Work dedication, balanced-lifestyle, service and managerial competence were positively and significantly related to self-determination.	
		(H3c) --> Indonesian academics' perceptions of psychological empowerment facets are positively related to job satisfaction.	Partially supported. Two out of four psychological empowerment facets had a direct effect. Meaning and impact had positive and significant effect on job satisfaction.	
		(H3d) --> The mediating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job	Partially supported. Two out of four facets of psychological empowerment played a role as mediators on three out of seven anchors and job satisfaction relationship. Meaning and impact mediated the effect of work dedication, managerial compatence and pure challenge on job	
		(H3e) --> The moderating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction.	Partially supported. Three out of four psychological empowerment facets served as moderators on three out of seven anchors and job satisfaction relationships. Self-determination moderated the effect of pure challenge, service and balanced-lifestyle on job satisfaction.	New hypothesis was fomulated because of the unexpected weak relationship between the predictor and the criterion variable.
			Impact moderated the relationship between service and job satisfaction.	
			Competence moderated the relationship between balanced-lifestyle and job satisfaction.	
			Meaning mediated and moderated only balanced-lifestyle and job satisfaction relationship.	
			when balanced-lifestyle tended to be high, high levels of meaning, competence and self-determination increased job satisfaction; however, at a low level for balanced-lifestyle, the facets dropped job satisfaction.	
			When service increased, both high and low levels of impact and self-determination raised job satisfaction level.	
			When pure challenge increased, both high and low levels of self-determination increased job satisfaction.	

The next chapter will analyse and discuss the qualitative research data of the interviews and the two open-ended questions on the questionnaire. The qualitative findings will be presented in the form of themes and be used to support the results of the quantitative analysis.

Chapter 5
Academics' perceptions of the career anchors

5.1 Introduction

The previous chapters introduced the background of the study, the theoretical framework, the methodology and the results of the quantitative data. Chapter One outlined the aims, the background and the research problem of the study. Chapter Two reviewed the previous studies on career anchors, psychological empowerment and job satisfaction, and developed the framework, the research model and the hypotheses. Chapter Three discussed the research design for the current study including the study approach, the sample, the data collection method and procedures, and the data analysis design. Chapter Four presented the results of the quantitative data analysis. It began by presenting the response rates of the surveys, and the demographic background characteristics. The psychometric measurement of the three instruments (the career anchor inventory, the psychological empowerment scale and the job satisfaction scale) used was tested. The chapter also examined the dominant and multiple career anchors and then identified the career anchor relationship pairs. Finally, testing the effects of predictors on the criterion was performed including the testing of mediators and moderators.

This chapter, Chapter Five, discusses the results of the qualitative data. It presents the analysis design of the data gathered. It provides the responses and the demographic profiles of the participants from the interviews and the two open-ended questions on the questionnaire. The chapter then identifies the macro and micro themes and displays some examples of the responses. The emergent themes from the interviews are defined and related to the career anchor concept to identify dominant career anchors. A number of other themes from the written responses are used to strengthen the analysis. This chapter also presents the contribution of the qualitative results to the theory. Finally, the chapter compares the results that are associated with the quantitative results and draws a conclusion.

5.2 Framework for the qualitative analysis

This chapter discussed and solved issue 5 of the research question in Chapter One.

Issue 5: How do Indonesian academics' perceptions of their career development influence the way they pursue the career anchors?

The qualitative question is intended to explore how or why factors related to the career development of academics from the viewpoints of different respondents. The responses are used to strengthen the findings revealed in the quantitative analysis in Chapter Four. In addition, it is also strength of the mixed method as used in this study.

Academics' understanding of their career goals is rooted in their understanding of career anchors and the match between the needs of academics and their organisations. It is suggested that an individual should be better able to understand her or his self-image of what she or he is 'good at' (in the form of talents or competencies), 'what motivates' her or him (in the form of needs) and 'what values' she or he has learned (Schein & van Maanen 2013, p. 1). If an individual has a clear self-image of the three components of the occupational self-concept (talents/competence, needs/motives and values), 'the individual has anchored her or his career' (Schein 2006a, p. 1). Individuals who have identified their career anchors need to communicate this to their workplaces because the self-concept is one's interest, not an organisation's or an employer's interest. Moreover, Schein (1978, p. 2) discovered that the concept of career focuses on 'the interaction of the individual and the organization over time'. In other words, on the one side, individuals need organisations to exercise their skills and competencies, give security and provide career opportunities and continuity; on the other side, organisations need to benefit from individuals' performances in order to grow. Individuals need an interaction with organisations at work as they maximise their career anchors to achieve their own goals. The framework of the analysis of the relationships between the variables for the current study is presented in Figure 5.1.

The current study analysed the academics' understanding of career goals using the qualitative data. It attempted to uncover any aspects within career anchors that were not covered in the quantitative analysis. First, academics' dominant career anchors were identified through their work histories and experiences. An interview using Schein's

interview protocol was employed to collect the data (see Appendix 6). Schein and van Maanen (2013, p. 19) pointed out that 'an interview protocol is needed to analyse your career history and determine more precisely what your anchor is'.

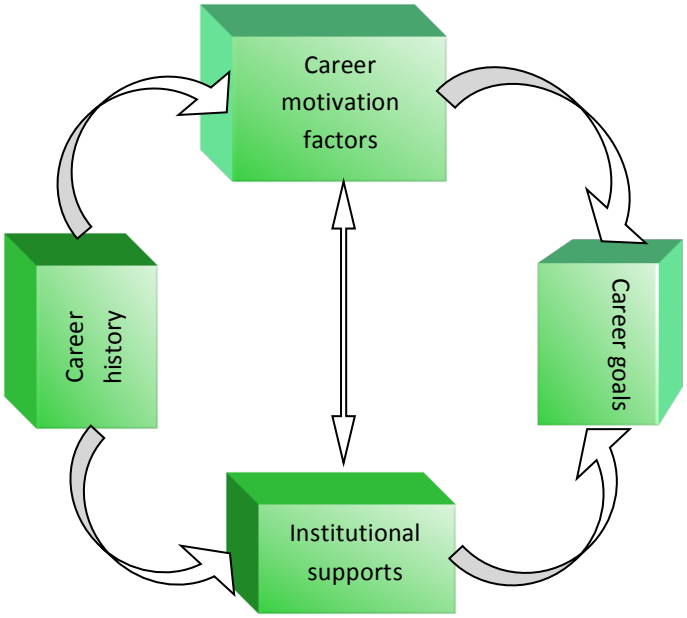

Figure 5.1: Framework of academic understanding of career anchors

Following Schein's (1978) work in finding an individual career anchor, the respondents in the current study were interviewed to obtain their actual work history, including their educational background. Schein (1978) established the concept of career anchor initially based on the educational and employment history of interviewed participants. They were asked to trace their employment and the reasons for choosing the jobs they had held since completing their first degree including the dynamics encountered during the course of their employment history. The respondents then were asked to predict their desired job in the future. This step identified themes that emerged and classified them with reference to the career anchor categories. Then, the anchors were counted to determine the respondents' dominant career anchors. Themes that could not be characterised into one of the anchor categories were grouped into new categories. Second, the interaction between the individuals and the organisations (denoted ⇔) was examined through the factors that affected the individual career motivation and the support provided by the institutions in the development of their careers. At this step,

data collected via written answers also identified their themes. All discovered themes were used to support the discussion of the identified dominant career anchors. Finally, the identified career anchors were linked to the interaction (denoted), including to the quantitative findings, to understand the career goals of academics.

5.3 Interview and open-ended questions responses

Qualitative data were collected in two ways: face-to-face interviews and open-ended questions on the questionnaire (Patton 2002). Biased opinions in interviews can be clarified through the answers given on the questionnaires. Similarly, unclear written answers on the questionnaire can be checked via interviews.

As discussed in Chapter Three, Schein's structured interview protocol was used to identify academics' career anchors. Interviews were conducted with 20 lecturers on-site at six universities: three each at four of the universities, and four each at the other two universities. Each interview took 25 to 35 minutes. Those who participated in the interviews have a varied demographic background as explained in Sub-section 5.4.1.

Survey respondents were asked to respond to open-ended questions on the questionnaire. Question 1 asked for the factors that influenced their internal career motivations. Of the total 585 valid questionnaires, 94 (16,07%) were discarded due to blank answers (77, or 13.16%) and vague responses (17, or 2.91%). It was pointed out that those deleted answers required further justification if they were to be used for the analysis (Miles & Hubermann 1994). Some deleted examples given by the respondents are 'read books and journals; community's need to change; up–to-date; profession; and literature to benefit community'. Thus, 491 surveys (83.93%) were used for further analysis. More detailed examination revealed of the total 491 valid surveys, the researcher found 676 responses that included multiple answers.

Finally, the respondents were asked to give responses to question 2, which related to the institutional supports given to academics in achieving career goals. A total of 192 questionnaires were excluded from the analysis because 185 respondents (31.62%) left the answer blank and seven questionnaires (1.20%) were removed. The reason for deletion is that those answers needed further justification if they were to be included in the analysis. Some examples of deleted responses were 'Low academic atmosphere due

to academic political issues; advanced innovation and technology, and unified nation; if I am not working in this present institution, I may not think to develop myself, educate community and do community services; and institutional development in general'. Thus, 393 (67.18%) of the total of 585 valid respondents were acceptable for analysis. Further assessment obtained 462 responses indicating that there were some respondents who gave more than one answer.

5.4 Thematic analysis of the understanding of academics' career anchors in achieving career goals

Thematic analysis is one form of qualitative research. All responses given by the respondents were analysed using thematic analysis, which emphasises identifying themes and/or patterns of behaviours (Aronson 1994) that reflect the textual data (Howitt & Cramer 2008). It can group similar meanings of responses conceptually into meaningful themes. Miles and Huberman (1994, p. 127) stated that:

> a conceptually clustered matrix has its own rows and columns arranged to bring together items that "belong together." This outcome can happen in two ways: *conceptual* –the analyst may have some a priori ideas about items that derive from the same theory or relate to the same overarching theme; or *empirical* – during early analysis you may find that informants answering different questions are tying them together or are giving similar responses. The basic principle, however, is conceptual coherence.

The analysis is ordered based on the concept, and not on persons or roles (Miles & Huberman 1994). It is possible that the responses given are vague and imprecise, and some are overlapping (Bernard 1994). These could mean that not all themes that emerged are labelled. According to Ryan and Bernard (2003, p. 85), identifying themes is a four-step process: (1) discovering themes and subthemes; (2) winnowing themes to a manageable few; (3) building hierarchies of themes or code books; and (4) linking themes into a theoretical model. The researcher is therefore considered the person who is most familiar with the textual data, and thus has the right to build themes that reflect them (Howitt & Cramer 2008). Six procedures introduced by Howitt and Cramer (2008) mentioned in Chapter Three are an extension of Ryan and Bernard's. As suggested by Howitt and Cramer (2008) and implemented by Muchiri and Cooksey (2009), the thematic analysis in the current study was done manually by the researcher.

Data gathered were analysed based on the steps described in the Sub-section 3.6.1 in Chapter Three. Data were transcribed, listed and coded, and themes were identified. Then, similar responses were combined into 'micro themes' as a higher order, which in turn were integrated into 'macro themes' as the highest order (Muchiri & Cooksey 2009). Because respondents were free to discuss all aspects of their academic lives, the identified macro and micro themes were, therefore, classified as reflecting an internal or external career orientation, following the understanding of internal and external career meanings discussed in Chapter Two. In addition, the terms of 'theme' and 'category' are used interchangeably.

Macro and micro themes that emerged from the interviews were used as the benchmark or reference point to the themes from the two open-ended questions. If the responses were not covered by the existing labels, they were categorised into the new themes. Then, the micro themes were supported with some examples, and the number of samples (symbolised N) and the percentages (symbolised %) were counted. Howitt and Cramer (2008) argued that 'there is no reason why researchers cannot give numerical indications of the incidence and prevalence of each theme in their data'. Similarly, Ghauri and Gronhaug (2005, p. 109) asserted that '…it is possible to quantify qualitative data'. Siegel (2011, p. 727) in his book *Practical Business Statistics* emphasised that qualitative data could be summarised by using frequencies or percentages to 'preserve information in a more useful way in a smaller space'. In addition, for the demographic profiles, the number of respondents who chose the categories given was obtained from the calculation of the descriptive statistics on the SPSS software version 19.0 for Windows.

The themes that emerged were then analysed for their validity and reliability (Ryan & Bernard 2003). As discussed in Chapter Three, triangulation validity and the bilingual peer approach were employed, while the reliability analysis adopted Gibb's (2007) procedures. All macro and micro themes were tabulated and presented in tables, and then were validated based on the concept and the linguistic-semantics by either 'local experts' (Jehn & Doucet 1997 in Bernard & Ryan 2010, p. 72) or 'experts and novices' (Barkin, Ryan & Gelberg 1999 in Bernard & Ryan 2010, p. 72). For the purpose of the current study, the themes were judged by two experts: one academic who had a degree in English, and another who spoke English and had completed a degree overseas that

specialised in organisational psychology. This process aimed to determine whether the themes accurately captured the responses, and whether those themes measured the same thing.

Feedback from the two experts suggested that the themes of academic freedom and academic creativity should be combined into one theme designated academic freedom and creativity. The reason is that academics who perceived themselves to be independent and felt autonomous would feel free to create and innovate with their ideas. The remaining themes were adopted without change for the analysis.

5.5 Thematic analysis of the career history: findings from interviews

5.5.1 Demographic profiles

Career histories of academics of various backgrounds were gathered through 20 interviews. There were eight female participants (40%) and 12 male participants (60%). All participants had postgraduate qualifications. Of them, 12 participants (60%) had completed their master's degree, while eight participants (40%) had attained a doctoral degree with a ratio of domestic to overseas graduates of 10 (50%) to two (10%) for master's and six (30%) to two (10%) for doctorates. The majority of participants specialised in the fields of plant sciences and economics. Five participants (25%) studied in the areas of plant science (e.g., agronomy and forestry) and 10 (50%) in social science (e.g., law, management, accounting and economic development). Three (15%) studied in education (educational technology and language), and the rest majored in either science or tourism. Most respondents were in the established stage of their career cycle: 14 (70%) were senior lecturers and three (15%) were lecturers and professors; 16 participants (80%) had over 20 years of work experience and the remaining four participants (20%) had worked at the current organisations between 11 and 20 years. Of the 20 interviewees, only five participants (25%) held managerial positions, such as vice dean, head of department or head of postgraduate studies. With such a diverse set of participant demographics, it was considered that there would be a variety of responses for analysis.

5.5.2 Thematic categories

Table 5.1 shows all macro and micro themes identified in the thematic analysis.

Table 5.1: Thematic analysis on career history

	No	Themes		Examples of the Quotation	N	%
		Macro	Micro			
Internal career	1	Personal bias	Service	At my first job, I immediately chose to become a lecturer and I do not have any plans to get out of this job, I desire to improve the quality of [my] teaching (Tecm8).	17	27.42
	2		Academic freedom and creativity	As an academic I am free to develop my skills. If I may dream, I want to write a lot of books and have many publications in national and international journals (Marf9).	11	17.74
	3		Managerial competence	I always strive to achieve the highest structural position to bring academics and administrative staff together to achieve the university's goals (Agrm16).	6	9.68
	4		Work-family lifestyle	…in life, I stick to the principle: success in career, success (also) in the family (Agrf7).	6	9.68
	5		Flexible working schedule	Working as a lecturer is similar to the flexibility of working time; I can work anytime, not bound by time (Vocf18).	3	4.84
	6		Economic security	A pension package is my main consideration to be an academic as a civil servant (Edum4).	3	4.84
	7		Skill orientation	...I refused because I was given subjects to teach that were not relevant to my field ...I could not do much. I was not ready scientifically and mentally (Admm20).	3	4.84
	8		Academic atmosphere	I want a positive competition between colleagues (Finm5).	2	3.23
	9		Pure challenge	I would still be a lecturer in the future because there is still much to be improved at my department as a new department (Toum11).	2	3.23
	10		Geographic stability	I refused promotion to move to another area. This is because I appreciate a place that has raised me where a lot of experiences were gained. I am responsible for my decision to work at this institution (Marf9).	2	3.23
	11		Running a business	Besides being a lecturer, in the future I will be doing business. It is important to support my income (Marf12).	1	1.61
	Sub-total Personal bias				56	90.32
	12	Personal ambivalence			1	1.61
	Sub-total Personal ambivalence				1	1.61
External career	1	Organisational bias	Career arrangement	If there is an opportunity for further study [doctoral degree], I really want to continue my studies. Unfortunately, the scholarship policy related to age does not allow me to advance my degree (Opef3).	4	6.45
	2		Financial support and reward	…research grants from university and at least acknowledgement (Finm5).	1	1.61
	Sub-total Organisational bias				5	8.06
	Total samples				62	100.00

N = Number of samples; % = Percentage

Table 5.1 ranks the career anchors and organisational themes chosen by academics in public higher education institutions. As suggested by Schein and van Maanen (2013), after reviewing all anchor categories, the anchors should be ranked from the highest to the lowest. In relation to the internal career orientation, the *service* theme was highest

ranked, while the *running a business* theme was the least-often chosen theme by academics. The next ranked themes in the hierarchy in descending order are *academic freedom and creativity, managerial competence, work-family lifestyle, flexible working schedule, economic security, skill orientation, academic atmosphere, pure challenge* and *geographical stability.* Contrary to the internal career orientation themes, the *career management* and *financial support and reward* themes of the external career factors also appeared to influence academics' career decision. The characteristics of each theme that emerged are described below.

5.5.3 Identified macro themes

Two macro themes were identified. The first was personal bias as an internal career. Personal bias highlights academics' insights into their competencies and skills, their motives or needs, and their attitudes and values to be actualised for career decisions (Schein 1978, 1992, 2006a; Schein & van Maanen 2013). The second macro theme, as an external career factor, was organisational bias, in which each academic expected real support from their institutions in improving their career. The micro themes, discussed below, provide a more detailed understanding of the macro themes.

5.5.4 Identified micro themes: personal bias and dominant career anchors

From the Personal bias macro theme, 12 micro themes including personal ambivalence emerged. *Managerial competence, running a business* and *skill orientation* are classified into *talents-based* anchors. *Work-family lifestyle, flexible working schedule, academic freedom and creativity, economic security* and *geographical stability* were classified as *needs-based* anchors. *Pure challenge, service* and *academic atmosphere* were categorised as *values-based* anchors.

As discussed in Sub-section 5.2, the interviews were conducted to find out the dominant career anchors of Indonesian academics at public universities. The results were grouped as reflecting an internal career orientation. *Personal bias*, as shown in Table 5.1, emerged because all the responses were associated with self-insight that reflected the individual occupational self-concept as introduced by Schein (2006a). Psychologically, academics recognise their competencies and talents (grouped in *talents-based* anchors), require motivation and ambition (grouped in *needs-based* anchors) and understand their

own attitudes and values held (grouped in *values-based* anchors) in the development process of their careers (Schein 1978, 1987a, 1993, 2006a; Feldman & Bolino 1996).

The dominant career anchors

As discussed earlier, the central themes relevant to the academics were identified through their job histories, and reflected the dominant academic career anchors of each respondent (Schein 1978; DeLong 1982; Igbaria & Baroudi 1993). The number of dominant anchor categories and the number of respondents anchored on each were calculated based on the frequency and presented in Table 5.2.

Table 5.2: Respondents' dominant career anchors

Interviewee's code / CA identified	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	N
Service	√	√	√	√		√	√	√	√	√	√		√	√		√	√	√	√	√	17
Academic freedom and creativity	√	√		√	√	√	√		√					√			√	√	√		11
Managerial competence		√			√	√						√				√				√	6
Work-family lifestyle			√				√		√			√		√					√		6
Flexible working schedule														√			√	√			3
Economic security	√			√	√																3
Skills orientation				√						√										√	3
Academic atmosphere					√	√															2
Challenge										√	√										2
Geographic stability									√		√										2
Running business												√									1
NoCA	3	3	2	4	4	4	3	1	4	3	3	3	1	4		2	3	3	3	3	56
Personal ambivalence															√						*1*

Shaded cells = Anchors that were not selected by participants; NoCA = Number of career anchor; N = Number of samples.

Table 5.2 shows different labels from the original terms (see Chapter Two, Sub-section 2.3.1). For the needs of the qualitative analysis, two categories (*skill orientation* and *running a business*) used different terminologies that better represented the respondents' responses. The terms were chosen because of the nature of the study that used academics who were working at public higher education institutions as the research subjects. The remaining labels (*academic freedom and creativity, work-family lifestyle, flexible working schedule* and *academic atmosphere*) were treated as new anchor categories.

Of the 11 identified dominant career anchors, the highest rank order was *service* (17 respondents, or 29.82%), followed by *academic freedom and creativity* (11 respondents, or 19.30%). Two anchors (i.e., *managerial competence* and *work-family lifestyle*) were ranked in third place with each anchor nominated by six respondents (10.53%); the fourth position was occupied by three anchors (i.e., *flexible working schedule, economic security* and *skills orientation*), with each anchor chosen by three respondents (5.26%); and the fifth position was also occupied by three anchors (i.e., *academic atmosphere, pure challenge* and *geographical stability*), with each anchor chosen by two respondents (3.51%). The dominant career anchor with the lowest rank was *running a business*, which was selected by only one respondent (1.75%). Personal ambivalence was also attached to one respondent (1.75%); in other words, this respondent had difficulty in expressing a dominant career anchor.

As Table 5.2 indicates, while two respondents perceived a single career anchor, the majority had multiple anchors. Of those with more than one career anchor: five participants (25%) were oriented to four career anchors, 10 participants (50%) held three anchors, and two participants (10%) had two career anchors. The remaining respondent had a high level of personal ambivalence.

The description of each anchor that is the same as the original labels extended the explanation given by Schein (2006a, pp. 7-25) while the new anchor categories description were provided according to the interview results. Each of the anchor description is as follows:

Service: As expected, the most preferred career anchor selected by academics as government employees is *service*. Schein and van Maanen (2013, p. 17) determined that 'if one score stands out, (indicated by the highest scores), that is what you can begin to consider as your career anchor'. There are some academics who see this theme as important in their careers. They desire to serve the community in a wider context by improving the quality of the teaching environment. Academics as employees of governmental higher education institutions have an obligation to serve the stakeholders: students –through teaching, and society –through the application of research results. They feel satisfied when their work is beneficial or acknowledged by colleagues and others. They will still work even when unpaid. For them, money is not a key issue. This

group also has the intention to back the institution's mission and goals. Here are some examples of the participants' comments:

> My commitment is to keep on going to serve community through teaching my students and conducting research even if these are not got paid in terms of extra money…except [my] regular monthly salary. I feel happy if I can help my students to solve their assignments and other academic matters, including social problems (Foom8).
>
> Being a lecturer at a public university is more like working as a civil servant at a public organisation … highly demanding work with low pay. However, I am happy with this job…because I can produce books and conduct research… I can also help and transfer knowledge and skills to my students and colleagues. Money is not my focus but serving people is number one (Edum6).
>
> I switched from a private company to a public institution because I like to serve people. I will enjoy my career if what I am doing is beneficial to others and those people appreciate my work (Marf9).

This anchor reflects an important characteristic of civil servants, which is serving the community at public institutions, including the higher education sector. Civil servants either as employees at government institutions or as academics at higher education institutions have the same interest in this dominant career anchor as observed by Schein (1990, 2006a).

***Academic freedom and creativity*:** The *academic freedom and creativity* anchor is a new proposed anchor category that reflects a typical characteristic of academics. Academics consider intellectual freedom to underpin the teaching and learning process, which includes teaching, research and community services. They tend to be free in expressing or communicating ideas within their disciplines, not only without undue interference, but also without pressure from superiors, society, political and other special-interest groups, and the law including university regulations. They undertake the creation and innovation of academic products (e.g. books, papers) and services (e.g., counsellors, advisers) and present them to students, colleagues and other communities. However, if there is a decline in academic productivity, such as no publications due to lack of autonomy, they would question the role of institutions in promoting their academic careers. These people, therefore, do not set money as their target. Money will come as their products are published. The following quotes are two examples that reflect the selection of the anchor and reinforce the merging of the two themes:

> …What I am looking for as an academic is satisfaction through autonomy to implement my ideas … freedom of expression in academic world, I mean (Finm5).
>
> Although the present job gives me a salary far less than before, I am able to develop myself and work for my future career independently... I feel free to express what I have [regarding my ideas] (Agrm2).

Academics need independence and freedom to be creative and innovative in academic work. This requires that they can both teach and research without any constraint (Robinson & Moulton 2002). Success for them means, for example, that they are able to produce publications/books, transfer new ideas to colleagues, students and other communities and design quality courses. As validated above, this career anchor is a combination of the *autonomy* and *entrepreneurial creativity* anchors.

Managerial competence: The *managerial competence* anchor was third on the career anchor hierarchy. Some academics pursue their careers through managerial positions. These academics see themselves as having ability to supervise, control, organise, direct, lead and influence people. They demonstrate that they have skills to solve problems, motivate academics and students to perform, communicate institutional goals and behave as a role model. This group also claims that they can control their feelings to act reasonably and without bias to all academic and administrative staff. Having those competencies, they are able to reach the top management level. In other words, these academics want to contribute to the success of the institutions through managing people and administrative work. Getting a higher level or rank is also viewed as promotion. For them, holding managerial positions means an opportunity to earn extra income (on top of their regular monthly salary). It is not surprising that there were six academics who thought this anchor was important to them. They stressed that they wanted to manage the institutions or practice the leadership skills by occupying the highest position. For instance, one participant commented:

> I am sort of an individual who likes to manage people and change my university to a better-quality standard. So, I never reject any kinds of managerial positions when it is offered and... I am doing it [serving as an administrator] now (Agrm2).

In addition to implementing the three pillars of higher education (teaching, research and community service), academics are also allowed to occupy managerial positions. The positions should be viewed as part of a need to apply the three basic areas of competencies 'based on analytical skills, interpersonal and group skills, and the emotional capacity' (Schein 2006a; Schein & van Maanen 2013, p. 10) instead of an ambition to reach top management.

***Work-family lifestyle*:** Some academics wanted to prioritise family over work. The *work-family lifestyle* anchor was ranked fourth. Academics with this category look at life not only for work but also for personal attachment. They, therefore, want a balanced work life (career and ambition in teaching, research and community service) and family/personal life, including social activities (e.g., family, friends, health, childcare options, holidays and leisure activities). For married couples with or without families, where both members of the couple are employed full time, a serious conflict of interest may arise between the priority given to workplace commitments and the priority given to family needs when family problems arise, e.g., a child is seriously ill, or one spouse's job is transferred. For some couples, the family has a higher priority than the workplace, and one parent (in this case) will choose to take time away from work to care for the family member. So, promotion to another geographical area is not their aim or ambition. One participant exemplified this anchor:

> I had to leave my previous university to follow my husband who is working in another place… I then [found] work at one university in the same location as my husband (Marf9).

Work-family lifestyle is one of the two anchors split from *lifestyle*. Work-family lifestyle-oriented academics would develop their careers so that they integrate the two needs. The other anchor category split from *lifestyle* is *flexible working schedule*.

Flexible working schedule: Some other respondents were motivated by flexibility in time and place of work. This anchor placed fifth. This is a lifestyle preference of academics who want to be flexible while still working within institutional rules, restrictions and job performance requirements. Academics with this anchor are not autonomy-anchored because they still obey institutional rules. Performance is examined not only by academics' presence at their universities but also by outcomes. Except for

the standard required teaching hours in classes or laboratories and consultation times, they prefer flexibility in terms of time, location and how they work to meet their career needs. Academics consider that while they are away doing research projects either at home or at other locations, institutions should consider their performance, for example. Academics believe that a rigid schedule would limit them or become a blockage to developing their talents and applying their values in advancing their careers. One participant commented:

> Working as a lecturer has flexible time because I can work at home at the moment, as there is no teaching in the classroom or scheduled meetings (Ecom14).

This group would develop careers if a career situation allowed them to have autonomy in managing their own work schedule.

Economic security: Qualitative data shows that the respondents who chose security were only concerned with the amount of pay and the long-term economic benefit package. This anchor category was ranked sixth. Academics who choose this theme need secure employment and finance at the institutions they work for. They prefer to have attractive long-term employment benefits, such as a pension package and health insurance. The type of job is not so important as long as the institutions can assure their financial security after retirement. These people may not be willing to perform some tasks because they understand that they will not be fired due to the long-life employment status. Their career advancement is usualy steady or slow. In addition, they also rely heavily on their monthly salary. One participant commented:

> A pension package is my main consideration to be an academic as a civil servant (Edum4).

In relation to the *security/stability* anchor category, the present findings confirmed the separation of this anchor. The *security/stability* anchor was split into two categories labelled the *economic security* anchor and the *geographical stability* anchor.

