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Intentional Personality Change: The Development and Evaluation of a Group Based Program to Increase Conscientiousness

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Intentional Personality Change: The Development and Evaluation of a Group Based Program to Increase Conscientiousness

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This thesis is presented as part of the requirements for the award of the degree of Doctor of Philosophy (Clinical Psychology) from the University of Wollongong.

December, 2017
THESIS CERTIFICATION

I, Jonathan Allan, declare this thesis, submitted in fulfilment of the requirements of the award of Doctor of Philosophy, in the faculty of social sciences, 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.

Jonathan Allan
January, 2018
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ABSTRACT

The current thesis contains a series of papers which explored intentional personality change. The first paper explored what aspects of personality people want to change and what are the personality characteristics of those who want to change their personality. This study utilised data gathered during Martin, Oades and Caputi’s (2014a) randomised waitlist controlled trial of their intentional personality change coaching program (Martin, Oades & Caputi, 2014b). The results of the study indicated that the personality domains that people most wanted to change were neuroticism and conscientiousness and the sub-domains (facets) were anxiety, self-discipline, anger/hostility, depression and self-consciousness. Participants in the study were significantly higher in neuroticism and openness than the general population.

The second study explored what domains of personality had been changed via the intervention conducted by Martin et al. (2014a) and whether these changes were dependent on those aspects of personality being targeted for change. The findings of the study indicated that participants experienced significant increases in extraversion and conscientiousness and significant decreases in neuroticism over the 10 week coaching program. These changes were maintained three month post-intervention. Targeting of facets within the domain was significantly related to change for the domain of conscientiousness and neuroticism but not for extraversion.

The third paper was a review of the literature informing the development of personality change resources, followed by a more specific review exploring personality change resource development for the domain of conscientiousness. The paper argued for the utilisation of change processes which have been found to be effective in psychotherapy to be combined with the limited intentional personality change intervention literature in developing future personality change resources. The paper also argued that the clinical literature could be
used to help inform techniques for changing specific domains. It was argued that the theoretical similarities between low conscientiousness and ADHD suggested that adult ADHD treatment programs may be a useful source of resources to utilise in the development of programs to increase conscientiousness.

The final paper described the results of a group program designed to change conscientiousness. The results of the program indicated that conscientiousness and extraversion significantly increased and neuroticism significantly decreased over the 10 week intervention. These changes were maintained 3 months post-intervention. The results were supported by changes in peer ratings for conscientiousness, extraversion and neuroticism. The program also resulted in a decrease in stress, depression and negative affect and an increase in positive affect, life satisfaction and occupational self-efficacy.

Consequently, this thesis provides evidence informing the characteristics of individuals who wish to change their personality, what aspects of their personality they wish to change and how this change might be achieved. Finally, it provides evidence that personality can be changed via specific targeted intervention and that these changes extend beyond personality into positive changes in life outcomes.
STATEMENT OF CONTRIBUTION

1. Peter Leeson: Primary supervisor.

2. Filip De Fruyt: Secondary supervisor

3. Sue Martin: Developed the original stepwise process for intentional personality change which was adapted for the conscientiousness group program. Conducted the randomised waitlist control trial on the effectiveness of the stepwise process of intentional personality change which was used as the data source for the first two papers in this thesis.

4. Carol Keane: Co-facilitated conscientiousness group program.

5. Samantha Broyd: Co-facilitated conscientiousness group program.

6. Stephanie Deuchar: Co-facilitated conscientiousness group program.

7. Tony Swinton: Provided clinical supervision while I was facilitating the conscientiousness group program.
PUBLICATIONS FROM THE THESIS

Chapter 2

Chapter 3

Chapter 4

Chapter 5

Appendix 2
PEER REVIEW

The papers described in chapters 1, and appendix 2 have accepted and published in peer reviewed journals. The paper described in chapter 2 has been submitted and accepted to a peer reviewed journal but has yet to be published. The following conference presentations have been undertaken...


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Chapter 1: Introduction

This thesis contains a series of papers which explore the possibility of intentional personality change. The first two papers explored the broad questions of what aspects of personality people want to change and what they are able to change. The final two papers explored how personality change resources may be developed, how change resources for the specific domain of conscientiousness might be developed and whether conscientiousness can be increased via a targeted intervention. Thus this thesis explores what people want to change about their personality, what they are able to change, whether people can choose to be more conscientiousness and how this can be achieved.

Definitions and Model of Personality

A key prerequisite to engaging in a discussion on the possibility of intentional personality change is to define personality change. There are several definitions of personality however for the purpose of this thesis we will use the definition that personality refers to “relatively enduring patterns of thinking, feeling and behaving, that differentiate people from one another, and that are elicited in situations that leave room for individual differences” (Allemand & Fluckiger, 2017, p. 4). Consequently this definition suggests there are multiple criteria to be met in order for someone’s personality to have changed. The first is that there is a difference in a person’s thoughts, feelings or behaviours in response to certain situations. The second is that this change occurs often enough and in enough different situations for it to become a relatively enduring pattern for this person. This temporal consistency and situational breadth of change is what distinguishes personality change from simply acting, feeling or thinking differently (Allemand & Fluckiger, 2017; Roberts & Pomerantz, 2004).

The other component that requires definition is the term “intentional”. Intentional can be defined as "any desire, plan, purpose, aim or belief that is oriented towards some goal,
some end state. The term is used by most with the connotation that such striving is conscious” (Reber & Reber, 2001, p. 362). This definition implies that for change to be considered “intentional” it must be a conscious goal. Thus in the context of “personality change” a “conscious goal” suggests that the person must be aware of what personality is and have a desire to change specific aspects of it in a specific direction. Based on these definitions, intentionally changing ones conscientiousness would involve setting a specific goal to either increase or decrease conscientiousness; and then successfully changing ones conscientious relevant thinking, feeling and behaving in a sufficiently broad set of situations, and across a sufficiently extended period of time, for these changes to be considered a relatively enduring pattern.

In discussing the notion of intentional personality change it is also important to specify a model of personality. The Five Factor Model of personality is the dominant paradigm in current personality research (Goldberg, 1983; Tupes & Christal, 1961/1992; Widiger, 2017). The Five Factor Model was developed through extensive research involving both factor analytic and rational methods (Costa & McCrae, 1996; Digman, 1990; John, 1990; John & Srivastava, 1999). The results of this research have indicated that personality can be described by using five key factors. These are conscientiousness, agreeableness, neuroticism (or emotionality), openness and extraversion (Costa & McCrae, 1992). People high in conscientiousness will tend to display high levels of organisation, discipline and the need for achievement. Agreeableness is reflected in being co-operative and sympathetic toward other people. Neurotic individuals are prone to negative affects such as stress, anxiety, sadness and anger. Openness is reflected in a strong preference for novelty, ideas and culture, while extroverted people will tend to show a high degree of sociability, energy and assertiveness (Costa & McCrae, 1992). McCrae and Terracciano (2005), who looked at the
validity of the five factor model in 50 countries, indicated that the Five Factor Model is valid across cultures.

The current thesis explored data gathered via the NEO PI-R and IPIP NEO PI-R (Costa & McCrae, 1992; Johnson, 2014). The NEO PI-R is a widely used and well researched measure of the five factor model of personality (e.g., Costa, Herbst, McCrae, & Siegler, 2000; McCrae & Terracciano, 2005). It measures the five domains of personality as well as six more specific traits (facets) within each domain. The IPIP NEO PI-R is a public domain representation of the NEO PI-R. It also describes the five domains of personality as well as six specific traits (facets) within each domain. The facets for the five domains for the NEO PI-R and their IPIP NEO PI-R equivalents are described in appendix 1.

**Argument for and Against Personality Change**

Several papers have found that personality remains relatively stable once adulthood is reached (Costa, Herbst, McCrae, & Siegler, 2000; Fraley & Roberts, 2005; Roberts & DelVecchio, 2000). Costa & McCrae (1994) suggested that personality may vary in conjunction with development until the age of about 30. After this age is reached Costa and McCrae (1994) argued that personality remains relatively stable except for small but consistent declines in activity levels. Costa & McCrae (1994) indicated that stability coefficients for adults (over extended time periods) range between .60 to .80, while short term test-retest reliabilities range from .70 to .90. Consequently they suggested that when measurement error is taken into account the evidence indicates that personality traits are relatively stable. These results led Costa & McCrae to conclude that there is an "inevitability of [a person's] one and only personality" (McCrae & Costa, 1994, p. 175). This statement would seem to suggest that personality is not amenable to change. However, Roberts, Walton and Viechtbauer (2006) argued that this is an over-interpretation of the data. Roberts et al. (2006) argue that neither rank order consistency or mean level consistency preclude large
changes in the data (e.g. 1, 2, 3 changes to 2, 4, 6 and the rank order would remain the same or 0, 1, 2 changes to 1, 1, 1 and the mean remains the same). Roberts et al. (2006) also found that after young adulthood there were mean level increases in conscientiousness, social dominance and emotional stability.

McCrae et al., (2000) argued that the heritability research suggested a greater role for “nature over nurture” in personality. McCrae et al. (2000) supported this view by citing that, in twin studies, a substantial portion of personality (around 50%) has been found to be heritable. A different perspective is that a 50% heritability co-efficient leaves substantial space for there to be environmental influences on personality. Furthermore, the 50% figure is based on twin studies. In comparison, adoption studies tend to find much smaller influences on personality. In their meta-analysis Vukasovic and Bratko (2015) found an average heritability in adoption studies of .22 versus .47 for twin studies. When these findings were combined their findings suggested average heritability co-efficient of .39, indicating that environment was responsible for 61% of the variance in personality. Consequently this suggests that changing the environment (as in an intentional personality change intervention) may have the potential to influence that substantial portion of personality which has been found to be subject to environmental influences.

The argument that environment is responsible for a significant proportion of personality is further supported by research into the impact that major life events have on personality. Specht, Egloff and Schmuke (2011) in their longitudinal study of 14,718 Germans across adulthood found that personality changed in response to significant life events. They found that individuals became more introverted and less open following marriage. They also found that individuals tended to become more agreeable and conscientious after separating from their partner. They also became more conscientious after starting their first job but less conscientious after retiring or having a baby. Specht et al.
(2011) also found that women became significantly more emotionally stable after moving out of the parental home while men became more open after separating from their partner. Mrozek and Spiro (2007), in their study of the personality growth curves of 1600 men, found that marriage, remarriage and the death of a spouse had significant impacts on the trajectory and rate of personality change. Roberts, Caspi and Moffitt (2003) found that occupational attainment in young adulthood was related to positive changes in the personality facets of negative emotionality, positive emotions and self-confidence. Roberts, Walton, Bogg and Caspi (2006) indicated that deviant workplace behaviours such as malingering, interpersonal aggression and stealing resulted in increases in neuroticism and decreases in constraint (related to conscientiousness). Consequently there is evidence to suggest that significant life events and certain behaviours can influence personality development.

**Evidence for Personality Change interventions**

The arguments around the changeability of personality have tended to focus on interpreting the longitudinal data. However this research, describing changes in personality over very long periods without any type of intervention, is related to but distinct from the current research which focuses on intentional personality change over relatively short periods of time in response to interventions. That is, whether or not personality remains stable over time in normal circumstances does not preclude the possibility that it may be changeable in non-normal circumstances (such as participating in a personality change intervention). Consequently, of more relevance to the current thesis is the literature which has measured personality variables in the context of interventions. While there is limited literature in this area, possibly due to the assumption that personality is not changeable, there has never the less been a number of studies which have measured personality during drug and therapeutic interventions for mental health issues. There have also been a limited number of studies that have found personality change as the result of interventions in non-clinical populations.
Finally a literature search revealed three studies which have specifically targeted personality for change and were successful in producing change.

A placebo controlled trial conducted by Tang et al. (2009) aimed to determine whether treatment of major depressive disorder (MDD) with selective serotonin re-uptake inhibitors (SSRIs) resulted in personality change. Their findings indicated that over the treatment period, the group who received SSRIs showed significantly greater changes in extraversion and neuroticism than the group that received a placebo. The researchers also aimed to determine whether these changes were the result of measurement bias due to state improvements in depression. The results of the study suggested that the SSRI group had significantly lower neuroticism and significantly higher extraversion as compared to the placebo group when controlling for changes in depressive symptoms. Furthermore, their findings suggested that the SSRIs did not have significant anti-depressant effects when controlling for changes in personality. Thus, these findings indicated that SSRIs produce personality change in participants with MDD, and that these changes mediate changes in depressive symptoms.

Tang et al. (2009) also measured the effect of cognitive therapy on personality. They found significant differences on neuroticism and extraversion over the treatment period. However, after controlling for improvement in depression only changes in extraversion remained significant. Consequently these findings suggest that personality change is possible through both therapeutic and drug interventions for individuals with MDD, and that this change is reflective of trait (changes in measures of personality) rather than state (changes in measures of depression) changes.

De Fruyt et al. (2006) also found significant changes in personality factors as the result of treatment for depression. Their findings suggested that six months of therapeutic and pharmacological interventions produced small but significant differences in extraversion,
openness, conscientiousness and agreeableness. They also found that participants self-reported as substantially more emotionally stable (positive pole of neuroticism). Similarly, Piedmont (2001) indicated that a 6 week outpatient program for individuals with substance abuse problems resulted in significant changes across all five dimensions of personality. Furthermore, for three of these traits (conscientiousness, agreeableness and emotional stability), these changes remained significant 15 months after treatment had ceased. Finally, Santor, Bagby & Joffe (1997) indicated that a 5 week trial of anti-depressant medication resulted in significant increases in the domain of extraversion and significant decreases in the domain of neuroticism. At the facet level, Santor et al. (1997) found significant decreases in anxiety, hostility, depression, self-consciousness and vulnerability (facets of neuroticism) as well as significant increases in warmth, assertiveness, activity and positive emotions (facets of extraversion).

The aforementioned studies measured the effect of interventions on personality for individuals suffering from psychopathology. However there have also been a limited number of studies which have measured the effect of psychological interventions on personality for non-clinical populations. Maeda, Kurihara, Morishima and Munakata (2008) found that providing breast cancer patients with a psychological intervention (provision of psychological and medical information as well as counselling), post-surgery, resulted in significantly lower scores in the personality facet of self-repression and a significantly higher scores in the facet of self-esteem as compared to the control group. Krasner et al. (2009) found that an intensive mindfulness education course produced significant increases in conscientiousness and emotional stability. Chokkalingam, Kumari, Akhilesh & Nagendra (2015) produced significant increases in conscientiousness via a four month integrated yoga intervention. A meta-analysis by Orme-Johnson and Barnes (2014) indicated that transcendental meditation significantly reduced trait anxiety. Nellis et al. (2011) examined the effect of 18 hours of
emotional competence training, and subsequent email follow ups, on several variables including personality. Their results suggested that the training resulted in a significant reduction in neuroticism and significant increases in agreeableness and extraversion. A six month follow up revealed a small decline towards pre-intervention levels. However, neuroticism was still significantly lower, and agreeableness and extraversion still significantly higher, when compared to pre-intervention scores. Similarly, Jackson, Hill, Payne, Roberts and Stine-Morrow (2012) indicated that older adults, when given inductive reasoning training, demonstrated significant increases in openness over a 30 week period. Consequently, there is evidence that training interventions can have significant impacts on participant’s personality.

Spence and Grant (2005) found that 10 weekly life coaching sessions significantly increased the personality factors of extraversion and openness over a ten week period. Spence and Grant (2005) noted that their study did not intentionally target personality. Furthermore, they suggested that constructs that are specifically targeted in coaching interventions tend to change more than those that are not. Consequently, they suggested the possibility of producing larger changes in personality if personality was specifically targeted.

The interventions discussed so far, on non-clinical populations, have not specifically targeted personality. A literature search revealed two published studies (outside the current line of research) which had specifically targeted personality change through an intervention. Maclean, Johnson and Griffiths (2011) explored the effect of high doses of the drug psilocybin (found in hallucinogenic mushrooms) on the personality trait openness. The study indicated that there were significant increases in openness pre and post drug treatment and that this significant difference was maintained after a one year follow up. Hudson and Fraley (2015) examined the impact of a 16 week goal setting intervention on personality. Participants were provided with information on different personality traits and asked to set
weekly goals to change these traits. The first study found that this process did not significantly change participant’s personality (and conscientiousness actually decreased). However the 2nd study altered the intervention by training participants to set more specific, structured and concrete goals. The modified intervention resulted in significant mean level increases in emotional stability and extraversion.

**Beneficence of Personality Change**

There is extensive literature that suggests that personality is predictive of a variety of life outcomes (Ozer & Benet-Martinez, 2006; Widiger, 2017). The predictive quality of personality appears to extend broadly across life domains. Personality has been found to predict such wide ranging outcomes as happiness, health, longevity, relationship satisfaction, divorce, income and job satisfaction (Widiger, 2017). Furthermore certain personality traits appear to be associated with positive outcomes, while others appear to be generally associated with negative outcomes. For example, conscientiousness is associated with better relationships, career outcomes, health and well-being (Jackson & Roberts, 2017). In contrast neuroticism appears to be negatively associated with positive relationship outcomes, occupational attainment and happiness (Tacket & Lahey, 2017). These findings suggest the possibility that if those personality traits that are associated with positive outcomes are increased and/or those associated with negative outcomes are decreased this may have a positive impact on people’s lives.

There is also evidence to suggest that this relationship between personality and life outcomes is maintained in the case of personality change. Human et al. (2013) found that negative personality changes (decreases in conscientiousness and increases in neuroticism) resulted in lower well-being and perceived health. Similarly Allemand, Steiger & Fend (2015) found that decreases in self-esteem during adolescence were related to significantly higher depression rates in adulthood. Turiano et al. (2012), in their study of 3990 middle aged
Americans, found that increases in conscientiousness predicted better self-rated health and fewer work limitations. Turiano et al. (2012) also found that increases in extraversion predicted self-rated health. Mrozek and Spiro (2007) found that increases in neuroticism in later life were associated with a higher risk of mortality. Thus the evidence suggests that changes in personality across the lifespan impact upon associated consequential outcomes. This suggests the possibility that changes in personality as the result of an intervention may also translate to changes in associated life outcomes.

The current line of research

Based on the research described above, Martin, Oades and Caputi (2012) proposed that client motivated intentional personality change was possible and could be beneficial. Martin, Oades and Caputi (2014a) developed a model and step wise process of intentional personality change coaching, and related coach training material (Martin, Oades and Caputi, 2010). A randomized, wait-list controlled trial found that application of these resources over ten one hour coaching sessions achieved significant change in clients personalities, and that such change was maintained at twelve week follow up (Martin, Oades & Caputi, 2014b). Semi-structured interviews with participants in this study found that personality change coaching was a positive experience which translated into real life tangible benefits, greater self-awareness and a more authentic, values consistent way of living (Martin, Oades & Caputi, 2014c).

The literature reviewed above, combined with the findings of Martin, Oades and Caputi (2014b) raised a number of questions which will be addressed in this thesis. Given that the consequential outcome literature clearly demonstrates that certain personality traits are associated with positive outcomes while others are associated with negative outcomes (Ozer & Benet-Martinez, 2006; Widiger, 2018) an important question that arises is what aspects of personality do people want to change? And whether these desired changes are
reflective of the consequential outcome literature. Another important consideration, given that
personality has been found to influence behaviour (i.e. Ozer & Benet-Martinez, 2006;
Widiger, 2017), and that choosing to engage in a personality change intervention constitutes a
behaviour, is what are the characteristics of individuals who choose to change their
personality? Knowing who wants to change their personality may also be an important
consideration for informing the direction of the development of future personality change
interventions.

In developing personality change interventions an important aspect is likely to be the
targeting of specific domains and/or facets for change. However, the impact that targeting of
specific facets and domains has on overall and specific facet/domain level change is presently
unclear. Consequently, an important question that will be explored in this thesis is whether
targeting specific facets of personality is important in generating change in that facet and how
this change generalises at the domain and overall personality levels.

Based on the findings that conscientiousness has been consistently show to be
associated with positive life outcomes (Jackson & Roberts, 2017) the current thesis will aim
to evaluate an intervention specifically targeted at increasing conscientiousness. However,
before this can be achieved an intervention will need to be developed. Due to the volitional
personality change literature being in its infancy there is not a clear guide on how to develop
interventions to change personality. Thus this thesis will explore and argue for a set of
principles that should guide the development of personality change interventions. Finally, a
key argument justifying the present line of research is the association between personality
and life outcomes. Thus the current thesis will evaluate an intervention designed to change
conscientiousness in terms of its success in changing personality domains but also in terms of
its success in changing associated life outcomes.
References


Chapter 2: Who wants to change their personality and what do they want to change?

Personality is predictive of both positive and negative life outcomes (Ozer & Benet-Martinez, 2006). This relationship spans across several life domains, including job performance, social functioning, happiness and health (Ozer & Benet-Martinez, 2006). For example, the personality domain emotionality is associated with relationship conflict, poor work performance, low levels of happiness and negative mental and physical health outcomes (Barrick, Mount & Judge, 2001; Hudek-Knezevic, Kardum, 2009; Karney & Bradbury, 1995; Malouff, Thorsteinsson & Schutte, 2004; Steel, Schmidt & Shultz, 2008). In contrast, personality factors are also related to positive outcomes. For example, the personality domain conscientiousness is related to superior job performance and greater subjective well-being (SWB) (Barrick & Mount, 1991; Deneve & Cooper, 1998). Consequently, there is the possibility that changing certain aspects of an individual’s personality may increase positive life outcomes, and reduce negative ones. However, it is possible that certain individuals may have maladaptive personality characteristics but no desire to change them. Consequently, in discussing intentional personality change, it is useful to determine the personality characteristics of those who choose to change their personality, and what aspects of their personality they wish to change.

The current study utilised the NEO PI-R which is one of the most well researched measures of the five factor model of personality (Costa & McCrae, 1992). In addition to measuring the five factors (domains) of personality the NEO PI-R divides each domain into six facets. For example extraversion is divided into the six facets of warmth, gregariousness, assertiveness, activity, excitement seeking and positive emotions.

This paper will discuss personality change within a coaching context. Martin, Oades and Caputi (2012) proposed that client motivated intentional personality change interventions could be beneficial. They proposed that intentional personality change also appeared feasible
given that individuals were capable of changing their personality as they moved from one social context to another (Donahue & Harary, 1998; Robinson, 2009; Wood & Roberts, 2006). Furthermore a range of interventions had been associated with incidental personality change, even though such change was not directly targeted (e.g., medication, therapy, coaching, and emotional competence training) (Nelis et al., 2011; De Fruyt, Van Leeuwen, Bagby, Rolland & Rouillon, 2006; Piedmont, 2001; Spence & Grant, 2005; Tang et al., 2009). Consequently, Martin, Oades and Caputi (2014a) developed a model and step wise process of intentional personality change coaching and related coach training material (Martin, Oades & Caputi, 2010). A randomized, wait-list controlled trial found that application of these resources over ten one hour coaching sessions achieved significant change on client selected personality facets, and that such change was maintained at a twelve week follow up (Martin, Oades & Caputi, 2014b). Semi-structured interviews with participants in this study found that personality change coaching was a positive experience which translated into real life tangible benefits, greater self-awareness and a more authentic, values consistent way of living (Martin, Oades & Caputi, 2014c).

Who Wants to Change their Personality?

It is theorised that there may be two factors that would differentiate individuals who would volunteer for intentional personality change coaching from the general population. Firstly, they may have personality characteristics that would make them more likely to sign up to coaching interventions in general, and secondly, they may have aspects of their personality that they find undesirable and thus wish to change.

While there has been some research into the personality characteristics that facilitate coaching success (Stewart, Palmer, Wilkin & Kerrin, 2008), there has been little research into the types of individuals who volunteer for coaching interventions. Thus while the current
study is specifically focussing on a personality change coaching intervention the results may have wider implications for coaching in general.

Several aspects of the openness to experience factor of personality suggest that those who would seek coaching interventions may be higher on this factor. One facet of openness, “ideas” may be particularly relevant to coaching. “Ideas” refers to ones' level of intellectual curiosity (Costa & McCrae, 1992). Individuals high on this facet will tend to actively pursue intellectual interests and be more willing to consider new ideas (Costa & McCrae). Arteche, Chamorro-Premuzic, Ackerman, and Furnham (2009) indicated that openness was correlated with measures of intellectual engagement. That is, it was correlated with enjoying intellectual pursuits such as solving complex problems, examining difficult issues and abstract thinking. Consequently, intellectual engagement and willingness to consider new ideas appears to be an important aspect of the openness to experience factor. These aspects may also be important for coaching, given that the coaching process often involves the consideration of new ideas (Auerback, 2006, Ives, 2008; Kemp, 2006). Consequently this suggests the possibility that openness is higher in those who choose to undergo personality change coaching interventions than NEO PI-R norms.

Individuals high in openness will tend to actively seek new experiences (Costa & McCrae, 1992). This aspect of openness is captured in the facet “actions”. Individuals who score high on “actions” will tend to enjoy and seek out new activities (Costa & McCrae, 1992). They prefer variety and embrace change. These tendencies relate to coaching in several ways. The coaching process involves experimenting with new behaviours (Peterson, 2006; Ives, 2008). Furthermore, the very act of volunteering for coaching and attending a first session may constitute a new behaviour, and many of the techniques and methods used in the coaching process involve experimenting with new behaviours (Cox, Bachkirova & Clutterbuck, 2010). Consequently given that experimenting with new behaviours is an
important aspect of coaching, and the personality factor openness is related to engaging in new behaviours, this would suggest that those individuals who are high in openness may be more likely to volunteer for a coaching program.

There is evidence to suggest that openness to experience is associated with risk taking behaviour. Nicholson, Soane, Fenton-O’Creevy and William (2005) found that openness to experience was correlated with overall risk taking. Nicholson et al. also looked at risk taking in different life domains. Their findings suggested that openness was correlated with risk taking across multiple domains, including recreation, health, career, finance and social domains. Engaging in a coaching program involves elements of risk (Kemp, 2006). Coachees are investing their time and energy to try to improve their lives. As with any pursuit of this nature there is a risk of failure. Risk taking is also an important part of the coaching process. That is, implementing new behaviours and strategies involves risk. Consequently, this suggests that openness is related to risk taking, and the willingness to take risks may be an important variable in beginning coaching and successful engagement in the coaching process.

There is also the possibility that the aforementioned variables may interact. That is engaging in coaching may require an openness to ideas, a willingness to engage in new behaviours and the ability to take risks. Thus it is likely that openness may be higher in those individuals who volunteer to undergo coaching.

It would also seem likely that individuals who choose to engage in intentional personality change coaching may have certain personality characteristics that they consider undesirable. The personality factor that is most strongly related to negative outcomes is emotionality. Emotionality has been found to be a strong negative predictor of happiness and related constructs (Deneve & Cooper, 1998). A meta-analysis by Steel et al. (2008) found that emotionality negatively predicted happiness, positive affect, life satisfaction, quality of life and overall affect. Emotionality has also been found to be associated with negative social
outcomes. Emotionality negatively predicts marriage satisfaction and stability (Karney & Bradbury, 1995). It is a positive predictor of conflict and abuse in romantic relationships (Robins, Caspi & Moffitt, 2002). Emotionality has been found to be a negative predictor of job satisfaction and performance (Hurtz & Donovan, 2000; Thoreson, Kaplan, Barsky & Warren, 2003) and mental and physical health outcomes (Malouff, Thorsteinsson & Schutte 2005; Ploubidis & Grundy, 2009; Stamatakis et al., 2004; Shipley, Weiss, Der, Taylor, & Deary, 2007). Consequently, there is strong evidence that emotionality is associated with negative personal outcomes across several life domains.

It has been argued that the negative health outcomes associated with emotionality are sufficient to be considered significant from a public health perspective (Lahey, 2009). Cuijpers et al. (2010) gathered data from 5504 participants via a Netherlands mental health survey. These findings indicated that the incremental cost (per 1 million people) of participants who were in the top 25% of emotionality was 1.393 billion (USD) in health costs. This was two and a half times the cost incurred as the result of mental health disorders. Cuijpers et al. (2010) speculated that overall costs may be much higher as their study only measured health care costs. The authors indicated that for individuals who scored in the top 5% for emotionality, employment rates were 48%. This was compared to employment rates of 70% for the general population. Consequently there is evidence to suggest that emotionality is related to negative outcomes to both individuals and society.

Consequently the literature suggests that emotionality is predictive of an array of negative life outcomes. Thus, if it is assumed that individuals who are high in emotionality are aware of the negative impact of this aspect of their personality, and wish to experience less negative life outcomes, then they may be motivated to change this aspect of their personality.
What do they want to change?

An important component of the personality change process outlined in Martin, Oades and Caputi (2014a) is asking participants to reflect on what aspects of their personality they find unhelpful and then selecting the facets that they wish to change. Consequently it is argued that participants will tend to select to increase those personality domains that they believe are associated with positive life outcomes, and will choose to decrease personality domains they believe are associated with negative outcomes. Furthermore it is proposed that those personality domains that are not strongly associated with either positive or negative life outcomes would be less frequently targeted.

The negative outcomes associated with emotionality have already been discussed above. Furthermore it was hypothesised that participants who engage in intentional personality change may be particularly high on emotionality and its facets. If they are high on this domain it is likely that they may also be experiencing related negative life outcomes. Thus it would seem likely that those who would seek intentional personality change may target the facets of emotionality during the coaching process.

