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2015

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The importance of context when applying social cognitive theory in organizations

Abstract

It is argued that whilst Social Cognitive Theory has universal application in work organizations, and human functioning generally, it should not be applied without taking account of the work context. Three broad contextual categories, conceptually distinct from general organizational contexts, are canvassed: individual, team and cultural. Specific sub-contexts are discussed, not with the view of providing an exhaustive typology, but rather to provide some examples from the very large number of contextual factors that could have been selected. It is concluded that investigation of contextual differences is likely to be a fruitful pursuit for future research into the application of Social Cognitive Theory in organizations.

Keywords

context, importance, theory, social, when, organizations, cognitive, applying

Disciplines

Education | Social and Behavioral Sciences

Publication Details

McCormick, J., Alavi, S. Babak. & Hanham, J. (2015). The importance of context when applying social cognitive theory in organizations. In A. Ortenblad (Eds.), *Handbook of research on management ideas and panaceas: Adaptation and context* (pp. 110-129). Cheltenham, United Kingdom: Edward Elgar Publishing.

7. The importance of context when applying social cognitive theory in organizations

John McCormick, Seyyed Babak Alavi and José Hanham

INTRODUCTION

In this chapter, our fundamental thesis is that whilst Social Cognitive Theory (SCT) has universal application, including work contexts, such application needs to take account of contextual variance if it is indeed to be an effective organizational tool. With this in mind, we impose a structure, namely, individual, team, and cultural contexts, whilst acknowledging these are embedded within general organizational contexts. Within each context, we have chosen to discuss specific examples, chosen from the multitude of possible examples.

Notwithstanding, even when discussing these specific examples, we still emphasize that they are intended to be illustrative of the accompanying arguments and the fundamental thesis.

SCT may be viewed as a coherent and extensive set of theories that effectively explains and predicts human motivation and behaviour (Bandura 1997). Arguably, there are four key concepts or sub-theories that deserve particular attention in organizational settings. The overarching, meta-theory in SCT is Triadic Reciprocal Determinism, which proposes that behaviour, internal personal factors, and the external environment are reciprocally related, and these relationships explain human functioning (Bandura 1986, 1997). Three other sub-theories relate to capability beliefs. Probably the most researched of these is self-efficacy, which is a person's belief about her or his capability to successfully complete a specific task or achieve a specific goal (Bandura 1997). Although it may be conceptualized at the individual level,

collective efficacy usually is defined as a shared belief of group members of the group's capability to successfully complete a specific task or achieve a specific goal (for example, Salanova et al. 2003). Proxy efficacy is a belief of the capability of a proxy (person, team, or other entity) to assist in the achievement of a specific goal (Alavi and McCormick 2011; Hanham et al. 2014). Collective proxy efficacy is a shared belief of that capability. Compared to self-efficacy and collective efficacy, there has been relatively little research involving proxy efficacy, most of which appears to be related to health and exercise contexts (for example, Bray et al. 2006; Shields and Brawley 2006; Priebe et al. 2012). Notwithstanding, Alavi and McCormick (2011) have argued that proxy efficacy is salient for leadership and team processes in management settings.

It has widely been accepted in the fields of organizational psychology and management, that when possible, context should be taken into account (for example, Johns 2006; Griffin 2007). Certainly, the concept of triadic reciprocal determinism (Bandura 1997), which underlies SCT, specifies the external environment as one of the triad of major determinants. This makes the assertion that 'context is important' in SCT, almost a trivial observation. Thus, viewed superficially, one might contend that all environments are in some way unique. Hence, all contexts are unique, at least to some extent. Indeed, Bandura (1999) asserted,

'In triadic causation there is no fixed pattern for reciprocal interaction. Rather, the relative contribution of each of the constituent classes of influences depends on the activities, situational circumstances, and sociostructural constraints and opportunities. The environment is not a monolithic.' (p. 159)

Nevertheless, SCT arguably has universal application to the extent that the theory can explain human action across a huge range of conceivable environments. This suggests some

contextual shared variance, and that identifying this commonality may be more fruitful than simply stating every context is different.