***Skill orientation*:** Academics with this anchor are only motivated to grow in their careers in the area of their specialisation. The anchor category was ranked seventh. Some only teach or research based on the field of their formal educational, regardless of

offers of higher incomes if they work in other fields. However, others focus on their technical and functional skills to develop their careers by getting extra work (e.g., faculty web designer, university counsellor). These people, in general, feel happy when they have an opportunity to exercise their talents/skills and to be challenged in their area of expertise. Managerial positions are not their concern, but leading people to work in the same area of interest, such as becoming the head of the university computer laboratory, is much appreciated. Thus, promoting them based on their interest is preferred rather than giving extra money for the achievement. One participant commented:

> ...I refused [a promotion] because I was given subjects to teach that are not relevant to my field, ... I was not ready scientifically and mentally (Admm20).

Academic atmosphere: It is surprising that the *academic atmosphere* anchor as a typical anchor of academics was only ranked eighth out of the 11 anchors. This anchor was also classified in the internal factors whereas other authors might regard it as an external factor. Academics with this theme require a supportive academic work environment to build a positive relationship between and among academics and students. It is believed that such a conducive academic climate can promote trust among academics and accelerate academics' career choices. Having support from colleagues in collaborative research, sharing knowledge, building teamwork, developing quality education and creating positive competition are viewed as forms of a positive working atmosphere. These people respect individual work, but recognise that working together enhances their career goals. One participant commented:

> Without the support of colleagues, collaborative work is not going to happen so that [one's] career will stagnate. Teamwork is needed to support one another (Edum6).

The proposed new anchor was only considered important by two respondents, who argued that without a positive academic climate, it is impossible to operate the teaching and learning process. Nizam (2006, p. 77) emphasised that a conducive academic atmosphere would create 'healthy relationships' between and within academic communities to develop quality of teaching and research and 'a mutual trust'. Sharing the same beliefs and values boosts academics' careers by extending academics' knowledge and skills.

Pure challenge: This anchor ranked ninth. Success for academics means they can handle the tough or complex problems in the teaching and learning process, including students' problems either personal or academic. Pure challenge-oriented academics are also obsessed by learning new things. They are happy to overcome problems even outside of the area of their expertise and win competitions over tough opponents in the multifaceted academic situation. Winning research grants among colleagues who are from higher academic ranks or from well-known universities, for instance, is more important than the money itself. However some academics with this anchor find hard to advance in their career. Interestingly, these people regard both money and challenge as a form of benefit. One participant stated:

> I would still be a lecturer in the future because there is still much to be improved at my department as a new department (Toum11).

Geographical stability: Academics with this theme make *geographical stability* a central motivation to pursue their careers. Academics feel strong loyalty to the institution that has supported them in developing their academic career, making them more likely to remain at their institutions. They are not generally interested in promotions or salary increases offered by other institutions even if the current institution does not provide enough resources and opportunity for developing careers. Considering the current career situation in which more and more people are in dual career couples, family care or their spouse's career may also be their reason to stay. One participant commented:

> Yes. I even refused a promotion to another place although it was promising. My reason is loyalty. I have decided to work and grow at this university so I should dedicate [myself] to the institution where I grow my career (Vocf18).

This anchor category was regarded as a trade-off benefit for the economic and employment security guarantee that academics receive.

Running a business: As expected, only one respondent chose the *running a business* anchor as an important theme in deciding a career, causing the anchor category to have the lowest rank. Some academics choose to run a business to exercise their skills as a side job. These academics have entrepreneurship skills and are willing to take risks for the sake of generating money. They merely do academic tasks based on the minimum

required workload and use the remaining time to run their business. In addition to looking for extra incomes, these people also want to exercise their skills in business for future opportunities. Because a sense of businesses is more to them than their public sector work, academics might choose the anchor either because of security reasons (e.g., pension and lifelong employment) or because no other job opportunities were available at the time. One participant commented:

> Besides being a lecturer, in the future I will be doing business to exercise my skill. It is important to support my income (Marf12).

Following the separation of the creativity anchor from the *entrepreneurial creativity* anchor, and the emergence of the *running a business* anchor, the *entrepreneurial creativity* anchor in the current study was broken down into two anchor categories: the *running a business* and *academic freedom and creativity* anchors. As discussed earlier, creativity was joined to the *academic freedom* theme (Sub-section 5.4). The career anchor was not expected to appear since it is opposed to the characteristics of many academics who work in the public education sector.

In spite of the identified dominant career anchors, some academics face an ambiguous career situation to decide which job would be the key career for them. This may result when the present work undertaken does not conform to an academic's expectation or does not accommodate her/his talents and motivation, but she/he still wants to stay and work in the current institution. It could be because she/he has too many career goals that could lead her/him to be a multiple career anchors-oriented person. These individuals are categorised in the 'personal ambivalent' theme (hereafter personal ambivalence) suggested by Feldman and Bolino (1996, p. 99). A strong statement expressed by a participant was:

> Once I left my job in the private sector, I applied to become a lecturer in a public university in another geographical area; I thought it was great. In fact, I am stuck now and am getting older... moving, it is a bad idea. I am worried people will think I am corrupt... moving to a private sector does not matter for me if it should be somewhere else, wherever I am willing to do so... my plan before retirement [is that] I have to change the current job. I do not want to do business because business requires a big investment, however, if I work for a company and some of the income can be saved then I will work.

Hence, the current study showed that academics identified their career anchors that could enable them to advance their careers. While academics' anchors fell for the most part within Schein's career anchor typology, some new anchor categories also emerged. In terms of the number of career anchors held by each respondent, most academics (90%) had more than one anchor category, with between two and four anchors.

5.5.5 Identified micro themes: organisational bias

There are two themes under the organisational bias theme: *career arrangement* and *financial support and reward*.

Career arrangement: Academics think that what the researchers call the 'hardware' of career arrangement (e.g., career system and policy, training, education, publications) is crucial in achieving career goals. They argue that though an academic has a very strong internal motivation, if the institution does not establish a clear and transparent career path system, motivation will be diminished or useless. They, therefore, expect institutions to create positive competition for each individual academic, for instance, to further their study to the highest level of education, join skills enhancement training, do research and produce publications, and hold structural positions. Institutions may establish a reasonable teaching load so as to give the opportunity for research, and have no age limit to get a scholarship for further studies or training under scholarship schemes.

Financial support and reward: Most academics consider that this theme is important to achieve their career goals. They need financial support from their institutions, especially for research and publications. It does not mean that the academics have no funds to do their activities. Academics, however, argue that the involvement of institutions is because the results of the research and publications will raise the institutions' image. Those who choose this theme do so as a consequence of the benefits received, such as rice allowance and tax subsidies, that are unrelated to their achievement. This is not only burden the institutions but also inhibits them from developing their own career. They also value appreciation in the form of extra money, like bonuses.

5.6 Thematic analysis of career motivation: responses from open-ended question 1

This sub-section refers to the first open-ended question on the questionnaire:

What factors influence your career motivation?

5.6.1 Demographic profiles

As discussed in Sub-section 5.3 above, 491 of 585 respondents answered the question about the factors that influenced their career motivation. All demographic information is summarised in Table 5.3.

Table 5.3: Respondents' profiles

Description	∑*	%**	Description	∑*	%**
Gender			**Marital status**		
Female	160	32.59	Single	34	6.92
Male	331	67.41	Married	452	92.06
Total	491	100.00	Other	5	1.02
			Total	491	100.00
Work experience			**Institution size**		
5 to 10 years	136	27.70	Small	34	6.92
11 to 20 years	138	28.11	Medium	201	40.94
over 20 years	217	44.20	Large	256	52.14
Total	491	100.00	Total	491	100.00
Age			**Educational level**		
25 years and less	9	1.83	Bachelor's degree	34	6.92
26 to 45 years	229	46.64	Master's degree	317	64.56
Over 45 years	253	51.53	Doctoral degree	140	28.51
Total	491	100.00	Total	491	100.00
Place of study			**Managerial position**		
Indonesia	365	74.34	Vice Rector	16	3.26
United States	41	8.35	Dean	12	2.44
Australia	28	5.70	Vice Dean	16	3.26
Philippines	10	2.04	Head of School/Department	58	11.81
Japan	9	1.83	Head of Postgraduate Studies	7	1.43
France	7	1.43	Head of Unit	25	5.09
Malaysia	6	1.22	Total	134	27.29
United Kingdom	5	1.02	**Religion**		
Germany	5	1.02	Islam	364	74.13
Canada	5	1.02	Christianity - Protestant	69	14.05
Total	481	97.96	Hinduism	29	5.91
Academic rank			Christianity - Catholic	14	2.85
Assistant lecturer (*Asisten ahli*)	78	15.89	Buddhism	2	0.41
Lecturer (*Lektor*)	136	27.70	Missing values	13	2.65
Senior lecturer (*Lektor kepala*)	246	50.10	Total	491	100.00
Professor (*Guru Besar*)	31	6.31			
	491	100.00			

*Frequency; **Percentage

Table 5.3 showed that more than half respondents, (331, or 67.41%), were males and 160 respondents (32.59%) were females. Most respondents (452, or 92.06 %) were married. A large proportion of respondents (217, or 44.20%) had worked more than 20 years with their present institutions. Out of 491 respondents, 256 (52.14%) worked at large higher education institutions and 201 (40.94%) worked at medium-sized higher education institutions. There was only a slight difference in the number of samples in each age group: 229 respondents (46.64%) in the 26-45 group and 253 (51.53%) in the over 45 group.

Three hundred and seventeen respondents (64.56%) had a master's degree and only 140 respondents (28.51%) had a doctoral degree. More than three-quarters of the respondents (365, or 74.34%), had only studied in domestic universities, while 116 (23.62%) completed their studies at overseas universities, such as in the U.S., Australia, the Philippines, Japan and France. Furthermore, of the 491 respondents, 134 (27.29%) held managerial position, such as vice rector, dean, vice dean, head of schools/departments, head of postgraduate studies or head of units; 246 respondents (50.10%) held the academic rank of senior lecturer (*lektor kepala*) and 139 (27.70%) held the rank of the assistant lecturer (*lektor*). Approximately 364 respondents (74.13%) listed Islam as their religion. The profiles indicate that the respondents came from a wide range of demographic backgrounds at the mature career level.

5.6.2 Thematic categories

The same steps of the thematic analysis that had been done in the interview analysis were applied to analyse Question 1. Table 5.4 displays all macro and micro themes identified and examples of relevant comments, while the completed results are shown in Appendix 16.

It is surprising that the two most preferred themes come from the organisational bias macro theme as the external career. The career arrangement and organisational structure themes were the main focus of the respondents. They mentioned the themes 99 times (14.64%) and 70 times (10.36%) respectively. It seems that the respondents depended heavily on the institutions to advance their careers. In other words, intrinsic career development is less important where institutional factors are perceived as deficient –i.e.,

it is a hierarchy of needs and career anchors will not come strongly into play if external factors are not accommodated.

Table 5.4: Thematic analysis of career motivation factors

	No	Themes		Summary of short phrases	Samples	
		Macro	Micro		N	%
Internal career	1	Personal bias	Academic atmosphere	Supportive work environment, collegiality, teamwork, sharing knowledge.	64	9.47
	2		Managerial competence	Manage the community, work for better life, to be a role model for students, employers' attention, attitude of the leader, leader's support.	56	8.28
	3		Personal integrity	Accomplishment, discipline, honesty, self-actualisation, capability, trust, intention to develop talents, personality, likes and dislikes.	48	7.10
	4		Work-family lifestyle	Family, support from extended family, family and work should have the same priority.	47	6.95
	5		Intangible recognition	Appreciation of hard work, reputation, recognition of performance.	43	6.36
	6		Academic freedom and creativity	Freedom of expression, opportunity to express new ideas, innovation, creativity.	41	6.07
	7		Motivation and goal orientation	Intrinsic self-motivation, intent to develop knowledge; life is a positive change, real hope, personal target, realistic goals.	38	5.62
	8		Happiness	Love of job, caring atmosphere, positive feel, job satisfaction, holidays.	33	4.88
	9		Spiritual values	Doing your work based on religious teachings, reward at the end of life.	19	2.81
	10		Economic security	Pension, certainty of future, financial security, health insurance.	16	2.37
	11		Pure challenge	Success in overcoming complicated problems, ability to compete, teaching is an important challenge, publications are a challenge to reach a higher academic rank.	15	2.22
	12		Flexible working schedule	Flexibility in setting the work schedule, flexibility in the workplace: either at university or at home.	15	2.22
	13		Service	Want to dedicate myself to the institution, intentions to improve institutional quality, intentions to achieve the institution's vision, want to help institution achieve its goals.	13	1.92
	Sub-total personal bias				**448**	**66.27**
External career	1	Organisational bias	Career arrangement	Career path system, experience, academic rank requirements, field training-related, research and publications, linear career progression, structural levels, career opportunity and continuity.	99	14.64
	2		Organisational structure	Workload, type of work, job descriptions, open management, advanced technology for teaching media & research, laboratory equipment, government policies or rules, organisational culture, the readiness of the organisation to continue to learn and innovate.	70	10.36
	3		Financial support and reward	Salary, incentive, compensation, bonus, need money to grow my career.	59	8.73
	Sub-total organisational bias				**228**	**33.73**
	Total samples				676	100.00

N = number of samples; % = percentage

In terms of personal bias as the focus of the study, the most preferred theme is *academic atmosphere* (9.47%). It was followed by *managerial competence* (8.28%), *personal integrity* (7.10%), *work-family lifestyle* (6.95%), *intangible recognition* (6.36%), *academic freedom and creativity* (6.07%), and *motivation and goal orientation* (5.62%). This, in a descending order, was followed by *happiness* (4.88%), *spiritual values* (2.81%), *economic security* (2.37%), *pure challenge* (2.22%) and *flexible working schedule* (2.22%). Interestingly, *service* (1.92%) was the least-preferred theme chosen by the respondents.

5.6.3 Identified macro themes

Two macro themes identified in the analysis were the same as those identified in the interview: personal bias and organisational bias. The understanding of them follows what has been discussed in Sub-section 5.5. However, the micro themes identified within each macro theme differed, as described as follows.

5.6.4 Identified micro themes: personal bias

There were 13 micro themes that emerged under the personal bias macro theme. Even though three micro themes identified in the career history interviews did not appear (i.e., *skill orientation, geographical stability* and *running a business*), the other eight themes and characteristics remained the same (i.e., *academic atmosphere, work-family lifestyle, academic freedom and creativity, managerial competence, economic security, pure challenge, flexible working schedule* and *service*). Five new themes emerged: *personal integrity, intangible recognition, motivation and goal orientation, happiness* and *spiritual values*. These new themes are described below

Personal integrity: This theme relates to one's personal beliefs and values. Academics appreciate consistency in performing their duties and perceive that there is a moral responsibility to maintain such consistency. Discipline, honesty, trust, confidence, like and dislike are some examples that fall into this category. These people declare themselves as open-minded. They accept diversity and respect others' opinion. Conversely, judging, blaming and conflict are not of interest to them. Academic misconduct – such as cheating is also absolutely prohibited. However, these people have high level of self-resilience in facing difficult conditions. Training, collaborative

research and strong team work, for instance, increase academic personal integrity and accelerate their career goal. In terms of promotion, they will accept a new job appointment if the new work environment fits their values, even if it is more poorly paid.

Intangible recognition: Academics with this theme have a strong need for recognition of the work they accomplish regardless of tangible rewards. These people value communication with superiors and build a career based on respectful and credible gratitude. Like in the service anchor, individuals with the intangible recognition theme are not driven to work hard by the prospect of promotion, because such increases in salary and promotion are not based on what they value in their work. They may also have slow career improvement because they are easily demotivated. Encouragement to work productively and to pursue personal career growth opportunities, therefore, is desirable. A conspicuous thank-you or acknowledgement for the contribution they make or value added to the work team and the institutions, for example, would satisfy them. A career is meaningfulness if appreciation in the form of money is not a priority.

Motivation and goal orientation: Academics will act based on a psychological drive to reach their desired goals. They initiate to learn, innovate and improve competency to master academic tasks. In response to changes in the workplace, they build self-motivation to develop themselves with realistic expectations and goals under the circumstances that they encounter. They work in the area of their abilities and skills and are happy to increase their workload. Like in the pure challenge anchor, these people enjoy facing challenges in order to achieve in the workplace. Thus, this theme refers to individuals who build a strong motivation to achieve their goal and success. In terms of promotion, they accept a new placement or job that can result in the career success.

Happiness: Some academics have characterised themselves as individuals who value inner happiness by loving and enjoying the work, and having positive feelings towards life. Happiness is often associated with psychological satisfaction. They believe that with happiness they can be productive in achieving career goals and, ultimately, job satisfaction. Having a feeling of happiness can overcome problems at work and control emotions to reach career success. To be happy in the workplace, there is a need for a match between individual and institutional needs. They seek institutions that can create

a conducive work atmosphere that contributes to their feeling of happiness and satisfaction. These people will accept new work with a positive work climate. They will move to another geographical location as long as the new place provides work environment that makes them happier and healthier. Individuals with this theme do not focus on money for their career development.

Spiritual values: This theme is related to the context of religion and the inner life values. It is believed to direct one's life, including work. Some academics adhere to religious instructions regarding work (Farros 2011; Jamilazzaini 2013), while others interpret working hard as a result in a reward at the end of life. These people feel a sense of spirituality at work that help them attain their career goals when they start work with prayer, for instance. In the work environment, spiritual values are usually interpreted as integrity, honesty, trust and respect that can bring staff moral support in climbing their career ladder. It is not clear whether spiritual valued-persons are concerned with financial rewards as a growing number of people believe that values and ethics should put on the top of priority, including spirituality. It seems that these people do not prefer any particular types of work but will choose a job that gives them more room to exercise the spiritual values.

5.6.5 Identified micro themes: organisational bias

There were three micro themes under the organisational bias theme. Of the three themes, only one was new, namely *organisational structure*, while *career arrangement*, and *financial support and reward* were the same as the two themes discovered in the career history analysis. The new theme is defined as follows.

Organisational structure: Institutions design effective institutional rules and policies on teaching and research, particularly reasonable academics' task-related work, to give latitude to academics to improve their careers and performances. Academics expect that institutions will provide a predictable and understandable academic environment through open management, less bureaucratic administration, clear job descriptions, manageable task allocation and advanced teaching and research instruments. Effective structure will enhance them in climbing their career goals.

5.7 Thematic analysis of institutional supports: responses from open-ended question 2

This Sub-section refers to the second open-ended question on the questionnaire:

How well does your institution support your career goals?

5.7.1 Demographic profiles

Three hundred and ninety-three respondents answered the second question out of the total 585. Demographic data of the respondents are presented in Table 5.5.

Table 5.5: Respondents' profiles for institutional support questions

Description	N	%	Description	N	%
Gender			**Marital status**		
Female	131	33.33	Single	28	7.12
Male	262	66.67	Married	362	92.11
Total	393	100.00	Others	3	0.76
			Total	393	100.00
Work experience			**Institution size**		
5 to 10 years	107	27.23	Small	27	6.87
11 to 20 years	115	29.26	Medium	157	39.95
over 20 years	171	43.51	Large	209	53.18
Total	393	100.00	Total	393	100.00
Age			**Educational level**		
25 years and less	3	0.76	Bachelor's degree	23	5.85
26 to 45 years	189	48.09	Master's degree	267	67.94
Over 45 years	201	51.15	Doctoral degree	103	26.21
Total	393	100.00	Total	393	100.00
Place of study			**Managerial position**		
Indonesia	296	60.29	Vice Rector	4	0.81
United States	26	5.30	Dean	9	1.83
Australian	25	5.09	Vice Dean	15	3.05
Philippines	8	1.63	Head of School/Department	52	10.59
Japan	8	1.63	Head of Postgraduate Studies	4	0.81
Malaysia	6	1.22	Head of Unit	21	4.28
France	5	1.02	Total	105	21.38
United Kingdom	3	0.61	**Religion**		
Germany	3	0.61	Islam	287	73.03
Total	380	77.39	Christianity - Protestant	64	16.28
Academic rank			Hinduism	24	6.11
Assistant lecturer (*Asisten Ahli*)	63	16.03	Christianity - Catholic	9	2.29
Lecturer (*Lektor*)	114	29.01	Missing values	9	2.29
Senior lecturer (*Lektor Kepala*)	189	48.09	Total	393	100.00
Professor (*Guru Besar*)	27	6.87			
Total	393	100.00			

N= number of samples; % = percentage

The number of men was greater than the number of women, that is 331 male respondents (67.41%) compared to 160 female respondents (32.59%). Almost all of the respondents were married (362, or 92.11%). On average, the respondents had sufficient work experience: 115 respondents (29.26%) had 11 to 20 years' work experience and 171 respondents (43.51%) had over 20 years' work experience. There were 209 respondents (53.18%) who provided answers came from large universities, and 157 respondents (39.95) came from medium-sized universities. The age range of respondents was appropriate to be able to decide on and develop a career: 189 (48.09%) were aged 26 to 45 years and 201 (51.15%) were aged over 45 years. The majority of respondents (267, or 67.94) had a master's degree, i.e., followed by those with a doctoral degree (103, or 29.21%). More than half of the respondents (296, or 60.29%) attended universities in Indonesia, and 313 respondents (22.61%) completed the study in foreign countries, such as the U.S., Australia and the Philippines. Of all of the respondents, only 105 respondents (21.38%) held the managerial positions of vice rector to head of unit with the greatest number in the position of head of schools/departments, that is 52 respondents (10.59%). Nearly half of the respondents (189, or 48.09%), held the academic rank of senior lecturer (*lektor kepala*), followed by lecturer (*lektor*), with 114 respondents (29.01%). Finally, the majority of respondents (287, or 73.03%) indicated that their religion was Islam. The demographic backgrounds imply that the data gathered could give meaningful results because the samples are not homogeneous.

5.7.2 Thematic categories

There are two types of answers given by the respondents to the question about how their institutions support the career development of academics. First, the respondents answered using the phrases: very supportive/supportive and less supportive. Such answers did not give an idea of what the institutions did or did not do to address the career development of their academics. The responses (174, or 46.77%) could not be carried on to the thematic analysis. Second, the respondents expressed their opinions of what kinds of support they received from the institutions toward their career. From these respondents (198, or 53.23%), several themes emerged. Thus, the thematic analysis was based on the second set of answers. Table 5.6 presents the macro and micro themes, instances of summary responses of the respondents, the number of respondents and the percentages.

As in the results of the motivating factors analysis, the organisational factors dominate the answers of respondents. The most chosen theme is *career arrangement* (44 respondents, or 22.22%), followed by *organisational structure* (33 respondents, or 16.67%) and *financial support and reward* (32 respondents, or 16.16%). It is argued that the institutions play an active role in supporting the career development of academics.

5.7.3 Identified macro themes

It is clear from the study that only two macro themes emerged from Question 2, namely personal bias and organisational bias. These themes have the same meaning as in the two previous analyses.

5.7.4 Identified micro themes: personal bias

Table 5.6 displays the six emergent micro themes. Four themes were similar to the ones found in the previous two analyses, while two themes were new. The micro themes of *academic atmosphere*, and *academic freedom and creativity* have the same meaning as for interviews and Question 1. The *intangible recognition* micro theme is the same as that found for Question 1. Personal ambivalence appeared with only three respondents.

***Self-determination*:** Academics are likely to take responsibility for developing their own career lifecycles. They are strongly self-motivated to determine career goals by updating their skills and remaining employable in the workplace. For them, career improvement is related to their self-concept and is not the institutions' or leaders or seniors' responsibilities. They, therefore, attempt to change from dependence on the institutions to the application of their own talents and values in making career choices.

Impact: This theme is considered important for academics who want to increase control over their talents, needs and values and to make an impact on their institutions. Academics need to exercise their skills and competencies by involving themselves in academic matters in their institutions. In this sense, autonomy is a key notion in the workplace. A feeling that what academics have becomes invaluable for institutions will encourage academics to improve their performance in pursuing their career goals. This theme, alongside the *academic freedom and creativity* theme in which there was an

increase in independency and autonomy, would be a positive indicator of empowerment.

Table 5.6: Thematic matrix of institutional support for career goals

	No	Themes		Examples of summary of short phrases	Sample	
		Macro	**Micro**	**Responses**	**N**	**%**
Internal career	1	Personal bias	Academic freedom and creativity	Freedom to express ideas and be creative and innovative in research, community service and teaching.	20	10.1
	2		Academic atmosphere	Creating a positive working environment, such as competition and teamwork, sharing knowledge and experiences, developing skills together with other colleagues.	18	9.1
	3		Impact	Involvement in making decision for institutional policies; empowering potential academics even if they are young.	14	7.07
	4		Managerial competence	Coordinating research activities, and managing responses to cases; clear vision for developing academics' careers; opportunities to sit on structural positions and climb to a higher level.	13	6.57
	5		Self-determination	Institutions give freedom to me to develop my career. I believe, it is not institutions' responsibility... Academics should seek challenge to transform themselves from external motivation into internal motivation for their own sake. Academics have to be self-motivated to grow.	13	6.57
	6		Intangible recognition	Non-financial appreciation	8	4.04
	Sub-total personal bias				**86**	**43.43**
	1	Personal ambivalence		No support and I do not care but I need career counselling.	3	1.52
	Sub-total Personal ambivalence				**3**	**1.52**
External career	1	Organisational bias	Career arrangement	Clear career policy; further education rule, improving skills via research and training.	44	22.22
	2		Organisational structure	Provide facilities but needs more resources; open management, no double standard.	33	16.67
	3		Financial support and reward	Limited financial support for research, publications, workshops and further study; monetary reward.	32	16.16
	Sub-total organisational bias				**109**	**55.05**
	Total Personal bias + Organisational bias + Personal ambivalence				198	100.00

No = Number of samples; % = Percentage

5.7.5 Identified micro themes: organisational bias

Three micro themes that showed up under organisational bias were the same as those for Question 1. These three themes were *career arrangement, organisational structure*, and *financial support and reward*. The meanings of the three themes, therefore, follow the description given in Sub-sections 5.4.2 and 5.4.3.

5.8 The significance of the emergent themes from the open-ended questions

As discussed, thematic analysis was employed to analyse the internal career motivations and the institutional supports in the career development of academics. Table 5.4 and Table 5.6 show that some themes were consistent with the dominant career anchors and the others were an extension of the anchor categories. Moreover, some of the other themes were also associated with the psychological empowerment and job satisfaction concepts, the two variables that were also examined for the quantitative analysis in the current study. Although three themes did not show up in the open-ended response analysis (*skill orientation, running a business* and *geographical stability*), eight themes that reflected the career anchor categories had been identified in the analysis (*academic freedom and creativity, academic atmosphere, work-family lifestyle, flexible working schedule, pure challenge, managerial competence, economic security* and *service*). *Intangible recognition* and *spiritual values* were categorised as *needs-based* anchors. *Impact* and *self-determination* clearly reflected two of four facets of psychological empowerment. *Personal integrity*, as well as *motivation and goal orientation* were associated with the psychological empowerment facets (Spreitzer 1997). Lastly, *happiness* is a characteristic of job satisfaction (Hackman & Oldham 1975; Schermuly, Schermuly & Meyer 2011).

Intangible recognition was an important factor for 6.5 percent of respondents. In contrast to the recognition described by Schein (2006a) as a consequence having each anchor category, *intangible recognition* in this study is part of a 'need' in supporting academics' careers. Recognition of performances at work that academics want is not in tangible forms (e.g., money); however, saying 'thank-you' for what academics have achieved can give a morale boost to perform better. The proposed new *intangible recognition* anchor is classified as *needs-based* anchors.

Another interesting point is the emergence of the *spiritual values* theme. Although only a few (2.81%) of the respondents chose the theme, it attracts attention. A detailed analysis of the responses (see Table 5.4) and the demographic data show that the *spiritual values* theme seems to relate to the respondents' faith, in this case, as Muslims. Academics who chose the theme stated that working was one of the 'religious

instructions' (Farros 2011; Jamilazzaini 2013) or 'Islamic obligations' (Mujahid n.d.) and it was treated at an individual level (Ahmad & Owoyemi 2012). Therefore, working – in their case - in the higher education sector, is an application of their religious obligation. It is noted that the large number of Muslim respondents, nearly three-quarters, (see Table 5.3) allowed the emergence of the theme. *Spiritual values* considered as a new anchor theme is grouped in *needs-based* anchors.

Personal integrity and *motivation and goal orientation* contributed to the extent of the psychological empowerment concept (Spreitzer 1995). It is assumed that academics want to be involved and have self-efficacy in the work environment. They also want to have control in their workplace rather than just to share the power. Feeling empowered is very important because it will improve their performance at work and have an impact on satisfaction. A form of satisfaction in the current study is *happiness*, which was revealed through the thematic analysis. Academics who sought a caring atmosphere or a positive feeling, or who took holidays, did this not only for their intrinsic worth but also because these things gave them pleasure.