While the negative outcomes associated with certain personality domains has been discussed, it should also be noted that certain personality factors are associated with positive outcomes. Conscientiousness appears to be the strongest personality domain in predicting work performance (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Mount & Barrick, 1995). Furthermore Judge and Mount (2002) indicated that conscientious individuals are more likely to find satisfaction in their work. Conscientiousness has also been positively related to happiness and related constructs. Steel, Schmidt and Shultz (2008) found that conscientiousness positively predicted happiness, life satisfaction, positive affect, overall affect and quality of life. Conscientiousness has also been found to positively predict relationship satisfaction with intimate partners (Malouff, Thorsteinsson, Schutte, Bhullar &
Rooke, 2010) and to negatively predict symptoms of mental health problems (Malouff et al., 2004). Consequently conscientiousness appears to be related to positive outcomes across multiple life domains. Thus individuals engaging in personality change interventions may be expected to frequently target conscientiousness facets.

The personality factors of extraversion and agreeableness are related to positive outcomes across some life domains, however they appear to have little influence on others (Ozer & Benet-Martinez, 2006). Extraversion is positively related to happiness constructs, positive mental health outcomes and relationship satisfaction (Malouff et al., 2004; Malouff et al., 2010; Steel et al., 2008). However the evidence suggests that extraversion is unrelated to overall job performance (Hurtz & Donovan, 2000).

Agreeableness has been found to positively predict happiness and related constructs, relationship satisfaction and job satisfaction (Judge & Mount, 2002; Malouff et al., 2010; Steel et al., 2008). It also negatively predicts psychopathology (Malouff et al., 2004). However there is little evidence to suggest that agreeableness predicts job performance or physical health outcomes (Hurtz & Donovan, 2000; Knezevic & Kardum, 2009). Consequently extraversion and agreeableness appear to be related to positive outcomes across some life domains but not others. Thus it would be expected that corresponding facets would be targeted somewhat, but less frequently than facets within the conscientiousness and emotionality factors of personality.

Openness is the weakest of the five factors in predicting happiness and related constructs (Steel et al., 2008). Furthermore it appears to be unrelated to job performance, relationship satisfaction and mental and physical health outcomes (Hurtz & Donovan, 2000; Knezevic & Kardum, 2009; Malouff et al., 2004; Malouff et al., 2010). Given that it is expected that individuals who undergo personality coaching will be likely to be high on openness already, and that openness is the weakest personality factor in terms of predicting
life outcomes, it is likely that openness facets will be infrequently chosen for change by clients engaging in intentional personality change coaching.

Hypotheses

Consequently the following hypotheses are offered…

1. Participants that volunteer to participate in intentional personality change coaching will be significantly higher in the personality factor of openness to experience as compared to normative scores.

2. Participants that volunteer to participate in intentional personality change coaching will be significantly higher in the personality factor of emotionality as compared to normative scores.

3. Participants will primarily choose to change facets within the domains of emotionality and conscientiousness.

Method

Data collection

The data used in the current study was archival data collected during a randomised wait list controlled trial of intentional personality change coaching conducted by Martin et al. (2014b). Participants completed a NEO-PI-R before the beginning of the intervention, or, if in the waitlist group, before the beginning of the waitlist period. Participants chose which facets they wished to target during session two of the intervention program.

Participants

A total of 63 participants from New South Wales, Australia, volunteered to be involved in the study. Three individuals were initially excluded due to having major psychopathology. Participants were randomly allocated to either the waitlist or personality coaching group after being matched for sex (male/female) and age category (18-30, 31-50,
51+ years). Six participants, all from the waitlist group, withdrew. These participants were replaced with new participants who matched their age category and gender.

Consequently, the final set of participants consisted of 54 adults (27 in each group) whose ages ranged between 18 and 64 ($M = 42.18$, $SD = 12.44$). There were nine males and 45 females.

**Measures**

**NEO PI-R**

The NEO PI-R (Costa & McCrae, 1992) consists of 240 items and employs a five point scale (0 = strongly disagree, 4 = strongly agree). Examples of items are "when I do things I do them vigorously" and "I'm not known for my generosity". The NEO PI-R is based on the five factor model of personality and assesses five domains which are emotionality, extroversion, agreeableness, openness and conscientiousness. Within each domain are six facets which provide further detail. The NEO PI-R is well validated in the literature and has high levels of internal consistency (ranging from .86 to .95) (Costa & McCrae, 1992).

**Procedure**

Participants were recruited via a press release in a local paper, an advertisement on a university website and word of mouth. Participants were required to be 18 years or older. Participants who scored in the very high range for one or more of the emotionality facets were asked to complete a Millon MCMI-III, in order to assess for psychopathology. Participants who had AXIS II disorders, active psychosis, bipolar disorder or significant current alcohol and drug abuse were excluded from the study. Participants were then either placed in the coaching group or the waitlist group via the process described in the participants section. After completing the waitlist period, participants in the waitlist group also engaged in the coaching program. A description of this program and how specific facets were selected for change can be found in the method section of chapter three.
Results

Participant’s scores on the five personality domains were compared to NEO PI-R norms. It should be noted that the normative sample was American. However, McCrae and Terraciano (2005) indicated that there are minimal differences in personality norms for the two countries. Consequently these norms may be valid for an Australian sample. The participants were predominately female (83.33%). Females score significantly higher in the domains of agreeableness and emotionality (Costa & McCrae, 1992). Consequently for these domains and their corresponding facets additional analyses were performed comparing the female participants to female norms. In order to limit the number of analyses, and reduce the possibility of type one errors, only those domains in which significant differences were found were then further analysed at the facet level. Descriptive statistics indicating frequency of facets targeted for the coaching intervention and their associated higher order domains are presented.

Domain level analyses of personality differences

Five one sample t tests were performed to test the hypothesis that there would be significant differences in personality domains between participants and NEO PI-R norms (Costa & McCrae, 1992). The results of the analyses are summarised in table 1 below.
Table 1

*Output from One Sample T-tests Comparing the Personality of Coaching Participants to NEO PI-R norms at the Domain Level.*

<table>
<thead>
<tr>
<th>Trait</th>
<th>Participants</th>
<th>Norms</th>
<th>T(53)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Emotionality</td>
<td>90.2</td>
<td>27.9</td>
<td>79.1</td>
<td>21.2</td>
<td>2.92</td>
</tr>
<tr>
<td>Extraversion</td>
<td>112.8</td>
<td>24.1</td>
<td>109.4</td>
<td>18.4</td>
<td>1.05</td>
</tr>
<tr>
<td>Openness</td>
<td>127.2</td>
<td>17.6</td>
<td>110.6</td>
<td>17.3</td>
<td>6.93</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>131.8</td>
<td>18.7</td>
<td>124.3</td>
<td>15.8</td>
<td>2.93</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>121.4</td>
<td>21.0</td>
<td>123.1</td>
<td>17.6</td>
<td>-.61</td>
</tr>
</tbody>
</table>

*Note* *p < .01*

The results of the analysis supported the hypothesis that openness would be significantly higher in personality coaching volunteers as compared to NEO PI-R norms. This result was associated with a large effect size (Cohen, 1988). The results of the analysis supported the hypothesis that emotionality would be significantly higher in participants as compared to NEO PI-R norms. This result was associated with a small to medium effect size (Cohen). Participants in the coaching program were also found to be significantly higher in agreeableness as compared to NEO PI-R norms. However further analyses indicated that this result could be accounted for by gender differences.

**Facet level analyses of personality differences**

Analysis revealed significant differences between participants and NEO PI-R norms for the domains of openness and emotionality. Consequently 12 one sample t-tests, with a Bonferonni adjusted significance level of .004 were performed in order to determine whether there were significant facet level differences between participants and NEO PI-R norms.
**Emotionality facets**

The results of the facet level analysis for emotionality indicated that anxiety was significantly higher for participants when compared to NEO PI-R norms. However further analyses indicated that this result was attributable to gender differences. No significant differences were found in the facets of anger, depression, self-consciousness, impulsiveness and vulnerability. A summary of these results is presented in table two below.

Table 2

*Output from One Sample T-tests Comparing Scores on Emotionality Facets of Coaching Participants to NEO PI-R norms.*

<table>
<thead>
<tr>
<th>Trait</th>
<th>Participants</th>
<th>Norms</th>
<th>T(53)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>17.2</td>
<td>14.3</td>
<td>3.13</td>
<td>.003*</td>
<td>.43</td>
</tr>
<tr>
<td>Angry Hostility</td>
<td>14.4</td>
<td>12.4</td>
<td>2.36</td>
<td>.022</td>
<td>.32</td>
</tr>
<tr>
<td>Depression</td>
<td>14.7</td>
<td>12.3</td>
<td>2.61</td>
<td>.012</td>
<td>.35</td>
</tr>
<tr>
<td>Self-Consciousness</td>
<td>15.1</td>
<td>14.3</td>
<td>.93</td>
<td>.36</td>
<td>.13</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>17.1</td>
<td>15.8</td>
<td>1.76</td>
<td>.08</td>
<td>.24</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>11.7</td>
<td>10.0</td>
<td>2.21</td>
<td>.03</td>
<td>.29</td>
</tr>
</tbody>
</table>

*Note* *p* < .004

**Openness facets**

The result of the facet level analysis for the domain of openness indicated that the facet fantasy was significantly higher for the personality change coaching volunteers as compared to NEO PI-R norms. This result was associated with a medium effect size (Cohen, 1988). The facet feelings was also significantly higher for participants as compared to NEO PI-R norms. This result was associated with a large effect size (Cohen, 1988). Similarly, the facet ideas was significantly higher for the participants as compared to NEO PI-R norms.
This result was associated with a medium effect size (Cohen, 1988). Finally, the facet values was significantly higher for participants as compared to NEO PI-R norms. This result was associated with a large effect size (Cohen, 1988). A summary of the results is presented in Table three below.

Table 3

*Output from One Sample T-tests Comparing Scores on Openness Facets of Coaching Participants to NEO PI-R Norms.*

<table>
<thead>
<tr>
<th>Trait</th>
<th>Participants</th>
<th>Norms</th>
<th>T(53)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fantasy</td>
<td>19.39</td>
<td>16.6</td>
<td>3.66</td>
<td>.001*</td>
<td>.50</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>20.1</td>
<td>17.6</td>
<td>3.04</td>
<td>.004</td>
<td>.42</td>
</tr>
<tr>
<td>Feelings</td>
<td>23.5</td>
<td>20.3</td>
<td>5.9</td>
<td>.001*</td>
<td>.80</td>
</tr>
<tr>
<td>Actions</td>
<td>18.1</td>
<td>16.4</td>
<td>2.77</td>
<td>.008</td>
<td>.38</td>
</tr>
<tr>
<td>Ideas</td>
<td>21.8</td>
<td>19.0</td>
<td>4.02</td>
<td>.001*</td>
<td>.57</td>
</tr>
<tr>
<td>Values</td>
<td>24.3</td>
<td>20.7</td>
<td>7.21</td>
<td>.000*</td>
<td>.97</td>
</tr>
</tbody>
</table>

*Note* *p* < .004

**Personality Facets Targeted**

Descriptive statistics were used to explore the frequency that personality facets were targeted for change during the intentional personality change intervention. A summary of the results is presented in Table four below.
Table 4

**Frequency of Facets Targeted in Personality Coaching Intervention**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Frequency Chosen</th>
<th>Rank</th>
<th>Trait</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>28</td>
<td>1</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>19</td>
<td>2</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Angry Hostility</td>
<td>17</td>
<td>3</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Depression</td>
<td>11</td>
<td>4</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Self-Consciousness</td>
<td>11</td>
<td>4</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>10</td>
<td>6</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Achievement Striving</td>
<td>8</td>
<td>7</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>7</td>
<td>8</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Competence</td>
<td>7</td>
<td>8</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Order</td>
<td>7</td>
<td>8</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>6</td>
<td>11</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Compliance</td>
<td>6</td>
<td>11</td>
<td>Agreeableness</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>5</td>
<td>13</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Trust</td>
<td>4</td>
<td>14</td>
<td>Agreeableness</td>
</tr>
<tr>
<td>Deliberation</td>
<td>4</td>
<td>14</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Straightforwardness</td>
<td>3</td>
<td>16</td>
<td>Agreeableness</td>
</tr>
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<td>Warmth</td>
<td>2</td>
<td>17</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Feelings</td>
<td>2</td>
<td>17</td>
<td>Openness</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>1</td>
<td>19</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Activity</td>
<td>1</td>
<td>19</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Excitement Seeking</td>
<td>1</td>
<td>19</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Fantasy</td>
<td>1</td>
<td>19</td>
<td>Openness</td>
</tr>
<tr>
<td>Actions</td>
<td>1</td>
<td>19</td>
<td>Openness</td>
</tr>
<tr>
<td>Modesty</td>
<td>1</td>
<td>19</td>
<td>Agreeableness</td>
</tr>
<tr>
<td>Dutifulness</td>
<td>1</td>
<td>19</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>0</td>
<td>26</td>
<td>Openness</td>
</tr>
<tr>
<td>Ideas</td>
<td>0</td>
<td>26</td>
<td>Openness</td>
</tr>
<tr>
<td>Values</td>
<td>0</td>
<td>26</td>
<td>Openness</td>
</tr>
<tr>
<td>Tendermindedness</td>
<td>0</td>
<td>26</td>
<td>Agreeableness</td>
</tr>
<tr>
<td>Altruism</td>
<td>0</td>
<td>26</td>
<td>Agreeableness</td>
</tr>
</tbody>
</table>

**Personality Domains Targeted**

The data indicated that 79 of the 164 (48.17%) facets chosen belonged to the domain of emotionality, 21 (12.80%) belonged to the domain of extroversion, four (2.4%) belonged to the domain of openness, 14 (9%) belonged to the domain of agreeableness and 46 (28.04%) belonged to the domain of conscientiousness. A visual summary of these results is presented in Figure one below.
Discussion

The results of the current study indicated that, in keeping with our hypotheses, participants who volunteered for the personality change intervention program had significantly higher emotionality and openness. Facets that fell within the emotionality and conscientiousness domains of personality were the most likely to be targeted. Overall these results suggest that individuals who volunteer for personality coaching have different personalities to NEO PI-R norms, and that, in keeping with the consequential outcome literature, they are more likely to choose to change aspects of their personality related to emotionality and conscientiousness.

The finding that openness was significantly higher for participants in the personality coaching program may be indicative of the nature of the construct (Costa & McCrae, 1992). It makes sense that those who have a propensity to seek out new ideas, try new behaviours and take risks would be more likely to choose to engage in the coaching process. This is
likely because the aforementioned aspects of the openness construct lend themselves to coaching. That is, coaching is a process which involves thinking in new ways, trying new behaviours and taking risks in order to better oneself and achieve one’s goals (Auerback, 2006; Cox et al., 2010; Ives, 2008; Kemp, 2006). A person who does not possess higher than average levels of openness may be unlikely to choose to be coached and may also struggle with the requirement to alter their thinking and behaviours. Indeed, Stewart et al. (2010) indicated that openness was predictive of coaching success. Stewart et al.'s findings, in combination with the findings of the current study, suggests that those who choose to be coached may be those who would most benefit from coaching. In some ways this is encouraging as it suggests that those who choose to be coached are likely to be successful. However, it also brings into question the applicability of coaching to the general population. That is, if coaching participants tend to be higher on openness, and openness is predictive of successful outcomes, then it is difficult to determine how effective personality coaching would be for those individuals who are average or below average in this construct.

The finding that emotionality was significantly higher for those who chose to participate in personality coaching, as compared to a normative sample, could be explained by the fact that individuals high in this domain experience associated negative outcomes (Ozer & Benet-Martinez, 2006). Having higher levels of negative emotions is likely unpleasant and is also predictive of lower levels of happiness, job satisfaction, relationship quality and physical and mental health (Barrick et al., 2001; Hudek-Knezevic & Kardum, 2009; Karney & Bradbury, 1995; Malouff et al., 2004; Steel et al., 2008). What is encouraging is that these results suggest that those individuals whose personalities are likely causing problems in their lives are more likely to choose to change their personalities. Cuijpers et al. (2010) indicated that emotionality may be associated with enormous economic costs and suggested the need to start developing interventions to target emotionality rather
than its consequences. The findings of Martin, Oades and Caputi (2014b) combined with the findings of the current study suggested that those high in emotionality can change their personality and that they are more likely to choose to do so than the general population. Thus these findings suggest that those high emotionality, who may be incurring costs upon society, are more likely to be receptive to personality change interventions. Consequently these findings suggest that it may be possible to create, as Cuijpers et al. (2010) stated, "interventions that focus not on each of the specific negative outcomes of neuroticism, but rather on the starting point itself".

However it should be noted that in the context of the other findings these conclusions may not apply to all those high in emotionality. That is it may be that those individuals with high emotionality who have higher than average personal resources (e.g. adaptive personality characteristics such as higher openness) that are more likely to choose to change their personality via coaching.

The results indicated that participants in the current study predominately choose to change aspects of their personality which were facets of emotionality. This suggests that individuals are most motivated to change those aspects of their personality that are associated with negative outcomes. That is individuals appear to recognise those aspects of their personality which are causing problems and consequently wish to change these aspects. If the personality change is effective and coaching is successful, this in turn may lead to fewer negative outcomes stemming from their emotionality. However the benefits of reducing ones emotionality may extend beyond the individual. The costs of emotionality are sufficient that some have argued that they may be of public health significance (Lahey, 2009; Cuijpers et al., 2010). Furthermore it has been suggested that the costs of emotionality extend beyond health outcomes and may also have further economic impacts relating to employment and productivity (Cuijpers et al., 2010). Consequently the finding that individuals in the current
study predominately targeted emotionality for change is encouraging. Furthermore when these findings are combined with the findings that personality change coachees were higher on emotionality, and that those in the highest bracket of emotionality create significant costs upon society (Cuijpers et al., 2010), than this suggests that personality change coaching has the potential to produce wider benefits for society.

It should be noted that there are several limitations to this research. Firstly, this was a study of individuals who volunteered for personality change coaching. Consequently, it is possible that our conclusion that individuals higher in openness may be more likely to choose to engage in coaching may only apply to personality coaching. Furthermore the importance of this paper is largely dependent on the premise that personality change coaching is possible. As yet there has only been one study on personality change coaching. While the results from this study are encouraging it should be considered that a single study does not constitute irrefutable evidence of the efficacy of a coaching method.

In conclusion the results of this study suggested that the personality of individuals who choose to change their personality via coaching is different to NEO PI-R norms. It is suggested that the higher openness found among participants may be because being open is important to the process of coaching. The findings that emotionality is higher for individuals who wish to change their personality and that they are more likely to target emotionality facets is important. These findings, combined with the research outlining the personal and societal costs of emotionality, suggest that individuals high in this domain may be more likely to choose to change this aspect of their personality and that this may be of benefit to themselves and society.
References


Coaching and Mentoring, 6(1), 32-43.


Chapter 3: Application of a 10 week coaching program designed to facilitate volitional personality change: Overall effects on personality and the impact of targeting

There is an increasing body of literature to suggest that personality may be amenable to change via interventions (e.g., Piedmont, & Ciarrocchi, 1999; Nelis et al., 2011; Tang et al., 2009). Furthermore, the consequential outcomes literature is extensive and suggests that personality is predictive of a number of important life outcomes (Ozer & Benet-Martinez, 2006). Researchers have found that certain personality domains tend to be associated with positive outcomes, while others are associated with negative outcomes (Ozer & Benet-Martinez, 2006). Taken together the literature above suggests that personality characteristics may be changeable, and that if characteristics associated with positive outcomes are increased and those associated with negative outcomes are decreased, this may have a positive impact on an individual’s life. However, while there has been extensive research on personality change, there has been limited research on whether personality can be successfully targeted for change via intervention. The majority of personality change research has looked at personality change over the lifespan (e.g., Roberts, Walton & Viechtbauer, 2006) or explored incidental personality change in interventions targeting other constructs (e.g., Tang et al., 2008). Consequently, the current paper will explore the effect of a 10 week personality change coaching program on overall personality domains and how targeting specific aspects of personality affects outcomes.

Evidence for personality change via interventions

Excluding the current line of research, a literature review found a total of two studies (described in one paper) that found empirically significant evidence for intentional personality change. The first study by Hudson and Frayley (2015) found that people’s personality change goals predicted changes in personality in the desired direction (i.e., the direction of their goal). The second study found that training participants in how to create
specific structured personality change goals (and then having them set specific intentions each week) resulted in significant changes in personality in the desired direction. It should be noted however that these changes were quite small (an average .02 standard deviations per month). Interestingly those participants who set unstructured goals did not change their personalities in the desired direction. Taken together, the research reviewed above, and in chapter 1 of this thesis, provides evidence that intentional personality change is possible and suggests that structured goal setting may be an important technique in producing change.

**Coaching versus therapy and other ethical considerations**

The broadness of personality brings up questions of whether an intervention targeting personality should be considered therapy or coaching. One aspect which makes this distinction difficult is that the boundaries between therapy and coaching can be considered “fuzzy” and that in many areas therapy and coaching overlap (Jopling, 2007; Spinelli, 2010; Hart, Blatner & Leipsic, 2007). Furthermore, certain personality traits will have closer theoretical ties to coaching while others will have closer ties to therapy (e.g. the conscientiousness facet “self-discipline” versus the neuroticism facet “anxiety”). Consequently it may depend on what personality facets are being targeted that determines whether a personality change intervention looks more like therapy or coaching. However there is one area of difference between coaching and therapy which the authors felt was important enough to definitively call the current study a coaching intervention. That is that coaching tends to focus relatively more on strengths whereas therapy tends to focus relatively more on deficits or pathology (Hart et al., 2007). While many therapeutic approaches have attempted to move away from the perspective that therapy is for addressing deficits or pathology (e.g. solution focused therapy, acceptance and commitment therapy) there is never the less a general assumption in society that you see a therapist to fix a problem or to address a mental health disorder (Vogel, Wester & Larson, 2007). This problem/pathology focus
becomes particularly concerning when applied to the construct of personality. Approaching participants (who in the current study were from the general population) from the perspective that they have a problem/pathology within their personality has the potential to be damaging to that persons self-image (particularly if no change occurs). In contrast, focusing on using the participant’s strengths to make positive changes in their personality appears to carry a lower risk of potential harm. Consequently the decision to label the current study a coaching intervention was based more so on the perceived benefit of a coaching frame over a therapeutic frame as opposed to being based on whether the specific techniques utilized were more related to coaching or therapy.

Another area of concern regarding potential harm to participants relates to the level of volitionality. That is, to what extent participants desire to change their personality stems from intrinsic versus extrinsic sources. The idea that someone may choose to change themselves does not appear ethically problematic provided that decision comes from intrinsic sources. However the possibility that a person may choose to change their personality because of extrinsic pressure exerted upon them by a partner, organisation or professional is very concerning. Thus it is important that any personality change interventions are executed in a way that maximises volitionality. This suggests that personality change interventions may be inappropriate in an organisational context (even with an opt in methodology as there still may be pressure to take part). Furthermore recruitment methods should involve minimal social pressure (e.g. mediums where the person can choose to opt out without saying “no” to someone). Examples of this would be flyers and newspaper advertisements. It is also important that once a person is engaged in the program that the changes they choose to make are based on their own reflection on their personality and where it is causing problems in their lives as opposed to being pressured to make certain decisions based on the consequential outcome literature. Finally, it is argued that it is important that changes that participants
choose to make are driven by their values (what is truly important to them). Consequently, coaching programs should utilise intervention techniques designed to elicit values, and once these values are elicited, they should be used to inform future decisions regarding what personality traits should be changed and how change may be achieved.

The current study

In response to the evidence that personality change appeared both possible and beneficial, Martin, Oades and Caputi (2014a) developed a step-wise process of intentional personality change. A detailed description of the development of this intervention can be found in Martin et al. (2014a). This intervention incorporated elements of intentional change theory, and utilized motivational interviewing, and eclectic therapeutic and coaching techniques, within a goal setting framework (Boyatzis, 2006).

Martin, Oades and Caputi (2014b) found that application of the step-wise process of personality change over a 10 week coaching period resulted in significant change in targeted personality facets. Furthermore, these changes remained significant at the three month follow up. Allan, Leeson and Martin (2014) found that the most common facets targeted for change fell within the domains of neuroticism and conscientiousness.

Martin et al. (2014b) allowed participants to choose specifically what facets they wished to target for change. This makes sense from a coaching perspective as it allows participants to tailor their goals to their own individual needs. It is also important from an ethical standpoint that participants are in complete control of what aspects of their personality they choose to target for change. This design meant that participants tended to target different facets for change. Furthermore some participants targeted as few as one facet while others targeted up to eight facets. Consequently to allow for comparison between participants the construct of “average targeted facet score” was created. This score was an average of the change that had occurred in the facets that had been targeted by a participant.
The construct of average targeted facet score allowed Martin et al. (2014b) to determine whether on average scores on targeted facets changed. However there is no specific information regarding which personality facets or domains changed as a result of the intervention. While Allan et al. (2014) did provide information on which facets were most commonly targeted this still does not provide specific information on which aspects of personality were changed as a result of the intervention. For example an average change of five points for someone who targeted anxiety and self-discipline could be the result of a five point change in both facets, or a 10 point change in one facet and a zero point change in the other. Information on specifically what aspects of personality were changed is important because it could provide tentative evidence to justify the development of more specific and standardized interventions to explore the possible efficacy of targeting a specific domain or facet for change.

Another limitation of Martin et al. (2014b) is that it did not provide evidence for whether changes in targeted facets stemmed from targeting that facet or arose from general intervention effects. For example, a decrease in a targeted facet such as anxiety may be the result of targeting this facet or it could be that the overall effect of the intervention (regardless of whether anxiety is targeted or not) tends to reduce anxiety. This is important as it provides some information regarding how important the specific targeting of facets is to the change process.

It should be noted that a study exploring the impact of a targeting specific facets or domains for change would ideally control these variables during the experiment. However, as mentioned above, allowing the participants to control what they targeted was important from both an ethical and motivational standpoint. Furthermore Martin et al. (2014b) study sought primarily to help answer the general question of could participants intentionally change their personality. This is a question that needs to be answered first before more specific questions
such as can individuals change “x” facet or “y” domain are answered. However, despite these limitations, the authors of the current study argue that information regarding overall change at both the domain and facet level, as well as the impact of targeting of specific facets on change in those facets, would present a useful contribution to the personality change and coaching literature.

Consequently the current study hypothesized that the domains which had the highest number of facets targeted by participants (neuroticism and conscientiousness) would significantly change as a result of the intervention. Furthermore it was hypothesized that the targeting of facets would have a significant effect on the results of the intervention.

**Method**

**Participants**

The participants were 54 adults (8 males and 46 females) with ages ranging from 18 to 64 ($M = 42.18$, $SD = 12.44$). Participants were matched for gender and age and then randomly allocated to the waitlist ($n = 27$) or coaching ($n = 27$) group. Six participants from the waitlist group withdrew, and were replaced by individuals who matched their age and gender. After completing the waitlist period the waitlist group also underwent the coaching program. Consequently the data used in the current study consists of the data collected during the coaching period for both the waitlist and coaching groups. Three participants who completed the waitlist period chose not to engage in the coaching program. One participant from those who completed the coaching program did not complete the three month follow up. Consequently a total of 50 participants (27 from the coaching group and 23 from the waitlist group) completed all measures for the current study.

Participants were recruited via an article in a local paper, word of mouth and an online post on a university's website. Participants were required to be older than 18. Participants
with AXIS II disorders, psychosis, bipolar disorder or who had a current substance use
disorder were excluded from the study.

Procedure

After completing informed consent forms, participants were randomly allocated to
either the waitlist group or the coaching group. Those participants in the coaching group were
then allocated a coach. This was followed by 10 weekly meetings with their coach in which
they engaged in the step-wise process of intentional personality change (described below).
Participants in the coaching group completed the NEO PI-R pre-intervention, at week five of
the coaching program and post intervention. A follow up NEO PI-R was also conducted at
three months post intervention (week 22).

Those participants in the waitlist group completed their time one NEO PI-R, and then
after a 10 week waiting period completed an additional NEO PI-R. Following this, they
underwent the 10 week coaching program delivered to the coaching group described above
(they also underwent an identical testing regime to the coaching group).

Data collection

The current study used archival data collected during Martin, Oades and Caputi’s
(2014b) randomized wait list controlled trial of intentional personality change coaching.

Coaches

Coaching was provided by registered and trainee psychologists. The trainee
psychologists had a minimum of five years education in psychology and a minimum of 60
face to face client contact hours. They also underwent weekly one hour supervision sessions,
where videoed coaching sessions were reviewed. The psychologists were required to undergo
a one day training workshop and were provided with a training manual.
Measures

The NEO PI-R (Costa & McCrae, 1992) consists of 240 items on a five point Likert scale (0 = strongly disagree, 4 = strongly agree). An example item is "I often crave excitement". The NEO PI-R is designed to measure the five domains of personality, with 6 facets under each domain providing more specific information. The NEO PI-R has high levels of internal consistency (ranging from .86 to .95) and is well validated in the literature (Costa & McCrae, 1992; Piedmont, 1998).

 Coaching program

The step-wise process of intentional personality change utilized 10 steps in facilitating personality change. The first step involved assessing client’s current personality and helping them discover their values. The second step focused on discovering the current self and exploring personality functioning. Clients reflected on the positive and negative aspects of their lives and how their current personality may be affecting these aspects. They also reflected on the extent to which they were living in alignment with their values. Step three involved identifying the ideal self (a vision of who they want to be) and exploring discrepancies between the ideal and current self (Boyatzis, 2006). This involved exploring their current personality profile and how this might differ from their ideal personality profile. This allowed clients to determine a shortlist of personality facets for targeting. Step four involved selecting from this shortlist a realistic number of facets to target for change. The fifth step involved assessing the client’s attitude towards change. Specifically the importance of change, confidence in ability to change, timeliness of change as well as intrinsic and extrinsic motivation were assessed.

The sixth step focused on the development and implementation of a coaching plan. The coach and the client collaborated to determine, from a menu of eclectic therapeutic techniques provided for each facet, which interventions they would use to achieve desired
facet change. For example one participant may have wished to increase the conscientiousness facet self-discipline and thus they would have a choice of related techniques (e.g. goal setting, organizational skills, life style skills, positive self-talk). A second participant may have chosen to change anxiety and thus would have some techniques that overlapped with the first participant (e.g. goal setting, positive self-talk, life style skills) but also some different techniques (e.g. cognitive therapy techniques, exposure based techniques). Step seven occurred during week five of the program and involved re-assessing client’s personality, evaluating progress and using this information to inform the final five weeks of coaching. Step eight involved completing the remaining coaching sessions which consisted of applying the facet and participant specific interventions chosen via the process described in step six. Step nine occurred at the final coaching session and included re-assessing personality to review the client’s progress towards desired change, and developing a plan to maintain gains. Finally, in order to determine whether gains had been maintained, step 10 was a three month follow up personality assessment.

**Results**

To determine whether changes occurred at the domain level, across the intervention period, five one way repeated measures ANOVAS were conducted. Following this, change at the facet level was also assessed. In order to limit the number of analyses, only facets that fell within domains that had significantly changed over the intervention period were analyzed. Finally, a mixed design ANOVA was performed to determine whether targeting of facets significantly influenced change.

**Domain level change**

A one way repeated measures ANOVA with a Greenhouse-Geisser correction determined that mean neuroticism was significantly different between time points, $F (2.04, 99.99) = 30.07$, $p < .001$, $\eta_p$ (partial eta-squared) = .38. Post Hoc tests using the Bonferroni
correction indicated that there was a significant decrease in neuroticism between weeks one
(M = 88.14, SD = 29.52) and five (M = 79.70, SD = 27.06), p < .001. There was also a
significant decrease in neuroticism between weeks five to 10 (M = 71.04, SD = 25.06), p <
.001. This significant difference was maintained at week 22 (M = 71.06, SD = 24.68), p <
.001.

A one way repeated measures ANOVA with a Greenhouse-Geisser correction
determined that mean conscientiousness was significantly different between time points,
F (1.86, 91.00) = 4.69, p < .01. ηp = .09. Post Hoc tests using a Bonferroni correction indicated
that there was not a significant increase in conscientiousness between weeks one (M =
122.33, SD = 20.43) and week five (M = 124.86, SD = 19.75) or between week five and week
10 (M = 128.90, SD = 19.76). However there was a significant difference between week one
and 10, p = .03. This significant difference was not maintained at week 22 (M = 127.54, SD =
19.02).

A one way repeated measures ANOVA with a Greenhouse-Geisser correction
determined that mean extraversion was significantly different between time points, F (2.26,
110.74) = 6.77, p < .001, ηp = .12. Post Hoc tests using the Bonferroni correction indicated
that there was not a significant increase in extraversion between weeks one (M = 110.54, SD
= 23.48) and five (M = 112.54, SD = 23.85). There was a significant increase in extraversion
between weeks five and 10 (M = 116.48, SD = 23.34), p = .03. There was also a significant
increase between weeks one and 10, p < .01. This significant difference was maintained at
week 22 (M = 116.12, SD = 22.88), p = .02.

A one way repeated measures ANOVA with a Greenhouse-Geisser correction
determined that mean agreeableness was not significantly different between time points,
F(2.54, 124.63) = 1.7, p = .86. Similarly there was no significant difference between time
points for mean openness, F(2.41, 118.08) = 2.20, p = .05.
Facet level change

A one way repeated measures ANOVA was performed for each of the facets of neuroticism. A Greenhouse-Geisser correction was used for anxiety, vulnerability, depression, impulsiveness and self-consciousness as Mauchly’s test indicated that sphericity had been violated for these variables. The results of the analysis indicated that there was significant variation across time points for all facets. A summary of these results is provided in table one below.

Table 1.
Summary of repeated measures ANOVA for neuroticism facets across the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>F</th>
<th>p</th>
<th>ηp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>19.15 (2.47, 121.07)</td>
<td>&lt;.001</td>
<td>.28</td>
</tr>
<tr>
<td>Angry/hostility</td>
<td>10.52 (3, 147)</td>
<td>&lt;.001</td>
<td>.18</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>11.93(2.49, 121.93)</td>
<td>&lt;.001</td>
<td>.20</td>
</tr>
<tr>
<td>Depression</td>
<td>19.42 (2.17, 105.90)</td>
<td>&lt;.001</td>
<td>.28</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>11.20 (2.46, 120.41)</td>
<td>&lt;.001</td>
<td>.19</td>
</tr>
<tr>
<td>Self-consciousness</td>
<td>14.56 (2.25, 110.40)</td>
<td>&lt;.001</td>
<td>.23</td>
</tr>
</tbody>
</table>

Post hoc testing using the Bonferroni adjustment indicated that there was a significant decrease in all neuroticism facets between week one and week 10 (all p < .001). This difference was maintained at week 22 for all neuroticism facets (all p < .001). There was a significant decrease between week one and week five for anger (p = .02), vulnerability (p = .05), depression (p < .01), impulsiveness (p < .01) and self-consciousness (p < .03) but not for anxiety (p = .13). There was a significant difference between week five and week 10 for anxiety (p < .001), vulnerability (p < .01), depression (p < .001) and self-consciousness (p < .01) but not for angry/hostility (p = .20) or impulsiveness (p = .20). A summary of the means for each facet of neuroticism at each time point is presented in table two below.
Table 2.

A summary of the means for neuroticism at each time point during the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Week 1</th>
<th>Week 5</th>
<th>Week 10</th>
<th>Week 22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>M</em></td>
<td><em>SD</em></td>
<td><em>M</em></td>
<td><em>SD</em></td>
</tr>
<tr>
<td>Anxiety</td>
<td>16.90</td>
<td>7.11</td>
<td>15.74</td>
<td>6.38</td>
</tr>
<tr>
<td>Angry/hostility</td>
<td>13.28</td>
<td>5.24</td>
<td>12.20</td>
<td>5.35</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>11.98</td>
<td>5.56</td>
<td>11.00</td>
<td>5.34</td>
</tr>
<tr>
<td>Depression</td>
<td>14.34</td>
<td>7.19</td>
<td>12.14</td>
<td>6.65</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>16.68</td>
<td>6.03</td>
<td>14.86</td>
<td>5.44</td>
</tr>
<tr>
<td>Self-consciousness</td>
<td>14.96</td>
<td>5.89</td>
<td>13.76</td>
<td>6.13</td>
</tr>
</tbody>
</table>

A one way repeated measures ANOVA was performed for each of the facets of extraversion. A Greenhouse-Geisser correction was used for warmth, gregariousness assertiveness and positive emotions as Mauchly’s test indicated that sphericity had been violated for these variables. The results of the analysis indicated that there was significant variation across time points for mean warmth, gregariousness, assertiveness and positive emotions. A summary of these results is provided in table three below.
Table 3.

Summary of repeated measures ANOVA for extraversion facets across the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>$F$</th>
<th>$p$</th>
<th>$\eta_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmth</td>
<td>4.37(2.43, 119.29)</td>
<td>&lt;.01</td>
<td>.08</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>3.61 (2.54, 124.65)</td>
<td>&lt;.01</td>
<td>.07</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>4.51 (2.17, 106.12)</td>
<td>&lt;.01</td>
<td>.08</td>
</tr>
<tr>
<td>Activity</td>
<td>.13 (3, 147)</td>
<td>.47</td>
<td>.00</td>
</tr>
<tr>
<td>Excitement</td>
<td>1.32 (3, 147)</td>
<td>.13</td>
<td>.02</td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>7.22 (2.03, 99.44)</td>
<td>&lt;.001</td>
<td>.13</td>
</tr>
</tbody>
</table>

Post hoc tests using the Bonferroni correction indicated that there was a significant increase in positive emotions ($p = .03$), gregariousness ($p = .04$), warmth ($p = .02$) and assertiveness ($p = .03$) between weeks one and 10. This significant difference was maintained at week 22 for positive emotions ($p = .01$), gregariousness ($p = .05$) and assertiveness ($p = .04$) but not for warmth ($p = .13$). All other results were non-significant. A summary of the means for the facets of extraversion at each time point is provided in table four below.
Table 4:

A summary of the means for extraversion at each time point during the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Week 1</th>
<th>Week 5</th>
<th>Week 10</th>
<th>Week 22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Warmth</td>
<td>23.32</td>
<td>4.20</td>
<td>23.64</td>
<td>4.63</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>16.96</td>
<td>6.01</td>
<td>17.78</td>
<td>6.19</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>16.32</td>
<td>5.93</td>
<td>17.08</td>
<td>5.78</td>
</tr>
<tr>
<td>Activity</td>
<td>18.50</td>
<td>4.99</td>
<td>18.78</td>
<td>5.16</td>
</tr>
<tr>
<td>Excitement Seeking</td>
<td>14.86</td>
<td>4.87</td>
<td>14.36</td>
<td>5.02</td>
</tr>
</tbody>
</table>

A one way repeated measures ANOVA was performed for each of the facets of conscientiousness. A Greenhouse-Geisser correction was used for competence, order, dutifulness, achievement striving and self-discipline as Mauchly’s test indicated that sphericity had been violated for these variables. The results of the analysis indicated that there was significant variation across time points for mean competence, dutifulness, achievement striving and self-discipline. A summary of these results is provided in table five below.
Table 5:

Summary of repeated measures ANOVA for conscientiousness facets across the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>F</th>
<th>p</th>
<th>η_p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>3.09</td>
<td>.02</td>
<td>.06</td>
</tr>
<tr>
<td>Order</td>
<td>.76</td>
<td>.25</td>
<td>.02</td>
</tr>
<tr>
<td>Dutifulness</td>
<td>2.86</td>
<td>.03</td>
<td>.06</td>
</tr>
<tr>
<td>Achievement Striving</td>
<td>2.54</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>6.41</td>
<td>&lt;.01</td>
<td>.12</td>
</tr>
<tr>
<td>Deliberation</td>
<td>.67</td>
<td>.29</td>
<td>.01</td>
</tr>
</tbody>
</table>

Post hoc testing using the Bonferroni adjustment indicated that there was a significant increase in competence between week one and week 22 (p = .03). There was also a significant increase in self-discipline between week one and 10 (p = .01). However this difference was not maintained at week 22. All other results were non-significant. A summary of the means for each conscientiousness facet at each time point is provided in table six below.
Table 6:

A summary of the means for conscientiousness at each time point during the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Week 1</th>
<th></th>
<th>Week 5</th>
<th></th>
<th>Week 10</th>
<th></th>
<th>Week 22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Competence</td>
<td>21.58</td>
<td>4.92</td>
<td>22.40</td>
<td>3.87</td>
<td>22.88</td>
<td>5.00</td>
<td>23.06</td>
<td>4.54</td>
</tr>
<tr>
<td>Order</td>
<td>20.12</td>
<td>4.68</td>
<td>19.76</td>
<td>3.70</td>
<td>20.44</td>
<td>3.70</td>
<td>20.14</td>
<td>3.51</td>
</tr>
<tr>
<td>Dutifulness</td>
<td>23.14</td>
<td>4.12</td>
<td>23.42</td>
<td>3.69</td>
<td>24.18</td>
<td>3.52</td>
<td>23.58</td>
<td>3.17</td>
</tr>
<tr>
<td>Achievement Striving</td>
<td>19.52</td>
<td>4.99</td>
<td>20.40</td>
<td>5.15</td>
<td>20.74</td>
<td>5.03</td>
<td>20.56</td>
<td>4.85</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>19.68</td>
<td>5.74</td>
<td>20.50</td>
<td>5.42</td>
<td>21.98</td>
<td>4.93</td>
<td>21.38</td>
<td>4.68</td>
</tr>
<tr>
<td>Deliberation</td>
<td>18.28</td>
<td>4.73</td>
<td>18.38</td>
<td>4.84</td>
<td>18.68</td>
<td>4.88</td>
<td>18.82</td>
<td>4.68</td>
</tr>
</tbody>
</table>

The impact of targeting

A mixed design ANOVA was used to determine whether there was a significant change in personality across all facets and whether these changes were related to facets being targeted by the participants. The between group factor was whether a facet was targeted or not and the within group factor was time (Week one versus week 10). The facets of neuroticism was reverse scored as participants universally chose to decrease neuroticism facets. The results of the analysis indicated that there was a significant main effect for time, $F(1, 1528) = 60.74, p < .001, \eta^2 = .04$. Participants average score on personality facets increased from week one ($M = 19.87, SD = 5.81$) to week ten ($M = 21.01, SD = 5.39$). There was a significant interaction effect between targeting and time, $F(1, 1528) = 135.109, p < .001, \eta^2 = .08$. Targeted facets increased more between week one ($M = 13.37, SD = 4.96$) and 10 ($M = 17.77, SD = 5.32$) than non-targeted facets ($M = 20.61, SD = 5.43$ to $M = 21.38, SD = 5.27$).
Discussion

The finding that the current intervention resulted in significant decreases in neuroticism adds to the literature which has indicated that neuroticism may be changeable via interventions (e.g. De Fruyt et al., 2006; Hudson & Frayley, 2015; Nelis et al., 2011; Piedmont et al., 1999). This is encouraging as higher neuroticism has been associated with a number of negative outcomes from both an individual and societal standpoint (Cuijpers et al., 2010; Hurtz & Donovan, 2000; Karney & Bradbury, 1995; Malouff et al., 2005; Robins et al., 2002; Steel et al., 2008). Furthermore Allan et al. (2014) indicated that neuroticism was the personality domain that individuals were most likely to choose to change. Consequently the current findings, in combination with the literature, provide evidence that individuals are motivated and able to reduce neuroticism through application of the step-wise process.

The finding that conscientiousness increased as the result of the intervention is encouraging. Conscientiousness facets were the second most commonly targeted traits during the intervention and conscientiousness has been associated with improvements across multiple life domains (Hampson et al., 2007; Hurtz & Donovan, 2000; Karney & Bradbury, 1995; Kern & Friedman, 2008; Steel et al., 2008). Conscientiousness appears to be particularly important for health-related outcomes due to its influence on health behaviours (Kern, Hampson, Goldberg & Friedman, 2014). Thus it had been suggested that it may be helpful from a public health perspective to develop interventions to change conscientiousness (Reiss, Eccles, & Nielsen, 2014). However it had not been established that conscientiousness could be changed through a targeted intervention. This research provides a first step in this line of enquiry. Future research may be able to explore whether changes in conscientiousness are reflected in changes in health behaviours and subsequent changes in health status.

The current study also found significant increases in extraversion over the intervention period. These changes were unexpected because extraversion was infrequently targeted by
participants. While surprising, the outcome is nevertheless an encouraging one. Extraversion has a number of positive associations. It is positively predictive of well-being, job satisfaction, and relationship satisfaction and negatively predictive of mental health symptoms (Karney & Bradbury, 1995; Malouff et al., 2005; Steel et al., 2008; Thoresen et al., 2003).

One area where the current study extends upon the work of Hudson and Frayley (2015) is its effect sizes. Hudson and Frayley (2015) indicated that the personality changes found in their studies were relatively small (about .02 of a standard deviation per month). In contrast several of the effect sizes for change in the current study were large (Cohen, 1988). One key difference between the two studies is the relative difference in the intensiveness of the intervention (weekly one to one coaching versus structured goal setting training). This presents an interesting area for future research. That is, what attributes of the intervention contribute to the size of personality change.

The changes achieved during the current intervention appear to be positive. That is the changes are occurring in the direction whereby the consequential outcome research indicates positive outcomes increase and negative outcomes decrease. However due to the associative nature of this research the current study is not able to determine whether there were any changes in life outcomes. It may be useful for future studies conducted in this area to measure associated outcomes, in order to determine whether these changes in personality are related to positive changes in life outcomes. This would aid in determining the beneficence of the current intervention as well as providing criterion validity for the changes in personality domains that were found.

The current study also found that the targeting of specific facets was an important component in creating personality change. This suggests that producing change in personality is similar to producing change in other areas in that more specific goals tend to result in better
outcomes (e.g. Locke et al., 1981; Locke & Latham, 2006). It also suggests that future research should incorporate specific targeting of facets into personality change interventions. Finally it provides some insight into the overall results of the study. That is the three domains which had the most facets targeted were neuroticism, conscientiousness and extraversion. These were the three domains that were found to have changed significantly over the intervention period. The two least targeted domains (agreeableness and openness) did not change. Consequently the lack of change in these domains may not be reflective of them being more difficult or unable to change, rather it may be that they did not change because participants did not want to change them.

These findings add to the expanding research that refutes the claim that past young adulthood personality does not and cannot be significantly changed. It suggests that people who are motivated are able to change their personality and that they can do this in a relatively short period of time provided they are given the right resources. Furthermore it suggests that, at least for extraversion and neuroticism, these changes can be maintained after several months.

There are however a number of legitimate limitations to the current study which may need to be addressed in future research in order for the research supporting intentional personality change to be considered substantive. Perhaps the largest limitation is that only self-report measures were used. Consequently results may be subject to confounding effects such as common source and social desirability bias (De Fruyt & Van Leeuwen, 2014). This is a particular concern, considering that the intervention required the development of a close relationship between the coach and client. This limitation could be addressed in future research by using multiple informants for baseline and follow-up personality descriptions, who are unaware of the coaching objectives and targeted traits.
Another limitation is that the follow up data was taken only 3 months after the intervention had finished. The current study design is unable to determine whether these changes will be maintained throughout the lifespan.

In summary, the current study indicated that neuroticism significantly decreased and conscientiousness and extraversion significantly increased as the result of the application of a 10 week targeted personality change intervention. These changes were considered to be positive as increases in extraversion and conscientiousness and decreases in neuroticism are associated with increases in positive and decreases in negative life outcomes. An important component to this change appeared to be the specific targeting of facets. A number of limitations were discussed. However, this study should be considered as preliminary research into a new and important area. Personality has been found to have a wide reaching impact across people’s lives. Consequently, the possibility of being able to change ones personality for the better is an exciting and important development in the coaching and personality literature.
References


language and in questionnaires. In L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 66-100). New York: Guilford.


communication with burnout, empathy, and attitudes among primary care physicians. *Journal of the American Medical Association, 302*(12), 1284-1293.


Chapter 4: Intentional Personality Change: The Case for Conscientiousness

There is a growing body of literature to suggest that personality may be changeable via interventions (e.g., De Fruyt, Van Leeuwen, Bagby, Rolland, & Rouillon, 2006; Hudson & Fraley, 2015; Krasner et al., 2009; Martin, Oades & Caputi, 2014b; Piedmont & Ciarrocchi, 1999). This is encouraging because personality has been found to be predictive of a number of life outcomes (Friedman & Kern, 2014; Ozer & Benet-Martinez, 2006; Widiger, 2017). One aspect of personality that has been consistently associated with positive outcomes is conscientiousness (Jackson & Roberts, 2017). Consequently interventions that increase conscientiousness may be beneficial. However, the personality change intervention literature is in its infancy, and there is an absence of well-established empirically supported interventions for changing conscientiousness (Allemand & Fluckiger, 2017). Thus the current paper will discuss possible directions for the development of interventions to increase conscientiousness.

Theories of personality change

Allemand and Fluckiger (2017), in their theoretical paper which intended to lay down some guiding principles for the development of personality change interventions, suggested a three level approach to how personality change could occur. They based this theory on Rosenberg’s (1998) model describing the organisation of affect and Roberts and Pomerantz’s (2004) person by situation interaction model. Rosenberg’s (1998) model posits that affect can be segregated into three levels. These are emotions, moods and affective traits. Rosenberg (1998) distinguishes between these levels in regards to their temporal and situational breadth. That is, traits, at the highest level have the longest temporal duration and have the propensity to influence the broadest range of cognitive and behavioural processes. In contrast, emotions at the lowest level are the shortest in duration and have the lowest potential to influence a broad array of processes. Rosenberg (1998) argued that one of the defining features of this
model is the propensity for the higher level (traits) to exert organisational influences over the lower levels (moods and emotions). That is someone who is high in trait anxiety is more likely to experience anxious moods and thus is more likely to experience the emotion of anxiety. In contrast a single incidence of an anxious emotion is unlikely to have a significant influence on trait anxiety. Rosenberg (1998) does concede that there is the potential for persistent emotions and moods to produce bottom-up influences on traits.

Roberts and Pomerantz (2004) in their person by situation interaction model describe three levels of breadth that can occur from both a situation and person centred perspective. From a situation perspective the lowest (narrowest) level is a proximal situation. At the next level of breadth are organisational climates such as school or work. Finally, at the highest level of the situation are the constructs that provide the broadest influence such as community or culture. From a person perspective the narrowest level is single instances (states) of thoughts, feelings and behaviours. At the second level are broader constructs such as social roles, identity and habits. At the highest level are traits which exhibit the broadest influence over a person’s cognitions, emotions and behaviours. One of the key aspects of this model is that Roberts and Pomerantz (2004) distinguish the different levels both in terms of their broadness of influence over lower levels but also in terms of their stability. That is, at the narrowest level, single situations or emotional, cognitive or behavioural states are easily changed. However, at the broader level, culture and personality traits tend to exhibit a greater level of stability.

Consequently if these models are used as a framework for producing and assessing personality change, then interventions may be directed at three different levels. That is they may be directed at the personality trait level, at the level of moods, social roles, identity and habits or at the level of discrete cognitive, emotional or behavioural states (Allemand & Fluckiger, 2017; Roberts & Pomerantz, 2004; Rosenberg, 1998). It has been suggested that
because states are the easiest to change that this is the level where personality interventions should target (e.g. Roberts et al., 2014). The extension of this idea is that if one is able to produce enough state changes, these may become habits, and if enough habits are changed this may translate to changes at the trait level. However a limitation of this approach is that while producing change is easiest at the state level, change at this level also has the smallest influence over change at the other levels of the system (Allemand & Fluckiger, 2017; Roberts & Pomerantz, 2004; Rosenberg, 1998). Consequently this suggests the need for many state level changes to occur in order for there to be a change at the broader levels of the person (which may be impractical for interventions). However, it is also possible for change processes to be targeted at multiple levels. For example, a primary aspect of exposure therapy is the extinction of the anxiety response to a specific situation. This is an example of an intervention targeted at the narrowest level of changing a specific state in a specific situation. However Bandura (1977) suggested that this intervention also had the potential to influence higher order constructs such as self-efficacy. Bandura argued that interventions such as exposure increased self-efficacy which had the potential to have top-down influences. That is learning to cope with anxiety in one situation can create the belief that person can cope with anxiety in another situation. Thus, the intervention is producing change at both a narrow and broad level. This concept of inducing specific state level changes in thinking, feeling or behaving for the purpose of challenging broader constructs such as beliefs, habits or schemas is widely used in psychotherapy. Consequently, this suggests that there would be a wealth of empirically supported resources to draw upon should this multi-level approach to changing personality be pursued.

Developmental change versus intervention driven change

There is extensive evidence demonstrating that personality change occurs throughout the lifespan (e.g., Roberts & Mroczek, 2008; Roberts, Walton & Viechtbauer, 2006; Widiger,
Consequently, an important consideration is whether the mechanisms that are responsible for developmental personality change can be utilised to inform the development of interventions to change personality. Roberts & Mroczek (2008) argued that personality change that occurs over the lifespan is the result of maturational processes. The literature indicates that as people age they become more conscientious and agreeable and less neurotic (Roberts & Mroczek, 2008; Roberts et al., 2006; Widiger, 2017). These traits have been consistently shown to be important for successfully navigating the developmental tasks of adulthood such as becoming employed, getting married and raising a family (Barrick, Mount & Judge, 2001; Ozer & Benet-Martinez, 2006; Smith, Spinrad, Eisenberg, Gaertner, Popp, & Maxon, 2007; Malouff, Thorsteinsson, Schutte, Bhullar & Rooke, 2010). Furthermore, it has been found that achievement of these adult developmental milestones tends to be associated with personality change in a direction reflective of this maturational process (Roberts, Caspi, & Moffitt, 2003; Specht, J., Egloff, B., & Schmukle, 2011). Roberts and Jackson (2008) argued that through adopting these mature social roles there are changes at the state level in thinking, feeling and behaving which are further maintained by the changed social environment and thus these changes become instantiated at the trait level.

In contrast, it is unlikely that changes that result from a personality change intervention would stem from transitioning into mature social roles. While interventions may focus on strategies to achieve goals such as finding a long-term relationship, having children, getting married and/or becoming employed, these tasks often will not be achievable within a short time frame. Thus, it is likely that other mechanisms must be explored to explain personality change that occurs as the result of interventions and to inform the development of future personality change interventions.
Principles for creating personality change interventions

A literature search indicated that the first successful intervention specifically designed to change personality traits was developed by Martin et al. (2014a). Application of this intervention resulted in significant changes in personality (Martin et al., 2014b). This intervention utilised intentional change theory (Boyatzis, 2006). Consequently it may be helpful to consider this theory when developing future interventions. Intentional change theory argues that change involves a series of five steps (or discoveries). The first step is discovering the “ideal self”. This involves creating an image of where one would like to be, facilitating hope in attaining this image and considering what aspects of oneself are already ideal (strengths). The second step is gaining a realistic image of the “current self” and determining where there are gaps between the ideal and current self. The third step is creating a program of learning that the person believes will facilitate the desired change. The fourth step is experimenting with new thoughts, feelings and behaviours and instantiating these through repeated practice until mastery is achieved. The final step (which is present throughout the process) is the engagement of positive and helpful relationships (Boyatzis, 2006).

One issue with using previous personality change interventions to inform future interventions is that intentional personality change is a relatively unexplored concept. Consequently there is a lack of empirical literature to draw upon. Allemand and Fluckiger (2017) proposed a solution to this problem. They argued that psychotherapy has been changing patterns of thinking, feeling and behaving for over a hundred years. Furthermore there is an extensive literature base to draw from. Consequently they argue for using the principles which have been found to be fundamental to successful psychotherapy to guide future personality change intervention development.
The common factors approach stems from research which has suggested that for the majority of mental health disorders there are minimal differences in efficacy between different treatment methods (Imel & Wampold, 2008). Given the wide variation in techniques used by different therapy styles it was concluded that the factors common to all therapy styles were the primary drivers of change (Imel & Wampold, 2008; Wampold & Imel, 2015). Several studies have suggested four common factors in creating therapeutic change. These are extra-therapeutic factors (e.g. client strengths and personality), hope/expectancy (belief in the treatment and that it will result in improvements), relationship factors (therapeutic alliance, empathy, positive regard) and model/technique (Lambert, 1992; Hubble, Duncan & Miller, 1999 & Thomas, 2006).

Based on the common factor research Grawe (1997) developed a model describing four mechanisms of change. These were adapted by Allemand and Fluckiger (2017) in order to provide further clarity and to make them applicable to the problem of intentional personality change. The mechanisms and their adaptations (see brackets) were mastery/coping (practice), clarification of meaning (insight), problem actuation (discrepancy awareness) and resource activation (strengths orientation) (Allemand & Fluckiger, 2017). These four processes are benefited by a positive and helpful relationship with a caring person (Allemand & Fluckiger, 2017; Grawe, 1997).

All of the common factors listed above appear to be relevant to intentional change theory (Boyatzis, 2006; Grawe, 1997). “Insight” closely aligns with the concept in intentional change theory of becoming aware/gaining insight into the nature of the ideal and real self and where there are gaps between these two constructs. This process involves both developing insight into the nature of the problem (the gap) as well as insight into where changes in intentions and goals may need to occur. Resource activation appears to closely align with the concept of building on those areas in which the ideal and real self are congruent (strengths).
Discrepancy awareness refers to the idea that problems can be best targeted while people experience them. This concept may most closely relate to step four of intentional theory, that of experimenting with new feelings, thoughts and behaviours. That is, to produce change one must experience the situation where they would like to think, feel or act differently and then experiment with these changes. The final concept of “practice” clearly resonates with the other aspect of step four which is to repeat these new ways of thinking, feeling or acting until they become habit. Finally, as in intentional change theory, Grawe (1997) argues that these processes are enhanced through the utilisation of helpful, trusting relationships. It is interesting that these two different approaches, which have come from different theoretical perspectives, have such a high degree of overlap. However if it is considered that psychotherapy involves the process of producing positive changes in thinking, feeling and behaving rather than the treatment of specific mental health disorders than it is unsurprising that the common factors in psychotherapy would have significant overlap with empirically supported theories of change (Boyatzis, 2006; Grawe, 1997).