Interestingly, as indicated in the interview findings, the results of the two open-ended questions also point to organisational bias as a key factor in career advancement. The respondents thought that the institutions should take apart in improving their careers (see Tables 5.1, 5.3 and 5.5). They revealed three main factors that they felt affected their career movements (forward, backward or stagnation): *career arrangement, organisational structure*, and *financial support and reward*. Management transparency, a cross-discipline career policy instead of a linear career progression, a meritocracy system and grants for academic travels, for example, need to be applied professionally to support academic careers. If academics do not develop their careers progressively, it is not necessarily caused by a lack of self-concept, but it may be because the rules of the institutions are considered as a threat. Despite the demands of career development through the examination of individual academics' talents, motivations and values, some organisational factors could not be avoided in determining academics' career goals. The findings demonstrate that academics depended strongly and significantly on their institutions' supports in developing their careers.

To sum up, there is a relationship between dominant career anchors, empowerment and satisfaction in achieving career goals. Some themes of the internal career orientation that were identified from career histories and the open-ended questions, showed how academics looked at their internal career motivation. Particularly, the emergence of the organisational factors that were grouped into the external career indicated that academics' cultural values influenced their attitudes. The emerging themes that reflected career anchors, psychological empowerment and job satisfaction, therefore, indicate that the variables examined in the current study are important and need to be recognised. A suggested research model based on the findings is presented in Figure 5.2.

5.9 Integrating qualitative research results with quantitative research findings

As described in Chapter 3, Sub-section 3.6, the results of the qualitative analysis were found to support the discussion of the quantitative analysis findings (Creswell & Plano Clark 2011; Creswell 2009). The concurrent-embedded design, which has been employed in the current study occurs when researchers integrate the quantitative and qualitative data in the form of comparison or parallel. Table 5.7 summarises the quantitative and qualitative findings related to the dominant career anchors and the factors that influenced respondents' career goals. The discussions begin with the dominant career anchors.

The results of the survey data analysis showed that of the seven career anchors, *economic security* was the most preferred anchor, while *service* that characterised those employed in government institutions was ranked second (see Table 4.6, Chapter Four). However, academics' perception shown in the qualitative analysis placed *service* first and *economic security* sixth (see Table 5.6) among their multiple anchors. In other words, each type of analysis produced different results, which is a strength of the mixed method approach (see Table 5.7).

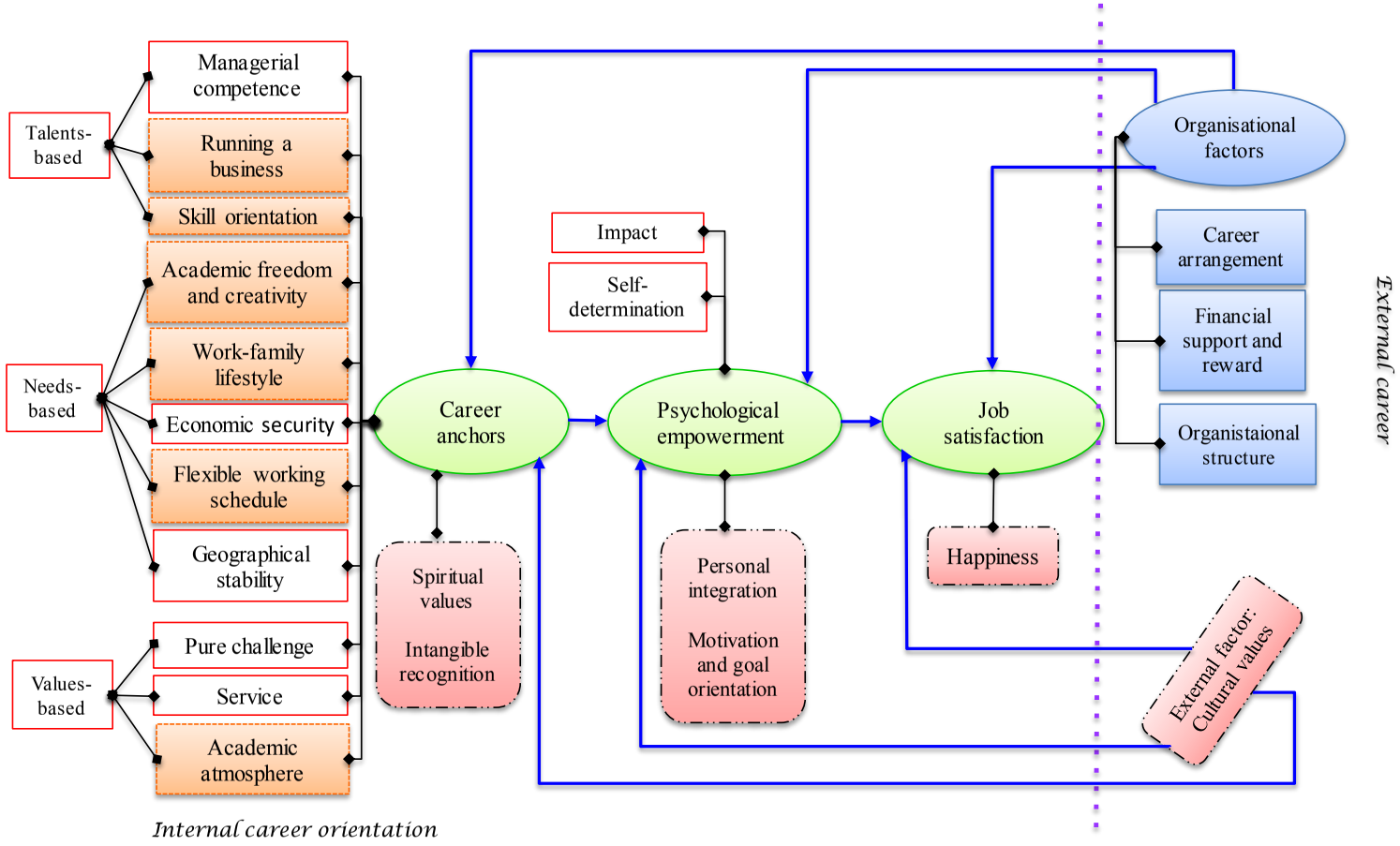

Figure 5.2: Modified research framework for qualitative analysis of the relationships between career anchors, psychological empowerment and job satisfaction

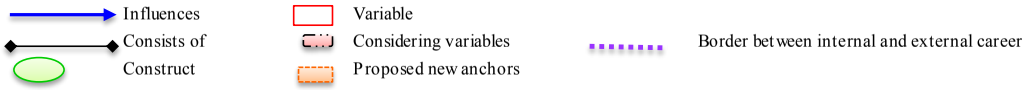

Table 5.7: Summary of quantitative and qualitative findings of career anchor categories

	Macro themes	Dimensions	Quantitative findings	Qualitative findings		
			Dominant career anchors (Survey)**	Dominant career anchors (Interview)**	Career motivation factors (Q1)***	Institutional support (Q2)***
Internal career	Personal bias	Economic security*	Economic security (1)	Economic security 6)	Economic security	
		Service*	Service (2)	Service (1)		
		Managerial competence*	Managerial competence (3)	Managerial competence (3)	Managerial competence	
		Entrepreneurial creativity*	Entrepreneurial creativity (4)	Running a business (11)		
		Technical competence*	Work dedication (5)	Skills orientation (7)		
		Geographical stability*		Geographical stability (10)		
		Pure challenge*	Pure challenge (6)	Pure challenge (9)	Pure challenge	
		Autonomy*	Balanced-lifestyle (7)			
		Lifestyle*		Work-family lifestyle (4)	Work-family lifestyle	
				Flexible working schedule (5)	Flexible working schedule	
		Autonomy + Entrepreneurial creativity		Academic freedom and creativity (2)	Academic freedom and creativity	Academic freedom and creativity
		New anchor category		Academic atmosphere (8)	Academic atmosphere	Academic atmosphere
		Proposed new anchor categories			Intangible recognition	Intangible recognition
					Spiritual values	
		Psychological empowerment		Self-determination#		Self-determination
				Impact#		Impact
				Proposed new facets	Personal integrity	
					Motivation and goal orientation	
		Proposed new dimension of job satisfaction			Happiness	
External career	Organisational bias	Organisational factors		Career arrangement	Career arrangement	Career arrangement
				Financial support and reward	Financial support and reward	Financial support and reward
					Organisational structure	Organisational structure

*Career anchor categories were advanced by Igbaria and Baroudi (1993) according to Schein and DeLong's (1982) original categories
** ( ) Career anchor hierarchy descending order, starting with no. 1 for the most dominant anchor
***Open-ended question on the questionnaire
Psychological empowerment facets according to Spreitzer's (1995)

There are three points to be considered. First, the methods design for the current study has pointed out the unbalanced weighting between the quantitative and qualitative results and has provided a solution for this condition (see Sub-section 3.3, Chapter Three). Second, both *service* and *economic security* are common amongst those working in public organisations (Schein 1982, 1990, 2006a). Thus, in practice, *service* and *economic security* are complementary. Third, a detailed investigation points out that the different rank orders are because of: (a) the merging of four anchors (*technical competence*, *geographical stability, autonomy* and *lifestyle*) into two proposed new anchors (*work dedication* and *balanced-lifestyle*) on the quantitative analysis; (b) the combination of two anchors (*autonomy* and *entrepreneurial creativity*) into a proposed new anchor (*academic freedom and creativity*); and (c) the separation of the *lifestyle* anchor into the *work-family lifestyle* and *flexible working schedule* anchors, and the *entrepreneurial creativity* anchor into the *running a business* and *academic freedom and creativity* anchors, respectively, in the qualitative analysis. The other themes on the qualitative analysis better reflect of the original anchors created by Schein. Thus, academics' dominant career anchors, based on the survey data were extended in more detail in the interviews.

The extent to which survey respondents reported multiple career anchors (28.38%) was supported by the findings from the qualitative analysis (35.71%). Academics who were included in this category held between two and four career anchor categories (Table 5.6). In terms of the multiple groups-based anchors, the clustering of a single career anchor category fits Feldman and Bolino's (1996) reconceptualisation except for *work dedication*. Considering the fact that *skills orientation* and *geographical stability* clearly emerged in the qualitative analysis, and taking into consideration Schein and van Maanen's (2013, p. 19) notion that 'an interview protocol to analyse your career history and determine more precisely what your anchor is', the two anchors would be considered in future analysis. Hence, the multiple groups-based anchors are: [1] *talents-based* anchors which consists of *managerial competence, skill orientation* and *running a business*; [2] *needs-based* anchors, includes *balanced-lifestyle*, which in turn includes *work-family lifestyle* and *flexible working schedule, academic freedom and creativity, economic security, intangible recognition* and *spiritual values*; and [3] *values-based* anchors which comprises *service, pure challenge* and *academic atmosphere*. These

results show that a single career anchor was not adequate for academics to achieve their career goals (Schein 2006a).

In relation to psychological empowerment, *impact* and *self-determination* were two facets of psychological empowerment Spreitzer (1995) identified. These two facets, which also emerged through the qualitative analysis, were tested as mediators and moderators in the quantitative analysis. The qualitative analysis also uncovered the *personal integrity*, and *motivation and goal orientation* themes as two potential facets augmenting the existing four facets described in the literature.

Academics designated *happiness* as a form of job satisfaction in the qualitative analysis. Job satisfaction was the only job outcome examined in the quantitative analysis as a criterion variable. *Happiness*, the finding from the qualitative analysis, can be added to the job satisfaction construct to enhance the feelings of satisfaction that related not only from the task assignments but also from the expression of happiness.

Theme identification, therefore, shows support for both confirmation and extension of career anchors, psychological empowerment and job satisfaction.

A series of tests was conducted to investigate the relationships between career anchors, psychological empowerment and job satisfaction. Hierarchical multiple regression analysis was used for this purpose. Career anchors accounted for nearly 24 percent of the variance in job satisfaction; this was considered a small contribution. The thematic findings showed the reasons for the weak contribution by identifying a number of the other categories and themes that influenced academics' job satisfaction in achieving their career goals. Some examples are *work-family lifestyle* and *flexible working schedule* (category of *lifestyle*), *academic freedom and creativity* (categories of *autonomy* and *entrepreneurial creativity*), *academic atmosphere* (a proposed new category), *intangible recognition* and *spiritual values* (new characteristics), including *happiness*, which is a characteristic of job satisfaction, and personal ambivalence. *Intangible recognition* and *spiritual values* were two characteristics which appeared from the open-ended questions and are considered as new anchors.

Similarly, psychological empowerment also contributed directly, although to a relatively weak extent (nearly 24%), to job satisfaction and played a weak role as mediating and moderating variables in a relationship between career anchors and job satisfaction. This is supported by the results of the qualitative analysis, which reported that *personal integrity*, along with *motivation and goal orientation* were the other characteristics of psychological empowerment that may contribute to the degree of influence. The two themes would be considered to add to the four existing facets of psychological empowerment.

In addition to a number of categories and characteristics that emerged through the qualitative analysis, it is known that the small contribution of career anchors and psychological empowerment to job satisfaction is also due to the external career factors. The qualitative findings demonstrated that the external factors of organisational aspects affected the magnitude of the contribution. Each of the three themes of organisational bias (*career arrangement, organisational structure* and *financial support and reward*) (see Tables 5.3 and 5.5) has a greater effect than any of the 14 themes of personal bias.

As discussed, it can be concluded that the results of the analysis of the qualitative data support the results of the statistical analysis. Five major factors point to the cause of the different themes identified, the results and the contribution to the concepts. First, the quantitative method used a forced choice survey in which the respondents must give only one response from the choice provided by the researcher (Wivagg 2008; Brown & Maydeu-Olivaes 2011). On the other hand, the qualitative method allows free responses and less control, which gives the respondents the chance to elaborate on an answer as much as they want (Richardson 2002). The written responses allowed more time to answer the questions compared with the interview in which academics answered the questions directly after the interviewee asked them. Although bias was an issue, the data were crosschecked with the quantitative results and contributed significantly to the statistical outputs.

The second factor is the circumstances of the academics when they answered the questions. For instance, academics who were facing complicated administration work for promotion could have answered with factors that affected their career advancement, such as bureaucracy, leadership and career system.

The third factor is the type of research subjects, which also dictated the themes identified. Rather than *autonomy* and *entrepreneurial creativity, academic freedom and creativity* are more reflective of academics' attitudes as public servants. Although there were several new themes that emerged, most of the themes reflected an extension of the career anchor concept. Some reflected the psychological empowerment and job satisfaction facets, two constructs that had been analysed for the quantitative examination. The different terms used from the original labels were only intended to better represent the subjects of the current study.

Fourth, because of the identification of a number of new themes, it was necessary to incorporate the new themes in amending the measurement of the career anchor inventory, the psychological empowerment scale and the job satisfaction scale. It is also essential to extend the concepts of career anchors, psychological empowerment and job satisfaction from the academics' perspective.

Last, culture is found to shape academics' perception in their career decisions. Both quantitative and qualitative findings indicate that academics' cultural background and institutional culture influence the responses. The emergence of the *work dedication* anchor, and the *spiritual values* and *career arrangement* themes, for example, reflects how academics from different local cultural values, including the institutional culture background, and various interests view the concept of their career goals. This cultural factor needs further investigation.

Summary

Chapter Five presented the results of the qualitative analysis in which the data were collected through interviews with academics on their career history and through two open-ended questions related to their career advancement. Thematic conceptual analysis was employed to identify themes and grouped them into career anchor categories, internal motivation factors and institutional support in achieving the career goals. The categories were identified and then grouped into macro and micro themes, for which concise explanations were developed and some of these are an extension of Schein's original explanations. The macro themes of personal bias and organisational bias emerged from the analysis. The study found 21 micro themes consisting of six new

anchor categories, two anchor categories that were needed to be considered, five categories that remains the same as the original constructs, two new facets of psychological empowerment, two facets that had the same meaning as the original scales, and last, one dimension which emerged for the job satisfaction scale. From the external career factors, three themes appeared to represent the organisational factors that influenced respondents' career development. Each micro theme was counted for frequency and percentage. The chapter then continued by discussing the dominant career anchors obtained from the interviews and supported by the findings of the themes from the two written questions, including their contribution to the career anchor concept. The cultural issue also was discussed. The chapter concluded by comparing the quantitative findings to the qualitative results.

The next chapter will discuss the findings of the current study from both the quantitative and qualitative points of views. It will summarise and discuss the findings. It then draws conclusions and presents the implications of the study and its contribution to understanding of the topic.

Chapter 6
Summary, Discussions and Conclusions

6.1 Introduction

Chapter One explained the background of the study. It presented the purposes of the study, the career development system for Indonesian academics, the research problem, the research questions and the significance of the study.

Chapter Two discussed the conceptual framework of the study by reviewing the literature on career, career anchors, multiple career anchors, psychological empowerment and job satisfaction. It also reviewed the previous studies related to the variables analysed and presented the role of demographic data on those studies. It was followed by presenting the study framework, the research model and the proposed hypotheses.

Chapter Three designed the methodology of the current study. The chapter discussed the quantitative and qualitative approaches, including the survey questionnaire and the interview. It described the sampling method and the sample size, the construction of the career anchor inventory, the psychological empowerment scale, the job satisfaction scale and Schein's interview protocol. Issues on the culture and the translated instruments were also justified. The data collection method, the validity and reliability of the instruments, and the statistical tool used were discussed. The chapter also reported the pilot study conducted prior to the actual fieldwork. The thematic conceptual analysis for the analysis of the qualitative data was discussed.

Chapter Four reported the findings from the quantitative analysis. The chapter provided the response rate from both the online and paper-based surveys, followed by the description of the demographic data of the respondents. It tested the validity and reliability of the three scales used. The chapter assessed the applicability of the data collection instruments to the Indonesian academics context. The dominant career anchors and the multiple career anchors were also presented. Hierarchical multiple regression analysis was employed to examine the effects of relationships between career

anchors and psychological empowerment on job satisfaction, including the tests of mediation and moderation effects of psychological empowerment.

Chapter Five analysed the interview results and the responses to the two open-ended questions. It presented the framework for analysis, the responses and the demographic profiles. The procedures of thematic analysis were presented in order to identify themes that had emerged, and then the themes were classified into the macro and micro themes. The chapter also discussed the dominant career anchors and the significance of the emerging themes to the career anchor concept. The chapter finally incorporated the quantitative findings and the qualitative results.

Chapter Six concludes the current study by emphasising the key and important findings. It summarises the findings from the quantitative analysis, discusses the results and draws conclusions. It then presents the contributions of the study. The chapter also shows the findings of the qualitative analysis and discusses their implications. It highlights the implications for theory, methodology and practices. Finally, the chapter proposes a modified research model based on the study findings.

6.2 Summary of demographic characteristics for the survey questionnaire

The demographic backgrounds of the respondents gathered from the survey questionnaire were described as follows. The total sample of respondents who met the criteria was 585 respondents (87.57%), which consisted of 166 respondents who filled out the online questionnaire and 419 who completed the hard-copy survey, representing 11 public universities in Indonesia. Of the total respondents, the number of male respondents was greater than the number of female respondents by the ratio of 66.67%: 33.33%. In terms of age, most of the respondents (73%) were in the age range of 36-55 years. Approximately 89 percent of the respondents were married, 76 percent professed Islam and the largest single group (30%) were Javanese. Of the 585 respondents, about 63 percent held a master's degree, including those who had completed their studies at universities overseas (e.g., Australia, the U.S., France and Germany), and most of them had a specialisation in plant sciences (e.g., agronomy, socioeconomic agriculture and horticulture). Most respondents worked in medium-sized and large universities. Those

in medium-sized universities constituted 42 percent and in large were 51 percent. The majority of respondents (70%) have worked for more than 10 years. Nearly half (47%) held in the academic rank of senior lecturer, and one-third (33%) of the samples held the professor title, and only 27 percent held managerial positions (e.g., vice dean, head of school/department or head of unit). In the current study, selected demographic data were used as control variables: gender, education, work experience, institution size and age.

6.3 Conclusions and discussions of research questions and hypothesis testing results

The current study investigated the problem of:

> **The relationship between career anchors and job satisfaction and the effects of the psychological environment in the Indonesian public higher education context.**

To address the problem, five issues were raised and seven hypotheses analysed. There was no proposed hypothesis for Issues 1 and 5. Of the seven hypotheses, only two were significantly supported while the other five were partially supported. Below are the summary and conclusions of the analysis that has been done in Chapter Four and Five, followed by the discussion.

Issue 1: The relevance of the career anchor inventory, the psychological empowerment scale and the job satisfaction scale in the Indonesian academic context.

The current study employed three instruments to collect the data: the career anchor inventory, the psychological empowerment scale and the job satisfaction scale. The relevance of the instruments was measured by examining the structure and content underlying each scale. In other words, the issue investigated whether the items tapped into the same phenomena. Because Issue 1 was designed to find out whether the items underlying the constructs of the instruments had shifted, no hypothesis testing was formulated. This investigation employed exploratory factor analysis.

Career anchor inventory

The results of the exploratory factor analysis indicated that the structure and content of career anchors had changed, despite the fact that the scores of all items were reliable.

The results reported that five out of nine anchor categories, (*entrepreneurial creativity, service, managerial competence, pure challenge* and *economic security*) were confirmed as separate variables. The other four anchors *(technical competence, geographical stability, autonomy* and *lifestyle*) formed two new anchors (*work dedication* and *balanced-lifestyle*).

Technical competence and *geographical stability* were merged into one new anchor labelled *work dedication*. This is a key contribution to the career anchor concept, since no published studies has been found by the researcher with which to compare this construct. The construct, therefore, should be considered for further empirical studies.

The finding suggests that the work dedication anchor reflects academics who want to focus more on skills in their area of specialisations or use all their abilities and talents for the growth of their present institutions. These individuals want to be free to carry out their duties without too much interference from the rules of the institutions. Work dedication-oriented academics will do their best based on their specialisation in their own way, with strong loyalty and dedication to the universities where they work. Any forms of promotion or an attractive compensation package offered by other universities are ignored.

The characteristics of work dedication-anchored academics are in accordance with the characteristics of the academics as civil servants in Indonesia. Because the promotion system adheres to the linear career system (Dikti 2009, Soeparna 2011), the majority of academics carry out their duties, such as teaching and research, only with regard to their expertise. Beyond their expertise, all work will be rejected because it would not provide any benefits in terms of promotion. Besides working only in their specialisation, the results of their work are also dedicated to the universities where they belong as reciprocation because they have advanced their careers with their universities' support.

The remaining two anchors, *autonomy* and *lifestyle*, showed that their relationships could not be separated, and thus, the variables were incorporated into another new anchor named *balanced-lifestyle*. This is also a key contribution to the career anchor concept. To the best of the researcher's knowledge, no previous studies have been

published on this new *balanced-lifestyle* anchor. It should, therefore, be considered for further investigation.

The result shows that *balanced-lifestyle* reflects the characteristics of academics who want a high level of freedom and independence at work and to have control over their own working schedule. Based on a study conducted by the University of Toronto (reported by Kemick 2008), these people usually bring their work home so that they can also interact with the family and participate in social events. With the rapid changes in the economic situation and social values in actual life, balanced-lifestyle-anchored academics attempt to integrate autonomy with the need to balance work, family and career.

Other important characteristics of academics at universities are autonomy and academic freedom. They want to be free to perform academic assignments but still comply with the rules set by the universities for academic achievement. As noted previously, academics have autonomy in teaching and research. Academics will be on campus when required, such as for teaching in the classroom or in the laboratory, meetings and consultation time. For the rest of the time, they want to work at home. They think that they can work on academic tasks outside of office hours and can freely set when to start and when to stop work and when to have family time. With the high demand for a balance of career, family and work, it is significant that the study claims that the academics ask for the freedom to determine the work schedule to achieve a balanced lifestyle.

Hence, the present findings proved Schein's (1996; 2006a, pp. 43-48) premise that *technical competence, geographical stability, autonomy* and *lifestyle* would experience changes in the 21st century due to the workplace behaviours, such as downsizing, rightsizing, collaborative climate, sociocultural values and technology changes. The results also confirmed Schein's notion that if two or more anchors incorporated or corresponded with each other (1990, p. 33; 1992, p. 208; 2006a, p. 34) or could not be fitted into the existing anchor categories (Schein 1990b, p. 4) or were 'some combination' of the categories (Schein & van Maanen 2013, p. 17), new anchor categories could be constructed. Furthermore, *needs-based* anchors, as suggested by

Feldman and Bolino (1996), were evident through the merging of *autonomy* and *lifestyle*.

Only a few researchers have investigated the structures and content of career anchors inventory as stated by Dazinger, Rahman-Moore and Valency (2008). They argued that their study was 'the first rigorous test' of the structures of Schein's career orientation inventory. The claim needs elaboration because Igbaria and Baroudi (1993) tested the same instrument, producing a revised scale called a short form of the career anchor inventory, which was employed in the current study and other previous studies (e.g., Hsu et al. 2003). The findings also confirmed Schein's (n.d.) claim on the career orientation inventory that has been used worldwide with satisfactory reliability in languages other than English, such as in Swedish (Holdsworth & Cartwright 2002), in Hebrew (Dazinger & Valency 2006) and in Chinese (Chang et al. 2010). These findings, therefore, challenged Hofstede's (1991), and Bryant and Son's (2001) arguments that attempting to use the questionnaires in Eastern cultures and languages would create problems.

In short, the current study recognised that the structures of career anchors have been shifted by identifying the two new career anchor categories but the new structures were reliable. Despite the emergence of new anchors, all 25 items under seven anchors were valid and reliable (see Tables 4.4 and 4.5.) as in the original scale of the short form of career anchor inventory developed by Igbaria and Baroudi (1993). In addition, the cumulative variance explained was at the satisfactory level. The career anchor inventory, therefore, is applicable to the current study.

Psychological empowerment scale

In contrast to the results of the investigation of the career anchors inventory, a more detailed examination of the psychological empowerment scale confirmed the 12 items proposed by Spreitzer's (1995). Spreitzer's four facets are *meaning, impact, competence* and *self-determination* and in the current study, the facets have significant correlations ranging from 0.704 to 0.906. The results were also classified as highly reliable, which meant that no items were eliminated, and that the items were highly correlated, with alpha scores ranging from 0.71 to 0.91. This indicates that the Indonesian academics consider that these four factors are important to their feeling of being empowered in

their workplace. Academics believe in the meaning of their work goals so that they work in accordance with their own values and the feeling that they can influence the results of the work in the workplace (Spreitzer 1995; Meyerson & Kline 2007; Dewettinck & van Ameijde 2008; Dhladhla 2011). Their confidence in their capabilities to perform better and their sense that they have control over their task assignments make academics feel empowered (Meyerson & Kline 2008; Dhladhla 2011).

The present results pointed to Spreitzer's (1995) premise that the four facets of psychological empowerment were reflections of employees' perceptions of the work environment. However, these were partly supported by Menon's (1999) proposition that psychological empowerment was a cognitive state manifested in a sense of perceived control, competence and goal internalisation. In contrast to the type of education sector examined in the current study, Ghani, Raja Hussin and Jusoff's (2009, p. 163) study was at private universities in Malaysia. They concluded that the four facets of psychological empowerment could be used in a private context. Although the shift in the structures, such as the merging of *self-determination* and *impact* (Dimitriades 2005; Collins 2007), had occurred in few previous studies, the results of the current study supported findings from the literature by Spreitzer in which all 12 items loaded on the four respected facets of *meaning, impact, competence* and *self-determination*. It seems plausible that differences in results are due to differences in how individuals translate the words underlying the scale.

As with the career anchor inventory, the results indicated that the psychological empowerment scale that was translated into Bahasa Indonesia (Indonesian language) was satisfactory. The results were in line with the studies conducted by Akbat et al. (2000) in Iranian, Hocwalder and Brucefor (2005) in Swedish, Uner and Turan (2010) in Turkish and Fock et al. (2011) in Chinese. In other words, despite concerns expressed by Hofstede (1991), Feldman and Bolino (2000), and Bryant and Son (2001) that culture became a main problem when the scale was used in locations other than English-speaking countries, this difficulty did not arise in the current study.

Job satisfaction scale

Similarly, the results of this study confirmed the investigation of the job satisfaction scale developed by Hackman and Oldham (1975) and validated by Igbaria and Baroudi

(1993). Exploratory factor analysis produced a one-dimensional factor with three items and received high factor loadings (0.60 to 0.89) and high reliability (α=0.70). Indonesian academics are generally satisfied with their current job, and happy with the tasks they perform (Locke 1976; Ivancevich & Matteson 2002; Lumley 2009). The findings supported Igbaria and Baroudi's (1993) investigation that the three items clearly measured the employee's satisfaction with the job. The result was also in line with the results of studies reported by Feldman and Bolino (2000) and by Schermuly, Schermuly and Meyer (2011) that the three items were satisfactory and reliable (α =0.76 and 0.85 respectively).