Consequently, Boyatzi’s (2006) and Grawe’s (1997) theories of change appear to be complementary to one another. In regards to personality change, intentional change theory has the benefit of having been utilised to produce large changes in personality in a randomised controlled trial (Martin, Oades & Caputi, 2014b). In contrast, the common factor approach has not been used explicitly in the development of a successful personality change intervention. However, as previously discussed, it appears to encompass many aspects of intentional change theory. Furthermore this perspective allows researchers to utilise the vast clinical literature to aid in the development of future personality change interventions (Allemand & Fluckiger, 2017).
The case for conscientiousness

The literature reviewed above suggests that personality may be changeable in response to certain interventions and describes some theoretical principles to guide the development of such interventions. However an important point to consider is the beneficience of such interventions. The consequential outcome literature suggests that some personality traits are more strongly associated with positive outcomes than others (Ozer & Benet-Martinez, 2006; Widiger, 2017). One personality trait that has been consistently associated with positive outcomes is conscientiousness.

Conscientiousness has been found to predict academic achievement (Jackson & Roberts, 2017). Bratko, Chamorro-Premuzic and Saks (2006) found that self and peer report ratings of conscientiousness were the strongest personality predictors of mean school grades ($r = .38$ & $.54$ respectively). Interestingly peer rated conscientiousness was a stronger predictor than intelligence ($r = .49$). Similarly Noflle and Robins (2007) found that conscientiousness was the strongest predictor of both high school and college grade point average (GPA). Noflle and Robins (2007) indicated that the relationship between participant’s college GPA and academic performance was mediated by academic effort and perceived academic ability. Furthermore their analyses suggested that conscientiousness predicted college GPA when controlling for high school GPA. This suggests that conscientiousness may have an incremental effect on academic performance where highly conscientious individuals tend to experience greater performance as their education progresses relative to their less conscientious peers. Several other studies have confirmed this relationship between conscientiousness and academic performance (Poropat, 2009; Trautwein, Ludtke, Roberts, Snyder & Niggli, 2009).

Conscientious individuals also tend to have better work related outcomes. Self-report measures of conscientiousness have been found to be the strongest of the five domains of
personality in predicting work performance (Barrick & Mount 1991; Hurtz & Donovan, 2000; Tett et al., 1991). Similarly, Conelly & Ones (2010) found that observer measures of conscientiousness also positively predicted work performance. Interestingly the findings of Oh, Wang and Mount (2011) suggested that observer ratings of conscientiousness may be superior to self-report ratings when predicting job performance. Conscientiousness has also been found to be related to a number of other work related constructs including job satisfaction, organisational commitment and motivation (Thoresen et al., 2003). Colbert, Mount, Harter, James, Witt, Barrick & Murray (2004) found that conscientiousness negatively predicted interpersonal deviance (e.g. gossiping about another employee, stealing from other employees) and organisational deviance (e.g. working slowly, stealing company property) in the workplace. Conscientiousness has also been found to be negatively related to turnover and burnout (Barrick, Mount & Strauss, 1994; Storm & Rothman, 2003).

Conscientiousness has been found to be predictive of a number of physical health outcomes. Chapman, Lyness & Duberstein (2007) found that conscientiousness was a strong negative predictor of physician rated aggregate morbidity in older adults. Lodi-Smith et al. (2010) found that conscientiousness predicted self-reported physical health in adults. Conscientiousness has also been found to be related to biological markers of health (Hampson, Edmonds, Goldberg, Dubanoski & Hiller, 2013; Israel et al., 2014; Moffitt et al., 2011). For example, Israel et al. (2014) found that conscientiousness negatively predicted their measure of overall poor health which included a number of biological markers such as triglycerides, blood pressure and systemic inflammation. Finally, a number of studies have found a relationship between conscientiousness and longevity (Hill & Roberts, 2011; Jokela et al., 2013; Kern & Friedman, 2008). Turiano, Chapman, Gruenewald and Mroczek (2015) found that this relationship between conscientiousness and mortality was mediated by waist circumference, heavy drinking and smoking. Furthermore Lodi-Smith et al., (2010) found
that positive health behaviours partially mediated the relationship between conscientiousness and health. Consequently it has been hypothesised that the relationship between conscientiousness and health is due to conscientious individuals engaging in more pro-health and preventative behaviours and less health damaging behaviours (Shanahan, Hill, Roberts, Eccles & Friedman, 2014).

Conscientiousness is also predictive of relationship satisfaction (Dryenforth, Kashy, Donellan, & Lucas, 2010; Solomon & Jackson, 2014). Interestingly there is some evidence to suggest that having a conscientious partner improves relationship satisfaction independent of one’s own conscientiousness (Dryenforth, Kashy, Donellan & Lucas, 2010). Conscientiousness also negatively predicts divorce (Solomon & Jackson, 2014). Tucker, Kressin, Spiro and Ruscio (1998) found that teacher and parent ratings of conscientiousness negatively predicted the likelihood of divorce later in life. Conscientiousness has also been found to be negatively related to relationship damaging behaviours such as cheating and revenge and positively related to helpful relationship behaviours such as forgiveness (Buss & Shackelford, 1997; Hines & Saudino, 2008; Hill & Allemand, 2012). Baker and McNulty (2011) also suggested that conscientious individuals had a higher motivation to resolve relationship problems and engaged in more constructive problem solving in their relationships. Consequently, it is hypothesised that through engaging in less harmful relationship behaviours as well as working consistently to maintain and improve their relationship and overcome problems more conscientious individuals tend to experience more satisfying and longer lasting relationships (Baker & McNulty, 2014; Dryenforth et al., 2010; Hill & Allemand, 2012; Solomon & Jackson, 2014; Tucker et al., 1998).

Conscientiousness is predictive of happiness related constructs such as life satisfaction and positive and negative affect (Dryenforth et al., 2010; Steel, Schmidt & Shultz, 2008). It is also negatively predictive of criminality, gambling and mental health
problems (Bagby et al., 2007; Jones, Miller & Lynam, 2011; Malouff, Thorsteinsson & Schutte, 2005). Finally, conscientiousness is predictive of better credit scores and higher income (Bernerth, Taylor, Walker & Whitman, 2012; Furnham & Cheng, 2013; Palfika, 2009). Thus conscientiousness has been found to be related to a broad range of positive outcomes. Therefore the evidence suggests that the development of resources to increase conscientiousness may be worthwhile.

**Considerations**

Recently it has been questioned whether the association between conscientiousness and positive life outcomes is true across the full spectrum of conscientiousness. Le et al. (2011) argued that the relationship between conscientiousness and positive life outcomes may become negative when conscientiousness reaches extremely high levels. This argument has been supported by a number of studies which have demonstrated a curvilinear relationship between conscientiousness and some outcomes. For example Carter, Guan, Maples, Williamson and Miller (2016) found that the relationship between conscientiousness and wellbeing was curvilinear. Similarly, several studies have found a curvilinear relationship between conscientiousness and job performance and conscientiousness and grades (e.g. Cucina & Vasilopoulos, 2005; LaHuis, Martin & Avin, 2005; le et al., 2011; Vasilopoulos & Cucina, 2007; Whetzel, McDaniel, Powell Yost & Kim, 2010). Nickel, Roberts and Chernyshenko (2018) analysed the relationship between conscientiousness and several life outcomes across two samples (sample 1 = 8832 older adults, sample 2 = 753 younger adults). In contrast to the previously reviewed studies Nickel et al. (2018) did not find a curvilinear relationship between conscientiousness and health, well-being, job satisfaction or relationship satisfaction. Similarly, Robie and Ryan (1999) did not find a curvilinear relationship between conscientiousness and job performance. Consequently there is some evidence that, at the extremely high end of the spectrum conscientiousness may become maladaptive. However
overall this evidence is mixed. Never the less this concept that one may have “too much of a
good thing” in regards to certain personality traits may be an important consideration for
individuals who are choosing to try to change their personality (le et al., 2011).

**How to change conscientiousness?**

While the earlier discussion outlined general principles that could guide the
development of interventions designed to change conscientiousness it is also necessary to
consider specific techniques to facilitate these change processes. As previously stated, the
intentional personality change literature is in its infancy and consequently there is not an
extensive literature base of interventions to draw upon that have successfully changed
conscientiousness. Nevertheless, there are a number of areas which may provide clues as to
what techniques may be useful in increasing conscientiousness.

One area of the literature which may be useful for informing conscientiousness
interventions is the interventions that have successfully increased conscientiousness. There
have been several studies which have found incidental change in conscientiousness in
response to clinical and non-clinical interventions. De Fruyt, Van Leeuwen, Bagby, Rolland,
and Rouillon (2006) found a significant increase in conscientiousness, as a result of 6 months
of cognitive behavioural therapy for depression. Piedmont et al. (1999) found that
conscientiousness increased in response to a 6 week program of group and individual
counselling, vocational training and attendance at narcotics anonymous and/or alcoholics
anonymous for individuals undergoing outpatient treatment for substance abuse. Krasner et
al. (2009) found that an eight week intensive course (2.5 hours/week and a seven hour retreat)
in mindfulness, communication and self-awareness and subsequent maintenance phase (2.5
hours per month for 10 months) resulted in significant increases in conscientiousness
amongst primary care physicians. Similarly, Chokkalingam, Kumari, Akhilesh and Nagendra
(2015) were able to produce significant increases in conscientiousness via a four month
integrated yoga intervention in the workplace (participants practiced 1.5 hours per day). Thus
the literature on interventions that have produced incidental changes in conscientiousness is
sparse and describes several different types of intervention. This is useful in suggesting that
conscientiousness may be responsive to a wide variety of intervention techniques however
this also makes it difficult to refine specific techniques that might be most effective in
producing changes in conscientiousness.

The authors argue that the most relevant intervention to changing conscientiousness is
the intentional personality change coaching program created by Martin, Oades and Caputi
(2014a). This is because this program, intended to change personality, incorporated specific
resources targeted at conscientiousness and was able to produce significant change in
conscientiousness (Martin et al., 2014a; Martin et al., 2014b; Allan, Leeson, De Fruyt &
Martin, 2017). Martin et al. (2014b) produced a coaching manual that outlined specific
strategies for increasing conscientiousness based on the opinions of a panel of coaches,
personality and coaching researchers and psychologists. The techniques they suggested were
goal setting, organisational skills, cognitive behavioural skills, mindfulness skills,
procrastination management skills, values awareness training, problem solving skills, values
based goal setting and motivational interviewing. The benefit of this approach is that there is
a randomised controlled trial which found that the participant selected combination of these
techniques was able to produce significant changes in conscientiousness (Martin et al.,
2014b). However the key theoretical justification for these techniques were the panel’s status
as experts. Hence the techniques may lack a strong justification from an empirical
perspective. Consequently it is argued that it may be beneficial to explore other areas of the
literature to provide greater empirical support for possible techniques to increase
conscientiousness.
Allemand and Fluckiger (2017) suggested utilising the clinical literature in guiding general principles for the creation of personality change interventions. This would allow for developers of interventions to utilise the extensive clinical literature. This concept may also be applied to specific techniques for specific domains of personality. However, clinical research is usually deficit focussed. Consequently in determining what clinical research may be relevant to increasing conscientiousness the first step is to describe a deficit of conscientiousness. As previously discussed conscientiousness can be divided into four facets (Roberts, Lejuez, Krueger, Richards & Hill, 2014). These are industriousness, self-control, responsibility and orderliness (de Raad & Peabody, 2005; Jackson, Wood, Bogg, Walton, Harms & Roberts, 2010; Perguni & Gallucci, 1997; Roberts, Bogg, Walton, Chernyshenko, & Stark, 2004; Roberts, Chernyshenko, Stark, & Goldberg, 2005). A person who is low on these facets may be expected to have difficulty with working consistently, staying on task and overcoming challenges (low industriousness); may be messy and disorganised (low orderliness); may be impulsive and reckless (low self-control) and may be unreliable and liable to breaking their promises (low responsibility) (Roberts et al., 2014). This combination of impulsivity and difficulty persisting on tasks appears to have some overlap with attention deficit hyperactivity disorder (ADHD), at least from a behavioural perspective. ADHD is a disorder which is characterised by deficits in attention as well as excessive hyperactivity and impulsivity (American Psychiatric Association, 2013). Individuals with ADHD are often easily distracted, disorganised and have difficulty completing tasks (American Psychiatric Association, 2013). Research has suggested that the primary personality component to ADHD is low conscientiousness (Gomez & Corr, 2014; Nigg et al., 2002; Safren et al., 2010). Consequently there is the possibility that interventions that have been found to successfully treat individuals with clinical levels of disorganisation, distractibility, impulsivity and difficulty persisting with tasks may be useful in assisting individuals without
clinical disorders who wish to be more organised, less distractible, less impulsive and better able to persist with tasks (i.e. more conscientious).

Symptoms of ADHD have been found to be significantly reduced in response to cognitive behavioural treatment programs (e.g., Emilsson et al., 2011; Philipsen et al., 2010; Safren et al., 2010; Weiss, Murray, Wasdell, Greenfield, Giles & Hechtman, 2012).

Unsurprisingly, given the links discussed above, there is significant face validity with current cognitive behavioural programs for treating adult ADHD in regards to their application to increasing conscientiousness (Safren, Sprich, Perlman & Otto, 2005; Young, 2007).

Treatment programs utilise training in organisational skills (e.g. keeping a daily list and calendar) which would appear to have face validity in assisting with increasing the facet of orderliness as well as reliability (Roberts et al., 2014; Safren et al., 2005; Young, 2007).

Similarly, treatment programs utilise goal setting and strategies for improving task completion which may be relevant to industriousness (Roberts et al., 2014; Safren et al., 2005; Young, 2007). Finally they include methods for managing impulsiveness and distractibility which may be relevant to the facet of self-control (Roberts et al., 2014; Safren et al., 2005; Young, 2007). Interestingly many of these techniques overlap with the techniques that were suggested by the panel in Martin et al.’s (2014b) research.

Consequently, the ADHD intervention literature may be a useful source of specific techniques for the development of resources to increase conscientiousness.

**Conclusion**

There is growing evidence to suggest that personality may be changeable via interventions and that this change may be beneficial. Conscientiousness is a domain of personality that has been consistently associated with positive outcomes. Consequently the current paper argued for the beneficence of the development of resources to change conscientiousness. It was argued that these resources should be developed via integration of
two different sources. These are the burgeoning literature exploring intentional personality change and the well-established and extensive clinical literature. It is argued that utilisation of the change processes which have been found to be effective in psychotherapy may also benefit the development of personality change resources. Furthermore, it is suggested that for conscientiousness, the theoretical similarities as well as the correlational evidence, suggest that ADHD treatment programs may be a valuable source of specific techniques and treatment approaches for increasing conscientiousness.
References


http://dx.doi.org/10.1111/jopy.12177


psychology, 29 (4), 35-42.


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Chapter 5: Can we be more conscientious? An exploration of the outcomes of a group program designed to increase conscientiousness.

There is an increasing body of literature to suggest that personality may be changeable. This research has found that personality changes over the lifespan as well as in response to clinical and non-clinical interventions (De Fruyt, Van Leeuwen, Bagby, Rolland, & Rouillon, 2006; Krasner et al., 2009; Piedmont & Ciarrocchi, 1999; Roberts, Walton & Viechtbauer, 2006). The consequential outcome literature has shown that certain personality traits are associated with positive life outcomes while others are associated with negative outcomes (Friedman & Kern, 2014; Ozer & Benet-Martinez, 2006; Widiger, 2017). Consequently, this research suggests that if traits associated with positive outcomes are able to be increased and traits associated with negative outcomes are able to be decreased than this may have a positive impact on people’s lives. One personality trait that has been consistently associated with positive outcomes is conscientiousness (Jackson & Roberts, 2017; Ozer & Benet-Martinez, 2006). Conscientiousness has been found to be positively associated with job performance, job satisfaction, relationship satisfaction, happiness and health and has been found to be negatively associated with the symptoms of mental health disorders and mortality (Jackson & Roberts, 2017; Ozer & Benet-Martinez, 2006). Consequently given its relationship to these wide ranging and important life outcomes it is argued that increasing conscientiousness may be of benefit to individual’s lives. Thus, the current study explored the impact of an intervention designed to increase participant’s conscientiousness.

The current study explored data gathered through the IPIP NEO 120 item and IPIP NEO 300 item inventories (Goldberg, 1999; Johnson, 2014). These inventories are based on the NEO PI-R (Costa & McCrae, 1992). The NEO PI-R is a widely used and well researched inventory measuring the five factors (domains) of personality. In addition to measuring the five domains of personality the IPIP NEO 120 and 300 item inventories also measures 30
facets which provide additional detail. For example the domain of conscientiousness can be divided into the sub-facets of competence, order, self-discipline, dutifulness, achievement striving and deliberation.

**Beneficence on changing conscientiousness**

Conscientiousness appears to be the personality domain which is most strongly associated with work related outcomes (Ozer & Benet-Martinez, 2006). Self-ratings of conscientiousness have been found to predict job performance and career success (Judge, Higgins, Thoresen & Barrick, 1999; Hurtz & Donovan, 2000). A meta-analysis by Connelly and Ones (2010) indicated that observer ratings of conscientiousness also positively predict job performance. Thoresen et al. (2003) indicated that conscientiousness is associated with higher levels of job satisfaction. Colbert, Mount, Harter, Witt and Barrick (2004) found that conscientiousness is negatively associated with workplace deviance. Consequently, these findings suggest that those higher in conscientiousness tend to perform better at work, enjoy their work more and engage in less harmful workplace behaviour.

Conscientiousness has also been found to be a predictor of subjective well-being. A meta-analysis by Steel, Schmidt and Schultz (2008) indicated that conscientiousness was positively associated with positive affect and life satisfaction and was negatively associated with negative affect. Boyce, Wood and Powdthavee (2013) extended upon these findings by finding that conscientiousness changed over time and that changes in conscientiousness predicted changes in subjective well-being. This research by Boyce et al. is of particular relevance to the current study as it suggests the possibility that, if successful, the changes produced by the intervention delivered in the current study may translate into changes in subjective well-being.

Conscientiousness appears to have a positive relationship with good health. It has been found to be associated with several positive health outcomes including longevity (Chapman,
Roberts & Duberstein, 2011; Hampson, Goldberg, Vogt & Dubanoski, 2007; Kern & Friedman, 2008). A meta-analysis by Malouff, Thorsteinsson, and Schutte (2005) indicated that conscientiousness was negatively associated with the symptoms of mental illness. Conscientiousness has also been found to positively predict health protective behaviours (Bogg & Roberts, 2004) and negatively predict risk taking and health damaging behaviour such as substance abuse (Bogg & Roberts, 2004; Hampson et al., 2007). It has been hypothesised that it is through this mechanism (engaging in less health damaging behaviours and engaging in more pro-health behaviours) that conscientious people tend to experience better health and live longer (Kern, Hampson, Goldberg & Friedman, 2014).

Consequently, there is extensive evidence to suggest that those individuals higher in conscientiousness tend to experience better life outcomes (Friedman & Kern, 2014; Jackson & Roberts, 2017; Ozer & Benet-Martinez, 2006). Furthermore, there is some evidence to suggest that changes in conscientiousness are associated with corresponding changes in these life outcomes (Boyce et al., 2013; Kern et al, 2014). These findings suggest that increasing an individual’s conscientiousness may have a positive impact on their life. Consequently developing interventions to increase conscientiousness may be beneficial.

Evidence for incidental change in conscientiousness in response to interventions

There have been several studies which have found incidental change in conscientiousness in response to clinical and non-clinical interventions. De Fruyt, Van Leeuwen, Bagby, Rolland, and Rouillon (2006) found a significant increase in conscientiousness, as a result of 6 months of therapeutic and pharmacological interventions, in patients with depression. Similarly Piedmont et al. (1999) found significant increases in conscientiousness as the result of a 6 week outpatient substance abuse program. Furthermore, participants were still significantly more conscientious 15 months post-intervention. Krasner et al. (2009) found that an 8 week intensive course (2.5 hours/week and a 7 hour retreat) in
mindfulness, communication and self-awareness followed by an extended maintenance phase (2.5 hours per month over 10 months) resulted in significant increases in conscientiousness amongst primary care physicians. Similarly Chokkalingam, Kumari, Akhilesh and Nagendra (2015) were able to produce significant increases in conscientiousness via a 4 month integrated yoga intervention in the workplace (participants practiced 1.5 hours per day). Consequently there is evidence that conscientiousness can be increased via both clinical and non-clinical interventions.

Allan, Leeson, De Fruyt and Martin (2017) found a significant increase in conscientiousness as the result of a 10 week coaching intervention designed to change personality. A study by Hudson and Fraley (2015) looked at intentional personality change in response to a goal setting based intervention. Their interventions did not result in significant changes in conscientiousness; however they did find that change goals significantly moderated growth in conscientiousness. That is individuals who set more ambitious goals to change conscientiousness tended to experience greater increases in this domain. Hudson and Fraley (2015) also found that teaching participants to set specific, concrete goals created better personality change results.

**Intentional Personality Change**

The intervention used in the current study was based on the stepwise process for changing personality (Martin, Oades & Caputi, 2014a). This intervention was developed through a two stage process similar to a delphi technique. Stage one used a panel of coaches, psychologists and academics to develop a menu of change options for each of the 30 personality facets included in the NEO PI-R. Stage two involved a sub-group of the panel developing the steps of the intervention. This was done through integrating relevant findings from the literature with empirically supported change processes and the facet change interventions that were developed during step one. The 10 step process that emerged
involved the use of eclectic therapeutic techniques within a goal setting framework. The timeframe for this program was 10 weekly one-hour sessions. A clinical trial was conducted to test the efficacy of this intervention. The results of the study indicated that participants were able to produce significant changes in their personality through application of the step-wise method (Martin, Oades & Caputi, 2014b).

The current study involved two key differences to Martin, Oades and Caputi’s (2014b) personality change study which necessitated modification of the step-wise process. The first difference is that the current study only targeted conscientiousness for change. The second difference was that intervention was delivered in a group context.

Martin Oades and Caputi (2014b) allowed participants to target any personality facet within any domain. Participants then worked with a coach to develop a coaching plan from a menu of therapeutic techniques. This approach was excellent in terms of tailoring the intervention to the client. However, it presents some issues in regards to replicability. That is participants are likely, under this method, to have been given different interventions which makes it difficult to determine what aspects of the intervention were effective. The nature of this intervention was also very resource and skill intensive. That is participants required a one to one coach to produce a tailored one to one intervention program for them. The current study aimed to reduce this resource and skill intensiveness and also improve the replicability of the intervention by producing a manualised program to be delivered in a group context. This resulted in a standardised program that was adapted from the stepwise process for changing personality. A description of the step-wise process and the modifications to the process are described below.

The first step of the intervention involved assessing client’s values and current personality. As the current intervention was focused on conscientiousness only facets within this domain were assessed. The second step focused on discovering the current self and
exploring personality functioning. Clients reflected on the positive and negative aspects of their lives and how their current conscientiousness levels may be impacting their life. They also reflected on the extent to which they were living in alignment with their values. Step three involved identifying the ideal self and exploring discrepancies between the ideal and current self. This involved participants exploring their current conscientiousness profile and how this might differ from their ideal conscientiousness profile. This allowed participants to determine a shortlist of personality facets, within the conscientiousness domain, for targeting. Step four involved selecting the facets to target for change. The fifth step involved assessing attitudinal variables such as importance of change and confidence in ability to change, timeliness of change as well as intrinsic and extrinsic motivation.

The sixth step is where the key modifications to the step-wise process were made. In the original process, the sixth step focused on the development and implementation of a coaching plan. The coach and the client worked together to determine, from a menu of eclectic therapeutic techniques, which interventions they would use to achieve desired facet change. However, given the current intervention was being delivered in a group context this step required significant modification. The eclectic therapeutic techniques needed to be standardised in order for them to be delivered in a group context.

To develop this program of techniques for increasing conscientiousness the researchers used two primary sources. These were the coaching manual developed by Martin, Oades and Caputi (2014a) which presented a menu of change items for different facets of conscientiousness and cognitive behavioural techniques used to treat adult ADHD (a description of the techniques utilised is presented in the method section of this paper).

The seventh step of the process occurred during week five of the program and involved re-assessing client’s conscientiousness levels and evaluating progress. Step eight then involved completing the remaining group sessions which switched from goal setting and
organisational skill development to focusing on overcoming barriers to change through using mindfulness and cognitive behavioural strategies. Step nine occurred at the final coaching session and included re-assessing personality to review the client’s progress towards desired change, and developing a plan to maintain gains. Finally, in order to determine whether gains had been maintained, step 10 was a three-month follow up personality assessment.

**The current study**

The literature reviewed above provides evidence to suggest that personality change may be possible and beneficial. One personality domain which is consistently associated with positive outcomes is conscientiousness (Widiger, 2017). Several interventions have been found to incidentally increase conscientiousness. Furthermore, Allan, Leeson, De Fruyt & Martin (2017) found that conscientiousness could be increased through application of the step-wise process for changing personality. The current study aims to extend upon this research by adapting the step-wise process for changing personality to be applied specifically to conscientiousness and delivering this intervention within a group context. The current study will also extend upon this research by testing whether changes in self-report measures of conscientiousness are reflected in changes in observer ratings and associated life outcomes.

**Method**

**Data collection**

Data for the current study was collected via a Qualtrics survey. Participants completed the survey prior to beginning the 10 week intervention and during the final individual session at week 10. Participants also completed the survey three months post-intervention.

Participants were also asked to recruit a close relative or friend to complete a short personality questionnaire about them (Big Five Inventory). The friend or relative was
required to complete this questionnaire pre-intervention, directly post intervention and three months after the intervention had been completed.

Participants

The participants were 42 adults (27 females and 15 males) with ages ranging from 18 to 69 ($M = 46.74$, $SD = 16.99$). Five participants withdrew before the intervention started and thirteen participants withdrew during the intervention. All participants who completed the 10 week intervention also completed the three months follow up. Two participants did not return the observer measures for the three month follow up. Consequently a total of 24 participants provided complete all self-report measures while 22 participants completed all observer measures.

Participants were recruited via an article in a local paper, word of mouth, a radio interview and an online post on a university's website. Participants were required to be older than 18. Participants with AXIS II disorders, psychosis, bipolar disorder or who had a current substance use disorder were excluded from the study. This was assessed by a brief interview focussed on mental health history.

Groups

There were four total groups consisting of between 6 and 10 group members. Each group session was one and a half hours long and there were a total of nine group sessions. All groups were facilitated by the primary researcher. The primary researcher also recruited provisional and registered psychologists to co-facilitate the groups. All provisionally registered psychologists who were involved had a minimum of 60 hours of face to face client contact and 5 years education in psychology. They also received weekly supervision during this period.
Clinical Validity

The primary researcher facilitated (with the help of one to two co-facilitators) all groups within the current intervention. Facilitators were provided with a coaching manual and participants were provided with a workbook. The coaching manual detailed 57 sections across nine chapters that were to be delivered to the participants each week. After each group session the primary researcher recorded whether each section had been covered in full. For three of the groups all 57 sections were covered in full during the groups. For one of the groups, due to time restrictions, 56 of the 57 sections were covered during the face to face groups. Participants were asked to complete the uncovered section at home.

Measures

*IPIP NEO PI-R (120) and IPIP NEO PI-R (300)*

The primary personality measure consisted of a combination of the 120 item IPIP NEO PI-R (Johnson, 2014) and the 300 item IPIP NEO PI-R (Goldberg, 1999). Items from the 120 item IPIP NEO-PI-R were used to measure the domains of neuroticism, agreeableness, openness and extraversion. Items from the 300 item NEO PI-R were used to measure conscientiousness. This combination was chosen to increase the reliability of measurement for the primary variable (conscientiousness) while minimising demands on participants. The IPIP NEO PI-R 120 consists of 120 items on a five point Likert scale (0 = strongly disagree, 4 = strongly agree). An example item is "get stressed out easily". The IPIP NEO PI-R 300 consists of the items from the IPIP NEO PI-R 120 as well as an additional 180 items. Consequently the combined measure consisted of one hundred and fifty six items (96 measuring agreeableness, extraversion, openness and extraversion and 60 measuring conscientiousness). The IPIP NEO PI-R 120 and IPIP NEO PI-R 300 are designed to measure the five previously described domains of personality, with 6 facets under each domain providing more specific information. The IPIP NEO PI-R 120 and 300 have high levels of
internal consistency (ranging from .81 to .94 across the five domains) and are well validated in the literature (Johnson, 2014).

**Big Five Inventory**

The Big Five Inventory (BFI) was used as the observer measure of personality (John, Donahue & Kentle, 1991). The BFI is a measure of personality which consists of 44 items on a five point Likert scale (1 = disagree strongly, 5 = agree strongly). An example of an item is “I see Jane Doe as someone who... is a reliable worker”. The big five inventory has demonstrated acceptable levels of internal consistency ranging from .79 to .88 (John, Naumann & Sotto, 2008). DeYoung (2006) indicated that the correlation between different raters of the same participant’s personality averaged .41 across the five domains which is considered a moderate to strong relationship (Cohen, 1988).

**The Satisfaction with Life Scale**

The satisfaction with life scale (SLS) is a general measure of a person’s cognitive judgment of how satisfied they are with their life. It consists of five items measured on a 7 point Likert scale (1 = strongly disagree, 7 = strongly agree). An example of an item is “in most ways my life is close to my ideal”. The SLS has a high level of internal consistency (α = .87) and has been found to correlate with other measures of subjective well-being (Diener, Emmons, Larson & Griffin, 1985).

**Positive and Negative Affect Schedule**

The Positive and Negative Affect Schedule (PANAS) consists of two 10-item scales designed to measure positive and negative affect. Participants were asked to rate on a five point Likert scale (1 = very slightly or not at all, 5 = extremely) the “extent to which you have felt this way over the past week”. An example of an item is “interested”. Watson and Clarke (1988) found that the positive and negative affect scales had a high level of internal
consistency ($\alpha = .87$). The PANAS has been well-validated in the literature (Pavot & Deiner, 1993).

*Depression, Anxiety and Stress Scale (short version)*

The short version of the Depression, Anxiety and Stress Scale (DASS-SF) consists of 21 items on a four point Likert Scale (0 = did not apply to me at all, 3 = applied to me very much or most of the time) designed to measure symptoms of depression, anxiety and stress. The DASS-SF has an acceptable level of internal consistency with Cronbach’s alphas for the three scales ranging from .73 (anxiety) to .81 (depression and stress). The DASS-SF has been well validated in the literature (Henry & Crawford, 2005).

*Occupational Self Efficacy Scale (short form)*

The short form of the occupational self-efficacy (OSES-SF) scale consists of 6 items on a six point Likert scale (1 = not at all true, 6 = completely true) designed to measure a person’s occupational self-efficacy (Rigotti, Schnyns & Mohr, 2008). Due to several of the participants being university students it was decided to modify the items on the OSES-SF to incorporate self-efficacy towards studying. For example, the item “I can remain calm when facing difficulties in my job because I can rely on my abilities” was changed to “I can remain calm when facing difficulties in my job/studies because I can rely on my abilities”. Rigotti et al. found the unmodified version of the OSES-SF has an internal consistency of .90 in a British sample. The modified version used in the current study was found to have an internal consistency averaging .91 across the three time points.

*Overall Health Measures*

The health measures consisted of three items taken from Kern (2010). The first item was “Compared to others of the same age and sex, how healthy is your lifestyle?” with participants selecting on a five point Likert scale (1 = very unhealthy, 5 = very healthy). The second item was “From a health perspective, how satisfied are you with your current
lifestyle?” with participants selecting on a five point Likert scale (1 = very dissatisfied, 5 = very satisfied. The final item was “How would you describe your energy and vitality at this period of your life?” with participants selecting from “Vigorous (I have considerable endurance)”, “Adequate for a full program of activities”, “I have to limit myself somewhat” and “Lack of energy very much limits my activities”. These items had an average inter-rater reliability of .83 across the three time points of the study.

**Procedure**

*Coaching Program*

The personality change program was adapted from Martin, Oades and Caputi (2014a). The program was adapted in two ways. Firstly, it was changed so that it specifically targeted conscientiousness. Secondly, it was converted into a standardised participant manual so that it would be able to be used in a group context. The content of the manual is briefly described below.

Week 1: Participants were welcomed to the program and provided with a set of group rules to follow. Participants were then provided with psycho-education on personality and conscientiousness. Participants were then provided with their personalised personality profile (based on their scores in the pre-intervention survey). Participants then reflected on the pros and cons of their current conscientiousness profile (discovering the current self).

Week 2: This week focussed on the idea of “discovering the ideal self”. Participants were provided with psycho-education on values and then completed an exercise where they refined their values down to 6 or 7 “core values”. Participants were then asked to reflect on where in their lives they were not acting in alignment with their values.

Week 3: Participants were asked to set specific goals to address the areas where they were not acting in alignment with their values. Participants were provided with psycho-
education around goal setting and were then asked to set specific behavioural goals as well as select specific conscientiousness facets that they wished to change.

Week 4: This week focussed on learning organising and planning skills. Participants were taught how to use a calendar, notebook and prioritized task system. Participants were then encouraged to apply these systems to achieving the goals they had set.

Week 5: Participants were given a short personality questionnaire to gauge progress (the conscientiousness items of the IPIP NEO-120). Participants then completed an activity where they created an action plan for each of their goals and then incorporated this plan into their organizational systems.

Week 6: Participants were provided with the scores from their pre-intervention personality questionnaire and the questionnaire they completed at week 5. Participants were asked to reflect, in the context of their original change goals, on any change or lack of change that occurred. Participants were then provided with psycho-education on the Cognitive Behavioural Model, automatic thoughts and thinking errors. Participants were asked to keep a thought diary during the week.

Week 7: This week involved learning specific skills for managing unhelpful thoughts and feelings. Participants were introduced to cognitive restructuring and asked to practice applying this skill to times where they found that their thinking or emotional response to events was causing them to act less conscientiously then they would like. Participant also learnt a mindfulness technique designed to help them re-engage with their values in order to facilitate conscientious behaviour.

Week 8: The topic of this week was procrastination. Participants reviewed previously learned skills and applied them to the specific problem of procrastination. Participants were also taught some specific behavioural strategies (e.g. creating a reward schedule) to help combat procrastination.
Week 9: This week focussed on participants reviewing their goals, reflecting on their progress and creating a personalized strategy to maintain their gains and prevent falling back into old habits.

Week 10: Participants met individually with the primary researcher. Participants were asked to complete the post intervention questionnaire. They were then asked to reflect on their experience of the program and provide feedback on what they found helpful and what they thought could be improved.

Week 22: Participants completed the personality questionnaire for the final time.

Homework: Throughout the group program participants were asked to complete homework between each session for the purpose of instantiating skills learned in the group into everyday life

Ethics Approval

This study has been approved by the University of Wollongong Human Research Ethics Committee. The approval number is HE15/075.

Results

Personality

To determine whether changes occurred in personality domains across the intervention period, five one way repeated measures ANOVAS, across three levels (pre, post and three month follow up) were conducted (with a Bonferonni adjusted significance level of .01). Following this, change at the facet level was also assessed. In order to limit type one errors, only facets that fell within domains that had significantly changed over the intervention period were analysed.

Domain Level Change

A one way repeated measures ANOVA, with a Greenhouse-Geisser correction (Mauchly’s test indicated that the assumption of sphericity had been violated), determined
that mean conscientiousness was significantly different between time points, $F(1.19, 41.97) = 23.84, p < .001$. $\eta_p = .51$. Post Hoc tests (comparing week one, week 10 and week 22) using a Bonferroni correction indicated that there was a significant increase in conscientiousness between weeks one ($M = 3.23, SD = .26$) and week 10 ($M = 3.62, SD = .23$), $p < .001$. This significant difference was maintained at the three month follow up ($M = 3.59, SD = .42$), $p = .001$.

A one way repeated measures ANOVA indicated that mean neuroticism was significantly different between time points, $F(2, 46) = 22.17, p < .001$, $\eta_p = .49$. Post Hoc tests using the Bonferroni correction indicated that there was a significant decrease in neuroticism between weeks one ($M = 2.95, SD = .65$) and 10 ($M = 2.49, SD = .62$), $p < .001$. This significant decrease was maintained at the 3 month follow up ($M = 2.39, SD = .66$), $p < .001$.

A one way repeated measures ANOVA determined that mean extraversion was significantly different between time points, $F(2, 46) = 8.56, p = .001$, $\eta_p = .27$. Post Hoc tests using the Bonferroni correction indicated that there was a significant increase in extraversion between weeks 1 ($M = 3.08, SD = .39$) and ten ($M = 3.26, SD = .44$), $p < .01$. This significant difference was maintained at the three month follow up ($M = 3.30, SD = .48$), $p = .01$.

A one way repeated measures ANOVA determined that mean agreeableness was not significantly different between time points, $F(2, 46) = 1.87, p = .17$. The differences between mean openness between different time points approached but did not reach significance, $F(2, 46) = 4.76, p = .013$.

*Facet Level Change*

A one way repeated measures ANOVA was performed for each of the facets of conscientiousness. A Greenhouse-Geisser correction was used for competence and self-
discipline as Mauchly's test indicated that sphericity had been violated for these variables.

The results of the analysis indicated that there was significant variation across time points for mean competence, dutifulness, achievement striving, self-discipline and deliberation. A summary of these results is provided in table one below.

**Table 1**

*Summary of repeated measures ANOVA for conscientiousness facets across the intervention and post intervention periods.*

<table>
<thead>
<tr>
<th>Facet</th>
<th>F</th>
<th>p</th>
<th>ηp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>16.56 (1.33, 30.62)</td>
<td>&lt;.001</td>
<td>.42</td>
</tr>
<tr>
<td>Order</td>
<td>1.34(2, 46)</td>
<td>.27</td>
<td>.06</td>
</tr>
<tr>
<td>Dutifulness</td>
<td>12.39(2, 46)</td>
<td>&lt;.001</td>
<td>.35</td>
</tr>
<tr>
<td>Achievement Striving</td>
<td>7.39(2, 46)</td>
<td>&lt;.01</td>
<td>.24</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>28.91(1.28, 29.51)</td>
<td>&lt;.001</td>
<td>.56</td>
</tr>
<tr>
<td>Deliberation</td>
<td>14.21 (2, 46)</td>
<td>&lt;.001</td>
<td>.38</td>
</tr>
</tbody>
</table>

Post hoc testing using the bonferroni adjustment indicated that there was a significant increase in competence (*p* < .01), dutifulness (*p* < .001), achievement striving (*p* = .01), self-discipline (*p* < .001) and deliberation (*p* < .001) between week one and week 10. There was no significant differences on any of the facets between week 10 and the three month follow up. There was a significant increase in competence (*p* < .01), dutifulness (*p* < .001), achievement striving (*p* = .01), achievement striving (*p* = .05), self-discipline (*p* < .001) and deliberation (*p* < .01) between week one and the three month follow up. A summary of the means for each conscientiousness facet at each time point is provided in table two below.
Table 2

A summary of the means for conscientiousness facets at each time point during the intervention and post intervention periods

<table>
<thead>
<tr>
<th>Facet</th>
<th>Week 1</th>
<th>Week 10</th>
<th>Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Competence</td>
<td>3.42</td>
<td>.44</td>
<td>3.83</td>
</tr>
<tr>
<td>Order</td>
<td>3.17</td>
<td>.54</td>
<td>3.31</td>
</tr>
<tr>
<td>Dutifulness</td>
<td>3.82</td>
<td>.42</td>
<td>4.13</td>
</tr>
<tr>
<td>Achievement Striving</td>
<td>3.33</td>
<td>.59</td>
<td>3.70</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>2.43</td>
<td>.58</td>
<td>3.16</td>
</tr>
<tr>
<td>Deliberation</td>
<td>3.19</td>
<td>.57</td>
<td>3.58</td>
</tr>
</tbody>
</table>

A one way repeated measures ANOVA was performed for each of the facets of neuroticism. The results of the analysis indicated that there was significant variation across time points for all facets with the exception of impulsiveness. A summary of these results is provided in Table three below.
Table 3

*Summary of repeated measures ANOVA for neuroticism facets across the intervention and post intervention periods.*

<table>
<thead>
<tr>
<th>Facet</th>
<th>F</th>
<th>p</th>
<th>ηp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>14.56 (2, 46)</td>
<td>&lt;.001</td>
<td>.38</td>
</tr>
<tr>
<td>Angry/hostility</td>
<td>8.93 (2, 46)</td>
<td>&lt;.01</td>
<td>.28</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>10.74 (2, 46)</td>
<td>&lt;.001</td>
<td>.32</td>
</tr>
<tr>
<td>Depression</td>
<td>9.54 (2, 46)</td>
<td>&lt;.001</td>
<td>.29</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>3.93 (2, 46)</td>
<td>.03</td>
<td>.15</td>
</tr>
<tr>
<td>Self-consciousness</td>
<td>10.09 (2, 46)</td>
<td>&lt;.001</td>
<td>.31</td>
</tr>
</tbody>
</table>

Post hoc testing using the Bonferroni adjustment indicated that there was a significant decrease in anxiety (p < .001), anger (p = .02), vulnerability, (p = .03) and self-consciousness (p < .01) between week one and week 10. There were no significant differences between week 10 and the three month follow up for any facet. Participants experienced a significant decrease in the facets of anxiety (p < .01), anger (p < .001), vulnerability (p < .01), depression (p < .01) and self-consciousness (p = .01) between week one and the three month follow up. A summary of the means for each facet of neuroticism at each time point is presented in table four below.
Table 4

A summary of the means for neuroticism facets at each time point during the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Week 1</th>
<th></th>
<th>Week 10</th>
<th></th>
<th>Follow Up</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.10</td>
<td>.89</td>
<td>2.43</td>
<td>.90</td>
<td>2.40</td>
<td>.76</td>
</tr>
<tr>
<td>Angry/hostility</td>
<td>2.76</td>
<td>1.03</td>
<td>2.29</td>
<td>.90</td>
<td>2.24</td>
<td>.85</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>2.90</td>
<td>.85</td>
<td>2.43</td>
<td>.90</td>
<td>2.15</td>
<td>.88</td>
</tr>
<tr>
<td>Depression</td>
<td>3.31</td>
<td>.79</td>
<td>2.88</td>
<td>.94</td>
<td>2.73</td>
<td>.73</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>2.86</td>
<td>1.01</td>
<td>2.71</td>
<td>.86</td>
<td>2.57</td>
<td>.83</td>
</tr>
<tr>
<td>Self-consciousness</td>
<td>2.79</td>
<td>.68</td>
<td>2.24</td>
<td>.65</td>
<td>2.26</td>
<td>.71</td>
</tr>
</tbody>
</table>

A one way repeated measures ANOVA was performed for each of the facets of extraversion. A Greenhouse-Geisser correction was used for positive emotions as Mauchly’s Test indicated that sphericity had been violated for this variable. The results of the analysis indicated that there was significant variation across time points for mean warmth, activity and positive emotions. A summary of these results is provided in table five below.
Table 5

Summary of repeated measures ANOVA for extraversion facets across the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>F</th>
<th>p</th>
<th>ηp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmth</td>
<td>6.18(2, 46)</td>
<td>&lt;.01</td>
<td>.21</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>1.10(2, 46)</td>
<td>.34</td>
<td>.05</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>1.33 (2, 46)</td>
<td>.28</td>
<td>.05</td>
</tr>
<tr>
<td>Activity</td>
<td>6.00 (2, 46)</td>
<td>&lt;.01</td>
<td>.21</td>
</tr>
<tr>
<td>Excitement</td>
<td>.77 (2, 46)</td>
<td>.47</td>
<td>.03</td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>6.21(1.34, 31.16)</td>
<td>.01</td>
<td>.21</td>
</tr>
</tbody>
</table>

Post hoc tests using the Bonferroni correction indicated that there was a significant increase in warmth ($p < .01$) between weeks one and 10. There were no significant differences in any of the facets between week 10 and the three month follow up. There was a significant increase between week one and the three month follow up for warmth ($p = .02$), activity ($p < .01$) and positive emotions ($p = .04$). A summary of the means for the facets of extraversion at each time point is provided in table six below.
Table 6

A summary of the means for extraversion facets at each time point during the intervention and post intervention periods.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Week 1</th>
<th>Week 10</th>
<th>Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Warmth</td>
<td>3.29</td>
<td>.64</td>
<td>3.60</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>2.60</td>
<td>.68</td>
<td>2.73</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>3.22</td>
<td>.83</td>
<td>3.40</td>
</tr>
<tr>
<td>Activity</td>
<td>2.98</td>
<td>.90</td>
<td>3.22</td>
</tr>
<tr>
<td>Excitement</td>
<td>2.97</td>
<td>.67</td>
<td>2.86</td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>3.40</td>
<td>.78</td>
<td>3.75</td>
</tr>
</tbody>
</table>

Analysis of impact on associated life outcomes

To determine whether changes occurred in associated life outcomes across the intervention period, eight one way repeated measures ANOVAS were conducted. Due to the number of analyses a Bonferroni adjusted significance level of $p < .01$ ($0.05/8$) was used. The results are described below.

Life Satisfaction

A one way repeated measures ANOVA determined that mean life satisfaction was significantly different between time points, $F(2, 46) = 16.35, p < .001$. $\eta_p = .42$. Post Hoc tests using a Bonferroni correction indicated that there was a significant increase in life satisfaction between week one ($M = 4.17$, $SD = 1.13$) and week 10 ($M = 5.03$, $SD = 1.20$), $p < .001$. The significant increase in life satisfaction between week one and week 10 was maintained at the three month follow up ($M = 5.04$, $SD = 1.26$), $p < .001$. 
Positive Affect

A one way repeated measures ANOVA, with a Greenhouse-Geisser correction (Mauchly’s test indicated that the assumption of sphericity had been violated) determined that mean positive affect was significantly different between time points, $F(1.47, 33.80) = 11.51$, $p < .01$. $\eta_p = .33$. Post Hoc tests using a Bonferroni correction indicated that there was a significant increase in positive affect between week one ($M = 2.83$, $SD = .62$) and week 10 ($M = 3.46$, $SD = .78$), $p < .01$. The significant increase in positive affect between week one and week 10 was maintained at the three month follow up ($M = 3.46$, $SD = .80$), $p < .01$.

Negative Affect

A one way repeated measures ANOVA indicated that mean negative affect was significantly different between time points, $F(2, 46) = 11.46$, $p < .001$. $\eta_p = .33$. Post Hoc tests using a Bonferroni correction indicated that there was a significant decrease in negative affect between week one ($M = 2.16$, $SD = .77$) and week 10 ($M = 1.58$, $SD = .55$), $p < .01$. The significant decrease in negative affect between week one and week 10 was maintained at the three month follow up ($M = 1.63$, $SD = .71$), $p < .01$.

Stress

A one way repeated measures ANOVA determined that mean stress was significantly different between time points, $F(2, 46) = 5.10$, $p < .01$. $\eta_p = .18$. Post Hoc tests using a Bonferroni correction indicated that there was not a significant decrease in stress between week one ($M = 1.91$, $SD = .67$) and week 10 ($M = 1.62$, $SD = .62$), $p = .08$. There was also not a significant difference between stress at week 10 and stress at the three month follow up. There was a significant decrease in stress between week one and the three month follow up ($M = 1.47$, $SD = .44$), $p < .01$. 
Anxiety

A one way repeated measures ANOVA determined that mean anxiety was not significantly different between time points, $F(2, 46) = 2.67, p = .04$. $\eta_p = .10$.

Depression

A one way repeated measures ANOVA determined that mean depression was significantly different between time points, $F(2, 46) = 14.07, p < .01$. $\eta_p = .38$. Post Hoc tests using a Bonferroni correction indicated that there was a significant decrease in depression between weeks one ($M = 1.94, SD = .67$) and week 10 ($M = 1.38, SD = .38$), $p < .01$. The significant decrease in depression between week one and week 10 was maintained at the three month follow up ($M = 1.48, SD = .57$), $p < .01$.

Occupational Self Efficacy

A one way repeated measures ANOVA determined that mean occupational self-efficacy was significantly different between time points, $F(2, 46) = 6.18, p < .01$. $\eta_p = .21$. Post Hoc tests using a Bonferroni correction indicated that there was a significant increase in occupational self-efficacy between weeks one ($M = 3.78, SD = .89$) and week 10 ($M = 4.67, SD = .67$), $p < .01$. The significant increase in occupational self-efficacy between week one and week 10 was not maintained at the three month follow up ($M = 4.49, SD = 1.09$), $p = .06$.

Overall Health

A one way repeated measures ANOVA determined that mean scores on the overall health questions did not vary significantly between time points, $F(2, 46) = 3.11, p = .03$. $\eta_p = .12$.

Observer Data

Observer Rating Changes During the Intervention Period

In order to determine whether there were significant changes in the observer ratings of participant’s personality five one way repeated measure ANOVAs were conducted. A
Greenhouse-Geisser correction was applied for neuroticism, extraversion and openness as Mauchly’s test indicated that sphericity had been violated for these variables. The results indicated that observer ratings of participant’s conscientiousness varied significantly over the intervention period, $F(2, 42) = 9.45, p < .001, \eta_p = .31$. Post Hoc analysis using a Bonferroni correction indicated that there was a significant increase in conscientiousness between week one ($M = 3.30, SD = .62$) and week 10 ($M = 3.59, SD = .46$), $p = .01$. There was not a significant difference in conscientiousness between week ten and the three month follow up ($M = 3.67, SD = .42$), $p = .82$. This difference between week one and 10 was maintained at the three month follow up, $p < .01$.

Observer ratings of neuroticism significantly varied over the intervention period, $F(1.33, 27.81) = 36.12, p < .001, \eta_p = .63$. Post Hoc analyses using a Bonferroni correction indicated that there was a significant decrease in neuroticism between week one ($M = 3.08, SD = .82$) and week 10 ($M = 2.60, SD = .79$), $p < .001$. There was also a significant decrease in neuroticism between week 10 and the three month follow up ($M = 2.51, SD = .74$), $p = .05$.

Observer ratings of extraversion varied significantly over the intervention period, $F(1.26, 26.37) = 4.30, p = .04, \eta_p = .17$. Post Hoc analyses using a Bonferroni correction did not indicate any significant differences between week one ($M = 3.38, SD = .89$), 10 ($M = 3.64, SD = .75$) and the three month follow up ($M = 3.61, SD = .77$).

Observer ratings of agreeableness did not significantly vary over the intervention period, $F(2, 42) = .8, p = .46, \eta_p = .04$. Observer ratings of openness did not vary over the intervention period, $F(1.41, 29.60) = .19, p = .75, \eta_p < .01$.

**Discussion**

The results of the current study provide further support for the argument that personality is changeable throughout the lifespan. This study found large significant changes in self-report measures of neuroticism, conscientiousness and extraversion in participants
whose average age was 47. These findings would appear to be in conflict with the findings of Costa et al. (2000) and Fraley and Roberts (2005) which found only small changes in mean personality and rank order consistency for individuals past young adulthood. However these findings are only in conflict with the conclusion drawn from these studies that personality is not changeable (McCrae et al., 2000). What they suggest is that in normal circumstances adults personalities, on average and relative to each other, remain quite stable. However in the unusual circumstance that someone has engaged in an intervention to change their personality, personality change can occur.

The current study found significant increases in conscientiousness. This is encouraging as higher conscientiousness is generally associated with positive outcomes (Roberts & Jackson, 2017). Furthermore, there was a significant increase in extraversion and decrease in neuroticism. These changes appear positive as higher extraversion is associated with a number of positive life outcomes while lower neuroticism (or higher emotional stability) is also associated with positive life outcomes (Jackson & Roberts, 2017; Tackett & Lahey, 2017). A unique aspect of this study is that some of these associated outcomes were measured. Furthermore some of the changes that were found reflected the consequential outcome literature (Ozer & Benet-Martinez, 2006; Friedman & Kern, 2014; Widiger, 2017). This literature would suggest that an increase in conscientiousness and extraversion and decrease neuroticism would be associated with increased happiness and decreased symptoms of mental health problems (Steel et al., 2008; Malouff et al., 2005). This was what was found during the current study. Given the positive nature of the changes in life outcomes these findings suggest that the intervention was beneficial to participants.

These results are consistent with the findings of Martin, Oades and Caputi (2014b) which found that large changes in personality could be produced via application of the stepwise process for changing personality. The current study also extended upon the work of
Martin, Oades and Caputi (2014b) by addressing some of the limitations of the original study. One of the primary limitations of Martin, Oades and Caputi (2014b) was that participants in the study received different interventions. That is, participants were able to choose which facets they wanted to change and then selected their change strategies from a menu for each facet. This meant that there was variation in the intervention both in terms of what facets were targeted and also in what interventions were selected. While this method has many positive aspects in terms of tailoring the intervention to the client, it also presents a number of problems. Firstly, it makes it difficult to know what aspects of the intervention were successful. While it can be said that the intervention was successful overall (as significant change was achieved) it may be that certain menu items did not help while others were very helpful. That is, one participant may have received an effective intervention while another did not. That one of the interventions was ineffective would be hidden in the mean level change. Another issue is that of replicability. That is, given that the program was different for each participant it may be difficult to replicate this program. The current study addressed these concerns by using a manualised intervention program and focussing only on conscientiousness. While participants did choose different facets of conscientiousness to change, the intervention they received, regardless of their choices, was the same. Thus the current study has created an easily replicable and manualised intervention package that has been found to produce significant increases in conscientiousness.

Another limitation of Martin, Oades and Caputi’s (2014b) study is that only half the participants targeted conscientiousness. Allan, Leeson, Martin and De Fruyt (2017) in their analysis of Martin, Oades and Caputi’s (2014b) data found significant change in conscientiousness over the coaching period, however these changes were not maintained at the 3 month follow up, though they did approach a significant reduction. This could be because changes that were produced through the intervention were not maintained at 3
months post intervention. However another possibility is that the lack of significant change was because participants targeted multiple other facets from other domains (split focus) resulting in a smaller effect size. Similarly, participants in Hudson and Fraley’s (2015) study were able to target multiple facets during the intervention and the intervention did not produce mean level changes in conscientiousness. The results of the current study found a significantly larger effect size for changes in conscientiousness than was found in Martin, Oades and Caputi (2014b) and Hudson and Fraley (2015). This suggests that interventions that focus specifically on conscientiousness may produce larger change in this domain than more generalised interventions.

Another limitation of the intervention produced by Hudson and Fraley (2015) was that the impact of their intervention on participant’s personality was small. Furthermore, while they were able to produce very small changes in extraversion and neuroticism they did not produce any mean level changes in conscientiousness. In fact, in their first study, participant’s conscientiousness significantly decreased. One of the key differences between the current study and Hudson and Fraley’s (2015) study was that the intervention provided in the current study was a lot more intense. Participants were engaged with professional coaches, psychologists and provisional psychologists for 1.5 hours during the group sessions. Furthermore, they received significant support from likeminded participants in the group. Finally they were also given weekly homework. Consequently, the contrast between these results suggests the possibility that in order to successfully change conscientiousness a relatively intensive intervention is required.

Another limitation of Martin, Oades and Caputi’s (2014b) and Hudson and Fraley’s work is that they relied solely on self-report measures. Consequently, there may have been demand effects occurring which could explain any changes that occurred. This criticism is especially pertinent to Martin, Oades and Caputi’s (2014b) work because the intervention
relied on producing a close coaching relationship between the coach and coachee. The current study addressed these criticisms by incorporating observer measures. These measures supported the changes found in the self-report measures for conscientiousness, neuroticism and extraversion. The observers in the current study were close friends and/or relatives of the participants. Consequently, there may have still been some demand effects occurring as they likely would have been aware of the purpose of the study. However, these demand effects would have been significantly less than those on the actual participants. Consequently, it is felt that this result partially addresses the criticism of previous research regarding the validity of self-report measures. However future research may be able to further address these criticisms by utilizing different kinds of observers (e.g. supervisors) as well as incorporating behavioural measures.

Martin, Oades and Caputi’s (2014b) research produced large changes in personality however the intervention involved a significant amount of resources per participant. In contrast, Hudson and Fraley (2015) produced very small changes in personality yet the level of resources required for their intervention was also very small. The current study was able to adapt Martin, Oades and Caputi’s (2014b) program to a less resource intensive modality (group delivery) while maintaining the large effect sizes. This is significant as the resource cost of interventions is an important consideration if it is to be more widely adopted.

This study provided evidence for the adaptation of the step-wise process to conscientiousness. It suggested that utilizing this process along with specific conscientiousness focussed techniques (psycho-education, goal setting, organisational, cognitive behavioural and mindfulness skills) produced large, significant and sustainable changes in individual’s conscientiousness. It also suggested that specifically tailoring the step-wise process to one domain tends to produce larger changes in that domain compared to what would be produced by the general personality change intervention. It remains to be
seen whether this process can be adapted to change other domains, however the results of this study are encouraging for this prospect.

In conclusion the results of the current study supported the hypothesis that application of the step-wise process of increasing conscientiousness would result in an increase in conscientiousness. The intervention also resulted in an increase in extraversion, a decrease in neuroticism and positive changes in associated life outcomes. The self-report changes in conscientiousness, extraversion and neuroticism were supported by changes in observer reports. The current research demonstrated that Martin, Oades and Caputi’s (2014b) stepwise process for changing personality could be adapted to produce a manualised, easily replicable program capable of producing large increases in participant’s conscientiousness. It also provided further evidence for volitional personality change.
References


Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In Mervielde, I., Deary, I., De


Chapter 6: Conclusion

The purpose of this thesis was to extend upon the burgeoning intentional personality change literature. Chapter two suggested that individuals primarily want to change the personality facets within the domains of neuroticism and conscientiousness and individuals who choose to engage in personality change interventions tend to be more open and neurotic than the general population. Chapter three indicated that participants are able to reduce their neuroticism and increase their extraversion and conscientiousness via application of the stepwise process for changing personality. Chapter three also suggested that targeting of facets was an important aspect of producing change in those facets. It was argued that combining the step-wise process of intentional personality change with findings from the clinical literature would be useful for the development of general personality change interventions as well as for the development of interventions designed to try to increase conscientiousness (Allemand & Fluckiger, 2017). Application of a modified conscientiousness specific version of the step-wise process for intentional personality change resulted in significant increases in conscientiousness and extraversion and decreases in neuroticism.

Since the paper described in chapter two was published there have been a number of studies which have further explored the question of what people want to change about their personalities (Hudson & Fraley, 2016; Hudson & Roberts, 2014; Robinson, Noflте, Guо, Asadi, & Zhang, 2015). Robinson et al. (2015) found that, across three countries (Iran, China and the United Kingdom), between 87% and 95% of individuals wished to change at least one of the big five personality domains. Robinson et al.’s (2015) findings mostly supported the findings of the current thesis. Across the three countries neuroticism was the personality domain that people most commonly wanted to change, this was followed by conscientiousness for Iran and China and extraversion for the United Kingdom.
Hudson and Roberts (2014) also found that the personality domains that people most wanted to change were neuroticism followed by conscientiousness. Consequently there appears to be come general consistency in the current literature regarding goals for changing ones personality. Overall the findings of the current thesis, Hudson and Roberts (2014) and Robinson et al. (2015) suggested that people most commonly want to change their neuroticism followed by conscientiousness and then extraversion.