As in the other two scales that discussed culture, because the factor loadings and the alpha score of job satisfaction scale were at a satisfactory level, issues associated with translating the instrument could be ignored. The present results supported the results of the translated scale studied by Schermuly, Schermuly and Meyer (2011), who found that the job satisfaction scale translated into German was highly reliable (α=0.76).

To sum up, the results of the investigation of the structures underlying the three data collection instruments were significant. The findings were consistent with previous studies, which had various aims and were done in different countries using translated scales (e.g., Holdsworth & Cartwright 2002; Chang, Shih & Lin 2010; Uner & Turan 2010). The results, however, challenged the statement given by Bryant and Son (2001) that questionnaires that are developed based on Western cultures cannot be applied to studies conducted in Eastern cultures. It is argued that those scales are built for assessment at the individual level regardless of whether the research subjects are from the developed, less developed or newly industrialised countries or from the West or the East. Thus, the three scales are interpretable for academic subjects at public universities in Indonesia.

Issue 2: The single and multiple dominant career anchors of Indonesian academics.

Hypothesis 1: Indonesian academics score differently on the single dominant career anchor or multiple dominant career anchors.

The results in the Table 4.6, Sub-section 4.7.1 of Chapter Four, presented the sequence of the career anchor category from the highest to the lowest frequency among

Indonesian academics. Of the single career anchor, *economic security* was first, having been chosen by 42.39 percent of respondents, followed by *service*, *managerial competence, entrepreneurial creativity, work dedication, pure challenge* and *balanced-lifestyle*. The *service* anchor as a characteristic of public institutions was placed at the second rank, and selected by 14.70 percent of academics. The lowest dominant career anchor was *balanced-lifestyle* and was chosen by 0.68 percent of academics.

The hypothesis testing of the differences between the frequencies of the dominant career anchors employing the chi-square for goodness-of-fit test indicated that the proposed hypothesis was accepted (see Table 4.6). Thus, Indonesian academics scored differently on the single dominant career anchor and multiple dominant career anchors.

The emergence of the *economic security* anchor as a dominant career anchor might be a trend among government employees in Indonesia. They generally seek permanent job security to avoid layoffs, receive a full, regular salary based on years of service and rank, are less motivated to perform, prefer promotion based on seniority and have health insurance and pension programs. As stated by Schein, the *security/stability* anchor is more associated with jobs in government and service sectors, and as public servants strive for financial security at certain life stages (Schein 2006a, p. 17). Feldman and Bolino (1996, p. 102) and Chapman (2009) also stressed that *security/stability* was more easily found in government institutions.

Overall, Schein (1990, 2006a) emphasised that not all individuals who had jobs in the public service had the *service* anchor, and not every type of work of an individual always necessarily matched the career anchors held. These results also challenged Schein's (2006a, p. 24) speculation that money was to be the main focus at the beginning of the individual's entering the workforce, and that this would shift after some time due to changes in life environment. However, Schein noted that for some people, *economic security* dominated throughout their careers. The demographic characteristics of the current study that showed nearly 50 percent of academics were in the 45 years and above age group, more than 20 years of work experience and in the academic rank of senior lecturer (*lektor kepala*) – one below the highest rank of professor – supported Schein's claim to being economic security-anchored individuals.

It is claimed that although academics tend to be in the mature stage of their career life cycle (Super 1990), the security issue still dominates among Indonesian academics.

However, these results are contrary to the finding of a study conducted by Custodio (2000) about the career anchors of Filipino academic executives at public universities. She found that *economic security* was ranked lowest. Similarly, La Lopa, Beck and Giselli (2009) also placed *economic security* fourth; however, they argued that even though economic condition was not an issue, academics would leave their present universities for a better salary. The results did not reflect Schein's (1990) claim that only one dominant career anchor linked to a specific job-related field.

Further attention is given to two studies conducted in developing countries. Like the current study, which was conducted in Indonesia, Custodio (2000) was conducted in the Philippines. While the former found that academics had an *economic security* anchor, the latter found that they had a *lifestyle integration* orientation. The two studies' differing results challenged Ituma and Simpson's (2007) claim that *economic security* has become the most dominant anchor in developing countries, as in their information technology sample in South Africa. The current study argues that the different findings were due to each individual having unique attitudes and behaviours. In addition, the social and economic backgrounds of countries contribute to individuals' perceptions of their career lives.

Although *geographical stability* was combined with *technical competence* into one new anchor, the emergence of *economic security* as a single anchor showed that *geographical stability* and *economic security* are diverse. The present results reinforced DeLong's (1982, p. 60) findings and validated Igbaria and Baroudi's (1993) study and others (e.g., Custodio 2000) that *geographical stability* and *economic security* were two substantial and distinct themes in meaning.

That the *service* anchor only ranked second is unexpected, as one of the characteristics that distinguishes the public sector from other sectors is that of serving the public. It is assumed that academics considered the *service* anchor as axiomatic for a civil servant. They viewed other factors as more important and significant in influencing their career development. The result undermined Schein's premise of *service* as a key anchor for

public organisations (Schein 1990, 2006a). It is assumed that *service* is intended for employees who work in public service institutions, primarily in administration.

Issue 3: The talents-based, needs-based and values-based anchors of Indonesian academics.

Hypothesis 2: Indonesian academics score differently on the talents-based, needs-based, values-based and commitment-based anchors.

The issue was to examine whether multiple career anchors existed among Indonesian academics at public universities. The consequence of merging four career anchor categories (*technical competence, geographical stability, autonomy* and *lifestyle*) into two new anchors through factor analysis (see Table 4.4, Chapter Four) changed the composition of the multiple groups-based career anchor categories as set out by Feldman and Bolino (1996). *Commitment-based* anchors emerged as the new multiple groups-based anchors to accommodate the *technical competence* and *geographical stability* anchors. More empirical studies are, therefore, needed to investigate the composition.

The calculation of frequency showed that, of all academics who were investigated in this study, the largest group (43.25%) inclined to *needs-based* anchors (see Table 4.7, Chapter Four). *Values-based* anchors were second (17.44%), the *talents-based* anchors third (9.57%) and the *commitment-based* anchors last (3.42%). In terms of multiple groups-based anchors, multiple career anchors ranked second (26.32%). The highest combination of multiple anchors was anchors from two groups-based for 21.54 percent of academics, followed by three groups for 4.62 percent. The results of the chi-square test of goodness-of-fit showed that the hypothesis was supported. Hence, Indonesian academics scored statistically differently on *talents-based, needs-based, values-based* and *commitment-based* anchors.

It is noted that these results cannot be used to claim that academics are oriented to *needs-based* anchors. Despite the fact that this study was exploratory in nature, the emergence of multiple career anchors as the second largest anchor, both in the single dominant anchor analysis and multiple groups-based anchor analysis, indicated that academics combined *talents-based, needs-based* and *values-based* anchors to satisfy

multiple goals. Many academics develop multidirectional ways to develop their careers. These results, on the one hand, supported Schein's (2006a, p. 5) argument that 'talents, motives, and values become intertwined so it may be hard to figure out what your anchor is. Talents without motivation gradually atrophy'. On the other hand, Schein (1980, 1990) proposed that after five to 10 years and having some work experience, individuals' careers become more stable and are unlikely to change with time. The inconsistency of Schein's view was criticised by Feldman and Bolino (1996), who later suggested testing the multiple career anchors concept empirically.

With regards to the single career anchor and multiple career anchors views, the current study suggests that academics tend to have multiple career anchors. In spite of Schein's early research claim of one anchor for one individual during her/his career journey, the existence of multiple anchors emphasised his prediction that multiple career anchors would dominate individuals in the technological era. This result also supported Feldman and Bolino's (1996) criticism that it was impossible for individuals to have just one career anchor to face the challenges of a complex life. The initial research conducted by Schein (1977b) had indicated the existence of multiple career anchors, with 23 percent of the samples holding two anchors and nine percent holding three.

Up until the results of the current study were reported, the researcher has only found one similar empirical study that discusses the topic in detail. Contrary to the current study, a study conducted by Kniveton (2004) with 540 business managers found *talents-based, needs-based* and *values-based* anchors were held in equal number. The differences in the two studies may be due to the different characteristics of the samples (Kniveton 2004). The present results correspond with previous research that also highlighted the existence of multiple career anchors, with populations, such as primary school of educators, managers, information technology/system employees and students (Tan & Quek 2001; Marshall & Bonner 2003; Ramakhrisna & Potosky 2003; Suutari & Taka 2004; Smith 2005; Ituma & Simpson 2007).

In light of the existence of multiple career anchors, the degree of their relationships was observed. The results failed to identify ideal pairs to create an octagonal diagram. The bivariate correlation matrix showed that all significant correlation values were positive and weak, reflecting only the *complementary* relationships observed. There were seven

anchor pairs (*entrepreneurial creativity* and *work dedication*; *service* and *work dedication*; *service* and *balanced-lifestyle; managerial competence* and *entrepreneurial creativity, managerial competence* and *service*, *pure challenge* and *managerial competence, economic security* and *balanced-lifestyle*), one set with three anchor relationships (*economic security*, *service* and *pure challenge*) and another set with five anchor relationships (*pure challenge, work dedication, balanced-lifestyle, entrepreneurial creativity* and *service*). It is noted that no orthogonal relationship pairs were found. In other words, there were no *mutually exclusive* relationship pairs.

The career anchor relationships results were also an indication of the existence of multiple groups-based anchors. The importance of multiple groups-based anchors for academics was emphasised by placing them on the second rank of the career anchor patterns. The findings suggest that in achieving their career goals, academics have at least two anchors that complement or are correlated with each other. For example, in addition to serving stakeholders (reflected in *service* and grouped in *values-based* anchors), academics also pursue either a managerial career to exercise their leadership skills (reflected in *managerial competence* and grouped in *talents-based* anchors) or in running a business (reflected in *entrepreneurial creativity* and grouped in *talents-based* anchors). As interviewed, academics who have competency in management studies and are happy to work in the information technology area might take an additional job in the information technology centre at their universities to fulfil their values and needs.

It is claimed that the *complementary* anchor relationships are more common (Feldman & Bolino 1996). As discussed earlier, limited studies have investigated *complementary* and *mutually exclusive* anchors (Chapman 2009, p. 25). Both the *managerial competence* anchor that complementing the *entrepreneurial creativity* anchor and the *pure challenge* anchor complementing the *managerial competence* anchor supported Feldman and Bolino's (1996) claim; this complement was also found in a study done by Chapman (2009). The remaining pairs in the current study are exclusive to those two studies and have a significant contribution to the career anchor relationship concept. Because the current study found no orthogonal pairs, an octagonal diagram could not be created. The different results might be ascribed to the differences of sample characteristics, the scale measurement and the analysis design. Unlike the current study, which used (1) academics as public servants who worked for public universities, (2) the

25 items of the short form of career anchor inventory published by Igbaria and Baroudi (1993) and (3) a bivariate correlation matrix, Feldman and Bolino's (1996) study provided only a framework and propositions with respect to this topic. They applied Schein's (1990) 41-item career orientation inventory and proposed factor analysis to determine the independency of career anchor categories. However, even though the same inventory applied to Chapman's (2009) empirical study, he used an indices threshold method to investigate the relationships. It draws attention to the fact that more empirical research needs to be done if *complementary* and *mutually exclusive* anchors can be shown to be two other dimensions of career anchors.

In conclusion, the results of this study revealed that academics tended to have multiple career anchors. *Needs-based* anchors were regarded as the most important multiple groups-based anchors, and the degree of the anchor relationships was evident in *complementary* anchors. The current study argues that the single career anchor tended to be less popular than multiple career anchors. The findings that all were *complementary* strengthened the existence of multiple career anchors.

Issue 4: How do career anchors predict psychological empowerment and job satisfaction?

Five hypotheses were tested in relation to Issue 4. Three hypotheses tested the main effects of career anchors, psychological empowerment and job satisfaction, one hypothesis examined the mediation effects and one assessed the moderating effects. Before presenting the summary, discussion and conclusion of each hypothesis, the effect of demographic variables will be discussed for the evidence of control variables.

The effects of selected demographic variables across the variables researched in the current study were tested by employing multivariate analysis of variance (MANOVA). (Appendix 18). All demographic variables gender, education, work experience, institution size and age) were associated with certain career anchors, psychological empowerment and job satisfaction dimensions. Female academics were more likely to hold *service* for their dominant anchor than males. Academics with a bachelor's degree preferred to have *work dedication* and *entrepreneurial creativity* to guide and constrain their career decisions rather than academics with a master's degree or doctorate degree. Academics with a master's degree were more likely to be empowered when they felt

their work to be meaningful resulting in increased job satisfaction than those who held a bachelor's or doctorate degree. Academics who had worked for their universities for between 11 to 20 years were more confident and had a stronger belief in their capabilities to perform tasks at work than those with five to 10 years' work experience, or more than 20 years'. Academics who worked at large universities were more likely to orient to *service* and the *meaning* facet rather than academics at small to medium-sized of universities, whereas those who worked at small universities were more likely to orient to *pure challenge* than those from medium-sized to large universities.

These findings indicate the existence of substantial differences on selected demographic variables across the career anchors, psychological empowerment and job satisfaction variables. As Mitchell (1985, p. 196, cited in Spreizter, Kizilos & Nason 1997, p. 693) said, 'these demographic measures were included to actively try to conceptualize and measure those variables that may serve as potential confounds'. Demographic variables were, therefore, used as control variables in HMRA (Tan & Quek 2001; Dickson & Lorenz 2009; Bhattacherjee 2012).

A. The relationship between career anchor and job satisfaction

Hypothesis 3a: Indonesian academics' perceptions of career anchor subscales are positively related to job satisfaction.

The HMRA results reported that after controlling for the demographic variables, only four out of seven career anchor predictors were significant. *Work dedication, managerial competence* and *pure challenge* were significantly and positively related to *job satisfaction* while the *balanced-lifestyle* anchor significantly and negatively predicted *job satisfaction*. In contrast, *service*, *economic security* and *entrepreneurial creativity* did not predict *job satisfaction*. The hypothesis was not fully supported because only four out of seven anchor categories had significant relationships. Career anchors, therefore, were significantly and partially related to job satisfaction.

Indonesian academics who oriented to *work dedication, managerial competence* and *pure challenge* were associated with an increase in the *job satisfaction* level. The results suggest that academics who have a high dedication to the university where they work, work in their area of expertise, have ambition to achieve higher managerial positions,

feel challenged to do new tasks (e.g., creating a more effective teaching method, writing a book), solve complex problems and compete with tough opponents will feel satisfied in their workplace. The present results confirm Schein's (1978; 1990) premise, and Feldman and Bolino's (1996) assumption that individual career anchors are correlated significantly with job satisfaction. Those who achieve a match between the career anchors and work environments will be positively correlated with job satisfaction. W*ork dedication* predicted *job satisfaction* and was found to be the first contributed to the career anchor concept.

In line with Schein's and Feldman and Bolino's propositions, which stated that the incongruence of career anchors and work setting would lead to dissatisfaction, the current study found a negative relationship between the *balanced-lifestyle* anchor and *job satisfaction*. In other words, academics who held the *balanced-lifestyle* anchor would had a significant decrease in *job satisfaction*. Academics who wanted to be free from the university rules, have their own schedule in the teaching environment, and balance work, career and family needs would feel unhappy in their jobs. This was a major contribution to the concept of career anchors, and the study was the first to report that the *balanced-lifestyle* anchor was a predictor of *job satisfaction* in the negative direction. Typically, Indonesian academics have lifelong employment, linear career path, tight process control, centralistic arrangement and bureaucratic policies. Since most rules are controlled by the central government (e.g., salary and workload regulations, recruitment and promotion procedures, fringe benefits, pension arrangements), the desire to balance career, family and work needs is far from easy to implement. Only institutions with decentralisation policies might be able to support work and family balance.

It was noted that Schein's theory and Feldman and Bolino's propositions did not point to the specific career anchor category as the current study did. One possible explanation was that they focused on the overall notion of career anchors. As a consequence, they identified no single anchor category was that might be an indicator of job satisfaction.

In reviewing the literature on career anchors, the present researcher did not find any studies relevant to the finding of *work dedication* and *balanced-lifestyle* in the current study. Small number studies employing different research methodologies from the

current study either found evidence (e.g., Feldman & Bolino 2000, Tan & Quek 2001, Dazinger & Valency 2006, Lumley 2009) or did not find evidence (e.g., Steele 2008) for a relationship between career anchors and job satisfaction. None of the previous studies indicated the existence of the *work dedication* and *balanced-lifestyle* anchors that the current study found. This current study was the first to examine academics at public universities and the relationships between career anchor subscales and job satisfaction. Hence, the findings cannot be directly compared.

Thus, the career anchor chosen and the job satisfaction level attained in the current study reflected the characteristics of academics at public universities in Indonesia. It is imperative that management at either the university level or the central government level should understand academics' dominant career anchors of *work dedication, managerial competence, pure challenge* and *balanced-lifestyle* to modify the existing career policy for academics so that they can increase their job satisfaction and indirectly improve their job performance.

B. The relationship between career anchors and psychological empowerment

Hypothesis 3b: Indonesian academics' perceptions of career anchor subscales are positively related to psychological empowerment.

Hierarchical multiple regression analysis showed that more than 50 percent of career anchor categories had positive and negative relationships to the psychological empowerment facets. The results indicated that six out of seven anchors were significantly related to the four psychological empowerment facets. The hypothesis, therefore, was partly supported.

The *entrepreneurial creativity* and *managerial competence* anchors were associated positively with the four facets of psychological empowerment (*meaning, competence, impact* and *self-determination*); the *work dedication* anchor was positively related to *meaning, impact* and *self-determination*; the *pure challenge* anchor was predictive of only *meaning*; the *service* anchor was positively correlated to *meaning, competence* and *self-determination*; and the *balanced-lifestyle* anchor had a negative relation to *meaning* but a positive correlation to *self-determination*. Career anchors, therefore, were significantly and partially related to the psychological empowerment facets. These

suggested that by having the *entrepreneurial creativity, managerial competence, work dedication, pure challenge* and *service* anchors, academics would have higher feelings of *meaning, impact, competence* and *self-determination* in the way they improved their careers. However, those academics who perceived the *balanced-lifestyle* anchor had two choices of empowerment: to report higher *self-determination* or lower *meaning*.

This is another key contribution of the current study to the career anchor theory and the psychological empowerment concept. Up until the results were reported, the researcher has not found any published research on the predictive correlation between career anchors and psychological empowerment, nor have any previously found the two new anchors: *work dedication* and *balanced-lifestyle*. The current study calls for more empirical studies to explore the relationships between career anchors and psychological empowerment.

C. The relationships between psychological empowerment and job satisfaction

Hypothesis 3c: Indonesian academics' perceptions of psychological empowerment facets are positively related to job satisfaction.

The statistical computation of HMRA revealed that the hypothesis was partially and significantly supported for only two single facets of psychological empowerment. Perception of *meaning* and *impact* at work explained weak but significant variance beyond perception of *competence* and *self-determination* in predicting *job satisfaction*. Indonesian academics' perception of *meaning* and *impact* had effects on feelings of *job satisfaction*. Contrary to expectations, *competence* and *self-determination* did not contribute to *job satisfaction*. On the one hand, the findings were in line with Spreitzer's (1995) concept that when employees can derive meaning from their job and can influence job outcome, they will be motivated and will have greater job satisfaction. On the other hand, these results partially supported Spreitzer's (1996) study that *meaning* was the strongest predictor of *job satisfaction*. However, these were partially contrary to Spreitzer's (1995) previous findings that *self-determination* (in sample 1) and *competence* (in sample 2) were associated with *job satisfaction*.

In the current study, academics who had meaningful jobs and found a fit between their beliefs and values and the universities' goals to perform work, and had the possibility to

influence the universities' or faculties' strategic plan or administrative work, felt a higher level of job satisfaction. Despite the low level of the feelings of *meaning* and *impact*, which made academics feel only slightly connected to their work and outcomes, they were more likely to be loyal, service-oriented and work-committed people. They would be more satisfied with their current universities, if they could do more meaningful work and have more chances to be involved in making decisions for the better performance of their universities.

It was surprising that *competence* and *self-determination* did not predict *job satisfaction*, since the two facets were important attributes to academics. As Virtanen (2002, p. 77) stressed, competence was 'a kind of human capital or resources that can transform into productivity' and 'inherently related to teaching and researching'; similarly, Spreitzer, Kizilos and Nason (1997, p. 697) emphasised that *self-determination* was a main facet of empowerment. This may be because academics construed that having the ability to perform academic tasks was as not important as having a sense of meaningful work and having influence in their faculties or universities to feel satisfied at their workplace. Four possible reasons are that they: (1) felt that they were capable and skilful to perform tasks in their academic environment; (2) experienced overwork in teaching; (3) handled multiple roles; and (4) did not expect to have control over how their work was done.

Until these results were reported, however, the present researcher had not found any studies done on the same subject. The current study, therefore, was the first to make a contribution to the psychological empowerment concept from the point of view of academics as government servants in the public higher education sector.

D. The mediation effects of psychological empowerment

Hypothesis 3d: The mediating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors on job satisfaction.

Hierarchical multiple regression analysis and Sobel's test demonstrated that the psychological empowerment facets played significant roles as partial mediators to the influence of certain career anchors on job satisfaction. *Meaning* and *impact* were the only two significant mediators, while *competence* was an insignificant facet and *self-*

determination did not predict the relationship in the mediation-model testing. *Meaning* and *impact,* therefore, mediated the effects of *work dedication, managerial competence* and *pure challenge* on *job satisfaction*. It suggested that academics who tended to hold the *work dedication, managerial competence* and *pure challenge* anchors could increase the level of *job satisfaction* indirectly by having the feelings of *meaning* and *impact*. The results are in line with the concept of those anchors, in which individuals who concentrate on the intrinsic content of work are oriented to control workplace situation will feel their talents and values to be tested and will have an impact on job satisfaction (Schein 2006a). In developing their job characteristics model, Hackman and Oldham (1980) found that the meaningfulness and responsibility for outcomes that individuals experienced mediated job characteristics and job satisfaction. The outcome stated that when an individual works in accordance with their attitudes and values they are happy. Individuals who felt responsible for work outcomes also experience job satisfaction.

The findings also supported Ding and Lin's (2006) opinion that without being empowered to apply values, needs and abilities (reflected career anchors) to their career development, individuals feel unhappy. Academics feel happy when their dominant career anchors are in line with their values in the teaching and research areas. Sharing skills and knowledge with colleagues, influencing policy, controlling people around them and being involved in decision-making to improve their institutions increase the level of job satisfaction. It is imperative that academics realise that the two psychological empowerment facets of *impact* and *meaning* mediate between the *work dedication, managerial competence* and *pure challenge* career anchors effect and the level of *job satisfaction*. The absence of the *competence* and *self-determination* facets was unexpected.

The review of the literature on career anchors, psychological empowerment and job satisfaction did not find any studies that tested any hypotheses comparable to those of this study. This is the first study that concerns the predictive correlation of career anchors, including *work dedication, managerial competence* and *pure challenge*, on *job satisfaction* and that investigated psychological empowerment individually as mediators. It is worthwhile to have further studies using career anchors individually as predictors on the mediation model of psychological empowerment.

E. The moderating effects of psychological empowerment

Hypothesis 3e: The moderating role of psychological empowerment facets strongly explains the influence of Indonesian academics' perceptions of career anchors and job satisfaction.

The testing of moderating effects reported that three facets of psychological empowerment moderated the influence of three career anchors on job satisfaction. The hypothesis is, therefore, partially supported. *Impact* positively and significantly influenced the *service* anchor; however, *self-determination* showed a negative but significant association. *Competence* had a negative but significant association with the *balanced-lifestyle* anchor while *self-determination* positively and significantly influenced on the *balanced-lifestyle* anchor. Last, *self-determination* positively and significantly influenced the *pure challenge* anchor.

Despite a weak interaction on all moderators, some patterns emerged. A high feeling of *meaning* and *self-determination* and a low feeling of *competence* enhanced the *job satisfaction* of those academics with a *balanced-lifestyle* orientation. By contrast, low feelings of *meaning* and *self-determination* and high feelings of *competence* decreased the *job satisfaction* of those academics who had the *balanced-lifestyle* anchor. Both high and low feelings of *impact* strengthened the *job satisfaction* of service-anchored academics. The same pattern was shown for both high and low levels of *self-determination*, in which were associated with increased *job satisfaction* for those academics with the *pure challenge* anchor.

The current study also identified another important finding. *Meaning* played roles as both a mediator and a moderator for both *balanced-lifestyle*. Academics who tended to cling to the *balanced-lifestyle* anchor could indirectly have slightly higher *job satisfaction* through having high feelings of *meaning* at work, whereas low-level feelings could decrease *job satisfaction*.

Thus, it seems that increasing academics' empowerment through high feelings of *meaning, self-determination, competence* and *impact* could also increase their confidence in managing people, developing skills, balancing work and family lives, and facing and solving tough problems. Consequently, these situations could help academics

achieve greater *job satisfaction* at work. Conversely, restricting academics' empowerment through those four feelings would reduce their satisfaction. These results also explain why *competence* and *self-determination* do not mediate the relationship between career anchors and job satisfaction. It is imperative for academics to understand their level of feelings of empowerment to meet their career anchors to achieve greater of job satisfaction.

It has been stated in reviewing the literature that no studies have been conducted on the relationship between career anchors and job satisfaction through the moderating variables of the psychological empowerment facets. As in the findings of the mediating effect, these findings are also the first to claim the results of the moderating effects model. It is imperative to conduct further studies using career anchors as predictors in testing the moderating effects of the psychological empowerment facets.

6.4 Discussion and implications of the qualitative findings

Issue 5: How do Indonesian academics' perceptions of their career development influence the way they pursue the career anchors?

There was no hypothesis proposed for Issue 5. This issue was designed to explore academics' perceptions through their career history to find out the dominant career anchors and factors that influenced them to achieve their career goals. The answers to the issue were also used as supporting data and information for the quantitative analysis in the current study. This subsection summarises and discusses the findings presented in Chapter Five and suggests the implications for the current study.

As expected, *service* was identified as the most dominant career anchor among academics. This indicates that individuals who decide to become academics at public universities are expected to serve the community and are dedicated to the field of specialisation to bring about community a better world (Schein 1990, 2006a), even though they receive less income than their counterparts in the private sector. It is not surprising that tangible rewards, such as incentives and honoraria are not important to them.

The findings of dominant career anchors were in line with Schein's (1978, 1990, 2006a) notion by stating that individuals found their career anchors after exploring a number of patterns through career decisions that they made and a number of reasons underlay the decisions. *Service* being shown to be the most dominant career anchor also strengthens Schein's (1996, 2006a), and Schein and van Maanen's (2013) premise that service was a 'brand' of government employees, and that more and more people wanted to do something in a broader context (e.g., working on a new drug, reducing poverty). Individuals work not only to gain promotions but also to apply their own values. Academics would leave managerial positions for the chance to do something better for human beings. None of the previous studies reviewed here found the same dominance of *service* as a career anchor. Custodio's (2000) study ranked it second; La Lopa, Beck and Ghiselli (2009) ranked it third. The result suggests that using academics' values in teachings and research would give satisfaction to service-anchored academics.

The existence of multiple career anchors (see Table 5.7, Chapter Five) among academics in this study reflects the trend that the prevalence of single anchor careers is declining. Indonesian academics generally have at least two anchors. The assumption is likely that a lecturer position may not be the first choice when applying to be an academic, and/or it may be because academics' incomes are small, causing academics to look for additional jobs within their careers in order to fulfil their values or needs. Welch (2012, p. 35) emphasised that 'public academics preserved a second job either at a private higher education institutions and/or elsewhere'. These results answer the proposition of Feldman and Bolino (1996) by arguing that people would have two or more anchors to face a complex career situation and social life. The proposed notion needs to be considered even though Schein still believed that one's dominant anchor never changes, even when her/his career might change (2006a, p. 36). With the findings on this type of anchor but no detailed examination by other research (e.g., Tan & Quek 2001; Marshall & Bonner 2003; Ituma & Simpson 2007), it is imperative to have serious further exploration in a study of career anchors.

The current study discovered a new proposed anchor, *academic freedom and creativity*, that reflects a characteristic of academics. It determined that academics should be free of external interference (Henkel 2005), and free to teach, do research and discover new ideas (Robinson & Moulton 2002). Autonomy itself reflects the academics' freedom to

behave appropriately in the teaching environment. The *autonomy* anchor and the *creativity* anchor enlarge Schein's (2006a) and Schein and van Maanen's (2013) concept of the *entrepreneurial creativity* anchor. The separation has also been demonstrated in previous studies (Marshall & Bonner 2003; Dazinger, Rachman-Moore & Valency 2008), which have stated that the *entrepreneurial creativity* anchor was two separate anchors, each of which had different characteristics. As *academic freedom and creativity* is considered to be a new anchor, further empirical study is needed.