An interesting outcome of the studies conducted by Hudson and Roberts (2014) and Robinson et al. (2015) was that they found participants’ change goals were negatively related to the associated domain if that domain was associated with positive life outcomes and positively related to the domain if that domain was associated with negative life outcomes. That is, participants tended to have goals to increase positive personality characteristics they were low in and decrease negative characteristics they were high in. For example Robinson et al. (2015) found that high neuroticism was associated with change goals to reduce neuroticism. These findings potentially provide an explanation for one of the results of the current thesis. The participants described in chapter 2 were significantly higher in neuroticism. Thus, there may have been two components as to why participants targeted neuroticism more than any other factor. Firstly, neuroticism has been found across multiple studies to be the personality domain people most want to change (Hudson & Fraley, 2016; Hudson & Roberts, 2014; Robinson et al., 2015). Secondly, research suggests that people higher in neuroticism (as participants in the current study were) are more likely to want to reduce neuroticism than those lower in neuroticism (Hudson & Roberts, 2014; Robinson et al., 2015). Consequently it makes sense that facets of neuroticism were the most commonly targeted in the study described in chapter 2.

This research may also explain the results in the current thesis that openness was significantly higher for participants but was rarely targeted for change. Openness has been
consistently found to be the personality domain that people are least likely to want to change (Hudson & Fraley, 2016; Hudson & Roberts, 2015; Robinson et al., 2015). Secondly, individuals tend to be less likely to want to increase personality domains they are already high in (Hudson & Roberts, 2014; Robinson et al., 2015). Thus, participants in chapter two who were already high in openness would be unlikely to target facets within this domain for change.

The results of the paper described in chapter three add to the literature that indicates that neuroticism can be decreased and extraversion and conscientiousness increased via interventions (Chokkalingam, Kumari, Akhilesh & Nangedra, 2015; De Fruyt et al., 2006; Hudson & Fraley, 2015; Krasner et al., 2009; Martin, Oades & Caputi, 2014a; Nellig et al., 2011; Orme-Johnson & Barnes, 2014; Tang et al, 2009). This is encouraging because high neuroticism and low extraversion and conscientiousness have been consistently associated with negative outcomes (Widiger, 2017). Furthermore, the results of chapter two combined with the results of several other studies suggest that neuroticism, conscientiousness and extraversion are the domains of personality that people most commonly want to change (Hudson & Fraley, 2016; Hudson & Roberts, 2015; Robinson et al., 2015). Consequently, the results of chapter two and three, combined with the empirical literature, suggest that people are motivated and able to create positive changes in the domains of conscientiousness, extraversion and neuroticism and these changes may be beneficial.

The targeting of facets was found to be important in inducing change in participants. This finding is particularly interesting when considered in the context of the findings of Robinson et al., (2015) and Hudson and Fraley (2015). Robinson et al., (2015) found that plans to change neuroticism and conscientiousness were related to increases in neuroticism and decreases in conscientiousness. Similarly, in the first of their two studies, Hudson and Fraley (2015) found that creating non-specific change goals did not result in desired changes
in personality and actually resulted in a decrease in conscientiousness. This is in contrast to the findings of the study described in chapter three which found that targeting of facets significantly contributed to change.

A possible explanation for these apparently discrepant results is the interventions that were used. Robinson et al. (2015) did not provide a formal intervention. However the nature of the data collection involved providing psycho-education around personality domains, asking participants whether they had goals to change these domains and asking participants to write down their plans for achieving their domain change goals. Consequently, this could be described as a discrete goal setting intervention. Similarly Hudson and Fraley (2015) asked participants to engage in weekly goal setting around desired personality trait change. As discussed above, the results of these interventions were unhelpful and possibly harmful. What this suggests is that eliciting personality change goals without providing training on how one might achieve these changes is, at best, ineffective for changing people’s personality. Indeed, when Hudson and Fraley (2015) did provide some instruction on how to effectively set goals they were able to produce small, positive changes in extraversion and neuroticism.

A second source that may provide insight into the results of Hudson and Fraley (2015) and Robinson et al. (2015) is the study by Hudson and Roberts (2014). Hudson and Roberts (2014) found that personality change intentions were not related to daily behaviours. If this result is considered within the context of Roberts & Pomerantz’s (2004) person by situation model than the lack of personality change makes sense. That is, it is consistent with Roberts & Pomerantz’s (2004) model that a lack of change in people’s trait relevant behaviour states would be associated with a lack of change at the trait level. Thus interventions that seek to produce changes in personality must be powerful enough to elicit changes in behaviour. The current literature indicates that non-intensive interventions may not have the power to do this (Hudson & Fraley, 2015; Robinson et al., 2015).
It was argued in chapter four that the utilisation of change processes that were found to be fundamental to creating change in psychotherapy would be important in the development of personality change interventions (Allemand & Fluckiger, 2017). It was also discussed how the step-wise process, while developed from a different theoretical perspective, heavily utilised these change processes (Grawe, 1997). It could be argued that these change processes were less prominent in the interventions provided by Hudson and Fraley (2015) and Robinson et al. (2015) when compared to the interventions described in this thesis. For example, the presence of a trustful collaborative relationship has been found to be central factor in facilitating change in psychotherapy (Lambert, 1992; Hubble, Duncan & Miller, 1999; Thomas, 2006). The interventions described in the current thesis provided either 10 one to one coaching sessions with a trusting, empathetic professional or a combination of individual sessions and group sessions with trusting empathetic professionals (and supportive group members). In contrast, the relationship provided in Robinson et al. (2015) and Hudson and Fraley (2015) interventions seemed to occur primarily through written instructions. Thus there was a vast difference between the utilisation of relationship factors such as the therapeutic alliance between the different interventions. Therefore the differences in effect sizes between these interventions (negative, non-existent or very small versus large) adds support to the notion that common factors are important in facilitating personality change (Allemand & Fluckiger, 2017).

The intervention described in chapter five was based on the idea that the step-wise process of intentional personality change could be combined with relevant clinical literature to produce a specific intervention to change conscientiousness. It was argued that the theoretical similarities between low conscientiousness and ADHD, combined with the finding that the core personality component of ADHD was low conscientiousness, suggested that adult ADHD treatment program techniques may be useful for increasing conscientiousness
The results of the study described in chapter five supported this conclusion. This suggests the possibility that other programs designed to treat clinical disorders may be incorporated into the step-wise process to create specific interventions to change other personality domains. For example, social anxiety would appear to be theoretically related to low extraversion while numerous clinical disorders would seem to have associations with neuroticism (American Psychiatric Association. 2013; Widiger, 2017). Thus, established programs for changing clinical disorders, combined with the step-wise process may be a useful starting point for the creation of personality change resources targeted at other domains. This is an area for future research.

While it was hoped that the positive personality changes described in chapter three would result in positive changes in life outcomes this could not be determined as these variables were not measured. Chapter five extended upon this research by demonstrating significant changes in associated life outcomes. These changes reflected the changes that would be expected based on the consequential outcome literature (Widiger, 2017). Several studies have found that personality change over the lifespan is consequential (e.g. Allemand, Steiger & Fend, 2015; Human et al., 2013; Mrozek & Spiro, 2007; Turiano et al., 2012). The current research adds to this by suggesting that changes in personality, as the result of an intentional intervention, are associated with changes in life outcomes that reflect the consequential outcome literature. A possible area for future research would be to explore whether changes in personality were causally related to the changes in life outcomes.

One of the limitations of Martin, Oades and Caputi (2014a) was that the flexibility of the program limited its replicability. With the development of the manualised step-wise process to increase conscientiousness there is now a standardised empirically supported program for increasing the specific domain of conscientiousness. This program is able to be
delivered in a group context and consequently is arguably more efficient than the original
step-wise process.

As far as I am aware, none of the intentional personality change intervention literature
has utilised observer measures. Chapter five found that observer reports of participant’s
conscientiousness, extraversion and neuroticism significantly changed over the intervention
period and this change was maintained 3 months later. These observer reports were not ideal
for addressing the criticisms around demand effects because the observers were either close
friends or relatives and thus likely would have been aware of the program the individual was
engaging in. However, given that these observers were never met by the researchers, and thus
a close therapeutic relationship (which was developed with the participants) was not
developed, these findings do partially address the criticisms regarding demand effects. This
will be a difficult area for future research to address as individuals who are not aware that a
person is engaging in an intensive personality change program may not have access to
enough situational and temporal breadth of participants behaviours to determine whether
change has occurred (Roberts & Pomerantz, 2004). That is, if someone is unaware that a
person is engaging in an intensive personality change program this may be because they are
not in contact with them very often or do not know them very well. In contrast, those who do
know them well and thus may have access to multiple situations in which to observe change
are likely to be aware of the program the person is engaging in. A possible solution to this
problem is to measure behaviours that are associated with personality traits to validate
personality trait change. For example, punctuality, which has been found to be a behaviour
that is associated with conscientiousness, could be measured to validate self-reported changes

One of the key limitations of the study described in chapter five was the sample size.
Only 24 participants completed the program. In contrast, the studies by Hudson and Fraley
(2015) utilised 135 and 151 participants. The contrast between these two studies highlights a key issue with the current empirical literature on personality change interventions. That is, providing a less intensive intervention requires fewer resources and thus allows for a greater sample size and a more reliable study. However, currently, these less intensive interventions have also been found to have minimal impact on personality (e.g. Robinson et al., 2015; Hudson & Fraley, 2015). Ideally future research would seek to conduct a large study utilising the intensive interventions described in this thesis. However, this would obviously be very resource intensive and thus may not occur. However, for the time being it can be argued that these different studies address the weaknesses of each other and in combination they provide strong evidence that personality can be changed via interventions.

Thus, the current thesis challenged the assertion that personality does not change. It was argued that this assertion appeared disembodied from the clinical literature which has as its core assumption the notion that people are able to change their patterns of thinking, feeling and behaving. It is also refuted by the longitudinal and intervention literature (including the interventions conducted in the current study) which has shown that personality changes over the lifespan and in response to both targeted and non-targeted interventions. Consequently, the core findings of this thesis are hopeful. That is, it suggests that people can change who they are for the better.
References


Hudson, N. W., & Roberts, B. W. (2014). Goals to change personality traits: Concurrent links between personality traits, daily behaviour, and goals to change oneself. *Journal of research in personality, 53*, 68-83.


Appendix 1: Description of NEO PI-R and equivalent IPIP NEO PI-R facet descriptions.

Table 1.

*Facets of Conscientiousness for the NEO PI-R and their equivalent IPIP NEO PI-R descriptions.*

<table>
<thead>
<tr>
<th>NEO PI-R (Conscientiousness)</th>
<th>IPIP NEO PI-R (Conscientiousness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Self-Efficacy</td>
</tr>
<tr>
<td>Order</td>
<td>Orderliness</td>
</tr>
<tr>
<td>Dutifulness</td>
<td>Dutifulness</td>
</tr>
<tr>
<td>Achievement Striving</td>
<td>Achievement Striving</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>Self-Discipline</td>
</tr>
<tr>
<td>Deliberation</td>
<td>Cautiousness</td>
</tr>
</tbody>
</table>

Table 2.

*Facets of Neuroticism for the NEO PI-R and their equivalent IPIP NEO PI-R descriptions.*

<table>
<thead>
<tr>
<th>NEO PI-R (Neuroticism)</th>
<th>IPIP NEO PI-R (Neuroticism)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Angry/hostility</td>
<td>Anger</td>
</tr>
<tr>
<td>Depression</td>
<td>Depression</td>
</tr>
<tr>
<td>Self-Consciousness</td>
<td>Self-Consciousness</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>Immoderation</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>Vulnerability</td>
</tr>
</tbody>
</table>
Table 3.

*Facets of Extraversion for the NEO PI-R and their equivalent IPIP NEO PI-R descriptions.*

<table>
<thead>
<tr>
<th>NEO PI-R (Extraversion)</th>
<th>IPIP NEO PI-R (Extraversion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmth</td>
<td>Friendliness</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>Gregariousness</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>Assertiveness</td>
</tr>
<tr>
<td>Activity</td>
<td>Activity Level</td>
</tr>
<tr>
<td>Excitement Seeking</td>
<td>Excitement Seeking</td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>Cheerfulness</td>
</tr>
</tbody>
</table>

Table 4.

*Facets of Agreeableness for the NEO PI-R and their equivalent IPIP NEO PI-R descriptions.*

<table>
<thead>
<tr>
<th>NEO PI-R (Agreeableness)</th>
<th>IPIP NEO PI-R (Agreeableness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Trust</td>
</tr>
<tr>
<td>Straightforwardness</td>
<td>Morality</td>
</tr>
<tr>
<td>Altruism</td>
<td>Altruism</td>
</tr>
<tr>
<td>Compliance</td>
<td>Cooperation</td>
</tr>
<tr>
<td>Modesty</td>
<td>Modesty</td>
</tr>
<tr>
<td>Tender-mindedness</td>
<td>Sympathy</td>
</tr>
</tbody>
</table>
Table 5.

*Facets of Openness for the NEO PI-R and their equivalent IPIP NEO PI-R descriptions.*

<table>
<thead>
<tr>
<th>NEO PI-R (Openness)</th>
<th>IPIP NEO PI-R (Openness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fantasy</td>
<td>Imagination</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>Artistic Interests</td>
</tr>
<tr>
<td>Feelings</td>
<td>Emotionality</td>
</tr>
<tr>
<td>Actions</td>
<td>Adventurousness</td>
</tr>
<tr>
<td>Ideas</td>
<td>Intellect</td>
</tr>
<tr>
<td>Values</td>
<td>Liberalism</td>
</tr>
</tbody>
</table>
Appendix 2: Rejoinder

Who wants to change their personality and what do they want to change?

A response to Allan, Leeson and Martin.

Jonathan A. Allan, Peter Leeson, Filip De Fruyt & Lesley S. Martin

We appreciate McCredie’s (2014) response to our article. It is very pleasing to see that the question of whether personality change can be achieved via coaching is continuing to generate discussion amongst coaching and personality researchers. Having said this, we would contend that the arguments raised by McCredie do not change the interpretation of our findings. Thus, the following rejoinder will address the three main points that McCredie raised in his response to our recent article. (1) That, considering the moderate findings of Spence and Grant (2005) and that Martin, Oades and Caputi (2014) has yet to be published, there is a lack of evidence for the effectiveness of coaching in producing personality change; (2) That, due to confounding factors associated with self-report measures, change at a biological level needs to be demonstrated in order to prove personality change has occurred; And (3) that personality is only moderately predictive of specific behavioral competencies and overall performance and thus “why bother?” trying to change it.

Lack of Evidence Demonstrating Efficacy of Coaching in Producing Personality Change

We agree that the Spence and Grant article (2005) does not provide strong evidence of the efficacy of coaching in producing personality change when considered in isolation. However, it is important to evaluate this study in the context of our overall argument. There have been multiple studies using different interventions (e.g. therapeutic, drug and training) that have produced significant changes on self-report measures of personality (Tang et al., 2009; Spence & Grant, 2005; Nelis et al., 2011; De Fruyt, Van Leeuwen, Bagby, Rolland & Rouillon, 2006; Piedmont & Ciarrocchi, 1999). Furthermore, coaching has been found to be an effective intervention for producing targeted change and shares a number of common
elements with therapeutic interventions (Theeboom, Beersma & Van Vianen, 2014; Cox, Bachkirova & Clutterbuck, 2010). Consequently, we feel that this evidence, combined with the finding of Spence and Grant, would justify the exploration of the question of whether personality can be changed via coaching. This was explored by Martin, Oades and Caputi (2014) and significant changes in personality were found. The Martin, Oades and Caputi paper has since been submitted to the International Coaching Psychology Review. Consequently, we are hopeful that this article will soon be available for review and comment.

**Demonstrating Change Via Biological Measures**

There is indeed a growing body of literature that indicates that personality domains are related to biological mechanisms. However in order to use changes in biological mechanisms to prove changes in personality a clear understanding of the functional neuro-anatomy of personality and how it can be measured is required. We would argue that at present personality neuroscience has not yet reached this point.

De Young (2010a) posits, in his review of personality neuroscience, that until recently there have been a relatively small number of studies exploring personality’s biological basis. He also indicates that there is significant inconsistency in the personality neuroscience literature. He suggests that this may be due to small sample sizes, which increase the possibility of type I and type II errors. Thus we would argue that neuroscience is still in the process of discovering how personality is instantiated in the brain and consequently demonstrating changes in biological mechanisms or structures would not necessarily prove changes in personality.

McCredie (2014) refers to Eysenck’s (1967) theory that neuroticism is related to the arousability of the autonomic nervous system. However, the evidence for this relationship is mixed. For example, Schwebel and Suls (1999) found no evidence for neuroticism influencing cardiovascular reactivity in response to emotional or psychological stressors. In
contrast, Reynaud et al. (2012) found that fear induced skin conductance response explained 22.5% of the variance in neuroticism. Reynaud’s research, while interesting, still presents a problem if attempting to use fear induced SCR as a measure of personality, because the degree of unexplained variance leaves an unreasonably high chance that change could occur without being detected.

Other research has explored the biological structure of personality via neural imaging techniques. De Young et al. (2010b), using structural magnetic resonance imaging (MRI), found significant associations between the big five and the volume of certain brain regions. For example, Neuroticism was associated with reduced volume in the posterior hippocampus, a brain region that has been linked with the control of anxiety. However while this research is both important and interesting the authors explicitly state “our findings do not provide definitive evidence to allow generalizations about the relation of volume to function” (De Young et al., p. 826). Thus considering the authors appear tentative about suggesting a definite relationship, it would seem that significantly more research is required before neuro-imaging methods are able to serve as accurate measures of personality.

However, while the evidence suggests that current biological measures are not able to accurately measure personality, McCredie’s (2014) point that self-report measures may be subject to bias remains valid (although not unique to this study). Thus, we would like to make clear that this research is a first, and necessary, step in demonstrating the efficacy of coaching in producing personality change, and that we are currently in the process of developing a study which will incorporate observer reports to address limitations associated with self-report measures.
Personality is only moderately predictive of specific behavioral competencies and overall performance and thus “why bother”?

This comment would be valid if the current article argued that the importance of personality change was that it was associated with specific behavioral competencies and overall performance. However, the argument made in the current article is that personality change would be beneficial as personality is associated with broader benefits. That is, personality is predictive of physical health, mental health, relationship satisfaction, happiness, life satisfaction, work satisfaction and work performance (Steel et al., 2008; Barrick & Mount 1991; Malouff, Thorsteinsson & Schutte, 2005; Malouff et al., 2010; Thoreson et al., 2003 & Ploubidis & Grundy, 2009). We feel that if there is the possibility that an intervention can have a positive impact on these important and varied life domains, than it is certainly worth the bother.
References


BUILDING CONSCIENTIOUSNESS

Participant Training Manual

Jonathan Allan
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**Week 1: Introduction**

The Stepwise-process for increasing conscientiousness is part of a series of studies looking at intentional personality change. These studies have sought to explore whether people are able to change their personality and whether this can have a positive impact on their lives.

This group focuses on one specific aspect of personality, which is conscientiousness. The aim of this group is too, through the application of specific skills, increase your conscientiousness. We are also hoping that these changes would have a positive impact on other areas of your life.

Throughout this course you will learn a range of skills. Some of these may be things you already do, while others may be new. We ask that keep an open mind. If you feel that something we teach won’t work for you, give it a shot. If it still doesn’t work, you don’t have to use it.

We have tried our best to minimise the amount of passive listening in this course. We feel that doing is the best way to learn. You will be asked to do a number of activities during the group. However, the most important part of this is that you apply what we do in the group to your own life.

You are the expert on your own life. While many of the facilitators here might have more experience using and/or teaching the skills we present here, you are the person who knows the most about you. Thus we will be relying on you to figure out the best way to apply these skills to your life.

Finally, we ask that you approach this course with a sense of fun and experimentation. Don’t hold on too tightly to any of the techniques because not everything will work for everyone.

We hope that this course will be enjoyable and that you will gain a different perspective on yourself and your personality.
Group rules

• Listen with acceptance – others will do the same for you
• Don’t interrupt others – your turn will come
• Speak up – we want to hear from everyone
• Be cautious about giving advice - sometimes the best thing to do is to listen.
• Avoid judgment
• You do not have to share anything you feel uncomfortable sharing
• Respect the rights and dignity of each participant
• Be easy on yourself and others
• All personal information shared by group members is confidential.
• This group is a stepwise program: you should attend every session.
• Please be punctual.

What is Personality?

There are many definitions of personality and not all personality theorists are in agreement as to what constitutes personality. However, for the purposes of this course we will take personality to mean characteristic patterns of thinking, feeling and behaving.

Five factors of personality

The dominant view in personality psychology is that a person’s personality can be best described using five key factors. These are extraversion, agreeableness, openness, neuroticism and conscientiousness. Extraversion refers to a person’s tendency to be outgoing and energetic while people high in openness tend to show a preference for novelty, new ideas and culture. Agreeableness is reflected in being co-operative and sympathetic to others while individuals high in neuroticism tend to be more prone to negative emotions such as stress, anxiety, sadness and anger. The final factor, and the subject of this course, is conscientiousness.
What is conscientiousness?

Conscientiousness is the final of the five factors of personality. The easiest way to explain conscientiousness is to describe someone who is conscientious. A conscientious person typically...

- Is self-disciplined
- Is achievement driven
- Tend to live in accordance with their values
- Is organised
- Works hard
- Is dependable
- Is careful and thorough

Facets of conscientiousness

Research has suggested that within conscientiousness lie a number of facets. Facets can be considered different aspects of conscientiousness. The facets that we will be using in this course are self-efficacy, orderliness, dutifulness, achievement striving, self-discipline and caution.

Self-efficacy refers to the level of confidence you have in your ability to perform tasks and reach your goals.

Orderliness refers to a tendency to be organised and do things according to a specific plan.

Dutifulness refers to the extent that one lives in accordance with their conscience. Dutiful people tend to tell the truth, do things on time and make decisions based on what they feel is right.

Achievement striving refers to the extent to which people work hard to achieve their goals. People high in this facet will tend to set high standards for themselves and work harder than what is expected.

Self-disciplined people tend to be able to start tasks right away and work hard on them until they are finished. They are usually well prepared and spend little time procrastinating.
**Cautious** people tend to think before they act. They avoid engaging in impulsive, crazy or dangerous behaviour.

**But these people sound boring?**

Some of the aspects I’ve described above can lead people to feel that being conscientious is boring. The truth is that there are plenty of ‘boring’ conscientious people and plenty of ‘exciting’ conscientious people. It all comes down to what’s important to you. If living an exciting life is important to you than we would encourage you to pursue that. However often being organised, working hard and thinking before you act are necessary in order to reach those exciting achievements. Of course, as with anything in this program, if you really feel that being cautious or more orderly is not in alignment with who you want to be, drop it and focus your efforts on the other facets.

**Why do we want to change it?**

Being more conscientious is associated with a range of benefits. Conscientious people tend to be happier, earn more money, be more satisfied with their jobs, have better relationships, live longer, be physically healthier and have lower levels of mental illness. In fact it is hard to find any area of life in which being more conscientious is not associated with more positive outcomes.

**Where I am now?**

It can be tempting when starting a program to rush right in to what you want to achieve by the end. However the first step is to figure where you are at now. A good way to think about this is through using the metaphor of a map. Even if we know exactly where the destination is, this information is useless if we don’t know where we are.
Your Conscientiousness Profile

Below is your conscientiousness profile. It is based on the answers you gave during your initial testing session.

**Overall conscientiousness**

<table>
<thead>
<tr>
<th>Conscientiousness</th>
</tr>
</thead>
</table>

**Specific facet scores**

<table>
<thead>
<tr>
<th>Self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orderliness</td>
</tr>
<tr>
<td>Achievement striving</td>
</tr>
<tr>
<td>Dutifulness</td>
</tr>
<tr>
<td>Self-disciplined</td>
</tr>
<tr>
<td>Cautious</td>
</tr>
</tbody>
</table>
Pros and Cons

**Activity:** Choose one facet and write down the pros and cons of this facet being at the level it is as it relates to your life.

<table>
<thead>
<tr>
<th>Facet ______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pros</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td></td>
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**Homework activities for week 1**

1. Be aware of how your level of conscientiousness affects your behaviour in different situations.
2. Fill out the work sheet on the next page for the five facets that you have not yet done pros and cons for. Remember that we want this to be for your current level for each of the facets and the pros and cons should be relevant to your life.
## Pros and Cons

<table>
<thead>
<tr>
<th>Facet _________________________</th>
<th>Pros</th>
<th>Cons</th>
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<th>Facet _________________________</th>
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<th>Cons</th>
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<th>Facet _________________________</th>
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<th>Cons</th>
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<table>
<thead>
<tr>
<th>Facet _________________________</th>
<th>Pros</th>
<th>Cons</th>
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</table>
Discovering your values

The next part of this course focuses on discovering your values. This is because it is important when engaging in personal change that this change is driven by you. Sometimes we may think that we want to change something but really this is being driven by outside forces such as friends, partners or society. Any changes you make in this program should be a reflection of who you are, your own desires and what is really important to you.

What are values?

Values are those qualities that truly matter to us in directing how we engage with the world. They are those qualities that we want to be remembered by. A good, albeit bleak way to get your head around what values are is to think of the kind of words people use to describe someone in their obituary. People don’t tend to say he/she had a really big house and made lots of money. They tend to say he/she was driven to succeed or he/she was loving and kind.

Values versus goals

The key distinction between goals and values is that goals are something that can be achieved whereas values are something that you can strive to embody throughout your life. A good example is looking at marriage versus being loving. Marriage is something that you can achieve. If your goal is to get married, once you say “I do” that’s it. You might get divorced but you still achieved being married, for a while. Being loving on the other hand is a value. This is because you can choose to embody this at any time. You can be loving to yourself, your partner, your friends and your neighbours but it isn’t something that you do once and then tick it off. Hopefully, if this is important to you, it is something that you can choose act in accordance with throughout your life.
Values exercise

The following exercise is designed to clarify those values that are most important to you. Please sort the cards into 3 piles. The piles should represent those values that are...

- very important to me
- somewhat important to me
- Not important to me.

Write the ones that you placed in the “very important to me” pile in the space below.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
My Core Values

1. __________________________

2. __________________________

3. __________________________

4. __________________________

5. __________________________

6. __________________________
Where I want to be

If I were living in alignment with my values what would my conscientiousness profile look like?

<table>
<thead>
<tr>
<th></th>
<th>A lot Less</th>
<th>The Same</th>
<th>A lot More</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-discipline</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Achievement striving</td>
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<tr>
<td>Cautiousness</td>
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<tr>
<td>Self-efficacy</td>
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<tr>
<td>Orderliness</td>
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<td></td>
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<tr>
<td>Dutifulness</td>
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</tbody>
</table>

Behaving, Thinking and Feeling

Behaving (what different things would I be doing)?
Thinking (what would I be saying to myself)?

What impact do you think this would have on the way you feel?
Homework activities for week 2

During the group:

1. Write in the values that will guide your actions this week.

At home:

2. Notice during the week when you are acting in alignment with your values and when you are not.
3. Notice if any different values (that you didn’t consider) come up throughout the week. Are there any additional values that you feel need to be added to your core values?
4. During the week you may become aware of more thoughts, actions and feelings that you feel would change if you were more conscientious. If you notice this, please write you insights down in the behaving, thinking and feeling sections above.
Being Aware of your Values

Notice the values that guide you in different situations throughout week.

Values

________________
________________
________________
________________

Week 3: Where I want to be

Goal Setting

This week we are going to focus on goal setting. You have probably done goal setting before but the process we will go through in this week is a little bit different. During the last two weeks we have explored where you are and what is really important to you. This week we are going to focus on where you want to be. This will be done by choosing the facets you wish to change and thinking about what these changes would look like. We will then work on setting goals to achieve these changes.

Facets I want to change

Based on the work we have done in the past two weeks, please have a think about, and write down the facets that you wish to change. It is fine to write down them all, but make sure that you only write down a facet if it is truly important to you that you make a change in this area. Please also write down the values that you associate with change in this area.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Values</th>
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<tbody>
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Now ask yourself, if I were to achieve the desired changes in the facets listed above what would this look like in terms of how I act in regards to my health, work, relationships and well-being.

<table>
<thead>
<tr>
<th>Health</th>
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<th>Work</th>
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<tr>
<th>Relationships</th>
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<tr>
<th>Personal Well-Being</th>
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Now that you have created a general list of things that would be different it’s time to refine this list into a specific set of goals. However, first it is important that you have an understanding about how to set effective goals.