As a consequence of this separation, the current study substituted *entrepreneurship* with the *running a business* anchor to represent the behaviour of academics as public servants for the purpose of qualitative analysis. Entrepreneurship in organisations and government administration (not companies) was emphasised as a means to create products, services and jobs by Marshall and Bonner (2003). When this is related to academics, it refers to the freedom to create innovative products and services in the academic environment through research, publications and teaching. This is because Indonesian academics are not allowed to run businesses (as a company), especially those who are at the academic rank of senior academic and upwards. By contrast, academics who want to exercise their business skills could be self-employed or have creativity-related, home-based businesses, such as bakery, hairdresser, or fashion line. As Schein (n.d.) pointed out entrepreneurial-oriented people who are academics have side jobs to be prepared for future opportunies. Similarly, Marshall and Bonner (2003) stressed that running businesses for academics means generating money, not building an enterprise.

As expected, the *running a business* anchor was ranked last. The anchor contradicted with the academic function to serve the community. The identification of the *academic freedom and creativity* anchor and the *running a business* anchor, and a clear distinction of *entrepreneurship* and *creativity* extended Schein's (2006a) notion that creativity could be interpreted in different ways by the various anchor groups. These also confirmed findings reported by Marshall and Bonner (2003) concerning public university students.

The *lifestyle* anchor was also broken down into two anchor categories: *work-family lifestyle* and *flexible working schedule*. Academics made a clear distinction between

these two anchors, one was for life purposes and the other was for working conditions. The findings reinforced Schein's (2006a) premise that more people now would like to integrate their family/personal life with their career/work life due to changes in social life. More and more Indonesian academics have a dual-career family life, in which both wife and husband are in full career development mode. A conflict of interest may be problematic. Work-family lifestyle-anchored academics desire to balance their personal and professional lives. The finding supports Schein and van Maanen's (2013, p. 15) point that *lifestyle* was related 'to the integration of career and family issues'. The *lifestyle* anchor has become more prevalent as more families are finding that they must meet the demands of two different, equally valued careers. The importance of the combination of work and family lives was also found in a study by Custodio (2000) for the *lifestyle integration* anchor, which she ranked first, and by La Lopa, Beck and Ghiselli (2009) for the *balancing career and family* anchor, which they also ranked first. Contrary to the findings reported by these two studies, which still used the same scale for the *lifestyle* anchor that had been developed by Schein (1982), the current study suggested revising the scale to fit the *work-family lifestyle* anchor. The proposed new *work-family lifestyle* anchor, therefore, needs further exploration.

While the demand for flexible of working hours is high, people with the *flexible working schedule* anchor still accept institutional rules and restrictions. Academics are fully concerned with their working schedules in facing the competitive of the world of work. Being civil servants in Indonesia, academics are required to be present every working day during standard working hours. These people feel that working at home when there is no explicit reason to travel to workplace would help them be more efficient and effective to keep up their job performance. A flexible working schedule was important also in Feldman and Bolino's (2000) study of self-employed employees. In contrast to the present finding, the employees raised the issue of the exchange of increasing the flexibility to work on their own schedule, as well as increasing the limited vacation days and time off. These findings suggest that the reconceptualisation of Schein's career concept as suggested by Feldman and Bolino (1996), by considering the concept of *talents-based, needs-based*, and *values-based* anchors needs to be taken into account.

The emergence of *academic atmosphere* as a dominant career anchor complements the other two anchors that could be expected to be attached to Indonesian academics: the *service*, and the *academic freedom and creativity* anchors. Together, they are the three basic characteristics of academics. This is associated with the three pillars of higher education (teaching, research and community service) so that in pursuing a career, academics must satisfy the three elements. Contrary to the competitiveness notion, academic atmosphere in the forms of research and teamwork among colleagues still dominates in the teaching environment. This is because all the rules and policies related to academics are considered to be centralised so that the individual's work or competition is not accommodated so easily. The argument supported Schein's (2006a, p. 47-48) analysis of future job/role in that the competitive climate was better developed for organisations that did not adhere to a centralistic policy system. Up to the time of this study, no previous studies have been reported on this anchor. The identification of the *academic atmosphere* anchor category, therefore, needs to be explored further, including its inclusion in the *values-based* anchors.

The current study validated the separation of the *economic security* and *geographical stability* anchors, as reported by DeLong (1982) and Igbaria and Baroudi (1993). Academics regarded the *economic security* anchor in the form of a pension package as the reason for being government employees. To academics, it is fair that government institutions demand dedication and loyalty in exchange for a pension and lifelong employment. Remaining in the present institution is a must because of government regulations. However, academics are allowed to move to other universities as set out in government regulations, such as following the transfer of one's spouse's job. Academics, therefore, distinguished between economic concerns and loyalty to the institution. Although Schein (1987; 2006a) developed one category of *security/stability*, the present findings confirmed DeLong's (1982) study and other previous research (e.g., Custodio 2000; Chang & Lin 2008) that separated the anchors.

The identification of the *spiritual values* theme was as expected. It is understandable that in a country where religious teachings are very strongly attached to a country's administration, these teachings would influence the spiritual life of its people as well as their career life. It is observed that Indonesian administration is implicitly conducted based on religious values (Sihombing & Pongtuluran 2011). In Indonesia, where the

majority of people (±86%) are Muslims, and almost every government organisation applies the teachings of Islam (Pekerti & Sendjaya 2010; Kyes 2012), it is possible that the teachings influence people's attitude in the workplace. In addition, nearly three-quarters of the respondents were Muslim, strengthening the case for the emergence of the theme (see Tables 5.2 and 5.4, Chapter Five). It is expected that some academics regard *spiritual values* as an important theme because working (in this case as lecturers) is part of a Muslim's obligation (Ahmad & Owoyemi 2012; Jamilazzaini 2013). It could imply that Baruch's (2004) suggestion of spiritual purposes should be taken into account for further and more empirical studies to claim this theme as an anchor and extend Schein's (1987b, 1992, 2006a) and Schein and van Maanen's (2013) career anchor theory and categories from a religious point of view.

The study also identified the *personal integrity, motivation and goal orientation, impact* and *self-determination* themes. *Impact* and *self-determination* are two of the four facets of psychological empowerment (Spreitzer 1995). *Personal integrity*, along with *motivation and goal orientation* are components of psychological empowerment, while *happiness* is a characteristic of job satisfaction. The findings imply that career anchors cannot be separated from empowerment and job satisfaction. Empowerment was necessary to ensure that the career anchors held by academics guide them to achieve job satisfaction. It is speculated that, on the one hand, academics interpreted the four facets of psychological empowerment and the concept of *talents-based, needs-based* and *values-based* anchors as being similar to each other. On the other hand, whether the emerging themes would be part of either of the two constructs, or the existing four facets would be treated as less important aspects, still needs to be investigated further by conducting more empirical studies, particularly with academics at public universities as the research subjects.

It is surprising that organisations are still expected to play an active role in the development of academic careers through *career arrangement, organisational structure* and *financial support and reward*. Academics have the perception that the universities where they work give less attention and support to these matters. If academics have the support of their institutions (e.g., up-to-date journals, books, computer databases), they are more responsible for the work and will feel more empowered. This suggests that educational background, work experience and academic rank (see Table 5.4, Chapter

Five) are not significant in supporting academic careers. Whether this is due to the inherent characteristics of civil servants, – for example, the perception that all matters relating to work are the responsibility of the government still requires further study.

In the meantime, leaders need to encourage academics to explore their talents, needs and values, and develop them through teaching and research to achieve their own career goals. The findings proved Schein's (1978) theory and some other previous studies' claims (e.g., Levi 2006; Dazinger, Rahman-Moore & Valency 2008) that the needs of individuals and the work environment need to fit in the context of a progression in one's career motivation.

Overall, the findings enhanced the results of the quantitative analysis. The existence of some new anchors through the merging of two anchors and the separation of one anchor into two, and the identification of a number of themes, including organisational factors, confirmed the prediction of the role of career anchors in relation to psychological empowerment and job satisfaction. The results of the qualitative analysis, therefore, deepen the understanding of career anchors from academics' perceptions as civil servants in the context of Indonesian public universities in particular. Thus, academics should recognise their talents, needs and values and their dominant career anchors to develop future career paths. At the same time, universities should support academics in such ways as a reasonable teaching workload (not overload), an equal opportunity to attend training and conferences, the availability of laboratory equipment for teaching and research, and the accommodation of multiple career directions. In relation to academics' job performance, human resources committees should conduct job analysis carefully so that recruitment meets the universities' needs.

6.5 Indonesian cultural values

Indonesia comprises over 300 ethnics groups, and every ethnicity, such as Javanese, Bataknese, Bengkulunese, or Balinese, has its own unique culture (Magnis-Suseno 1996; Moffatt 2012). Diversity can be in the form of, for example, language, folk songs, attitude, behaviours, religious faiths, food/clothing/traditional dance, sexuality, ceremonial events and customs (Moffatt 2012). Indonesian society is known for hospitality, family-oriented values and a desire to avoid conflict, respect for elders and

superiors, shaking hands in greeting while bowing, no use of the left hand in any kinds of activities in public and the importance of academic and professional titles for status (Moffat 2012). Some other traditions are associated with Islamic practices, such as no pork at restaurants, and not wearing sandals or shoes in the home. Some other cultures have adopted aspects of the Javanese culture (Indonesia's largest ethnic group). Magnis-Suseno (1996) and the majority of Indonesians claimed that Javanese culture represents Indonesia as a whole. Aspects include, for example, no negative emotion or anger in public, no criticisms of leaders, hierarchical social structures, smiling even in a situation of anger or negative feedback and a strong reluctance to say 'no' even when one disagrees with something (Moffat 2012).

While culture can be defined as customs and rights (Schein 2010) or policies, practices and principles (Cooke 1995) plus beliefs (Handy 1993), some studies classify cultures in several dimensions. A number of studies on the culture of Indonesia by several researchers (e.g., Magnis-Suseno 1997; Gupta et al. 2002; Giles 2003; House et al. 2004; Pekerti & Sendjaya 2010; Sihombing 2013) have come to a generally accepted conclusion that Indonesians like to work according to bergotong royong, or 'mutual assistance among members of a community' (Pekerti & Sendjaya 2010, p. 761), and to show mutual respect, and with a high degree of societal tolerance (Magnis-Suseno 1997). These three aspects reflect the collectivism dimension developed by Hofstede (1980).

The cultural orientation of Indonesian society is toward group and family collectivism, as opposed to the individualism dimension that was ranked 47 out of 53 countries sampled. Hofstede (1980) explained that hierarchical structures are strong where leaders have the power to make a final decision, and to control subordinates. Moreover, Indonesians, both male and female, are willing to offer support to strangers, particularly older people, compared to, for example, the British, who show higher in individualism, and among whom females are more likely than males to offer support (Giles 2003).

Recent studies have shown that Indonesian culture is slowly changing, especially for those who living in big cities. Along with changes in the social and economic environment, culture also alters. Religious fanaticism, for example, especially among

the majority group, is becoming more common (Rahayu 2012). Tolerance of differences is beginning to decline, and militants and anarchists are becoming more prevalent. There is growing feeling that leaders should be Muslim (Giles 2010), and recently the wearing of the hijab (headscarf) during all activities outside the home (such as, sport or education) has become more common for female Muslims. In addition to the traditional cultural values that attach to society and still apply to people other than those living in large cities, Sihombing (2013, p. 101) found seven dimensions of culture among respondents in large cities (Jakarta, Bandung, Semarang and Surabaya): 'mutual assistance (*gotong royong*), democracy (*demokrasi*), religion (*agama*), harmony (*harmoni*), hospitality (*ramah tamah*), religious fanatism (*fanatisme keagamaan*) and individualism (*individualisme*). A shift from the collective to individualistic values has become a trend in countries in Asia (Zhang & Shavitt cited by Hawkins & Mothersbaugh 2010), such as Japan and China are currently oriented to individualism and materialism (Faure 2012).

Although Hofstede (1980) denied that the individual values established the national values, the cultural diversity of individual values – which reflects that of the Indonesian nation – '… makes studies of Indonesian culture an enormous task' (Pekerti and Sendjaya 2010, p. 760), 'an extremely vast and complex…jigsaw puzzle' (Dewi Fortuna Anwar's words in Epstein 2010, p. 1). It has been recognised that there are cultural differences between organisations (e.g., Feldman & Bolino 2000), between countries (e.g., Sower & Sower 2005; Schein 2006a) and between West and East (e.g., Hofstede 1980; Pekerti & Sendjaya 2010). The identification of *spiritual values*, for instance, showed how the majority of Muslims in Indonesia affected their career decision. Hence, culture should be considered when a study employs a theory constructed in a different culture to that targeted in the research.

6.6 Suggested research model

The current study uncovered novel findings. In addition to the findings of two new anchors in the quantitative findings, several new themes emerged from the qualitative findings. Thus, the current study proposes a modified research model. The model merges the revised model for the quantitative study and a new model for the qualitative study shown in Figure 6.1.

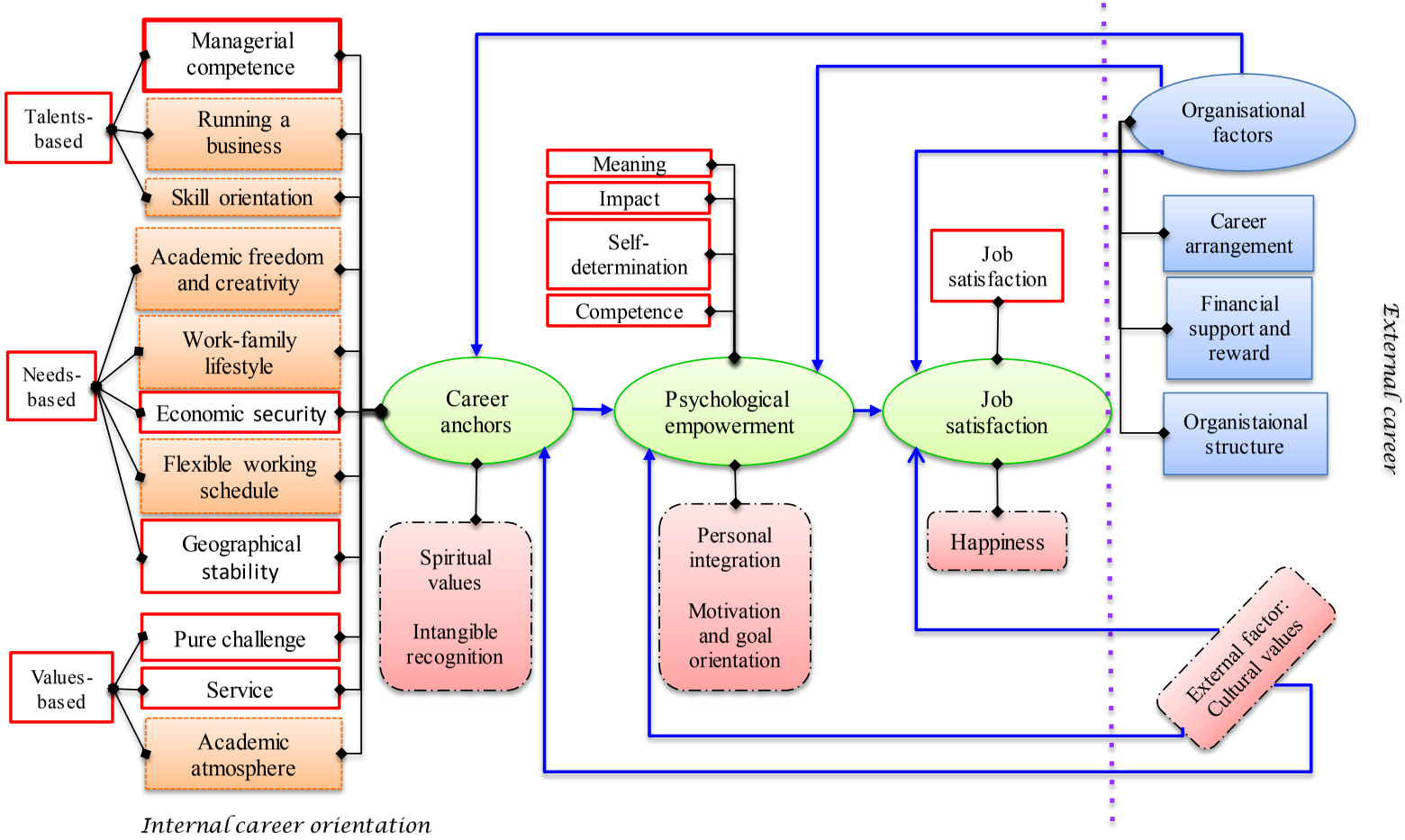

Figure 6.1: Modified research framework of the relationships between career anchors, psychological empowerment and job satisfaction

Influences
Consists of
Construct
Variable
Considering variables
Proposed new anchors
Border between internal and external career

Figure 6.1 presents a proposed research model for the relationships between career anchors, psychological empowerment and job satisfaction, linking organisational factors and cultural values. Five original anchor categories remain in the analysis, while six new anchors have emerged from the interviews. Schein (2006a) and Schein and van Maanen (2013) determined that Schein's interview protocol could identify new anchor categories from the respondents. The *work dedication* and *balanced-lifestyle* anchors were dropped from the model since the interviews clearly uncovered *skill orientation, geographical stability, work-family lifestyle* and *academic freedom and creativity* as more appropriate anchors. According to Schein (2006a) career anchors found through interviews are stronger than those identified with a questionnaire. The interview explores phenomena in-depth, while the questionnaire is forced-choice questions. In the same way, *commitment-based* anchors were also eliminated. Two new themes emerged (*spiritual values* and *intangible recognition*) from the open-ended questions, which were considered for proposal as new anchors. Hence, considering that the two themes are strongly significant factors reflecting Indonesian behaviours, the current study suggests including them in the model, although they still need to be supported by further research in other contexts.

All four facets of psychological empowerment are clearly assessed, and the two themes that emerged from the open-ended questions are also included in the model. Based on Quinn and Spreitzer's (1997) concept, Collins (2007, p. 25) stated that 'empowerment involves employees taking the initiative to respond autonomously to job related challenges with the encouragement and support of management'. In addition to the two new facets, organisational factors seem to be involved and influenced in the empowerment process. Like the career anchor categories, the themes need further research from the literature.

Three items of the general job satisfaction measured in the scale need some more indicators related to the task-role. The *happiness* theme was shown in the absence of indicators to measure the feelings of pleasure when one completes tasks. *Happiness,* therefore, is added to the job satisfaction construct.

As in the job satisfaction approaches, in which organisational factors and culture are included in the external factors (Levi 2006), the current study also grouped

organisational factors and culture into the external career factors. The factors are included because they are the most significant in their effect on respondents' career decisions. This shows how Indonesian academics as civil servants view their career development in their institutions. Organisational factors can play roles as mediators or moderators in the relationship of the three constructs.

As discussed, cultural values were revealed in the analysis and should be expressed. From a research standpoint, cross-cultural values need an in-depth examination, especially in Indonesia where there are huge local subcultures. Cultural studies can be measured in the individual culture level which is when they are combined in some way to represent a national culture level. To characterise more precisely a pattern of cultural influences in the relationships, they need to be incorporated in the measures and are considered as an external factors.

6.7 Implications of the current study

6.7.1 Implications for theory

The present findings extend the concept of career anchors introduced by Schein (1978, 1990) and a study of psychological empowerment by Spreitzer (1995), thus introducing psychological empowerment into the relationship between career anchors and job satisfaction. A review of the literature showed that only a handful of studies have investigated career anchors and job outcomes, and there has been no study with respect to the three variables from academics' perceptions in the public higher education sector. The results of this study, therefore, extend the studies on the three variables from the viewpoint of academics as civil servants in the context of public higher education, especially in Indonesia, and in Southeast Asia in general where previous studies used managers, employees and students (not academics) in private sectors or service organisations (not public organisations).

The current study proposed *work dedication, balanced-lifestyle, academic freedom and creativity, work-family lifestyle, flexible working schedule, academic atmosphere* and *running a business* as new career anchor categories. These confirm Schein's (1990, 2006a), and Schein and van Maanen's (2013) notion that if none of the original anchors could be fitted to the emerging themes, new anchors could be

formed. By contrast, the findings also question Schein's theory that individuals do not change their anchors, instead changing their career to adapt to circumstances. This implies that these proposed new anchors should be studied empirically to further confirm the suggested categories.

The findings that the *economic security* and *service* anchors were the dominant career anchors in both the quantitative and qualitative studies in the current research reinforced one another and supported Schein's (1990, 2006a) theory on the preferred career anchor of civil servants. On the one hand, the *security/stability* anchor (called *economic security* in the current study) is attractive to civil service and government employees. On the other hand, civil servants seek primarily the anchor of *service*. This also implies that what has been proposed by Schein more than 30 years ago since he and DeLong (1982) broke down the *security/stability* anchor can still be applied now, especially to academics in Indonesia, but also in developing countries in general. It reiterates further the implication of Schein's claim that his career anchor concept was applicable anywhere and in any condition and situation.

The finding of multiple career anchors and the merging of the *autonomy* and *lifestyle* anchors into a new category that reflected *needs-based* anchors also supported Schein's (2006a, p. 35) theory that this reflected a variety of career situations. Individuals were likely to fill *talents-based* first, followed by *needs-based* and *values-based* anchors. This takes into account Feldman and Bolino's (1996) proposition that individuals have at least two anchors and their recategorisation of career anchors into *talents-based, needs-based* and *values-based* anchors. This suggests that more empirical studies are needed to conduct an in-depth analysis of these anchors. Moreover, Feldman and Bolino's (1996) premise that individuals' anchors could be drawn on an octagonal diagram based on their relationship pairs did not work in the current study. This may be due either to the fact that the current study only found the *complementary* relationships or that the diagram has some conditional aspects. An appropriate statistical computation should be considered. This could suggest that further studies are needed in regards to the diagram.

The direct effects on the career anchor categories and job satisfaction relationships showed a moderate contribution both in a positive and negative direction. The

average effect was considered medium-sized. Only *work dedication, managerial competence*, *pure challenge*, *service* and *balanced-lifestyle* predicted *job satisfaction* and the *work dedication* anchor was the most substantial predictor of *job satisfaction*. The findings – particularly the comments on organisational factors through the interviews – suggest a lack of attention to the internal motivation driver in individuals' career advancement. There is a need to match individuals' needs with organisational needs (Schein 2006a). It also implies that anchors have not been found that can 'fit' (but not 'match') the working environment (Carless, 2004; Ding & Lin, 2006; Schein, 2006a; Collins, 2007).

Furthermore, a sense of meaningful work (*meaning* facet) and control over the work that affects the institutions (*impact* facet) have a low direct effect on happiness in the workplace (*job satisfaction*), while capability (*competence* facet) and autonomy (*self-determination* facet) do not necessarily satisfy academics in improving their careers. The insignificance of *competence* and *self-determination* show that they may be ambiguous facets associated with *job satisfaction*. By contrast, flexibility at work, autonomy and family life are not a priority to achieve job satisfaction, although academics view their work as important. In the case of this study, if conditions are imposed that constrain work practice, this will lower job satisfaction. In relation to mediation and moderation, the indirect effects contributed less than the direct effects. The results suggested that psychological empowerment did not play a significant role in determining job satisfaction. The inconsistency of each career anchor category might be caused by the degree of job satisfaction or the combination of categories. It is also possible that job satisfaction may not be the first outcome of psychological empowerment, as claimed by Spreitzer (1995). The current study confirms Feldman and Bolino's (2000) and Schein and van Maanen's (2013) by emphasising that there are other more suitable outcomes (Feldman & Bolino 2000) for these relationships. Another implication shows that two facets (*competence* and *self-determination*) that were not mediators and one facet (*meaning*) that was not a moderator could be better matched with other potential career outcomes, such as organisational commitment, organisational citizenship behaviour, job performance, occupational stress and job strain. The presence of a negative relationship and interactions could then be due to the influence of other job outcomes.

Thus, it can be implied that while academics assume *meaning, impact, competence* and *self-determination* are of central importance, in fact they are not significant in reaching their career goals. The academics in the current study considered them less valuable as factors to achieve their career goals. However, these implications do not mean that psychological empowerment can be ignored, especially when its reliability and validity has been shown to be high. It is assumed that there are other factors acting as drivers to these predictive relationships, as there were a number of new factors identified through the interviews. It is imperative to replicate this study longitudinally to get a more grounded understanding.

6.5.2 Implications for methodology

Satisfactory results with high scores on the construct validity and reliabilities of the short form of career anchor inventory, the psychological empowerment scale and the general job satisfaction scale have two implications. First, they show that the back and forward translation strategy was appropriate. Researchers can use this method, especially when the scales are applied to cultures in which English is used as a second language. Second, the construct validity examination through exploratory factor analysis resulted in two new cluster constructs (*work dedication* and *balanced-lifestyle*). This shows that how government employees interpreted the scale may differ from how private sector employees perceived the constructs. The findings suggest that research instruments developed in western cultures, especially in the U.S., and generally derived from research subjects in the private sector, may be applicable in some way to Indonesian academics at public higher education institutions. The scales, however, need some refinement when considering cultural issues.

The current study augments the data collection methods (survey questionnaire and interview) that were suggested by Schein (1990), and Feldman and Bolino (1993). In addition to the two methods, an online survey method was employed to collect data for the current study. In particular, a web-based survey was used in the hope of involving all lecturers at all universities throughout Indonesia, but it did not run smoothly due to the low availability of internet connectivity. Consequently, this method was treated as an alternative method. It is suggested that other researchers

who want to use this method should first observe the use of the internet and the internet connection itself in prospective research locations.

The results of mediation and moderation testing showed a clearer picture of the role of career anchors, psychological empowerment and job satisfaction. Although psychological empowerment contributed only weakly to its relationship with the other two variables, the four facets of psychological empowerment not only played roles as mediators, but also as moderators. Career anchors are also assumed to have an impact on career outcomes other than job satisfaction. The tests of the mediator and moderator provide an extension method to research career anchors because the majority of researchers only examine the dominance of an individual's particular career anchor.

The interview method gave some valuable results. Specifically, it found some additional anchor categories and themes on career anchor, psychological empowerment and job satisfaction constructs that supported the quantitative analysis. These rich findings contributed to a more thorough understanding of Indonesian academics' career goals. Employing the interview method along with the self-administrated survey as a mixed-methods strategy could be adopted by other studies to capture a broader understanding of the intended constructs.

The current study also used two open-ended questions that were added to the questionnaire. The inclusion of the open-ended questions on the questionnaire was considered helpful to fill the gaps in the statistical analysis. It also found some valuable information that was not covered in the interviews. It is suggested that other researchers can use this method to explore further information, particularly in individuals who are introverts, and in cultures where individuals rarely express their feelings or thoughts, let alone criticise or express ideas openly in the institutions where they work (or to a third party, such as researchers) (Pekerti & Sendjaya 2010).

6.5.3 Implications for practice

The findings in this study provided significant implications for managerial practices in the context of public higher education institutions, both from academics as public servants and universities as the institutions. The *economic security* anchor category

emerged as a dominant career anchor among academics; this was unexpected. Consistent with the characteristics of the anchor category that reflected the characteristics of academic work (e.g., lifelong employment, monthly salary and increases based on the length of employment, regular promotion, seniority-based activities, pension package, steady job performance), academics are more concerned with meeting their own need to feel safe and secure instead of serving the community, which is a core value of the public sector. The *service* category is axiomatic for them. In terms of the groups-based anchors, *needs-based* anchors (*economic security, autonomy* and *lifestyle*) also dominated their career choices.

This implies that institutions should pay more attention to the dominant career anchors of academics in developing policies and programs. Because there is a guarantee of monthly salary, pension scheme and employment status, the policies and programs might be concerned with improving academics' performance in the workplace. An appropriate reward policy and competitive research grants, for instance, could be expected to improve academic performance. Institutions should also be expected to develop a flexible career policy instead of the existing linear career progression to meet the needs of work and personal lives. In addition to the present new criteria of job performance evaluation indicators (called *Penilaian Prestasi Kerja* = Work performance appraisal) – service orientation, discipline, integrity, leadership, commitment and teamwork –, the task-based criteria are urgently needed. The career satisfaction scale developed by Greenhause, Parasuraman and Womley (1990) and the employee performance scale that was constructed based on basic core tasks and developed by Tsui, et al. (1997) used as a guide to revise the performance appraisal. It is believed that this will be able to change the mindset of economic security-anchored academics to be more willing to explore their talents, competencies and values to compete in the workplace. Academics with this anchor may find it difficult to deal with present and future work-life situations in which many institutions or organisations, including those in the public sector, are not going to offer a lifelong employment package.

At the same time, to accommodate the *service* anchor, the central government or persons who are in charge of policymaking could consider some academic activities that can improve the job performance of service-anchored people. Paid study leave

for a semester, as is done in many universities in developed countries, for example, could be adopted. The present policy's 12-days off in a year are meaningless to academics.

The emergence of multiple career anchors reflects Indonesian academics' career situations, as they face changes in the academic world due to sociotechnological trends. This can be interpreted as a lack of institutional support for academics, uninteresting academic jobs and unclear organisational objectives, so that academics feel the need to look for a career that matches their *talents-based, needs-based* and *values-based* anchors. It is suggested that academics could look for a suitable position within their institutions and improve employability.

Academic freedom and creativity ranked third in the dominant career anchor pattern. Human resource managers should pay attention to and maximise academics' anchors so that they can apply their anchors to accelerate the achievement of both their own career goals and the institutions' goals. The university management can do things like distribution of teaching load based on the standard set up by the central government, assign appropriate subjects to teach, offer travel grants to support academic interests, such as conferences and paid sabbatical leave as mentioned earlier.

The present findings suggest that academics feel more satisfied if they can perform academic tasks optimally (i.e., teaching, research and community service) in accordance with the current institution based on their specialisation (*work dedication*), balancing work, career and family lives (*balanced-lifestyle*), solving tough problems (*pure challenge*), holding structural positions and other administrative work (*managerial competence*) and serving the community (*service*). On the other hand, the level of *job satisfaction* did not increase significantly when the prediction and interaction roles of feelings of *meaningful* work, *impact* on outcome, *self-determination* and *competence* were imposed. *Economic security* and *entrepreneurial creativity* were excluded from the model due to the insignificant results. It is also argued that the dependence of academics on the institutions in improving their careers is still high. This implies that academics need to examine their competencies, motives and values to evaluate whether they have fulfilled the

responsibility as academics. Using academics' job descriptions and the three pillars of higher education (teaching, research and community service) can help them find out what they want from the work.

Overall, it can be said that the internal career orientation has not been a major driver in career development. This study has also revealed the absence of the *service* career anchor as a preferred anchor for public servants, and weak relationships in the indirect and interaction testing. These suggest that there are other external factors that significantly affect these relationships. The qualitative findings pointed to the organisational factor as an external career that was most influential. It is assumed that factors, such as a linear career policy, a lack of communication and transparency and teaching overload discourage academics from maximising their career anchors. Another speculation is that financial matters are related to the use of funding for academic activities, such as support for research and conferences, not money for basic needs.

In other words, a linear career path policy, a single organisation, lifelong employment and a pyramid career advancement model may contribute significantly to academics' career decisions and job satisfaction. Institutions, instead of the central government, need to develop policies that psychologically motivate and empower academics in pursuing their careers, and should become more academic market-oriented, such as having specialisations across areas of expertise, and various career roadmaps with multidirectional career paths. Institutions can support individual academics as they compete for research grants to enhance feelings of competence through teachings and publications, and to involve academics in designing teaching and research programs, for instance, and other meaningful empowerment programs and interventions. Involving academics in making decisions that could increase the quality of academics themselves has been found by Sukirno and Siengthai (2011) to significantly influence academics' performance.

Summary

This chapter presented the discussions and implications of the current study. It summarised, discussed and drew conclusions from the findings on the construction of the career anchor inventory, the psychological empowerment scale and the job

satisfaction scale. The emergence of the two merged anchors was presented. The single dominant career anchors and the multiple groups-based anchors followed by the hypothesis testing results were also described. The chapter summarised the results of testing the hypotheses concerning both direct and indirect effects of mediating and moderating variables of psychological empowerment in predicting relationships between career anchors and job satisfaction. It then continued with a discussion of the results. The chapter also presented a proposed model based the findings of the quantitative and qualitative analyses. In addition to the internal career motivation model, the model also showed the two external factors of organisational factors and cultural values that emerged during the data analysis. This was followed by a discussion of the implications of the qualitative findings. The chapter concluded by discussing the theoretical, methodological and practical implications of the current study.

The next chapter will discuss the limitations of the study. It will also present a possible direction for future study.

Chapter 7
Limitations and Directions for Future Research

7.1 Introduction

Chapter One, besides presenting the aim of the study, described the research questions and the significance of the study. The chapter also discussed the career policy of academics in Indonesia, including the Indonesian higher education systems. Chapter Two discussed the conceptual framework of the study and reviewed the literature regarding to the career anchors theory, the psychological empowerment concept and their relation to of satisfaction. It presented the model of the study and proposed hypotheses. Chapter Three dealt with the study's research methodology, discussing it from a mixed-methods approach. The quantitative and qualitative approaches were highlighted. It then discussed the research design, consisting of survey questionnaire, interview, sampling and sample size. The language issues concerning the translated research instruments were outlined. The pilot study results were reported. The statistical tools and the qualitative analysis method used in the current study were presented. Chapter Four presented the quantitative analysis findings. The chapter described the rate of return of questionnaires and information from the biographical data collected. It reported the results of the validity and reliability testings. The dominant career anchors and a series of statistical tests were discussed. The chapter then interpreted and discussed the results. Chapter Five analysed the qualitative findings. It identified the respondents' dominant career anchors from the interview results and showed the direct quotations related to the dominant anchors. It also discussed the themes that emerged from the open-ended questions. The integration of the quantitative and qualitative findings was explained. Chapter Six drew conclusions from the findings and discussed the contributions and the implications for theory, methodology and practice.

Chapter Seven is the last chapter of the current study covering only two Sub-sections. First, the chapter discusses the limitations of the study. Second, the chapter makes recommendations for future research based on the present findings to address the limitation.

7.2 Limitations of the study

While the current study has been designed carefully, it has some unavoidable limitations. At the time of the data collection stage (October 2011 to January 2012), the application of the higher education legislation amendment (after the legislation of state-owned entity was abolished in 2005) was delayed. The amendment currently has a valid legal basis but its implementation is still being discussed at the central government level. At the same time, the existing career promotion policy was being reformulated by the Directorate General of Higher Education. As a consequence, some universities currently implement the 'traditional' legislation in which all acts are controlled by the central government and some still use the state-owned legal entity legislation, in which the implementation is based on the autonomy principle (or decentralisation system) (Supriyanto & Suparjo 2010). This condition may affect academics in performing academic tasks, and is assumed to have had an indirect impact on both the questionnaire and the interview surveys. It is believed that the two open-ended questions could minimise the limitations.

The current study was exploratory in nature employing a cross-sectional study, at a given point in time. It used a group of academic samples with certain criteria set out for the current study at public higher education institutions in Indonesia. The results, therefore, cannot be generalised to a wider community of education-sector contexts.

The use of concurrent-embedded mixed-methods has issues concerning the unequal sample size and findings. The study recruited larger samples for the quantitative study and fewer for the qualitative. However, because the two methods have different aims – the quantitative method is for a generalisation of findings and the qualitative method explores an in-depth phenomena – the present researcher has strong confidence in the results, as argued by Creswell and Plano Clark (2011, p. 183). In addition, the present findings were discussed and referenced to previous studies.

In conjunction with the web-based survey, including referral emails and the response rate issue, internet speed and access in some geographical areas were moderately slow or very slow. Most of the prospective respondents, therefore, were not able to download the questionnaire and submit their answers. The slow connection was

assumed to discourage respondents to take part in the online survey. Consequently, its response rate was considered low (see Table 4.1, Chapter Four). However, the limitation was overcome by the paper-based strategy in which it received a high response rate (see Table 4.1, Chapter Four). Overall, the rate of return for the current study was acceptable to carry out the analysis.

The internet samples using random sampling are assumed to indicate the characteristics of respondents, such as that they tended to be younger academics who were more familiar with the internet compared to their older counterparts, and were more critical towards any policies or decisions. The strategy was considered one of the effective ways to increase the response rate, and any biases they introduced were outside the researcher's control. To verify the data, the researcher conducted a univariate analysis to find the trend of the data and test the significance of demographic data. All data were significant enough to carry out further analysis. In addition, the selected demographic variables that were treated as control variables in statistical analysis helped control the demographic issue.

The sizes of the university may also be of concern relative to the opportunity of academics to develop their careers. The respondents were selected from small, medium-sized and large universities. Compared to medium-sized and small institutions, large universities usually give more autonomy to their academics in managing careers, but have a more competitive academic environment. Medium-sized and small universities, however, give more room for their academics to explore and exercise their talents and values to reach their goals. This condition was assumed to influence respondents when they filled out the questionnaires or when they were interviewed. Because the size of the university is out of the present researcher's control, it is considered to be a limitation of the study. To minimise the bias, a multistage area cluster sampling technique was applied to the current study for the universities sampling.

Schein's interview protocol that was adopted in the study only investigated academics' dominant career anchors. Although several themes referred to the dimensions of psychological empowerment (e.g., *personal integrity*) and job

satisfaction (e.g., *happiness*), it is recommended for future studies to develop questions to measure the two constructs in conjunction with the interview protocol.

The current study interviewed 20 academics for the qualitative analysis. Although the previous studies also used small number of samples, between 10 and 25 participants (e.g., Suutari & Taka 2004; Chang et al. 2011), the sample size of the current study is considered small compared to the total number of academics in all public universities in Indonesia (±70,000 people). There are some constraints to collecting the data to some areas. This limitation can be accepted because the state universities in Indonesia are spread over a wide geographical area and transport to some locations is limited and expensive. The limited number of samples has been accommodated by providing the open-ended questions on the survey questionnaires that were distributed to all universities using the online survey to capture more responses.

7.3 Recommendations for further study

Exploratory factor analysis found two new anchors: *work dedication* and *balanced-lifestyle*. It is suggested that follow-up studies on these findings be carried out and to analyse their reliability and validity for those who want to use these anchors.

It has been verified that the majority of the respondents tended to hold multiple career orientations. Multiple career anchors have been evident through the findings of both the quantitative and qualitative analysis. Previous studies also recognised the existence of multiple anchors (e.g., Marshall & Bonner 2003; Smith 2005; Ituma & Simpson 2007), but no further information, such as how the anchors were measured and what the combination of the anchors were, was found. An in-depth research on multiple career anchors is, therefore, recommended, using a longitudinal study design.

The octagonal diagram cannot be created in the current study. It is because all career anchor relationship pairs were grouped as *complementary* career anchors, and no pairs were revealed as *mutually exclusive* anchors. Because the pairing used Pearson's correlation matrix, it is suggested to use other statistical analyses for future studies to pair the anchors.

The investigation of career anchors in predicting psychological empowerment and job satisfaction in the current study was the first study conducted. Further, the results for the main effects, the mediating effects and the moderating effects yielded weak correlations. It is premature to conclude that career anchors have little influence on academics' career development even though the qualitative analysis determined the strong influence of organisational factors. The present researcher believes that there are some other internal motivations that have not been explored. It, therefore, is imperative to replicate this research in the future using a larger sample and more universities involved to have a greater understanding of the relationships.

The quantitative analysis of the current study that used seven anchors, including the two new anchors from the factor analysis results, resulted in statistically low contributions for the relationships between career anchors, psychological empowerment and job satisfaction. It is suggested that future research use nine anchor categories, as in the original source developed by Igbaria and Baroudi (1993), and the results can be compared with the present findings. In relation to the suggestion, confirmatory factor analysis could be considered to employ for the validity check.

The influence of cultural values in the current study framework has been discussed. As Feldman and Bolino (2000) stated that each organisation has its own culture. Future research is, therefore, suggested to examine the degree of cultural effects on the career anchors, psychological empowerment and job satisfaction relationships. In addition to Hofstede's (1980) typology, some other references can be used, such as Schein's (2010) pattern of shared basic assumptions, Cooke's examination of organisations' norms and goals (Cooke & Lafferty 1995), and Handy's model explaining the importance of understanding needs and employees' motivation within them (Handy, 1993). In the proposed model, cultural values can be tested as mediator or moderator.

Thematic analysis produced five new dominant career anchors: *academic freedom and creativity, work-family lifestyle, flexible working schedule, academic atmosphere* and *running a business*. The study also identified the *spiritual values* and *intangible recognition* themes that were considered to be included in the anchor categories. It

seems imperative to replicate the study, and to follow up the new scale with a validity and reliability analysis.

The findings of the *personal integrity* and *motivation and goal orientation* themes were reported as components of psychological empowerment, while *happiness* was a component of job satisfaction. Whether these themes are parts of the two constructs or are factors identified under other constructs that have not been investigated, more empirical studies are needed to clarify this ambiguity.

Job satisfaction is the only job outcome that was analysed in the current study. It is suggested to include other job outcomes, such as organisational commitment, organisational citizenship behaviours, job stress, strain, job effectiveness, absenteeism, and job performance, to determine how they are influenced by career anchors.

The current study was confined to 11 out of 34 provinces in Indonesia. It is suggested that future studies replicate this study in universities not included in the current study. Because each province has at least two public higher education institutions with diverse characteristics, universities and academics from every province and geographical location should be represented. Future studies should also consider a longitudinal research design to expand the concept of career anchors from the academic perspective at public higher education institutions. This would enable better generalisation of the findings. It is also recommended academics in the private higher education sector to be examined as a comparison, to enable a conclusion that is more meaningful and gives a more comprehensive understanding of career anchors.

Samples were chosen based on university sizes (small, medium-sized and large) along with the geographical zones (western, central & eastern regions). It is noted that each of the university sizes and regions has different characteristics. Future research examines the cluster of the university sizes and geographical locations, and compares their results. The results can be used to suggest refinements of career policy.

The current study gives a large amount of coverage to the quantitative method while the qualitative method is limited to some extent. The qualitative findings through the interviews and the open-ended questions, however, uncovered factors that strongly enhanced the quantitative findings. It is vital to employ these methods for future research, including interviewing more participants to get an inclusive notion of the career anchors and psychological empowerment concepts and their impact on satisfaction from Indonesian academics' perspectives. It is also suggested to employ the sequential mixed-methods approach to improve the balance of results between quantitative and qualitative analysis.

In relation to the small contribution of psychological empowerment in predicting the relationships between career anchors and job satisfaction, the current study assumed that there is a possibility of psychological empowerment that is not appropriate as a mediator or moderator. It is, therefore, suggested that future research examine psychological empowerment as a predictor and career anchors as moderators and mediators in predicting job satisfaction, and/or between demographic variables and job satisfaction in the context of Indonesian public universities. Using more attitudinal outcomes is recommended.

The influence of demographic characteristics was not examined in the research model in this study. Some selected demographic, variables including gender, education, age, institution size and experiences, however, were treated as control variables. Previous studies revealed that selected demographic factors influenced career anchors, psychological empowerment and job satisfaction. There is a need to explore demographic factors in the future as moderators, mediators and/or predictors related to the relationships of career anchors, psychological empowerment and job satisfaction. It might help in understanding the demographic role in individuals' career decisions.

A new research model has been introduced based on the present findings to explore the research topic. The model was an incorporation of the quantitative and qualitative findings. The results of qualitative analysis found eight new career anchor categories, and proposed two anchor categories, two facets of psychological empowerment and one dimension of job satisfaction. The study also determined a strong influence of

organisational factors and cultural values on the relationships between career anchors, psychological empowerment and job satisfaction. It is imperative to empirically test the proposed model for the future research direction and to employ a longitudinal study research design.

7.4 Contributions of the study

Previous literature has examined the influence of single dominant career anchors and the power of psychological empowerment at work in increasing the job satisfaction level of employees in the public and private sectors. The current study is the first study to investigate academics' career anchors and their relation to psychological empowerment and job satisfaction at Indonesian public universities. The findings suggested that the single dominant career anchors concept is challenged whereas the multiple career anchors concept is supported. The relationship pair anchors identified challenge the octagonal diagram of career anchors. However, the study proposes that organisational factors are more important than occupational self-concept (i.e., career anchors) in developing careers causing a moderate role of psychological empowerment in mediating and moderating the relationships of the other two constructs. The career anchors will increase or decrease the job satisfaction level depending on whether a low or high level of psychological empowerment exists. The study advances the career anchor categories from the single and multiple anchors perspectives, questioning the stability of career anchors, and extending the psychological empowerment and job satisfaction dimensions. The results contribute to the academics' understanding of the importance of career anchors which create a match between institutional and individual needs, and to the understanding of why revising existing career policy might be crucial in improving career outcomes and efficiency of the public universities, – i.e., focusing on performance-based evaluation, autonomous curriculum and multidisciplinary career paths. The study also shows the benefit of using open-ended questions in addition to two types of the self-administrative surveys and the interview method. Finally, the results support the notion of cultural influences that have not been fully explored in the current study.

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Appendices

Appendix 1: Differences in academic ranks and levels for some countries

Indonesia			Netherlands	Australia		Philippines	U.S.
Rank		Level	Rank	Rank	Level	Rank	Rank
*Profesor**	Professor	IV D - IV E	Full professor	Professor	E	Professor	Professor
				Associate professor	D	Associate professor	Associate professor
*Lektor Kepala**	Senior lecturer	IV A - IV B	Senior lecturer	Senior lecturer	C	Assistant professor	Assistant professor
*Lektor**	Lecturer	III C - III D	Lecturer	Lecturer	B	Instructor	Lecturer
*Asisten Ahli**	Associate lecturer	III B		Assistant lecturer	A		
* Indonesian language							

Source: European Commission 2008; Dikti 2009; http://www.eui.eu

Appendix 2: Categories and Items on the short form of career anchor inventory

Categories	Items
Managerial competence	The process of supervising, influencing, leading and controlling people at all level is…
	To be in charge of a whole organisation is…
	To rise to a high position in general management is…
Technical competence	Remaining in my specialized area as opposed to being promoted out of my area of expertise is…
	Remaining in my area of expertise throughout
	I will accept a management position only if it is my area of expertise.
Service	I want a career in which I can be committed and devoted to an important cause.
	Being able to use my skills and talents in the service of an important cause is…
	Using my skill to make the world a better place to live and work in is …
Autonomy	The chance to do things my own way and not to be constrained by the rules of an organization is…
	A career that is free from organization restrictions
	I do not want to be constrained by either an organization or the business world.
Economic security	An employer who will provide security through guaranteed work, benefits, a good retirement program, etc. is…
	An organization that will give me long-run stability is…
Geographical stability	Remaining in one geographical area rather than moving because of a promotion is…
	It is more important for me to remain in my present geographical location than to receive a promotion or new job assignment in another location.
Pure challenge	Working on problems that are almost insoluble is…
	The only real challenge in my career has been confronting and solving tough problems, no matter what area they were in.
	I feel successful only if I am constantly challenged by a tough problem or a competitive situation.
Lifestyle	Developing a career that permits me to continue to pursue my own lifestyle is…
	A career is worthwhile only if it enables me to lead my life in my own way.
	Choosing and maintaining a certain lifestyle is more important than career success.
Entrepreneurial creativity	Building a new business enterprise is…
	I am always on the look out for ideas that would permit me to start and build own enterprise.
	I have always wanted to start and build up a business of my own.
Source: Igbaria and Baroudi (1993, pp. 53-54).	

Appendix 3: Facets of the psychological empowerment scale

Facets	Items
Meaning	The work I do is very important to me.
	My job activities are personally meaningful to me.
	The work I do is meaningful to me.
Competence	I am confident about my ability to do my job.
	I am self-assured about my capabilities to perform my work activities.
	I have mastered the skills necessary for my job.
Self-determination	I have significant autonomy in determining how I do my job.
	I can decide on my own how to go about my work.
	I have considerable opportunity for independence and freedom. in how I do my job.
Impact	My impact on what happens in my department is large.
	I have a great deal of control over what happens in my department.
	I have significant influence over what happens in my department.
Source: Spreitzer (2009, p. 1465).	

Appendix 4: Dimension of the job satisfaction scale

Dimension	Items
Job satisfaction	Generally speaking, I am very satisfied with this job.
	I am generally satisfied with the kind of work I do in this job.
	Most people on this job are very satisfied with the job.
Source: Oldham and Hackman (1975, p. 51).	

Appendix 5: A set of questionnaire

(Participant Information sheet – **English version**)

University of Wollongong

School of Management and Marketing
University of Wollongong
Northfield Avenue,
Wollongong, NSW 2522
Australia
Phone: +61 2 4221 3707
Fax: +61 2 4221 4154
Email: smm-enquiries@uow.edu.au

October 2012

Dear Respondents,

As a PhD candidate in the School of Management and Marketing, the University of Wollongong, Australia, I am currently conducting research on career motivation and individual's outcome. The specific aim of this study is to explore how employees in Indonesia think about their career goals. I would like to seek your support to take a part in this important survey. Your employer has agreed that I may approach you to request your participation by completing the attached questionnaire. The questionnaire should take approximately 20-25 minutes to complete. Your participation in this survey is completely voluntary. You may withdraw from the survey at any time without any risk to your current or future employment with your institution.

Please be assured that your responses will be kept strictly confidential. No individual or personal details will be identified. You are not asked to identify yourself in the survey. Data gathered will be stored in the secured cabinet and location and reported in the aggregated. So that, all answer will be confidential to me as the researcher and my two supervisors. The data will be destroyed after five years.

Your responses are important to the success of this research. Please ensure that you answer all the questions and kindly return it to the researcher. By completing and returning the questionnaire, it is indicated your willingness and understanding to participate in this survey.

You only need to feel this questionnaire once. Please leave this survey if you have already completed one.

Thank you for taking the time to participate in this study. Your support is greatly appreciated. Should you have any further queries, please feel free to contact me or one of my supervisors: Associate Professor Samuel Garrett-Jones on +61242214359, by email: sgarrett@uow.edu.au and Associate Professor Mario Fernando on +61242214053, by email: mariof@uow.edu.au.

This study has been approved by the Human Research Ethics Committee of the University of Wollongong. If you require any further information concerning the survey, please contact the research service office on +61242213386, fax: +61242214338, rso-ethics@uow.edu.au

Sincerely yours,

Meiliani
Telp.: +61415087484
Email: m330@uowmail.edu.au

A. ***Listed below are descriptive statements describing your view of career orientation. Please tick (√) clearly in the box that best indicates the importance of each item. The scale is numbered as 1 = of no importance to 6 = centrally important.***

	Of no importance 1	2	3	4	5	Centrally important 6
1. The process of supervising, influencing, leading and controlling people at all level is…	☐	☐	☐	☐	☐	☐
2. The chance to do things my own way and not to be constrained by the rules of an organization is…	☐	☐	☐	☐	☐	☐
3. An employer who will provide security through guaranteed work, benefits, a good retirement program, etc. is…	☐	☐	☐	☐	☐	☐
4. Working on problems that are almost insoluble is…	☐	☐	☐	☐	☐	☐
5. Remaining in my specialized area as opposed to being promoted out of my area of expertise is…	☐	☐	☐	☐	☐	☐
6. To be in charge of a whole organization is…	☐	☐	☐	☐	☐	☐
7. A career that is free from organization restrictions	☐	☐	☐	☐	☐	☐
8. An organization that will give me long-run stability is…	☐	☐	☐	☐	☐	☐
9. Using my skill to make the world a better place to live and work in is …	☐	☐	☐	☐	☐	☐
10. Developing a career that permits me to continue to pursue my own lifestyle is…	☐	☐	☐	☐	☐	☐
11. Building a new business enterprise is…	☐	☐	☐	☐	☐	☐
12. Remaining in my area of expertise throughout my career is …	☐	☐	☐	☐	☐	☐
13. To rise to a high position in general management is…	☐	☐	☐	☐	☐	☐
14. Remaining in one geographical area rather than moving because of a promotion is…	☐	☐	☐	☐	☐	☐
15. Being able to use my skills and talents in the service of an important cause is…	☐	☐	☐	☐	☐	☐

 # Other comments on your view of your working life (optional):

_____

_____

_____

B. ***Listed below are descriptive statements about <u>your career preferences</u>. Please tick (√) clearly in the box that best indicates the truth of each item. The scale is numbered as 1 = not at all true to 6 = completely true.***

	Not at all true 1	2	3	4	5	Completely true 6
16. The only real challenge in my career has been confronting and solving tough problems, no matter what area they were in.	☐	☐	☐	☐	☐	☐
17. I am always on the look out for ideas that would permit me to start and build own enterprise.	☐	☐	☐	☐	☐	☐
18. It is more important for me to remain in my present geographical location than to receive a promotion or new job assignment in another location.	☐	☐	☐	☐	☐	☐
19. A career is worthwhile only if it enables me to lead my life in my own way.	☐	☐	☐	☐	☐	☐
20. I will accept a management position only if it is my area of expertise.	☐	☐	☐	☐	☐	☐
21. I do not want to be constrained by either an organization or the business world.	☐	☐	☐	☐	☐	☐
22. I want a career in which I can be committed and devoted to an important cause.	☐	☐	☐	☐	☐	☐
23. I feel successful only if I am constantly challenged by a tough problem or a competitive situation.	☐	☐	☐	☐	☐	☐
24. Choosing and maintaining a certain lifestyle is more important than career success.	☐	☐	☐	☐	☐	☐
25. I have always wanted to start and build up a business of my own.	☐	☐	☐	☐	☐	☐

 # Other comments on your career preferences (optional):

_____

_____

C. For each of ***the following statements, please indicate your degree of agreement or disagreement by ticking (√) clearly in the box that best represent <u>your feelings</u>. The scale is numbered as 1 = strongly disagree to 6 = strongly agree***

	Strongly disagree 1	2	3	4	5	Strongly agree 6
26. Generally speaking, I am very satisfied with this job.	☐	☐	☐	☐	☐	☐
27. I am generally satisfied with the kind of work I do in this job.	☐	☐	☐	☐	☐	☐
28. Most people on this job are very satisfied with the job.	☐	☐	☐	☐	☐	☐

 # Other comments on your feeling about current job (optional):

_____

_____

_____

D. ***For each statement, I would like you to rate your own intrinsic task motivation by ticking (√) clearly the appropriate response. The scale is numbered as 1 = strongly disagree to 6 = strongly agree.***

	Strongly disagree 1	2	3	4	5	Strongly agree 6
29. The work I do is very important to me.	☐	☐	☐	☐	☐	☐
30. My job activities are personally meaningful to me	☐	☐	☐	☐	☐	☐
31. The work I do is meaningful to me.	☐	☐	☐	☐	☐	☐
32. I am confident about my ability to do my job.	☐	☐	☐	☐	☐	☐
33. I am self-assured about my capabilities to perform my work activities.	☐	☐	☐	☐	☐	☐
34. I have mastered the skills necessary for my job.	☐	☐	☐	☐	☐	☐
35. I have significant autonomy in determining how I do my job.	☐	☐	☐	☐	☐	☐
36. I can decide on my own how to go about my work.	☐	☐	☐	☐	☐	☐
37. I have considerable opportunity for independence and freedom in how I do my job.	☐	☐	☐	☐	☐	☐
38. My impact on what happens in my department is large.	☐	☐	☐	☐	☐	☐
39. I have a great deal of control over what happens in my department.	☐	☐	☐	☐	☐	☐
40. I have significant influence over what happens in my department.	☐	☐	☐	☐	☐	☐

 # Other comments on your feeling about intrinsic task motivation (optional):

_____

_____

_____

C. Your opinion

We would be interested in anything you might have to say in response to the following questions.

1. What factors influence your internal career motivation?

_____

_____

2. How well does your institution support your career motivation or goals?

_____

_____

Demographic Background

1. Your employment status at this institution: ☐ Contract ☐ Probation ☐ Permanent
☐ Private employee ☐ Other (please specify)_____

2. Your gender: ☐ Female ☐ Male

3. When did you complete your first degree? (year)_____

4. What was your first degree discipline or major: _____

5. What is the highest level of education you have attained: _____

5a. Where did you obtain this degree: ☐ Indonesia ☐ Other country (name) _____

6. How long have you been working with this institution?_____Years _____ Months

7. Your institution type: ☐ Public university ☐ Private university ☐ Other (please specify)_____

8. Your institution size: ☐ Small (< 5,000 students) ☐ middle-sized (5,000-10,000 students)
☐ Large (>10,000 students)

9. Your structural or managerial position(s) held at present? _____

10. Your present functional position: ☐ Asisten Ahli ☐ Lektor ☐ Lektor Kepala ☐ Profesor
☐ Other (please specify)_____

11. Your age: ☐<25 y.o.☐ 25-35 y.o. ☐ 36-45 y.o. ☐ 46-55 y.o. ☐ >56 y.o.

12. Your marital status: ☐ Single ☐ Married ☐Other (please specify)_____

13. Your ethnicity (please specify) _____

14. Your religion: ☐ Islam ☐ Catholic ☐ Protestant ☐ Buddhism ☐ Hinduism
☐ Kong Hu Chu ☐ Other (please specify)_____

Your participation and cooperation in this study is greatly appreciated.

Thank you.

(Participant Information Sheet – **Indonesian version**)

University of Wollongong

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Oktober 2011

Bapak/Ibu dosen yang saya hormati,

Pada saat ini saya sedang melakukan penelitian dengan topik orientasi karir internal di tempat kerja, dalam rangka penyelesaian disertasi program doktor di School of Management and Marketing, University of Wollongong, Australia. Penelitian ini bertujuan untuk mengeksplorasi ***bagaimana pengembangan konsep diri* yang meliputi: *bakat, motivasi dan sikap dalam memilih karir.*** Data yang terkumpul akan digunakan untuk keperluan analisis studi, dan hasilnya akan dilaporkan dalam tesis dan dipublikasikan melalui tulisan ilmiah pada jurnal dan/atau konferensi.