**SMART Goals**

Research suggests that the way you set your goals can impact on whether you successfully achieve them or not. The following points provide a good guideline on how to set goals. We use the acronym SMART. The following examples are designed to show you how to refine a goal so that it adheres to the SMART principles.

| **Specific** | Goals should be specific. You should say exactly what you want to achieve. For example “I will complete this report” is a lot more specific then “I need to work harder”. |
| **Measurable** | Goals should be measurable. To use the example above. “I will work on my report” is not as good as “I will complete sections 2, 3 and 4 of my report”. |
| **Alignment** | Goals should be in alignment with you values. You should carefully consider whether the goals that you choose are your goals (reflect what is important to you) or someone else’s (wife, husband, family, friends, society). Research suggests that we are less likely to achieve goals in which our motivation stems from external sources. |
| **Realistic** | It is important that your goal is realistic. This can be a bit of a balancing act. If you set goals that are too unrealistic, you can set yourself up for failure. However setting goals that are too easy may mean that you don’t achieve as highly as you could and/or you don’t get as great a sense of satisfaction when you achieve the goal. |
| **Timely** | Where appropriate goals should be given a time for when they will be completed by. Consequently, provided it is realistic and timely, an example of a SMART goal would be “I will finish sections 2,3 and 4 of my report by Thursday this week”. |
**My goals**

Now from this list of behaviours I want you to select 5-6 and turn them into smart goals. These should be the ones that are the most important to you.

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Homework activities for week 3

During the group

1. Write in one action you can do today or tomorrow, that will move you towards achieving one of your goals.

2. Write in two actions you can do throughout the week that will move you towards achieving one of your goals.

3. Write in the values that will be behind you completing the at home activities for the week.

At home activities

4. Perform the action that you wrote down for activity 1.

5. Perform the actions that you wrote down for activity 2.

6. Take some time to sit down and review your goals during the week. Did you get them right? Is there any additional goals that need to be added? Or, upon reflection, is one of your goals that you wrote down not that important to you?
Taking action

Performing actions
toward achieving
my goals

Week 4: Organizing and planning skills

Organization skill 1: Using a calendar and notebook

Developing a system for using a calendar and notebook is essential to being organized. For most of us, we have too much to do during the day to keep track of it in our heads. A calendar and notebook system allows us to free up our mind from trying to remember what we need to do next, and to focus on completing the tasks at hand.

Some people have a perception that “I’m just not a very organized person”. They might think that they are not organized due to some inherent aspect of their character which they can’t change. The truth is, that while there are individual differences between people, more organized people tend to be more organized because they use tools to assist them.

Using a calendar and notebook.

Notebook: Your notebook should be reserved for information that is not specifically related to a date. For example you might put down someone’s contact information or a to-do list for the day. The reason it is important to have a notebook is so that you have one place where you keep all important information. This ensures that it doesn’t get lost. Also because you refer to it every day you will be reminded of the important information repeatedly and thus you are less likely to forget about it/not act on it.

Calendar: Your calendar should be used for information that is specifically related to certain date. For example if you had a presentation for work on the 14th of September that would go in your calendar. Calendars are a very important aspect of being organized. They allow you to remember all the important events you have coming up. This can be important in terms of making sure that you are prepared. They also prevent issues such as double booking yourself.
Rules for calendars and notebooks

1. All important information goes in the calendar and notebook. You should not keep information on scrap pieces of paper because they tend to get lost. By having all the information in one place, when you check your notebook every day, you will be reminded of all the important information you need to know.

2. Appointments should go straight in your calendar. Don’t keep them in the form of business cards, as these will tend to get lost/not looked at.

3. Phone messages should be recorded in your notebook.

4. There is no such thing as a perfect system. It is better to get a pretty good system that you will use up and running than to delay getting started because you are trying to find the perfect system. Remember that you can refine your system as you go. Furthermore you won’t know what works for you until you try it.

5. Make it a habit. You should check, and write, in your notebook and calendar every day. This will make sure that you get into the habit of using it.

6. Only use a computer/phone system if you are competent with the technology. Learning one new skill is hard enough. If you try to also learn how to use a phone/computer system this may get in the way of you implementing the calendar/notebook system.
Task: Using the smart goal format, write down how you will develop a calendar/notebook/daily task system for the week. Please be specific in regards to what you will use for these systems.

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<th>Goal</th>
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Daily task list

Daily task list are essential to being organized. They should be made every day, and looked at every day. One of the key aspects of daily task lists is that they direct us towards what we need to do every day. This can get us out of the pattern of being distracted/reactive to our environment causing us to engage in tasks that are not what we really want to be doing (based on what’s really important to us in life).

If you were able to write down the correct steps to achieve your realistic goals, put them into your daily task list, and then everyday complete those steps than you would have to achieve your goal. This is why daily task lists can be so effective.

Refining the daily task list.

Imagine if you went to the emergency department of your local hospital. In the waiting room there appears to be some really sick people. In fact there are a few people that look like they might die if they don’t receive immediate attention. In walks a person with a paper cut, it looks pretty serious, it might
even require a band aid! This person is waved to the front of the line, given a band aid and sent on their way.

This sounds like a pretty terrible way to do things right? However, this can often be what occurs when implementing daily task lists. We can tend to avoid the big/urgent/difficult tasks by focusing on the easy/small tasks.

A way to combat this issue is to use a system for prioritizing. One way of doing this is by using an A, B, C system.

A: These are very important tasks and need to be completed very soon (e.g. within the next couple of days)

B: These are tasks are still important however they may need to be completed over a longer period of time. Certain aspect of this task may need to completed urgently and thus should be considered A tasks.

C: These are low importance tasks: They may be easy/fun but are not as important as other tasks.

**Tips**

- Finish you’re A tasks before your B tasks, and you B tasks before your C tasks.
- Think carefully about what constitutes an A task. You need to be careful to not have too many A’s
- Break down large tasks into smaller tasks, to make things easier.
Exercise: Create a daily task list for tomorrow below.

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<tr>
<th>Priority rating</th>
<th>Task</th>
<th>Date put on list</th>
<th>Date completed</th>
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Homework activities for week 4

In group activities

1. Fill out values guiding this week’s homework.

At home activities

2. Complete daily task list tomorrow.
3. Set up and implement calendar and notebook system.
4. Create and implement daily prioritized tasks lists.
5. Bring your calendar and notebook system in next week.
Taking action

Setting up and Implementing

notebook/calendar

system and daily task

lists.

Week 5: Creating an action plan

Today’s session will start off with some testing. This is to assess how you are going in increasing your conscientiousness. The answers you give to the questions will be used to create a report similar to the one you were given at the beginning of the course. Using this, you should be able to compare your current scores with your initial to gauge improvement.

The second aspect of today will be creating an action plan for one of your goals. This will combine the goal setting skills you have learned with organisational skills we went through last week. Writing down the specific steps required to achieve a goal, and then writing down specifically when you will do these steps can be very useful in helping you achieve your goals.

**Action plan exercise**
Homework activities for week 5

In group activities

1. Write in values guiding completing the activities for the week.

At home activities

2. Follow through on your action plan throughout the week.
Taking action

Following through on my action plan.

Week 6: Identifying obstacles

Well done! You’re over half way there. This week you will have received your second report back so that you can see how you have been going. We hope that you have experienced changes in your assessment results and even more importantly in your everyday life. If you haven’t noticed any changes that’s ok too. The next few weeks will look at firstly identifying some of the obstacles that can get in the way of acting more conscientious and also look at some different ways of overcoming these obstacles. Good luck!

Thinking, feeling and behaving.
**Automatic thoughts**

Automatic thoughts are those thoughts that just happen on autopilot. They can be very useful because it would take a lot of effort if we were forced to think carefully about everything we do. However, sometimes automatic thoughts can be unhelpful. For example, Joe finds that every time he sits down to do his work he automatically thinks “this is too hard” or “I can’t do this”. These thoughts are likely to hinder his ability to do his work and they may also make him feel stressed and anxious.

**Identifying negative automatic thoughts**

The first step in overcoming unhelpful automatic thoughts is to become aware of them. The following exercise is a simple way to do this. As you are doing this exercise, notice how the situation, your thoughts and your feelings are all connected.

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<tr>
<th>Situation</th>
<th>Automatic thought</th>
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Thinking errors

**Magnification/Minimization:** This involves making things bigger than they are e.g. “this task is impossible” (magnification). Or alternatively, making things smaller than they actually are e.g. “I have no skills whatsoever, so I can’t do this”.

**Overgeneralization:** This involves generalising something that applies to one aspect to all aspects. For example you may be having difficulty with on part of your work but overgeneralise this to “I can’t do any of my work”.

**Mental Filter:** This involves only seeing the negative aspects of a task. For example you may see going for a run with a friend as time consuming and tiring. However you are not considering the positive aspects such as it being fun, social and good for your health.

**Should statements:** These are absolute statements like “I shouldn’t have to do this” or “I should know how to do this”.

**Mind reading:** This involves deciding what people will think before we do anything. For example, you may wish to send an email or call and important person in your field of expertise. However through mind reading you have already decided that they will dismiss you.

**Fortune telling:** This involves deciding the outcome of something before it happens. E.g. “what’s the point of completing my assignment I’m just going to get a bad mark anyway”.

**Catastrophizing:** This is predicting extreme or horrible outcomes to events. E.g. “if I don’t do this perfectly my boss will fire me and I’ll be living on the street”

**Emotional Reasoning:** This involves taking how you feel about something as fact. E.g. “I am upset with this person therefore they must be a bad person”.

**All or nothing thinking:** You see things in black and white rather than shades of grey. E.g. “If I don’t get all the tools I asked for to do this task I can’t do any of it”.
**Perfectionist thinking:** You think that everything needs to be done perfectly. If things aren’t perfect this causes you significant distress.

**Personalization:** This involves personalizing negative events that you do not have control over.

**Maladaptive thinking:** These are general thoughts that while they may be true are not particularly helpful. For example, “I’m terrible at this” may be true if you are learning a new skill, however it’s not particularly helpful and is unlikely to motivate you to improve that skill.
Homework activities for week 6

In-group activity

1. Fill out values worksheet for the completion of homework this week.

At home activities

2. Fill out automatic thinking and thinking errors sheet during the week.
3. Continue to implement calendar/notebook system. You may also wish to implement another action plan. Worksheets are at the back of the book.
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<th>Situation</th>
<th>Automatic thought</th>
<th>Feeling/100</th>
<th>Thinking error</th>
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Taking action

Recording unhelpful
Automatic thoughts

Week 7: Overcoming barriers

This week we will build on what we learned last week and develop some skills to directly address unhelpful automatic thoughts. It is important to note that while last week was titled “identifying barriers”, the skills you learned last week can also be helpful in overcoming barriers. Often becoming more aware of our thoughts and how they are affecting our behaviour is enough for us to choose to act in a different way.

Helpful Responses

As we discovered last week, our minds can do a very good job of beating us up. Imagine that someone you knew decided to take all those unhelpful thoughts in your brain and follow you around repeating them verbatim all day. This would probably get pretty annoying. It might also lead to you feeling stressed out, unconfident?, and it would probably be difficult to get any work done. Pretty quickly I’m sure you would tell your friend to go away. Unfortunately we can’t do this with our minds. However what we can do is try to reframe some of those thoughts so that they are helpful rather than unhelpful.

Tips for formulating a helpful response

1. Make sure that your response is true and that you really believe it.
2. Think about what you might say to a close friend or family member if they had that thought about themselves. We are often much harder on ourselves than others.
3. But it’s true! Whether an unhelpful thought feels true doesn’t matter. Focus on rephrasing it in a way that is
helpful. For example, if I am learning a new instrument the thought “I am terrible at this instrument” may feel true but not be particularly helpful. A more helpful way to phrase this would be “Every time I practice I get better”. Both of these statements may be true but only one is helpful.

4. Look at the evidence. Sometimes we can have unhelpful thoughts even though all the evidence is to the contrary. Writing down this evidence can be helpful.

5. Manage unproductive worry. Can I do anything about this? Often we can get caught up in thinking about things we have no control over. So what are you suggesting. I have a handout on this if you need ideas.

6. Get things into perspective. What is the worst that could happen? Is it that bad?

7. Is this really that important?
Exercise: Rational Response

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<th>Situation</th>
<th>Thought</th>
<th>Feeling/100</th>
<th>Thinking error</th>
<th>Helpful Response</th>
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Strategy 2: Getting in touch with your values

Another strategy for dealing with unhelpful thoughts and feelings is to use your values. Often the thoughts we have can lead us away from our values. However at any point in time you can recognize this and choose to act in a way that is more in alignment with who you want to be.
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<th>Step</th>
<th>Description</th>
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<td>Stop</td>
<td>Notice that you’re acting in a way that is not in accordance with your values.</td>
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<tr>
<td>Take a step back</td>
<td>What are the thoughts and feelings you are experiencing right now?</td>
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<tr>
<td>Observe</td>
<td>What are the values you want to follow in this situation?</td>
</tr>
<tr>
<td>Put your values into action</td>
<td>Choose to act in a way that is in alignment with who you want to be.</td>
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In group activity

1. Fill out values sheet.

**Homework activities for week 7**

2. Do the stop worksheet for one situation.
3. Fill out the rational response worksheet during the week.
4. Continue implementing your notebook/calendar system and action plans.
Taking action

Overcoming Barriers

Actions

Goal

Values

Week 8: Procrastination

So far the modules have tended to focus on broad skills that you could then tailor to the specific areas that you wanted to address. This week will be a little different. We will be focussing on applying the skills you have learned to the specific problem of procrastination.

What is procrastination?

Procrastination refers to the practice of doing less important/more pleasurable tasks instead of more important/less pleasurable tasks. This can result in tasks being left till the last minute or in some cases not being done at all. Procrastination is often seen as something that we all do and not that big a deal. However it can have severe consequences. It can result in us not producing the standard of work that we would like, missing opportunities, as well as causing us to experience higher levels of stress.

Why do we procrastinate?

The reason we procrastinate, like everything else we do, is that we do gain some benefit from it. Usually this benefit is in the form of short term relief. Unfortunately despite the short term benefits, procrastination can often lead to long term consequences.
Applying your skills to procrastination: Adaptive thinking

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<th>Automatic thought</th>
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<tr>
<td><strong>Stop</strong> – Notice that you’re acting in a way that is not in accordance with your values.</td>
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<th><strong>Take a step back</strong> – What are the thoughts and feelings you are experiencing right now?</th>
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<th><strong>Observe</strong> – What are the values you want to follow in this situation?</th>
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<tr>
<th><strong>Put your values into action</strong> – Choose to act in a way that is in alignment with who you want to be.</th>
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Practical Skills for addressing procrastination

The skills above are very useful for addressing the unhelpful thoughts and beliefs that can lead to procrastination. However it can also be useful to use some practical skills for dealing with this issue.

*What you already know.*

Keeping a calendar and notebook system, writing to do lists, and using the action plan skills you have already learnt are excellent tools to combat procrastination. However if you are still finding it an issue we have a few more tips that might help.

*Tips*

**Set a specific amount of time:** For example “I will work on this for 1 hour”. Once you have completed that amount of time, give yourself permission to stop working on the tasks regardless of the amount of work completed. This can be especially useful if one of the reasons that you are procrastinating is because you don’t know how long something might take.

**Do the yucky task first:** This involves tackling the most important, biggest or most unpleasant tasks first. With the big thing out of the way, the small stuff tends to feel easier.

**Time and place:** It is important to pick the right time and place for performing tasks. Do you have a place which is just for work with minimal distractions? Do you find you work better in certain areas versus others? Similarly is there a time of the day where you have more energy than other times? Could you use this time to tackle that really difficult task?
Dob yourself in: This involves telling a friend, colleague, or family member exactly what you are going to do and by what time. You can even ask them to direct some motivational phrases (e.g. “get off your backside”) if they see you slacking. By making yourself more accountable this can help to reduce excuse making.

A few minutes: If you are really having trouble getting started on a task it can be helpful to just decide to do it for just a few minutes (e.g. 5, 10, 15). You should pick an amount of time that you are absolutely confident you can do. It is often sitting down and starting that is the hardest barrier to overcome.

Be realistic: Are you taking on more things than you can cope with. Do you need to shed some unimportant activities.

Rewards

Rewarding yourself can act as a great incentive to get started on tasks. It can help to overcome some of the positive aspects of procrastination which may be leading you to not acting the way you would like. Here are a few tips for rewarding yourself...

- Only get the reward after you complete the task.
- Rewards should be proportional.
- Make sure that it is a real reward that you really enjoy.
- Write down the reward beforehand and specifically what task needs to be completed.
- Reward yourself regularly.
- Rewards should be in alignment with your values.
- Rewards don’t just have to be things (e.g. food, items). They can be outings, time with the family etc.
• For larger tasks with several smaller steps you can give yourself small rewards for each step and a large reward when the task is completed.
• For really big achievements make sure that the reward isn’t something you would normally do.

**Rewards list**

In the space below write down some rewards that you could use to help motivate you.

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<thead>
<tr>
<th>Experiences</th>
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Rewards for small tasks (things that can be done in a few hours).

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<tr>
<th>Task</th>
<th>Rewards</th>
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## Rewards for larger tasks

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<th>Big Task</th>
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<td><strong>Step 1</strong></td>
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<td>Big Reward</td>
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Homework activities for week 8

In group activities

1. Fill out the values worksheet.

At home activities

2. Fill out a STOP sheet and Rational thinking sheet for procrastination.
3. Implement the rewards you chose during the session.
Taking action

Combatting procrastination

and rewarding myself

Week 9: Bringing it all together

Congratulations on making it to the end of the program. We are very thankful for the time and energy you have put into this program. We hope that you have experienced improvements in your conscientiousness and your life. This week is about reflection and review. It’s time to relax, take a breath and look back at what you’ve achieved over the last 9 weeks.

Goal review

Please go back to page 19 and read your goals again. Then spend some time reflecting on how far you’ve come towards achieving those goals. Write down the progress you have made for each of the goals in the space below.

Goal 1

Goal 2

Goal 3

Goal 4
Conscientiousness review

For each of the facets you targeted write down any gains you have made.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Self-discipline</td>
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<tr>
<td>Achievement striving</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
</tr>
<tr>
<td>Orderliness</td>
<td></td>
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<tr>
<td>Dutifulness</td>
<td></td>
</tr>
<tr>
<td>Cautiousness</td>
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</table>

Now that you have done that do the same for those facets that you didn’t target. Did you notice and improvements in these areas too?
Values review

Now go back to chapter 2 and spend 5 minutes reviewing the work you did. Then reflect on whether you are living more or less in alignment with your values now. Finally fill out the exercise below then compare it to what you wrote 7 week ago.

Where I want to be

If I were living in alignment with my values what would my conscientiousness profile look like?

<table>
<thead>
<tr>
<th></th>
<th>A lot Less</th>
<th>The Same</th>
<th>A lot More</th>
</tr>
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<tbody>
<tr>
<td>Self-discipline</td>
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<tr>
<td>Achievement striving</td>
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<td>Cautiousness</td>
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<td>Self-efficacy</td>
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<td>Orderliness</td>
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<tr>
<td>Dutifulness</td>
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</table>
Maintaining gains

Now that you have reflected on your achievements it’s time to write down some specific strategies for maintaining the gains you have made. We would suggest that the most important aspect to maintaining and improving on the work you have done is to continue practicing the skills you have learnt. Continue to set goals, use organisational skills and be aware of the mental and emotional blocks that can come up and block you from doing what you want to do in life.

If you notice yourself falling back into old habits, that’s OK. The first step to addressing this is to become aware of it so you’re already doing well. The second step is to review the skills you have learned in this book and apply the ones that you feel will be useful for addressing the old habit.

Exercise: In the space below please write down your plan for maintaining the gains you have made.
It’s time to celebrate!

Well done! You finished the course. We hope it was enjoyable and that you were able to produce real meaningful change in the areas of your life that you focussed on over these 9 weeks. Once again we want to thank you for being involved in this program and we wish you all the best.
References


BUILDING CONSCIENTIOUSNESS

Trainer’s Training Manual

Jonathan Allan
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University of Wollongong, New South Wales 2500
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### Week 1: Introduction and where I am now

#### 1.01 Introduction and group rules

**Inform:** Go through each of the paragraphs in the introduction section of the client workbook. You should deliver the main points of each paragraph but not verbatim.

**Activity:** Each of the facilitators should introduce themselves and their role in the program. Ask each participant to pair up with the person next to them. Then ask one participant to spend one minute giving a brief background about themselves. Then do the same for the other partner. After this is done we will go around the group and have the partners introduce each other to the group.

**Inform:** Deliver the group rules to the participants. You should highlight that many of these rules are designed to create a supportive and encouraging environment, without judgement. And the reason we do this is because we feel that this is the best environment for learning. You should spend a little bit of time clarifying the confidentiality rule (e.g. what is said in this group by others is confidential unless you have their expressed permission to share it). You should also stress the step-wise nature of the program and thus the need for regular attendance.

#### 1.02 What is personality?

**Inform:**

1. The nature of this course means that there is a little bit of theory that needs to be understood before participants begin applying the program to their own life. Explain that we are going to try and make this as brief as possible. Ask participants to relate the material to people that they know. This is a good way to help engrain the content for participants.

2. Defining personality. Use the definition provided in the workbook. You should talk about how thinking, feeling and actions all contribute to personality. To help participants get their head around this it may be useful to talk about two people who are acting the same (e.g. writing a report) but are having different thoughts and feelings while performing the task (e.g. one is thinking “it’ll be great to get this work done” and feeling energized while the other is thinking “I hate this, it’ll never get done” and feeling annoyed). Ask participants if they think these two people have the same personality? The second important aspect to convey participants is that this thinking, feeling and acting need to be consistent patterns over time. A good way to illustrate this too participants is to talk about two people who perform the same action (e.g. brushing their teeth/having a shower), with the same thoughts and feelings but then mention that for one of them this is the first time they’ve done this in 6 months whereas for the other they have done this every day of their lives.

3. The five factors of personality. Mention that this is the dominant view of personality in psychology and that it is the model we will be using for this course. Briefly describe the four facets (other than conscientiousness). It can be useful to ask participants, as you describe the factors, to try to relate the factors to people that they know who are extreme examples of the factor (e.g. do you know someone who is very extraverted? Or very shy?). This way when you describe the facets the participants can relate it to someone in their own
<table>
<thead>
<tr>
<th>1.03</th>
<th>25 mins</th>
<th><strong>Where I am now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform: (2 mins): Acknowledge that participants may feel like they want to jump right in to how to change their level of conscientiousness. However the first thing that needs to be done is to establish where they are right now. Use the metaphor of a map. That is a set of directions and the location of the desired destination are useless if we don’t know where we are. Activity (8 mins): Ask participants to review their personality profile. Tell participants to refer to earlier in the chapter for descriptions of the facets. Discuss (15 mins): Have a group discussion with participants about their personality. Do they feel that it accurately describes them? How so? If not, where are the differences? What did participants learn about themselves?</td>
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<table>
<thead>
<tr>
<th>1.04</th>
<th>15 mins</th>
<th><strong>Pros and cons of aspects of personality</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorm: (15 mins): Introduce the brainstorming exercise by discussing that there tend to be pros and cons to every aspect of our personality. Give an example of an aspect of personality that is generally considered bad (e.g. being highly anxious) and talk about the pros and cons of this trait (e.g. Often too anxious to go after what they really want versus tends to avoid potentially dangerous situations). Then put “self-efficacy” on the board and get participants to brainstorm the pros and cons of having high self-efficacy and the pros and cons of having low self-efficacy. The diagram should be as follows...</td>
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</table>
### Pros and Cons contd.

| Activity (5 mins): Ask participants to fill out a pros and cons list for one facet of conscientiousness (it should be the one that stuck out most for them when reading their profile). Stress that the pros and cons list should be for their current level of conscientiousness. They should only put down pros and cons that they are currently/or have experienced in their own lives because of their level of this facet. Stress that this isn’t about beating themselves up but rather getting an accurate view of where they are at the moment in terms of that facet and how it impacts on their lives. |
| Discussion (10 mins): Engage in a group discussion about what participants discovered through this activity. An important point of this activity is that the reason participants may not be as conscientious as they would like is that there are some cons to being conscientious. However these cons tend to be more short term versus long term benefits. |

| Week 1: Homework activity |
| At home activity: Inform participants that they will be asked to do some work at home each week. Stress that this is very important because the goal of this program is that participants are able to apply what they learn in the group to their own life. The first at home activity is that participants make a conscious effort to notice how conscientious they are in different situations. The second activity is that they take some time to write down pros and cons for the remaining facets. Also note that they may find they may notice additional pros and cons for the facet they already filled out and that they should add these to that section of their workbook. |
### Week 2: What is important to you?

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>2.01</td>
<td><strong>Introduction to this week and review of home activities</strong></td>
</tr>
<tr>
<td>15 mins</td>
<td>Inform: that this week is probably the most important week of the entire course. Discuss that what we will be doing this week is focusing on what each of the participants feels is truly important in their life. Inform: that each week will begin with a review of the activities from last week. Mention that we may not have time to hear from everyone but that we would like to know a little bit about how everyone is going. Activity: Ask participants to fill in how conscientious they have been during the past week. Review the homework with the participants. It may be useful to structure the discussion around each of the facets. Put an emphasis on discussing what participants discovered about themselves. Encourage a discussion to develop.</td>
</tr>
<tr>
<td>2.02</td>
<td><strong>Psychoeducation on values</strong></td>
</tr>
<tr>
<td>5 mins</td>
<td><strong>Key points to cover</strong></td>
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<tr>
<td></td>
<td><strong>Rationale.</strong></td>
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<tr>
<td></td>
<td>• The reason why we are going to be spending so much time on values is that it is important that any changes that participants choose to make in their personality are driven by them.</td>
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<tr>
<td></td>
<td>• Sometimes we make goals and strive for achievements that are driven by external things e.g. our partner, our friends, society etc. We want any changes you make during this course to be driven by what’s really important to you, not others.</td>
</tr>
<tr>
<td></td>
<td><strong>Defining Values</strong></td>
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<tr>
<td></td>
<td>• Values are qualities that we feel truly matter to us in directing how we engage with the world.</td>
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<tr>
<td></td>
<td>• Use the obituary metaphor. You can use the examples in the book or your own.</td>
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<tr>
<td></td>
<td><strong>Goals versus Values</strong></td>
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<tr>
<td></td>
<td>• Stress that goals are something that we achieve whereas values are something that we can strive to embody throughout our life.</td>
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<td></td>
<td>• Go through the marriage versus love example. Spend some times on this metaphor as it is likely that without this concrete example some participants may struggle to understand the distinction.</td>
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<tr>
<td>2.03</td>
<td><strong>Brainstorming values</strong></td>
</tr>
<tr>
<td>5 mins</td>
<td><strong>Brainstorm</strong></td>
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<td></td>
<td>• Brainstorm on the board examples of Values with the participants. Participants will likely make a few suggestions that are goals. It is important that you politely correct them, if possible try and get the value behind the goal that they are suggesting.</td>
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<tr>
<td>2.04</td>
<td><strong>Values cards exercise</strong></td>
</tr>
<tr>
<td>10 mins</td>
<td><strong>Activity</strong></td>
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</table>
- Go through the value cards exercise as described in the client Manual.
- Ask participants to take a little bit of time to think about each card before they place it in the appropriate pile.
- Values cards will be provided on the day by the primary researcher.

<table>
<thead>
<tr>
<th>2.05</th>
<th>My core values</th>
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<tbody>
<tr>
<td>20 mins</td>
<td><strong>Activity (10 mins)</strong></td>
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<td></td>
<td>- Ask participants to turn their chairs away for a little bit of privacy and to spend some time thinking about those values that are really important to them. Then using the values from the cards, the values from the brainstorming exercise or any additional values that have come up for them ask them to think about which ones really stuck out for them. Then get them to write down 5-6 values in the core values section of the workbook. Stress that the chairs will be turned around for 10 minutes regardless of whether they are finished or not, so they should really use this time to think about what is important to them.</td>
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<tr>
<td></td>
<td><strong>Discussion (10 mins)</strong></td>
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<td></td>
<td>- Get participants to discuss their experience doing this exercise? What did they find out about their values and what is important to them?</td>
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<tr>
<th>2.06</th>
<th>Where I want to be</th>
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<tbody>
<tr>
<td>10 mins</td>
<td><strong>Activity (5 mins)</strong></td>
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<td></td>
<td>- Get participants to put a circle or line through where they would be, in terms of their conscientiousness profile, if they were living fully in alignment with their values. Explain that one end of the line represents a lot less of that facet and the other end represent a lot more, the center represents the same level as they feel they were at the beginning of the course. Let participants know that they can refer back to chapter 1 if they have forgotten what any of the facets mean.</td>
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<tr>
<td></td>
<td><strong>Discussion (5 mins)</strong></td>
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<td>- Facilitate a discussion with participants about what they found out during this exercise. Was there a big discrepancy for anyone?</td>
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<tr>
<th>2.08</th>
<th>Behaving, thinking and feeling</th>
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<tbody>
<tr>
<td>25 mins</td>
<td><strong>Activity (15 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>- Ask participants to turn to the person next to them and discuss what they would be doing differently (in terms of actions) if they were living more in alignment with their values. As they go through this they should write it down in the behaving section.</td>
</tr>
<tr>
<td></td>
<td>- Ask participants to do the thinking section by themselves. They should write down what they would be different in terms of what they would say to themselves if they were living more in alignment with their values.</td>
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<td>- Participants may struggle with the thinking section. A good method to help get participants unstuck is to ask them what they would say to a close friend or family member who was struggling with these kind of thoughts.</td>
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<tr>
<td></td>
<td>- Ask participants to write down what would be different with how they feel about themselves if they were thinking and behaving at their ideal level of</td>
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**conscientiousness. Keep in mind that this has the potential to be emotional for some participants.**

**Discussion (10 mins)**
- Discuss what participants found out through the thinking and behaving exercise and the feelings exercise. It may be useful to structure this by discussing behaviours first, then thoughts, then feelings.