Sehubungan dengan hal tersebut, saya mohon dukungan Bapak/Ibu untuk berpartisipasi dalam penelitian ini dengan cara mengisi kuesioner yang tersedia. Pengisian kuesioner hanya membutuhkan waktu 20-25 menit. Jawaban Bapak/Ibu akan dijaga kerahasiaannya. Tidak ada data pribadi yang akan diidentifikasi termasuk nama dan universitas di tempat Bapak/Ibu bekerja. Jawaban Bapak/Ibu sangat penting bagi keberhasilan penelitian ini. Oleh karena itu, saya mohon kesediaan Bapak/Ibu untuk mengisi semua pertanyaan dan pernyataan yang terdapat di dalam kuesioner. Dengan mengisi dan mengembalikan kuesioner kepada saya, berarti Bapak/Ibu telah menyatakan kesediaan ikut dalam survei ini. Partisipasi Bapak/Ibu adalah sukarela.

Bapak/Ibu hanya diminta untuk mengisi kuesioner ini '*sekali*'. Jika pengisian dan pengembalian kuesioner telah dilakukan, dimohon untuk tidak mengisinya kembali.

Partisipasi Bapak/Ibu pada survei ini sangat saya hargai dan saya ucapkan terima kasih.

Penelitian ini telah disetujui oleh Human Research Ethics Committee, University of Wollongong. Akan tetapi, jika Bapak/Ibu masih mempunyai pertanyaan lanjut sehubungan dengan survei ini, silakan hubungi pembimbing saya: Associate Professor Sam Garrett-Jones (telp.: +61242214359, email: sgarrett@uow.edu.au) dan Associate Professor Mario Fernando (telp.: +61242214053, email: mariof@uow.edu.au) atau Research Service Office (telp.: +61242213386, faks.: +6142214338, email: rso@uow.edu.au).

Hormat saya,

Meiliani
Telp.: +6281298265510
Email: m330@uowmail.edu.au
Dosen Jurusan Manajemen
Universitas Bengkulu

A. Pernyataan-pernyataan di bawah ini menggambarkan **pandangan individual Bapak/Ibu yang berkaitan dengan *orientasi karir dalam dunia kerja.*** Skala pilihan dimulai dari ***1 = sangat tidak penting*** sampai ***6 = sangat penting***. Silahkan merespon dengan cara memberi tanda ✓ pada satu kotak yang paling sesuai dengan pendapat Bapak/Ibu.

	Sangat tidak penting 1	2	3	4	5	Sangat penting 6
1. Proses mensupervisi, mempengaruhi, memimpin dan mengontrol orang-orang pada semua tingkat adalah...	☐	☐	☐	☐	☐	☐
2. Kesempatan melakukan sesuatu menurut cara saya sendiri dan tidak dibatasi oleh peraturan organisasi/institusi adalah...	☐	☐	☐	☐	☐	☐
3. Pimpinan yang akan menyediakan rasa aman melalui jaminan pekerjaan, tunjangan, program pensiun yang baik, dll. adalah...	☐	☐	☐	☐	☐	☐
4. Mengerjakan berbagai permasalahan yang hampir tidak memiliki jalan keluarnya adalah…	☐	☐	☐	☐	☐	☐
5. Tetap berada dalam bidang keahlian saya daripada dipromosikan di luar bidang keahlian saya adalah...	☐	☐	☐	☐	☐	☐
6. Terlibat terhadap keseluruhan organisasi/institusi adalah…	☐	☐	☐	☐	☐	☐
7. Suatu karir yang bebas dari batasan aturan organisasi/institusi adalah.....	☐	☐	☐	☐	☐	☐
8. Suatu organisasi/institusi yang akan memberikan saya stabilitas pekerjaan jangka panjang adalah…	☐	☐	☐	☐	☐	☐
9. Menggunakan kemampuan saya untuk membuat dunia lebih baik sebagai tempat tinggal dan bekerja adalah...	☐	☐	☐	☐	☐	☐
10. Mengembangkan karir yang memungkinkan saya untuk terus mengejar gaya hidup saya sendiri adalah…	☐	☐	☐	☐	☐	☐
11. Membangun suatu usaha (bisnis) baru adalah...	☐	☐	☐	☐	☐	☐
12. Tetap berada dalam bidang keahlian saya sepanjang karir saya adalah…	☐	☐	☐	☐	☐	☐
13. Untuk naik ke posisi yang tinggi pada tingkat manajerial umum adalah...	☐	☐	☐	☐	☐	☐
14. Tetap berada dalam satu wilayah geografis daripada pindah ke wilayah lain karena suatu promosi adalah...	☐	☐	☐	☐	☐	☐
15. Mampu menggunakan keahlian dan bakat saya dalam membantu suatu hal yang penting adalah...	☐	☐	☐	☐	☐	☐

Jika Bapak/Ibu mempunyai pendapat lain tentang orientasi kerja, silahkan kemukakan di sini:

_____

_____

_____

B. Pernyataan-pernyataan di bawah ini berhubungan dengan **pandangan individual Bapak/Ibu terhadap *preferensi karir*.** Skala pilihan dimulai dari ***1 = tidak benar sama sekali*** sampai ***6 = sangat benar***. Silahkan memberi tanda ✓ pada satu kotak yang paling sesuai dengan pendapat Bapak/Ibu.

	Tidak benar sama sekali 1	2	3	4	5	Sangat benar 6
16. Satu-satunya tantangan nyata dalam karir saya adalah ketika menghadapi dan menyelesaikan masalah sulit dalam segala bidang.	☐	☐	☐	☐	☐	☐
17. Saya selalu mencari ide yang memungkinkan untuk memulai dan membangun usaha (bisnis) sendiri.	☐	☐	☐	☐	☐	☐
18. Lebih penting bagi saya untuk tetap berada pada lokasi geografis kerja sekarang daripada menerima Promosi atau pekerjaan baru di lokasi lain.	☐	☐	☐	☐	☐	☐
19. Suatu karir akan bernilai jika karir tersebut memungkinkan saya untuk menjalankan hidup dengan cara saya sendiri.	☐	☐	☐	☐	☐	☐
20. Saya akan menerima posisi managerial jika sesuai dengan bidang keahlian saya.	☐	☐	☐	☐	☐	☐
21. Saya tidak ingin dibatasi oleh organisasi/ institusi atau dunia bisnis dalam berkarir.	☐	☐	☐	☐	☐	☐
22. Saya menginginkan karir di mana saya terikat dan mengabdi pada suatu hal yang penting.	☐	☐	☐	☐	☐	☐
23. Saya merasa berhasil jika saya ditantang terus menerus oleh masalah yang rumit atau situasi yang kompetitif.	☐	☐	☐	☐	☐	☐
24 Memilih dan mempertahankan suatu gaya hidup tertentu adalah lebih penting daripada suatu karir yang berhasil.	☐	☐	☐	☐	☐	☐
25. Saya selalu berkeinginan memulai dan membangun bisnis saya sendiri.	☐	☐	☐	☐	☐	☐

Jika Bapak/Ibu mempunyai pendapat lain tentang preferensi karir, silahkan kemukakan di sini:

_____

_____

_____

C. Pernyataan-pernyataan di bawah ini meminta **Bapak/Ibu sebagai individu untuk menskala *tingkat kepuasan atas pekerjaannya.*** Skala pilihan dimulai dari ***1 = sangat tidak setuju*** sampai ***6 = sangat setuju***. Silahkan memberi tanda ✓ pada satu kotak yang paling sesuai dengan pendapat Bapak/Ibu.

	Sangat tidak setuju 1	2	3	4	5	Sangat setuju 6
26. Pada dasarnya, saya sangat puas dengan pekerjaan ini	☐	☐	☐	☐	☐	☐
27. Pada umumnya, saya puas dengan jenis pekerjaan yang saya kerjakan.	☐	☐	☐	☐	☐	☐
28. Umumnya, orang-orang yang bekerja pada pekerjaan ini sangat puas dengan pekerjaannya.	☐	☐	☐	☐	☐	☐

Jika Bapak/Ibu mempunyai pendapat lain tentang kepuasan kerja, silahkan kemukakan di sini:

_____

_____

D. Pernyataan-pernyataan di bawah ini berhubungan dengan **persepsi Bapak/Ibu terhadap *tugas dan peranannya* di tempat kerja.** Skala pilihan dimulai dari ***1 = sangat tidak setuju*** sampai ***6 = sangat setuju*** Silahkan memberi tanda ✓ pada satu kotak yang paling sesuai dengan pendapat Bapak/Ibu.

	Sangat tidak setuju 1	2	3	4	5	Sangat setuju 6
29. Pekerjaan yang saya lakukan sangat penting bagi saya.	☐	☐	☐	☐	☐	☐
30. Aktivitas pekerjaan saya secara pribadi berarti bagi saya.	☐	☐	☐	☐	☐	☐
31. Pekerjaan yang saya lakukan adalah berarti bagi saya.	☐	☐	☐	☐	☐	☐
32. Saya yakin pada kemampuan saya untuk melakukan pekerjaan saya.	☐	☐	☐	☐	☐	☐
33. Saya percaya diri pada kemampuan saya untuk melakukan aktivitas pekerjaan saya.	☐	☐	☐	☐	☐	☐
34. Saya telah menguasai keterampilan yang diperlukan untuk perkerjaan saya.	☐	☐	☐	☐	☐	☐
35. Saya memiliki otonomi yang signifikan dalam menentukan bagaimana saya melakukan pekerjaan saya.	☐	☐	☐	☐	☐	☐
36. Saya dapat memutuskan sendiri bagaimana cara saya melakukan pekerjaan saya.	☐	☐	☐	☐	☐	☐
37. Saya memiliki kesempatan besar untuk tidak tergantung dan bebas dalam cara saya melakukan pekerjaan saya.	☐	☐	☐	☐	☐	☐
38. Keberadaan saya berdampak besar terhadap apa yang terjadi di departemen/unit kerja saya.	☐	☐	☐	☐	☐	☐

39. Saya memiliki kontrol yang besar atas apa yang terjadi di departemen/unit kerja saya. ☐ ☐ ☐ ☐ ☐ ☐

40. Saya memiliki pengaruh yang signifikan atas apa yang terjadi di departemen/unit kerja saya. ☐ ☐ ☐ ☐ ☐ ☐

Jika Bapak/Ibu mempunyai pendapat lain tentang tugas dan peranannya di tempat kerja, silahkan kemukakan di sini:

_____

_____

E. Opini sendiri

1. Faktor-faktor apa saja yang mempengaruhi motivasi karir internal Bapak/Ibu?

_____

_____

2. Seberapa besar institusi/organisasi sekarang mendukung motivasi karir internal Bapak/Ibu? (Mohon penjelasan)

_____

_____

Informasi Demografi

1. Status pekerjaan Bapak/Ibu pada institusi/organsiasi ini: ☐ Kontrak ☐ CPNS ☐ PNS ☐ Dosen Swasta ☐ Lainnya (sebutkan)____
2. Jenis kelamin Bapak/Ibu: ☐ Perempuan ☐ Pria
3. Tahun Bapak/Ibu menyelesaikan kuliah S1 (Sarjana): (sebutkan)_____
4. Jurusan bidang keahlian Bapak/Ibu saat S1: (sebutkan)_____
5. Jenjang pendidikan tertinggi yang diperoleh Bapak/Ibu: (sebutkan)_____

5a. Di mana Bapak/Ibu memperoleh gelar pendidikan tersebut? ☐ Indonesia ☐ Negara lain (sebutkan)_

6. Berapa lama Bapak/Ibu bekerja pada perguruan tinggi ini?_____Tahun _____ Bulan
7. Tipe perguruan tinggi tempat Bapak/Ibu bekerja: ☐ PTN ☐ PTS ☐ Lainnya (sebutkan) _____
8. Jumlah mahasiswa di perguruan tinggi Bapak/Ibu: ☐ <5.000 ☐ 5.000-10.000 ☐ >10.000
9. Jabatan struktural/managerial yang diduduki saat ini: (Sebutkan)_____

10. Jabatan fungsional akademik terakhir Bapak/Ibu: ☐ Asisten Ahli ☐ Lektor ☐ Lektor Kepala ☐ Profesor ☐ Lainnya (sebutkan)_____
11. Usia Bapak/Ibu saat ini: ☐ ≤25 thn. ☐ 26-35 thn. ☐ 36-45 thn. ☐ 46-55 thn. ☐ ≥56 thn.
12. Status pernikahan Bapak/Ibu: ☐ Lajang ☐ Menikah ☐ Lainnya (sebutkan) _____
13. Etnis Bapak/Ibu: (Sebutkan) _____

14. Agama yang diyakini Bapak/Ibu: ☐Buddha ☐Hindu ☐Islam ☐Katolik ☐Kong Hu Chu ☐ Protestan ☐ Lainnya (sebutkan)_____

Terima kasih atas partisipasi dan kerjasama Bapak/Ibu.

Appendix 6: Interview protocol of career anchors (English version)

Questions:

1. *First Job*. What was your first real job after your education?

   What were you looking for in your first job?
   Why did you make that choice?

2. *Goals*. What were your ambitions or long-range goals when you started your career?

   How did the first job work out in terms of your goals?

3. *Next job*. What was your next major change in your job or career?

   Who initiated the change?
   What were the reasons?
   How did you feel about the change?
   How did it relate to your goals?

4. As you look back over your career and life so far, do you see any major transition points, times when the change seemed more than routine?

   What was the transition?

   Who initiated it?

   How do you feel?

   How did it relate to your goals?

5. As you look back over your career and life so far, can you describe some times that you especially enjoyed or do not enjoy?

   What was it about those times that made them enjoyable or do not enjoy?

6. Have you ever refused a job or promotion? If yes, why did you refuse it?

   As you look ahead in your career, are there things you avoid or afraid of?

   What makes you avoid them or afraid of them?

7. Have your ambitions or long-range goals change since you started your career?

   When? Why?

8. What do you think will actually happen in the next ten years of your career?

   What are you really good at?

9. Do you have any comments about yourself that you would like to make?

Source: Schein (2006a, pp. 38-55).

Interview protocol – **Indonesian** version

Daftar pertanyaan untuk wawancara

1. Perkerjaan pertama kali. Apakah pekerjaan Bapak/Ibu setelah lulus kuliah S1?

   Apa yang Bapak/Ibu cari pada pekerjaan tersebut?
   Mengapa Bapak/Ibu membuat keputusan tersebut?

2. Tujuan. Apakah tujuan jangka panjang ketika Bapak/Ibu memulai karir?

   Bagaimana hasil pekerjaan pertama terhadap tujuan tersebut?

3. Pekerjaan berikutnya. Perubahan besar apa pada karir Bapak/ibu berikutnya?

   Siapa yang berinisiatif?
   Apa alasannya?
   Bagaimana perasaan Bapak/Ibu terhadap perubahan tersebut?
   Bagaimana perubahan tersebut jika dihubungkan dengan tujuannya?

4. Jika Bapak/Ibu merefleksikan karirnya kembali, apakah Bapak/Ibu melihat poin pokok perubahan transisi? [waktu ketika perubahan kelihatannya lebih sebagai rutinitas?]

   Apakah transisi tersebut? Siapa yang berinisistif?
   Bagaimana perasaan Bapak/Ibu terhadap perubahan tersebut?
   Bagaimana perubahan tersebut jika dihubungkan dengan tujuannya?

5. Jika Bapak/Ibu merefleksikan karir kembali, dapatkah Bapak/Ibu menjelaskan kapan waktunya menikmati/tidak menikmati karir tersebut?

   Apakah peristiwa tersebut yang membuat Bapak/Ibu menikmati/tidak menikmati karir tersebut?

6. Pernahkah Bapak/Ibu menolak suatu pekerjaan atau promosi? Jika ya, mengapa?

   Jika Bapak/Ibu melihat ke depan, apakah ada yang dihindari/ditakutkan?
   Apakah yang membuat Bapak/Ibu menghindarinya?

7. Sudahkah tujuan jangka panjang Bapak/Ibu berubah sejak permulaan?

   Kapan? Mengapa?

8. Apa yang Bapak/Ibu pikirkan akan terjadi dengan karirnya dalam 10 tahun mendatang?

9. Apakah Bapak/Ibu mempunyai pendapat tentang diri sendiri terhadap karir yang dijalankan?

Appendix 7: University samples

Region	Institutional Approach	Individual approach
West	University A (L)	University G (L)
	University B (M)	University H (M)
	University C (M)	University I (M)
	University D (L)	University J (L)
		University K (L)
Central	University E (L)	University L (S)
		University M (M)
		University N (M)
East	University F (M)	
L = Large size; M = Medium-sized; S = Small size		

Appendix 8: Missing values examination of the measurement

Statistics

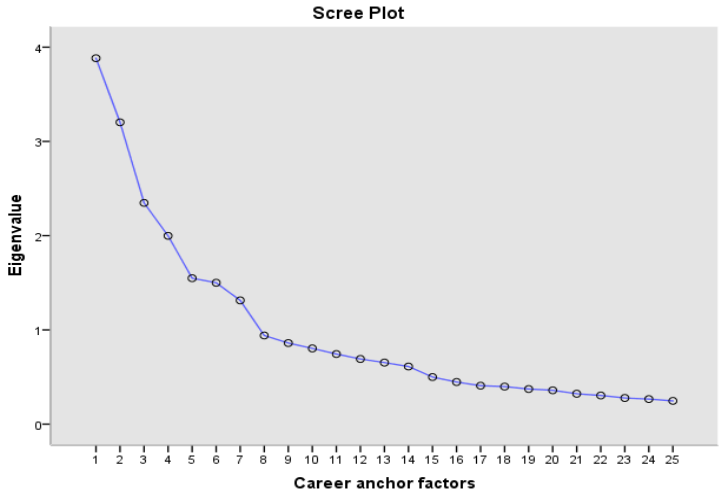
Career anchors	N			N	
	Valid	Missing	Valid	Valid	Missing
Managerial competence 1	585	0	Job satisfaction 1	585	0
Managerial competence 2	585	0	Job satisfaction 2	585	0
Managerial competence 3	585	0	Job satisfaction 3	585	0
Autonomy 1	585	0	Meaning 1	585	0
Autonomy 2	585	0	Meaning 2	585	0
Autonomy 3	585	0	Meaning 3	585	0
Economic Security 1	585	0	Competence 1	585	0
Economic security 2	585	0	Competence 2	585	0
Pure challenge 1	585	0	Competence 3	585	0
Pure challenge 2	585	0	Self-determination 1	585	0
Pure challenge 3	585	0	Self-determination 2	585	0
Technical competence 1	585	0	Self-determination 3	585	0
Technical competence 2	585	0	Impact 1	585	0
Technical competence 3	585	0	Impact 2	585	0
Service 1	585	0	Impact 3	585	0
Service 2	585	0	Job satisfaction 1	585	0
Service 3	585	0			
Entrepreneurship 1	585	0			
Entrepreneurship 2	585	0			
Entrepreneurship 3	585	0			
Geographic stability 1	585	0			
Geographic stability 2	585	0			
Lifestyle 1	585	0			
Lifestyle 2	585	0			
Lifestyle 3	585	0			

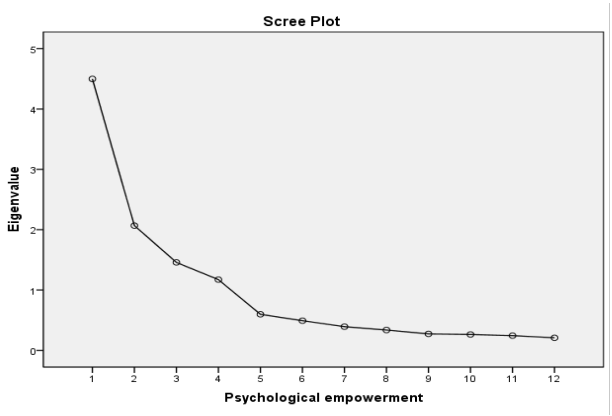
Appendix 9: Demographic background information of respondents

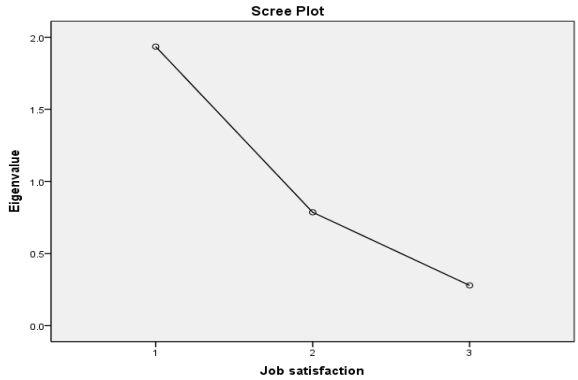
Description	∑	%	Description	∑	%
Year of first degree completion			**Marital status**		
1990 and before	250	42.74	Married	519	88.72
1991 to 2000	159	27.18	Single	56	9.57
2001 and after	79	13.50	Others	6	1.03
Total	488	83.42	Total	581	99.32
First degree major			**Functional titles**		
Plant sciences	129	22.05	Assistant lecturer	86	14.70
Economics	83	14.19	Lecturer	193	32.99
Engineering	78	13.33	Senior lecturer	273	46.67
Education	70	11.97	Professor	33	5.64
Mathematics & Natural sciences	68	11.62	Total	585	100.00
Social sciences & Humanities	51	8.72	**Managerial position**		
Health science	49	8.38	Vice Rector	5	0.85
Language	17	2.91	Dean	12	2.05
Religion & Philosophy	16	2.74	Vice Dean	19	3.25
Animal science	11	1.88	Head of School/Department	87	14.87
Art, Design & Media	9	1.54	Head of Postgraduate Studies	8	1.37
Medicine	3	0.51	Head of Unit	27	4.62
Total	584	99.83	Total	158	27.01
Place of study			**Ethnicity**		
Indonesia	434	74.19	Javanese	176	30.09
United States	48	8.21	Malay	66	11.28
Australian	34	5.81	Minangkabau	50	8.55
Japan	11	1.88	Ambonese	32	5.47
Philippines	10	1.71	Balinese	23	3.93
France	8	1.37	Batak	19	3.25
Malaysia	8	1.37	Sundanese	17	2.91
United Kingdom	6	1.03	Bugis	12	2.05
Germany	6	1.03	Acehnese	11	1.88
Canada	5	0.85	Chinese	7	1.20
Netherland	4	0.68	Banjar	4	0.68
New Zealand	3	0.51	Flores	3	0.51
Others	8	1.37	Toraja	3	0.51
Total	585	100.00	Others	2	0.34
Religion			Total	425	72.65
Islam	442	75.56			
Protestant	79	13.50			
Hinduism	29	4.96			
Catholic	15	2.56			
Buddhism	2	0.34			
Total	567	96.92			

*Frequency **Percentage

Appendix 10: Scree plot of the scale







Appendix 11: Correlation matrix

	F1	F2	EN	SV	MC	PC	ES	MN	IP	CP	SD	JS
F1	1											
F2	-.055	1										
EN	.279**	.023	1									
SV	.117**	.087*	-.048	1								
MC	.025	.045	.090*	.222**	1							
PC	.144**	.202**	.170**	.168**	.122**	1						
ES	.025**	.161**	.028	.136**	.071	.142**	1					
MN	.371**	-.063	.249**	.272**	.211**	.160**	.045	1				
IP	.231**	-.024	.186**	.153**	.348**	.120**	.025	.288**	1			
CP	.007	.110**	.110**	.263**	.197**	.078	.131**	.456**	.171**	1		
SD	.219**	.327**	.235**	.202**	.177**	.162**	.110**	.320**	.354**	.326**	1	
JS	.391**	-.057	.179**	.171**	.235**	.246**	.069	.460**	.294**	.247**	.226**	1
Mean	4.017	3.772	4.070	4.930	4.460	3.858	5.184	5.218	4.077	5.363	4.523	4.421
SD	1.119	.994	1.163	.897	1.058	1.05	1.047	.785	1.207	.647	.888	.843

**Correlation is significant at the 0.01 level (2-tailed)

F1=factor1, F2=Factor2, EN=Entrepreneurship, SV=Service, MC=Managerial competence, PC=Pure challenge, ES=Economic security, MN=Meaning, IP=Impact, CP=Competence, SD=Self-determination, JS=Job satisfaction

Appendix 12: Bivariate correlation of career anchors

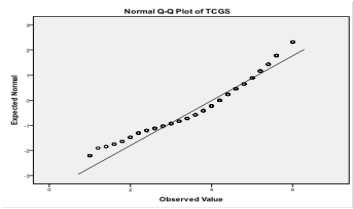
Correlations								
		WD	BLS	EN	SV	MC	PC	ES
WD	Pearson Correlation	1						
BLS	Pearson Correlation	-.055	1					
	Sig. (2-tailed)	.188						
EN	Pearson Correlation	.279**	.023	1				
	Sig. (2-tailed)	.000	.586					
SV	Pearson Correlation	.117**	.087*	-.048	1			
	Sig. (2-tailed)	.005	.036	.245				
MC	Pearson Correlation	.025	.045	.090*	.222**	1		
	Sig. (2-tailed)	.539	.272	.030	.000			
PC	Pearson Correlation	.144**	.202**	.170**	.168**	.122**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.003		
ES	Pearson Correlation	.025	.161**	.028	.136**	.071	.142**	1
	Sig. (2-tailed)	.545	.000	.498	.001	.086	.001	

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

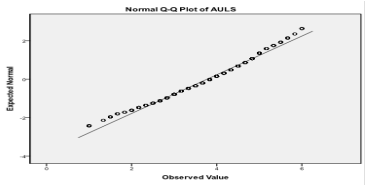
WD=Work dedication, BLS=Balanced-lifestyle, EN=Entrepreneurship, SV=Service, MC=Managerial competence, PC=Pure challenge, ES=Economic security

Appendix 13: Q-Q normal plot

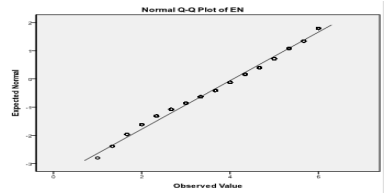
Work dedication



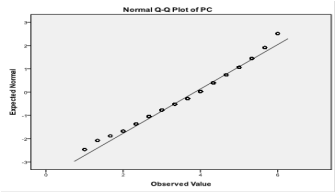
Balanced-lifestyle



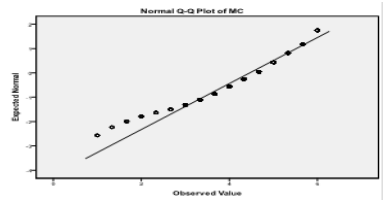
Entrepreneurial creativity



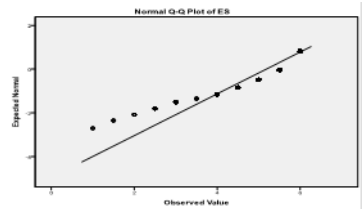
Pure challenge



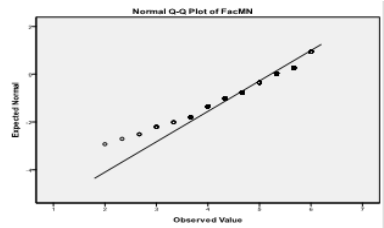
Managerial competence



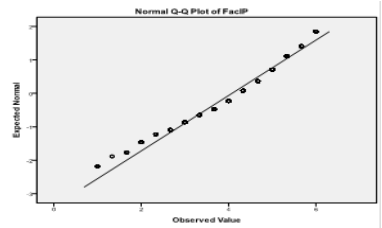
Economic security



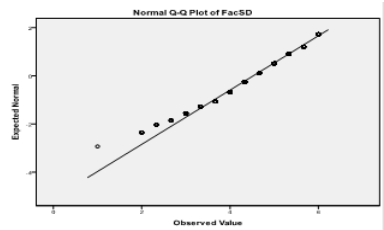
Meaning



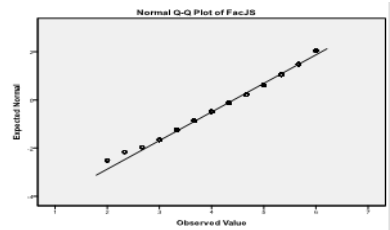
Impact



Self-determination



Job satisfaction



Appendix 14: Mahalanobis distance scores

Career anchors and job satisfaction relationship, career anchors and psychological empowerment relationship

	Minimum	Maximum	Mean	Std. Deviation	N
Std. Predicted Value	-3.313	2.577	.000	1.000	585
Mahal. Distance	3.295	39.827	**11.979**	6.269	585