---

**2.09 Week 2: Homework activity**

**In group activity**
- Get participants to fill in the values that will guide them in completing the at home activities this week. Explain that we will be doing this because we want the homework to be related to what is important to you in terms of how you live your life versus doing it because you’ve been asked to.

**At home activity**
- Go through the at home activity tasks. Explain that the homework this week is mostly about noticing and applying their values and that this is going to be the foundation of the program.
### Week 3: Where I want to be

#### 3.01 15 mins

**Introduction to this week and review of home activities**

**Inform:** So far we have gone through what participant’s personality looked like at the start of the program. We then went through what is important to them. Now we will be taking this information and using it to help us specify where participants want to be by the end of the program. Discuss that in a lot of programs goal setting is done during the first week. However we feel that the work we have done in the past two weeks allows goal setting to be more effective.

**Review:** how participants went with activity 2 of the homework. This was noticing when they were acting in alignment with their values and when they were not.

**Review:** how participants went with activity 3 of the homework. Did any additional important values come up for participants throughout the week?

**Review** home activity 4 with participants. Did they have insights into how they might act, think or feel differently if they were more conscientious?

#### 3.02 15 mins

**Facets I want to change**

**Activity** (10 minutes): Ask participants to, based on the work they have done so far, select facets that they will target for change. Mention that they can select as many as they want (between 1 and 6) but that they should only choose to target a facet for change if they feel that it is truly important to them to create change in this area. Ask participants to read back over the work they’ve done so far (and the facet descriptions in chapter 1). Then get them to write in the specific facets they wish to change and also the values that this change will be in alignment with.

**Discussion** (5 minutes): This is exciting! After three weeks of the personality change course we are finally deciding how we want to change our personality. Get participants to discuss how this process was for them. Try to elicit a general sense of what facets were picked and why they were picked.

#### 3.03 20 mins

**Health, work, relationships and personal well-being**

**Activity** (10 minutes): Ask participants to think about what would be different in terms of how they acted in regards to their health, work, relationships and personal well-being if they were at their ideal level for the conscientiousness facets they targeted. Stress that we are concerned with specific actions they would do, e.g. I would go for a walk everyday versus I would be healthier.

**Discussion** (10 minutes): Go through each of the four categories and see what participants would do differently/their perspective on each.

#### 3.04 5 mins

**SMART goals**

**Inform:** Mention that we have thought about what would be different in terms of our health, work, relationships and personal well-being if our conscientiousness profile was ideal. Now the next step is to refine these differences into specific goals. However before we start setting goals it is important that we spend a little time learning how to make goals as effective as possible. Inform participants about how to set effective goals.
that adhere to the SMART principle. Use the information presented in the client workbook to guide you in delivering this content.

It is worth mentioning after you have gone through the SMART principles that often the things we say to ourselves are examples of ineffective goals. Our brains can sometimes beat us up and say we need to “try harder”, “be smarter”, “more confident” etc. This is not particularly helpful. It we encounter a difficulty, it is much more effective to go through the specifics of what needs to be achieved rather than general “shoulding” on yourself e.g. “I should do better”.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>3.05</td>
<td><strong>My Goals</strong></td>
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<tr>
<td>25 mins</td>
<td>Activity (15 minutes): Ask participants, using the work we have done so far, to set 3-4 goals for the program. These goals don’t have to encompass all of the categories listed above (health, work etc) rather they should be guided by what’s important to the participants. Participants should also write in which values are behind these goals. It is likely that some participants may struggle with turning some of their goals into SMART goals. Facilitators may need to assist where appropriate.</td>
</tr>
<tr>
<td>3.06</td>
<td><strong>Week 3: Homework activity</strong></td>
</tr>
<tr>
<td>10 mins</td>
<td>At home activities: each of the activities listed in the activities for week 3 page of the client workbook. There is a little bit of work that participants will be required to do to set up their homework for the week. Ensure that participants complete activity’s 1, 2 and 3 before leaving the group. It may be useful to get everyone in the group to share one action they will do this week towards achieving their goal.</td>
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</tbody>
</table>
### Week 4: Organizing and planning skills

#### 4.01 15 mins

**Introduction to this week and review of home activities**

*Inform:* The last 3 weeks have been about figuring out where you are, what’s important to you and where you want to be. The next part of this program focuses on specific skills to help you achieve your goals. The module for this week is entitled “organizational skills”. Being organized is most closely associated with the personality facet of orderliness. However, it is also an extremely important skill for the other facets (give example. E.g. writing down exactly what I need to do, and when I need to do it will make me more likely to complete the task and less likely to procrastinate, so by being organized I have been able to behave in a more self-disciplined way). Being more organized can also help you to act more in alignment with your values. This is because it allows us to plan and think about what we really want to do, and what is important to us, rather than just reacting to situations as they occur.

*Review:* Ask participants to raise their hand if they were able to do one thing towards achieving their goal on the day or the day after they set it. Discuss.

*Review:* Discuss with participants the steps they did towards achieving these goals over the week.

*Review:* Did participants discover any new goals throughout the week? Did they upon reflection feel that one of their goals wasn’t their own, or simply wasn’t that important to them?

#### 4.02 15 mins

**Calendar and notebook**

*Inform:* Stress that having a calendar and notebook is essential for being organized if you have a busy life. Emphasize that while it may take a little bit of work initially, having a calendar and notebook system will actually make things easier. We tend to have so many different things to do each day that trying to keep them in our head can be difficult and stressful. Writing down what you have to do throughout the day frees up your mind to focus on the task at hand. Emphasize that keeping a calendar and notebook is great for both getting done what you want to get done and as a stress reduction tool.

*Inform:* Ask participants to raise their hand if they think that they are a naturally disorganized person. Given the topic of this course there should be a few hands raised. Ask participants why they think their disorganized. Ask participants whether they use any organizational tools. Probe as to why they feel they are not organized. Try to communicate through questioning/informing that some people might think that they are not organized due to an inherent aspect of their character which they can’t change. However the truth is, that while there are certainly genetic differences between people, more organized people tend to be more organized because they use...
tools to assist them. We will be learning some of these tools today.

**Discussion (5-10 minutes):** It is likely that some participant already have a calendar or notebook system, or have used one in the past. It may be useful to have a brief discussion with participants about previous or current systems that they have used. Finish this discussion by mentioning that for those who already have a system they may find some specific tips that can help to refine their system to make it more effective.

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<thead>
<tr>
<th>4.03</th>
<th>Using a calendar and notebook</th>
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</table>
| 25 mins | **Inform (5 minutes):** Go through each of the specific tips for using a calendar and notebook system as they appear in the workbook. It may be useful to spend a little bit of extra time talking about the pitfalls of trying to make the “perfect system” and also the importance of making using your notebook and calendar a habit. It may be useful to give a couple of practical examples about how making the calendar/notebook system a habit can be achieved. For example, having a specific conspicuous place where you keep your notebook and calendar so that you will be reminded every day (get participants to suggest some examples of good places for a calendar/notebook to be kept). Alternatively you could set a reminder on your phone telling you to check/update your calendar/notebook.

Exercise (10 minutes): Get participants to brain storm on the board some of the values that might go along with setting up a calendar and notebook system. Really focus on getting into exactly how setting up this system may help them live life more in alignment with how they want to. Following this, get participants to write down how they will set up their system in the form of some SMART goals for the week.

Discussion (10 minutes): It is likely that some participants may need some help troubleshooting setting up there system. Open this up to a group discussion. Participants can share their goals or if someone needs some help the group can discuss how to overcome any potential problems.

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<thead>
<tr>
<th>4.04</th>
<th>Daily task list</th>
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| 5 mins | **Inform:** Go through the information presented at the start of the chapter e.g. “Daily task list are essential to being organized. They should be made every day, and looked at every day. One of the key aspects of daily task lists it that they direct us towards what we need to do every day. This can get us out of the pattern of being distracted/reactive to our environment causing us to engage in tasks that are not what we really want to be doing (based on what’s really important to us in life).” You may also wish to give an example of a distraction pulling someone away from what they really want to do and how having a task list can prevent this.

Go through the next paragraph. “If you were able to write down the correct steps to achieve you realistic goals, put them into your daily task list, and then everyday complete those steps than you would have to achieve your goal. This is why daily task lists can be so effective.” Mention that in reality things are not always that simple. We are not in control of things and events can get in the way. However even when this does happen, having a daily task list system is a great for getting back on track.
<table>
<thead>
<tr>
<th>4.05</th>
<th>Refining the daily task list</th>
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| 20 mins | Inform: Go through the emergency room metaphor. Stress that while the situation I described sounds ridiculous this is often the way we go about our daily tasks. We put off the important, stressful, large or unpleasant work by doing the less important, easier, smaller work first. When we do this it can often lead to us getting more stressed out because the big important things aren’t getting done. It can also lead to use doing a poor job because we leave important stuff to the last minute.  
Inform: Discuss that a good way to combat these problems is by using an A, B, C system to prioritize tasks. Inform participants of the definitions of an A, B and C task. Go through the specific tips presented in the workbook. It is worth mentioning to participants that it may take some refinement to figure out what constitutes an A task. It is important not to make too many A tasks as this can create its own problems (e.g. which do I do first?)  
Exercise: Ask one participant to volunteer to create a daily task list for tomorrow. Then write this up on the board and get the other participants to vote on what is an A, B, C task etc.  
Exercise (10 minutes): Ask participants to create a daily prioritized task list for tomorrow.  
Discussion (5 minutes): Have a brief discussion with participants about how they will remember to use the system every day. Different participants may have different strategies which could be useful to other group members. |

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<tr>
<th>4.06</th>
<th>Week 4: Homework activity</th>
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|      | 1. Get participants to fill in values for the week. Re-enforce that we do this each week because we know that homework can be annoying but if you reflect on the real reason you are doing it (moving towards what important to you), this can help to motivate you to complete it.  
2. Participants should complete the tasks on the daily task list they wrote for themselves tomorrow.  
3. Participants should set up and start to implement their notebook/calendar system for the week.  
4. Participants should set up and implement their daily task system this week. Participants should incorporate their daily task lists into their notebook system.  
5. Remind participants to bring their calendar and notebook system in next week because it will be used for one of the exercises. **THIS NEEDS TO HAPPEN!** |
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>5.01 30 mins</td>
<td><strong>Introduction to this week</strong>&lt;br&gt;&lt;br&gt;Inform: participants that we will be starting today’s session off with further assessment. This is so they can get an idea of their progress towards increasing their conscientiousness. You may wish to offer to make participants a cup of tea while they fill out the forms. After they finish the testing let them know that the tests will be marked and a report written up for them for next week.&lt;br&gt;&lt;br&gt;Testing: Hand out tests to participants, you should read out the testing instructions as per the testing manual. These will be provided by the primary researcher. Make sure participants have adequate writing material an eraser and a clipboard.</td>
</tr>
<tr>
<td>5.02 20 mins</td>
<td><strong>Homework review</strong>&lt;br&gt;&lt;br&gt;Review: Discuss how participants went with completing their daily task lists. Discuss outcomes in terms of both how much they got done as well as how they felt. Was it less stressful to have everything written down? Did it feel good to cross things of the list? Some people may also have had some problems completing this task. Discuss this and also mention that it could be good preparation for next week to start noticing exactly what might be getting in the way of daily task list completion.&lt;br&gt;&lt;br&gt;Review: Discuss how participants went with setting up their calendar and notebook system. Troubleshoot with the group and issues that come up.&lt;br&gt;&lt;br&gt;Review: Check that everyone has bought in their calendar system as it is vital for this week’s task. It is likely that some participants will not have done this. These participants can use a photocopy of the calendar system that the primary researcher uses. Stress that they will need to copy the work that they do here into their own system.</td>
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<tr>
<td>5.03 15 mins</td>
<td><strong>Creating an action plan</strong>&lt;br&gt;&lt;br&gt;Exercise: If possible divide the group up according to the number of facilitators and have the different groups go into different rooms. Facilitators may need to coach/problem solve with participants. Get participants to select one of their goals. Then ask participants to write down everything that needs to be done to achieve this goal. They should be as specific as possible. Then get participant to put an * next to the tasks that are musts/need to be done right away. These would be tasks that need to be completed before other aspects of the action plan can be undertaken. This list needs to be exhaustive as this is designed to be a complete plan of how to achieve the desired goal.</td>
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| 5.04 20 mins | **Incorporating the action plan into their calendar system**<br><br>Exercise:<br><br>• Ask participants to, if they haven’t already, write in their calendar any times that are already locked in and can’t/shouldn’t be changed. This could be things like work, time with family, classes etc.<br><br>• Participants may ask about something like work, where they have that time...
locked off but they would also like to be able to put work related appointments in their calendar. What they can do in this situation is pick a color to represent work and draw a border around that period of time. This way they know that this is only for work related stuff but can also write in specific work related appointments within the border.

- Once they have non-negotiable time locked off. Ask them to put all of the actions they wrote down in the previous exercise into their calendar. They should start with the * items first. The follow up with the non-essential actions until all actions required to achieve the goal are in the calendar.
- Facilitators should be available to troubleshoot throughout the exercise.

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<th>5.05</th>
<th><strong>Week 5: Homework activity</strong></th>
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<td>5 mins</td>
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1. Participants should fill out their values for this week’s homework
2. Participants to follow through on the action plan they have set up.
3. Remind participants to continue to implement their notebook and calendar systems.
## Week 6: Identifying Obstacles

### 6.01 20 mins
**Review of reports**

**Inform:** Deliver reports to participants (reports will be provided by the primary researcher). Indicate that reports show both their initial and week 5 scores on overall conscientiousness and each of the six facets of conscientiousness. Give participants 5 minutes to read their report.

**Discuss:** Participants will likely want to talk about their reports with the group. Facilitate a discussion. How does the report reflect their own experience of how they have gone trying to increase their conscientiousness? It is possible that some people may have not experienced any change. This is a good lead in to this week, which is about identifying obstacles that get in the way of achieving what we want to achieve.

### 6.02 20 mins
**Homework and introduction to this week’s activities**

**Inform:** participants that this week will be about overcoming obstacles that can get in the way of them acting as conscientiously as they would like. Talk about how there are many things that can get in the way such as others actions and external events but that we don’t really have much control over these things. One thing we do have control over is ourselves, and often this can be the biggest obstacle in acting in a more conscientious way. So today we will be looking at how the way we think can cause us to act differently than how we would want.

**Homework Review:** Review the homework. Discuss participant’s experience of implementing their action plan. Discussion should focus both on actions towards their goals but also the effect that planning everything out has on their stress levels, well-being etc. Also discuss how they have been finding implementing the notebook/calendar system and daily tasks lists.

### 6.03 10 mins
**Introduction to thinking, feeling, behaving model**

**Brainstorm:** Draw the CBT model on the whiteboard. Briefly explain how our thoughts can influence our feeling and behaving and vice versa. Then ask participants imagine the following situation... “Joe has just woken up and knows he needs to work for about 12 hours today to get his work in for tomorrow”. The mention that Joe is not the most conscientious of individuals. Ask participants what are some of the thoughts that might be going through Joe’s mind. Than use Socratic questioning to get possible behaviours and feelings. Make sure to emphasize the link between thinking, feeling and behaving. Finish by saying that the purpose of this exercise was to see how certain ways of thinking can lead us to acting in ways that aren’t in alignment with who we want to be and can also lead to use experiencing negative emotions.

### 6.04 5 mins
**Automatic thoughts**

**Inform:** that as we live our lives we have millions of thoughts. Many of these thoughts we are not even aware of. However even though we are not aware of these thoughts they can still impact on how we behave and how we feel. Think about when you drive a car, turn on the tv or use your mobile. When you first learnt to do these things you likely had to think about every step, now you do it without even noticing. These...
Thoughts that just seem to happen are called automatic thoughts. We call them this because they occur automatically and we don’t have a whole lot of control over them.

Inform: While it can be very helpful to have automatic thoughts, as in the driving example, these thoughts can also be unhelpful. Ask participants if anyone here get nervous when doing public speaking. If someone puts their hand up ask them about some of the thoughts that go through their head. Then ask them if these thoughts help or hinder them. Use this as an example of how automatic thoughts can be unhelpful. Mention that as we saw with Joe, automatic thoughts can also get in the way of acting conscientiously.

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<tr>
<th>6.05</th>
<th>10 mins</th>
<th><strong>Recording automatic thoughts</strong></th>
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<tr>
<td></td>
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<td>Inform: The first step to addressing some of these thoughts that can get in the way of acting conscientiously is to become aware of them.</td>
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<td>Exercise: Ask participants to think of the last time they didn’t act as conscientiously as they would like and to write this in the situation column. Then write down the automatic thoughts that went along with that as well as the emotions (rate out of 100) that they were experiencing at the time.</td>
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<tr>
<th>6.06</th>
<th>20 mins</th>
<th><strong>Thinking errors</strong></th>
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<td></td>
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<td>Inform: A lot of the unhelpful automatic thoughts that we have fall into certain categories. Go through each of the categories presented in the workbook. It may be useful for some of the categories to give an example specifically of a thought that fits into that category that can get in the way of acting conscientiously.</td>
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<td>Discuss: have a short discussion (10 minutes) with the group about how what we have gone over resonates with their experience. Did they recognize that they engaged in some of the thinking errors listed above? How did this impact their behaviours/feelings?</td>
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<tr>
<th>6.07</th>
<th>5 mins</th>
<th><strong>Homework</strong></th>
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<tbody>
<tr>
<td></td>
<td>1. Get participants to fill in the values worksheet for this week’s homework.</td>
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<td></td>
<td>2. Ask participants to fill in the thought record on the following page during the week. It should be filled in for situations related to conscientiousness. There is also an extra aspect compared to the earlier exercise where they list the thinking error that they engaged in.</td>
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<td>3. Participants continue implementing their calendar and notebook system. They may also wish to create another action plan, the worksheets can be found at the back of the book.</td>
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# Week 7: Overcoming barriers

**NOTE:** I noticed when writing the last chapter of this manual that I had a tendency to think about this material from a perspective of psychopathology. This is probably because I have done most of my training in this context. When thinking about the thought diaries my mind was generating examples such as “I’m not good enough”, “I can’t cope” etc. While some participants may have thoughts like this, it is important to remember that this is a coaching program and the participants are the general population. Consequently be careful when using examples to illustrate the material to choose examples that reflect the nature of this program.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td><strong>7.01 20 mins</strong></td>
<td><strong>Introduction to this week and homework review</strong></td>
</tr>
<tr>
<td><strong>7.02 10 mins</strong></td>
<td><strong>Rational Response</strong></td>
</tr>
<tr>
<td><strong>7.03 10 mins</strong></td>
<td><strong>Tips for rational responses</strong></td>
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### 7.01 Introduction to this week and homework review

**Inform:** that this week we will be using the skills we learned last week and taking them a step further. That is by directly addressing those unhelpful thoughts and associated feelings. Mention that while last week was entitled “identifying barriers” sometimes just identifying the unhelpful things that we say to ourselves can reduce their power over us.

**Review:** Discuss with participants how they went with completing their thought diaries throughout the week. If a participant shares a thought it can be useful to enquire about the feelings that went along with. You may also ask what actions they engaged in after having the thought. This can help re-enforce the idea that feeling, thinking and behaving are all connected. Also enquire whether participants noticed they engaged in any thinking errors throughout the week and whether they were particularly prone to one sort.

**Review:** discuss with participants how the notebook and calendar system went for the week. Did anyone implement a new action plan?

### 7.02 Rational Response

**Inform:** Acknowledge how our minds are pretty good at beating us up. Facilitators should act out the analogy presented in the book. Set up a situation where one facilitator is trying to get started on a project, while the other facilitator barrages him/her with unhelpful thoughts (e.g. “do it later”, “its so big, I don’t know where to start”). Ask participants what they think they would do to the facilitator who was barraging them with unhelpful thoughts. There responses may be quite funny and violent. Mention that this is the same thing that our minds are doing all the time. Unfortunately, unlike with the facilitator. We can’t tell our minds just to “sod off”. Mention to that often these unhelpful thoughts can cause us to act in ways that are not in alignment with our values. Mention that while we can’t necessarily make these thoughts go away we can formulate a response to them so that they don’t push us around quite so much.

### 7.03 Tips for rational responses

Go through the tips presented in the manual. It may be useful to give specific examples for each tip. It is worth paying particular attention to the idea of helpful versus true. Participants may question whether we are engaging in denial. The instrument example in the client workbook is a good answer to this. While both statements are true, one is likely to make the problem (being bad at the instrument) worse, whereas the other may actually cause you to directly address the problem (by
encouraging you to practice). Thus the unhelpful thought is in fact much more related to denial as it is causing you to avoid the problem, whereas the reframed thought allows you to approach and deal with the issue.

<table>
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<tr>
<th>7.04</th>
<th><strong>Exercise: Rational Response</strong></th>
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<tr>
<td>10 mins</td>
<td>Exercise: Do the rational response exercise up on the board. It may be helpful to use the “joe” example we used last week so that you can quickly move on from the automatic thoughts to formulating rational responses. Make sure that rational responses adhere to the tips mentioned above. At the end of the exercise ask participants to contrast how they predict joe would act before and after reframing his thoughts.</td>
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**Exercise: Rational response worksheet**

<table>
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<tr>
<th>7.05</th>
<th><strong>Exercise: Get participants to fill out the worksheet for specific thoughts or situations that have occurred throughout the week or commonly occur in their lives. Facilitators will likely need to help a couple of participants during this exercise</strong></th>
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<tbody>
<tr>
<td>25 mins</td>
<td><strong>Discussion (10 mins): This is one of the primary skills of the program and will be used later when we address procrastination. Consequently it is important that participants are able to discuss how they found the process, what they learned, and any problems they had.</strong></td>
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<tr>
<th>7.06</th>
<th><strong>Exercise: Get participants to fill in the STOP exercise.</strong></th>
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<tbody>
<tr>
<td>10 mins</td>
<td><strong>Inform: Our values can be another very powerful way of addressing unhelpful thoughts. Often these thoughts can cause us to act against our values. However, we can at any point in time, notice when this is happening and choose to change our behavior.</strong></td>
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<td><strong>Exercise: Get participants to fill in the STOP exercise.</strong></td>
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<td><strong>Mention that participants can use either strategy and should experiment with what works for them.</strong></td>
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**Week 7: Homework activity**

1. Fill in values for the week.
2. Continue implementing the calendar/notebook system
3. Fill out the STOP worksheet for one situation during the week.
4. Fill out some rational responses to unhelpful thoughts.
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>8.01</td>
<td><strong>Introduction to this week and homework review</strong></td>
</tr>
<tr>
<td>8.02</td>
<td><strong>What is procrastination and why do we do it?</strong></td>
</tr>
<tr>
<td>8.03</td>
<td><strong>Rational response worksheet: Procrastination</strong></td>
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<tr>
<td>8.04</td>
<td><strong>S T O P procrastinating</strong></td>
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### 8.01 Introduction to this week and homework review

**Inform:** This week we will be applying the skills you have learned to the specific problem of procrastination. Mention that procrastination is something that most people will admit to engaging in at time to time. However, it can have very real consequences. This week we will be learning how to address this issue.

**Homework review:** Discuss with participants how they found implementing the rational response skills and S T O P skills. Did they notice an effect on their behavior? How did it effect their mood? Did they prefer one method over the other?

**Homework review:** Discuss how the calendar system, notebook system, and action plans have been going throughout the week.

### 8.02 What is procrastination and why do we do it?

**Inform:** Define procrastination as per the workbook. Stress that there are two key aspects to procrastination. These are “postponement” and “irrationality.” In order for it to be procrastination both criteria need to be filled. E.g. Postponing that important phone call because you have a sore throat/are feeling unwell is rational. However rearranging your bookshelf when you have a lot of important work that needs to be done immediately is not rational.

**Exercise:** Inform participants that the reason we procrastinate is that it provides some benefit (e.g. short term relief). Then get participants to provide pros and cons for procrastination. Write these answers on the board. Finish the exercise by noting that a lot of the pros are short term while a lot of the cons are long term. Also stress that while we all admit to procrastination it can have very serious consequences. Give an example.

### 8.03 Rational response worksheet: Procrastination

**Exercise:** Ask participants to generate a list of automatic thoughts/excuses they use when they procrastinate. Write these on the board.

**Exercise:** Ask participants to think of some of the common situations/excuses they use to procrastinate. Then get them to fill out the rational response worksheet for procrastination.

**Discuss:** What were some of the responses participants came up with? Do they think this will help them when they find themselves getting stuck in procrastinating?

### 8.04 S T O P procrastinating

**Exercise:** Ask participants to fill out the S T O P sheet for the last time they procrastinated. Get them to do this as if they were back in that situation. Stress that getting in touch with the values driving your behavior is a great way to overcome some of those unhelpful thoughts and feelings that can lead to procrastination. For example, while some aspects of work might be boring or uncomfortable getting in touch with
why you work (contribution to society, better life for me and my family) is often a lot more powerful than those unhelpful thoughts and feelings.

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<tr>
<th>8.05</th>
<th><strong>Practical tips to stop procrastination</strong></th>
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<tr>
<td>5 mins</td>
<td>Inform: Go through the practical tips as they are presented in the workbook. Mention that some of the most important skills for combatting procrastination participants have already learned. Briefly discuss with participants whether anyone else has some practical ideas that they have used in the past.</td>
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<tr>
<th>8.06</th>
<th><strong>Rewards</strong></th>
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<tr>
<td>20 mins</td>
<td>Inform: Mention that one other tool for combatting procrastination is rewards. One of the key reasons that we procrastinate is that we get a short term benefit out of it. Whereas the rewards for not procrastinating are often long term. By rewarding yourself as you complete tasks you provide that short term benefit that you may have previously been missing. This can reduce procrastination. Inform: Go through the tips mentioned in the workbook. You can illustrate some of these with examples but be mindful that there is a lot of content this week and time needs to be considered. You should emphasize the points that rewards don’t necessarily need to be material in nature. You should also emphasize that for larger tasks smaller rewards should be given as parts of the task are completed with a larger reward at the end. Exercise: Get participants to volunteer some ideas for different rewards and put them up one the board. Then get participants to write down the rewards that they feel they could use into their workbook. Exercise: Get participants to fill out 3 small tasks rewards and one big task reward sheet.</td>
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<tr>
<th>8.07</th>
<th><strong>Week 8: Homework activity</strong></th>
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| 5 mins| 1. Fill out values sheet in group.  
|       | 2. Fill out at least one STOP and rational thinking sheet throughout the week. Remember to apply this specifically to procrastination.  
|       | 3. Implement the rewards throughout the week. Did any additional rewards occur to them this week? If this is the case they can write them in the additional reward sheets at the back of the book.  
|       | 4. Ask participants to bring in their calendar/notebook system for this week.  
|       | 5. Mention that next week will be our last week. To celebrate we would ask that everyone brings in a small amount of food which we can enjoy while we go through the content next week. Stress that this doesn’t need to be anything fancy. |
## Week 9: Bringing it all together

### 9.01  20 mins

**Homework review and introduction to this week**

**Inform:** Congratulate everyone on reaching the final week. Let the participants know that sticking with a program and working it in around there busy lives is a real achievement and they should be proud.

**Inform:** This week will focus on reviewing your goals and performing that final push towards achieving them.

**Review:** Discuss with participants how they went with implementing some of the anti-procrastination strategies throughout the week. Discuss both the use of the practical techniques and the rational thinking and S T O P techniques. Focus on how useful these tools were in reducing procrastination behaviors.

**Review:** Discuss with participants how they went with rewarding themselves though out the week. Did they find that this strategy helped them be more productive? Did anyone feel guilty about rewarding themselves? Did anyone come up with any new cool ideas for how to reward themselves?

### 9.02  40 mins

**Goal review**

**Exercise:** Ask participants to go back to chapter 3 and look at the goals they set. Ask participants to rate how far they have gone towards achieving the goal. Following this spend 10 minutes discussing and reflecting with participants on their progress towards the goals.

**Exercise:** Ask participants to go back to chapter 3 and the facets they chose to target. Then ask them to write down how they have progressed with this facet. You should mention that if the participant doesn’t feel they have progressed that is fine too. Then ask participants to do the same thing for facets no targeted. Spend 10 mins discussing and reflecting with participants on progress in these areas. How has their personality changed?

**Exercise:** Ask participants to look back to chapter 2. Ask them to reflect on the values they wrote down at that time. Get them to fill out how closely they are living in alignment with their values now. Discuss and reflect on this.

### 9.03  20 mins

**Maintaining progress and falling back into old habits**

**Exercise:** Get participants to volunteer different ideas for maintaining their progress. Write these up on the board. If the participants do not volunteer it you should mention continuing to practice the skills they have learned and continuing to set goals.

**Exercise:** Ask participants to write down in their own workbook the strategies they will use to make sure they maintain the gains they have made.

**Inform:** Discuss with participants that there are likely to be setback. It is likely that they will fall back into some old habits and that they will act in ways not in alignment with their values. Stress that this is normal and that it is not the end of the world. Being aware that
you are falling back into old habits is the first step towards correcting them. Plus you have a whole book full of skills for how you can address this now.

| 9.04  |
| 10 mins |
| **Certificates and goodbye** |

Present a certificate to each member of the group. This is to signify that they have completed the program.

Each participant should see the primary researcher to arrange a time for the final set of testing.

Thank all of the participants for the work they have done.