Psychological empowerment and job satisfaction relationship

	Minimum	Maximum	Mean	Std. Deviation	N
Std. Predicted Value	-4.208	1.752	.000	1.000	585
Mahal. Distance	2.736	47.127	**8.985**	4.922	585

Career anchors, psychological empowerment and job satisfaction relationship

	Minimum	Maximum	Mean	Std. Deviation	N
Std. Predicted Value	-4.333	2.182	.000	1.000	585
Mahal. Distance	4.676	59.937	**15.973**	8.012	585

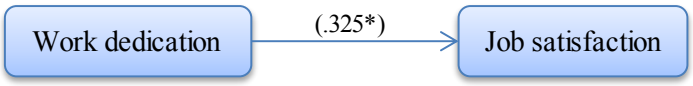
Moderators

	Minimum	Maximum	Mean	Std. Deviation	N
Std. Predicted Value	-4.208	1.752	.000	1.000	585
Mahal. Distance	2.736	47.127	**8.985**	4.922	585

Appendix 15: Mediation effects

Figure A: Direct and indirect effects of work dedication and job satisfaction by meaning

A. Direct effect



B. Mediation effect

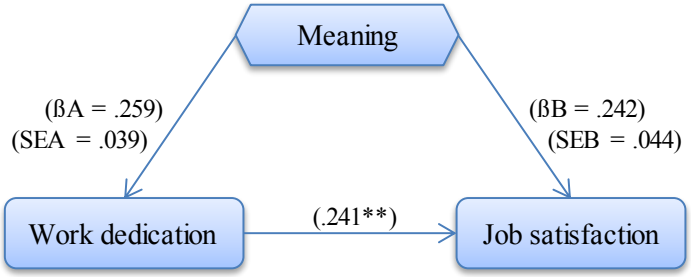
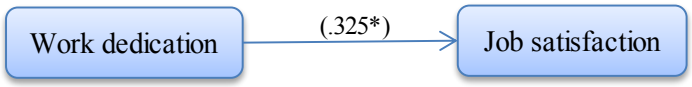


Figure B: Direct and indirect effects of the relationship between work dedication and job satisfaction by impact

A. Direct effect



B. Mediation effect

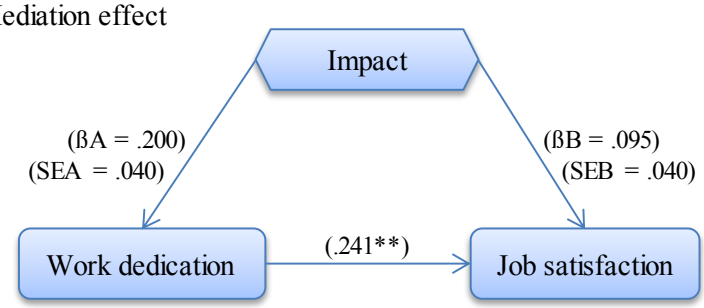
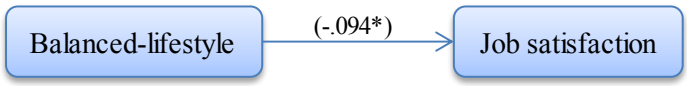


Figure C: Direct and indirect effects of the relationship between balanced-lifestyle and job satisfaction by meaning

A. Direct effect



B. Mediation effect

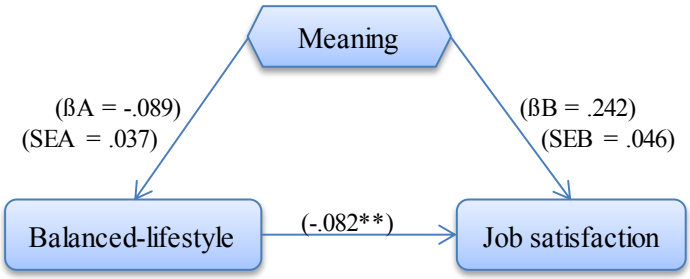
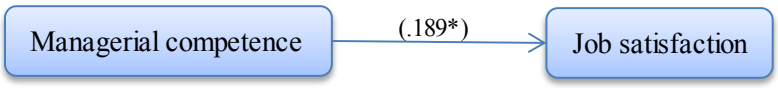


Figure D: Direct and indirect effects of the relationship between managerial competence and job satisfaction by meaning

A. Direct effect



B. Mediation effect

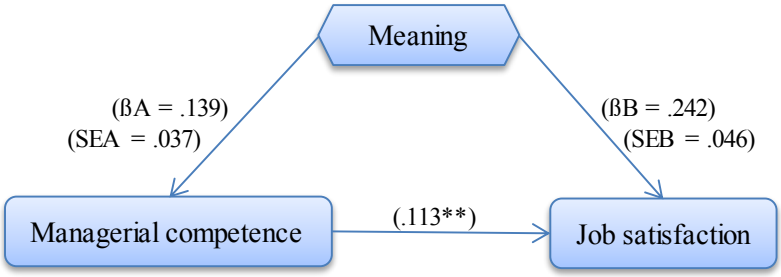
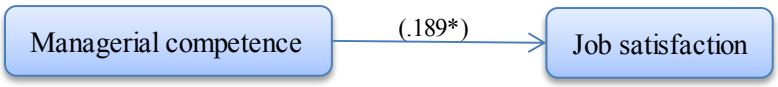


Figure E: Direct and indirect effects of the relationship between managerial competence and job satisfaction by impact

A. Direct effect



B. Mediation effect

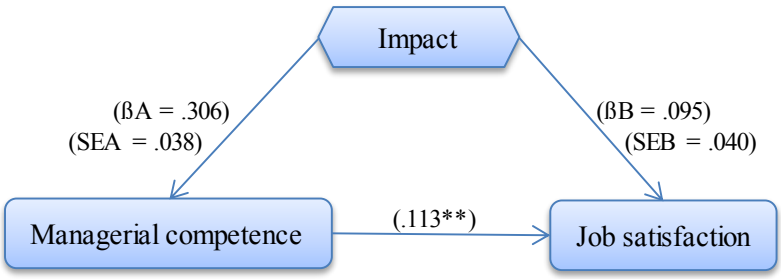
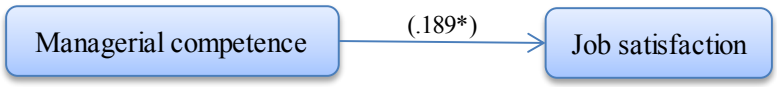


Figure F: Direct and indirect effects of the relationship between managerial competence and job satisfaction by competence

A. Direct effect



B. Mediation effect

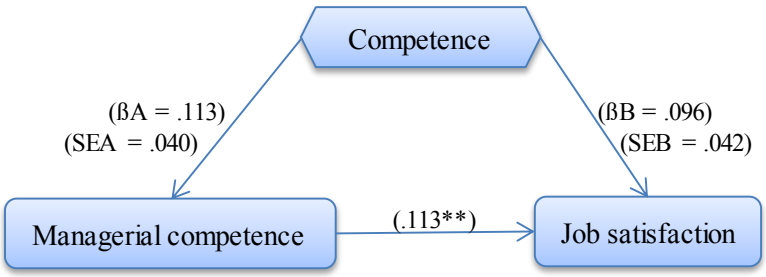
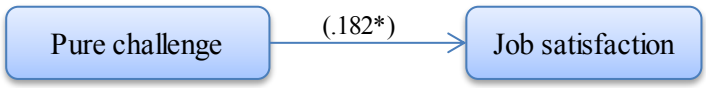
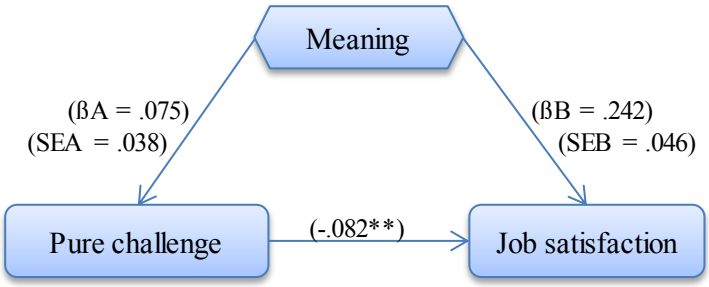


Figure G: Direct and indirect effects of the relationship between pure challenge and job satisfaction by meaning

A. Direct effect



B. Mediation effect



Appendix 16: Responses of internal motivation factors (Q1)

Themes		Summary of short phrases	Code
Macro	**Micro**		
Personal bias	Academic atmosphere	Supportive work environment, sense of togetherness among colleagues, collegiality, team work, sharing knowledge, work climate.	1, 3-9, 4, 8-9, 9, 9-9, 10-9, 11, 11-9, 13-9, 17, 18, 20, 22-9, 26, 27-9, 28, 37,40, 41, 42, 50, 53, 56-9, 61, 64-9, 72-9, 81-9, 88-9, 95-9, 106-9, 127-9, 141, 143, 145, 153-9, 167, 171, 183, 186, 195, 204, 209, 211, 215, 234, 236, 240, 244, 255,256, 257, 262, 263, 264, 277, 296, 301, 366, 379, 381, 383, 396, 413 = 64 (9.47%).
	Balancing work life	Family, support from extended family, family and work should have the same priority.	9, 15-9, 17, 20-9, 21-9, 26, 26-9, 27, 27-9, 44, 53, 61, 63, 64, 64-9, 73, 188-9, 06-9, 112-9, 127-9, 132-9, 142, 155-9, 163-9, 167, 171, 178, 184, 200, 215, 19, 204, 244, 272, 278, 291, 301, 340, 347, 355, 359, 364, 366, 371, 381, 400, 412 = 47 (6.95%).
	Recognition	Appreciation of hard work, reputation, recognition of performance.	2, 9, 9-9, 14-9, 20-9, 22-9, 26-9, 30-9, 38, 42-9, 50, 52, 55-9, 66, 74, 74-9, 82, 83-9, 99, 106-9, 119-9, 135-9, 144, 150, 154, 154-9, 162-9, 183, 185, 217, 227, 245, 249, 253, 256, 257, 291, 309, 332, 336, 387, 399, 411 = 43 (6.36%).
	Social orientation	Intention to serve the community, intention to be better, intention to be a role model for student, intention to succeed, meaningful for others.	2-9, 4, 5, 15-9, 16-9, 18-9, 19-9, 21-9, 24-9, 26-9, 44, 47, 53, 64-9, 66, 72-9, 73, 77, 127-9, 153, 155-9, 167, 172, 204, 229, 283, 329, 344, 362, = 29 (4.29%).
	Managerial orientation	Intention to dedicate myself to institution, intention to achieve the institution's vision.	3, 19-9, 20-9, 21, 23-9, 52, 92-9, 156-9, 211, 213, 263, 291, 313 = 13 (1.92%).
	Motivation and Goal-oriented	Self- intrinsic motivation, self-development, intend to develop knowledge; life is a positive change, real hope, personal target, realistic goals, to achieve my ambitions.	1, 3, 14, 16, 36-9, 50, 54, 61, 72-9, 77, 80-9, 136-9, 145, 154-9, 160, 161-9, 272, 193, 212, 239, 283, 336, 387, 389, 15-9, 18-9, 20-9, 21-9, 39, 46, 107-9, 136-9, 141-9, 194, 236, 372, 411, 412 = 38 (5.62%)
	Personal integrity	Accomplishment, achievement, self-actualisation, capability, personal ability, skills, confidence, educational qualification, experience, field training -related, extensive knowledge, decision making, intention to develop talents, personal integrity, personality, honesty, likes and dislikes, discipline, trust.	24, 82, 106-9, 149, 155-9, 150, 155-9, 183, 234, 13, 13-9, 14-9, 52, 77, 23-9, 24, 26, 38, 56-9, 71, 74, 82-9, 83,211, 213, 236, 244, 245, 246, 247, 305, 339, 383, 400, 401, 1, 2, 3, 15, 15-9, 17-9, 20-9, 22-9, 28-9, 36, 37, 37-9, 47-9, 83-9, 112-9, 131-9, 132-9, 149, 155-9, 168-9, 192, 199, 160-9, 177, 178, 184, 186, 192, 213, 253, 274, 311, 334, 356, 359, 366, 373, 379, 404, 409, 13-9, 26, 27-9, 28, 33-9, 34, 35, 53, 55-9, 63, 66, 83-9, 132-9, 144, 164, 234, 244, 246, 272, 346= 95 (14.05%).
	Creativity	Freedom of expression, opportunity to express new ideas, innovation, creativity.	7-9, 15-9, 22-9, 23-9, 34, 38-9, 40-9, 44-9, 51, 66-9, 67-9, 72-9, 75-9, 80-9, 81, 81-9, 93-9, 96-9, 108-9, 111-9, 132-9, 160-9, 163-9, 190, 200, 202, 234, 311, 318, 355, 360, 7, 8-9, 10-9, 12, 34, 38-9, 40, 78, 360, 379 = 41 (6.06%).
	Happiness	Loving of job, caring atmosphere, happiness, positive feel, enjoy my work, happy work life, psychologically happy, job satisfactory, holidays.	3-9, 10-9, 11, 11-9, 14, 20, 21-9, 22, 23-9, 30-9, 31-9, 42, 44, 46, 48, 51, 55-9, 63-9, 85-9, 92, 106-9, 111, 134-9, 145, 173-9, 177, 200, 204, 277, 286, 379, 399, 400 = 33 (4.88%).
	Being a leader	Employers' attention, attitude of the leader, leader's support, leader as a role model.	4, 9, 9-9, 19-9, 20, 20-9, 28, 32, 44, 56, 58-9, 64, 76, 79-9, 136-9, 162-9, 178, 180, 209, 234, 244, 264, 283, 286, 363, 400, 410 = 27 (3.99%).

Internal orientation

		Managerial attitude	The readiness of organisation to continue to learn and innovate, organisational culture, fair play, transparent information, openness, opens management.	17-9, 32-9, 1, 13, 13-9, 26-9, 34, 35, 40, 44, 56-9, 136-9, 143, 163-9, 185, 245, 247, 318, 341, 355, 381 = 21 (3.55%).
		Spiritual values	Understanding of religion, working is religious obligation for Muslims, faith, doing your work based on religious teachings, reward at the end of life, destiny, intention to achieve religious command.	2, 4, 7, 42, 53, 55-9, 85-9, 153, 155, 197, 219, 271, 273, 283, 285, 363, 409, 411, 413 = 19 (2.81%).
		Career approach	Opportunity to do career development, desire to gain chances, future study opportunity.	3-9, 4, 13, 13-9, 14-9, 15-9, 17-9, 22, 22-9, 33-9, 150, 190, 192, 195, 200, 291, 372, 339, 340 = 19 (2.81%).
		Security concern	Future life, pension, certainty of future, health insurance, financially secure.	2, 5, 22, 22-9, 26-9, 30-9, 37, 51, 78, 82, 157, 186, 195, 240, 268, 334 = 16 (2.37%).
		Challenging	Complicated problems, work challenge, success in overcoming problems, competition among scientists in the world, ability to compete, teaching is an important challenge, publications are a challenge to reach a higher academic rank.	24, 37, 42, 44, 144, 152, 186, 250, 265, 269, 276, 291, 294, 309, 339 = 15 (2.22%).
		Flexibility	Flexibility in setting the work schedule, flexibility in the workplace: either at university or at home.	21-9, 22, 44, 49-9, 51-9, 58, 60-9, 79-9, 154-9, 162-9, 204, 209, 318, 345, 352 = 15 (22%).
External orientation	Organisa-tional bias	Financial reward and support	Salary, incentive, compensation, bonus, fee, need money to grow my career.	3-9, 26-9, 37, 44, 46, 74, 81-9, 135-9, 226, 240, 253, 264, 272, 360, 362, 400, 4, 9-9, 22-9, 23-9, 26, 30-9, 32, 37, 38, 40-9, 41, 42, 48, 51, 68, 72-9, 80, 88-9, 127-9, 139-9, 141, 143, 144, 150, 154-9, 162-9, 167, 180, 185, 192, 195, 211, 234, 253, 268, 277, 278, 291, 332, 369, 375, 185, 283, 333 = 59 (14.64%).
		Career arrangement	Career paths system, academic rank requirements, research and publications, consistency of self-competence (linearity), career continuity.	7, 10-9, 13-9, 24, 27-9, 31-9, 40, 40-9, 41, 56, 62, 69-9, 75-9, 78-9, 81-9, 161-9, 195, 217, 165, 263, 271, 283, 286, 293, 296, 299, 300, 322, 324, 354, 355, 353, 360 = 33 (4.88%).
		Organisational arrangement	Workload, type of work, job descriptions, managerial positions, structural levels, advanced technology for teaching media & research, teaching aid, laboratory equipment, government policies or rules, university regulation.	12-9, 17, 19-9, 34, 43, 78, 88-9, 112, 141, 143, 171, 253, 32-9, 82, 96-9, 99, 133-9, 268, 293, 309, 346, 3, 5, 8-9, 9, 13, 13-9, 14-9, 26, 32, 38, 66, 106-9, 132-9, 152, 163-9, 212, 215, 244, 277, 355, 373, 37, 75, 192, 256 = 49 (7.25%).

Appendix 17: Responses of institutional support (Q2)

Themes		Types of support			
Macro	Micro	Supportive		Less supportive	
		Responses	Code	Responses	Code
Personal bias	Career pattern	...average...because each individual has an equal opportunity.	293 = 1 (.22%)		
		University gives chances to expand my career.	153, 54, 195, 253, 273, 300, 329, 344 = 8 (1.73%)		
		Institution provides me the opportunity to improve my skills via research, trainings, etc.	(287)(125, 155, 222, 287, 307, 320, 322, 324, 328, 339, 341, 352, 387, 399) = 15 (3.25%)		
		...teaching is fully supported.	(322) = 1 (.22%)		
	Academic atmosphere	I feel that the working climate currently leads me to formalism or more bureaucratic management.	(48-9) = 1 (.22%)	Work climate does not reinforce academics to excel in writing articles for publication.	(8-9) = 1 (.22%)
		University is trying to create a conducive working environment to increase academic productivity.	(13-9)(44, 211) = 3 (.65%)	Currently it tends to have a negative competition; personal virtue is no longer to be a reference in academic life.	(23) = 1 (.22%)
		My institution fosters a positive working environment.	(42)(186-9, 318, 391, 400) = 5 (1.08%)	Work climate tends to discourage in work performance.	(4)(178, 181-9, 186, 413) = 5 (1.08%)
	Academic freedom and creativity	I have autonomy to reach my academic goals.	(3-9)(52, 117-9, 300) = 4 (.87%)		
		Self-confidence to defend the knowledge.	(4)(202) = 2 (.43%)		
		…there is freedom for creativity in academic environment.	(38-9)(29-9, 77, 224, 233, 360) = 6 (1.30%)		
		I am given the freedom to set my own career through research, seminars, community services.	(352)(410) = 2 (.43%)		
		Decision is made free intervention from top leader.	(52) = 1 (.22%)		
		Freedom to be creative and innovative.	(52-9)(77-9, 165-9, 213, 360) = 5 (1.08%)		

Self-develop-ment	Those who are experts always have a place to develop.	(271) = 1 (.22%)	Support comes from colleagues and leaders personally.	(17-9)(20-9, 213, 412) = 4
	Individuals' career progression depends on the individual itself.	(76) = 1 (.22%)	My career motivation is not affected by the institution; I am the one in charge of my career development.	(18-9) (85-9, 357) = 3 (.65%)
			I think that the institution does not support my career but I want to move forward.	(61-9) = 1 (.22%)
			Contribution of institution in the development of lecturers is still very limited; generally academics fight individually in their career development.	(334)(169, 411) = 3 (.65%)
Career partnership			There is no attention from leadership to employees' careers.	(180)(140, 160-9, 215, 256, 319, 337) = 7 (1.52%)
			There is no awareness; everyone just does her/his task-roles.	(209) = 1 (.22%)
Recognition			The purpose of work is not because of money. But when an appreciation of an achievement is measured by money, accomplishment becomes less meaningful.	(23-9) = 1 (.22%)
			…there is no appreciation for hard work	(26-9)(36-9, 64-9, 332, 350, 351, 411) = 7 (1.52%)
Leader support	University strongly encourages me to reach professor by backing up my research activities.	(185) = 1 (.22%)	Institution support is very slow; supposing I want to run fast but the university responds it slowly.	(42-9)(413) = 2 (.43%)
			No motivation from institution because the leadership does not have a clear vision.	(44-9) = 1 (.22%)
			Nowadays institution tends to be passive in providing support to me.	(75-9) = 1 (.22%)
			Career pattern between functional positions and structural levels are different. Institutional support is more focus on support the teaching and learning process.	(193) = 1 (.22%)

External career		Transparency	Sometimes information just spread around certain people.	(351) = 1 (.22%)		
			My university adapts the open management system and creates a competitive environment	(47)(274) = 2 (.43%)		
			Institution provides clear information on career.	(143)(145, 177) = 3 (.65%)		
		Constructive feedback	Institution will criticise or give feedback in my career.	(43-9)(144, 210) = 3 (.65%)		
		Decision making	I am involved in making decision about institutional policies.	(3) = 1 (.22%)		
			Involvement in planning and evaluation of teaching process.	(3) = 1 (.22%)		
		Managerial attitude	Institution does not empower me although I have capability and experiences in restructuring higher education in Indonesia.	(53) = 1 (.22%)	My institution prioritises career advancement of senior academics and people who are closer to the top management rather than to the promising new or younger lecturers.	(226) = 1 (.22%)
	Organi-sational bias	Financial support support	Limited budget to support academic publications.	(40) (298, 303) = 3 (.65%)	No funding for academic activities.	(8-9)(95, 358) = 3 (.65%)
			Funding academic activities are only for certain people.	(164)(105, 108, 305) = 4 (.87%)		
			Limited fund to support academic career advancement.	(358, 404) = 2 (.43%)		
			Financial support for activities related to research and publications or workshops.	(38)(77, 339, 340, 341) = 5 (1.08%)		
			Facilitating academic events either for institutional purposes or individual needs.	(200)(212) = 2 (.43%)		
			Institution support is in the form of funding for further study.	(68)(14, 115, 200, 229, 273, 339, 340, 373) = 9 (1.95%)		
		Teaching and learning facility	Lack of facilities for research.	(155,197, 332, 362, 372) =5	No research and teaching facilities.	(197) = 1 (.22%)
			Support but it needs more resources.	(142)(401) = 2 (.43%)		
			University provides facilities so I can get done my work on time…	(38)(50, 115, 136-9, 145, 155, 249, 295, 308, 330, 344, 388, 400) = 13 (2.81%)		

Appendix 18: Summary of MANOVA outputs for demographic effects

Demographic variables	MANOVA test		Effect test								
			Career anchors			Psychological empowerment			Job satisfaction		
	F	Sig.	CA	F	Sig.	PE	F	Sig.	JS	F	Sig.
Gender	1.897	.05	SV	4.457	.004						
Education	1.569	.04	WD	6.919	.001	MN	3.337	.036	JS	5.268	.005
			EN	3.891	.021						
Work Experience	1.199	.023				CP	6.065	.002			
Institution size	1.571	.04	SV	4.887	.008	MN	4.434	.012			
			PC	4.329	.014						
Age	1.765	.042	MC	3.451	.011						

Estimated marginal mean*								
Demographic variables		CA				PE		JS
		WD	EN	SV	PC	MN	CP	JS
Gender	Female			4.85				
	Male			4.21				
Education	Bachelor	4.43	4.53			5.16		4.54
	Master	4.12	4.13			5.78		4.57
	Doctorate	3.34	3.75			4.82		4.09
Work experience	5-10 yrs					5.12	4.92	
	11-20 yrs					5.4	5.26	
	>20 yrs					5.28	5.09	
Institution size	Small			4.76	4.28	5		
	Medium			4.79	3.79	4.91		
	Big			5.03	3.96	5.31		
Age	≤ 25 yrs				4.02			
	26-45 yrs				4.63			
	≥ 46 yrs				3.48			

WD=Work dedication, EN=Entrepreneurial creativity, SV-Service, PC=Pure challenge, MN=Meaning, CP=Competence, JS=Job satisfaction, CA=Career anchors, PE=Psychological empowerment
*Only significant effect tests were shown

Appendix 19: Letters from visited universities

KEMENTERIAN PENDIDIKAN NASIONAL
UNIVERSITAS BENGKULU
Jalan W.R Supratamaan Kandang Limun Bengkulu 38371A
Telepon (0736) 21170, 21884 Faksimile: (0736) 22105
Laman: www.unib.ac.id e-mail rektorat@unib.ac.ad

Ref.# : 5946/UN30/PP/2011 Bengkulu , 29th July, 2011

Meiliani
Ph.D candidate
School of Management and Marketing
University of Wollongong
Northfield Avenue. NSW 2500
Australia

Re: Ph.D research project: An exploratory study of individual's career motivation

Dear Ms. Meiliani

This is in reference to your letter seeking authority to conduct your research within our institution between August to September 2011 and December 2011 to January 2012.

This letter therefore authorizes you to access our academics, Please do not hesitate to contact me for further assistance.

Yours sincerely,

KEMENTERIAN PENDIDIKAN NASIONAL UNIVERSITAS BENGKULU

Dr. Ir. Fahrurrozi, M. Sc.
Vice Rector for Academic Affairs

KEMENTERIAN PENDIDIKAN NASIONAL
Universitas Terbuka
UNIT PROGRAM BELAJAR JARAK JAUH (UPBJJ)
BENGKULU

Jalan Sadang Raya Lingkar Barat Bengkulu
Telepon : (0736) 26294 ; 22366
Fax. : (0736) 26294 ; 346177
E-mail : bengkulu@upbjj.ut.ac.id
Website : http://bengkulu.ut.ac.id
Homepage : http://www.ut.ac.id

Number : 676/UN31.26/LL/2011
Subject : Permission to conduct research

Dean of the Faculty of Economics
The University of Bengkulu
Jl. W.R. Supratman
Bengkulu 38371A

Based on you letter number 1761/UN30.6/PP/2011 dated 31 October 2011, regarding permission to run survey entitled "career anchors and job satisfaction: the mediating effect of psychological empowerment in Indonesian public universities and conducted by Meiliani, herewith I confirm that Meiliani is given an access to our academics as her respondents. Furthermore, she can collect the completed survey on 03 November 2011.

Thank you for your attention and cooperation.

Bengkulu, 01 November 2011

Head,

KEMENTERIAN PENDIDIKAN NASIONAL UNIVERSITAS TERBUKA UPBJJ BENGKULU

Drs. Rufran Zulkarnain R, M.Pd.
NIP. 195910051985031006

FAKULTAS PSIKOLOGI
UNIVERSITAS INDONESIA

Kampus Baru UI - Depok 16424

Telp. : (021) 727 0004, 727 0005, 786 3520, 786 3523, 786 8280. Fax. : (021) 786 3526
E-mail : fpsiui@ui.ac.id Website : www.psikologi.ui.ac.id

Number : 8008/H2.F8.WD/PPM.00.02/2011 November 31th, 2011
Subject : Research Permission

To
Prof. Ir. Zainal Muktamar, M.Sc., Ph.D.
Rector of Universitas Bengkulu
Jl. W. R. Supratman, Kandang Limun
Bengkulu 38371A

Replying your letter for granting permission to conduct a research number 7927/UN30/PP/2011, dated October 19, 2011, herewith we agree for Ms. Meilani to conduct her research at the Faculty of Psychology, Universitas Indonesia

Furthermore we would ask Ms. Meilani to contact Manager of Education and Research, Faculty of Psychology UI for further explanation.

Vice Dean,

Dr. Tjut Rifameutia, M.A., Psychologist
NIP 19600113 198703 2002

Copy to:
1. Dean F. Psi. UI
2. Secretary of the Faculty of F. Psi. UI
3. Manager of Education and Research F. Psi. UI

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS BENGKULU
FAKULTAS KEGURUAN DAN ILMU PENDIDIKAN
LABORATORIUM BAHASA
Jalan W.R. Supratman, Kandang Limun Bengkulu 38371A
Telepon (0736) 21170.Psw.203-232, 21186 Faksimile: (0736) 21186
Laman: www.fkip.unib.ac.id. E-mail: bahasa_lab@yahoo.com

Number : 12 /UN30.3.10/LK/2013 Bengkulu, 10 October 2011

Yth. Meiliani, M.Com
PhD Candidate
School of Management and Marketing
University of Wollongong
NSW – Australia

Re.: A survey questionnaire validation

Herewith, I stated that the Laboratory of Bahasa Indonesia has validated your questionnaire. The questionnaire consists of a cover later, 40 item statements in a six-point Likert scale, two questions in the form of open-ended questions, four questions asking about the respondents' opinions and 14 questions related to demographic background. All words and sentences used in the survey questionnaire are based on the Bahasa Indonesia's rule. The survey is ready for use.

I wish you all the best with your study.

Sincerely yours,

Bustanuddin Lubis, M.A.
Head Laboratorium Bahasa