PROTO-CONTEXTS

We acknowledge that context-focused theory is not novel (Johns 2006; Griffin 2007). An allied approach is establishing ‘proto-contexts’ that are relevant to the theory and practice of management. By proto-contexts, we mean models that can assist the categorisation of contexts relevant to the application of SCT. This is the broad approach we adopt for the purpose of this chapter, with an understanding that these proto-contexts fit beneath the rubrics of organization and management.

We have integrated our proto-contexts into three readily recognizable levels of analysis in organizational psychology and management: individual, team, and cultural. A clear hierarchy exists in that the individual context may be embedded within the team context, which in turn may be embedded within the cultural context. Our discussion proceeds using this structure. Moreover, in the sections that follow, we canvass relevant literature related to the application of SCT, which provides support for our contention that effective and efficient application of SCT in organizations should take account of context.

INDIVIDUAL CONTEXT

Individual contexts can relate to individual differences; they may be ‘idiosyncratic’, or not.

By ‘idiosyncratic’ we mean the contexts are likely to be unique for each individual. Examples

of typically non-idiosyncratic contexts are gender, age, organizational role, and years of experience in a role. Whilst acknowledging that exceptions do exist, most people identify as either males or females; at any instant, everybody has lived for a finite period of time, and so on. We refer to these as 'general' individual contexts. General individual contexts are in most, but not all, cases widely identified, and often are represented by control variables in regression models. Idiosyncratic contexts, on the other hand, generally are not as apparent; examples are level of autonomy, job satisfaction, and leadership self-efficacy; typically they are represented by dependent and independent variables in regression models. Clearly, one should not forget that individual contexts are embedded in wider social contexts. Idiosyncratic contexts may be expected to be important in a number of wider contexts, whilst general contexts may be expected to be more salient in some domains than in others. We proceed to discuss, principally as examples, some general individual contexts below.

Sex roles generally are socially determined, and certainly not immutable. We acknowledge that sex roles have changed over time (Bandura 1997). Hackett and Betz (1981) argued, and found empirical support (Betz and Hackett 1981) for, the proposition that females were discouraged from developing their capabilities, and consequently generally held weak self-efficacy beliefs in a number of occupations considered male-oriented. In SCT terms, generally, one might argue women had fewer opportunities for appropriate mastery experiences, for observing appropriate models vicariously, and were not actively encouraged to pursue such careers. Thus, unsurprisingly, Hackett and Betz (1981) found women generally had greater self-efficacy for some traditionally female-oriented occupations such as nursing and social work, than for some traditionally male occupations, such as accountancy and engineering. However, in more recent research involving 154 students of Business Administration at a Norwegian college, after controlling for a number of other general context variables, Busch (1995) found a statistically significant (self-efficacy) gender difference only

for computing. One can speculate that the relative novelty of computing in historical terms may explain the rate at which an inbuilt masculine bias in the use of computers (Murphy et al. 1989) has been eroded. It arguably is foolish to ignore the self-selected nature of business administration students, and the Norwegian cultural setting; the importance of context again is emphasized. It is likely that self-efficacy gender differences may readily be detected, but be explained best by context. This is discussed further in a later section.

The importance of differentiating life stages of human development was emphasized by the seminal psychoanalytic work of Erik Erikson (Erikson 1964; Stevens 2003), and may be particularly relevant for organizational settings (Super 1957; McCormick and Barnett 2008). Logically, although life/career stages are not inevitable, aging is salient in human resource management, and organizational settings generally (Conway 2004). Not surprisingly, there is evidence of maturation, not only in years, but also in attitude (Wille et al. 2014), with aging workers in organizational settings. However, most attention has been paid to decline in cognitive functioning (Bandura 1997) with age. Bandura (1986) has emphasized humans are not only products of their environments but also producers of their environments; self-efficacy may be expected to play a role in professional development (learning tasks) of older workers (Esposito et al. 2014), given the widespread focus on their cognitive functioning. Indeed, Maurer (2001) argued strongly that older workers were less likely to participate actively in developmental learning than younger colleagues, at least in part because of diminished self-efficacy for learning, in spite of the likely relevance of the learning for all age groups in the work force. This emphasizes the importance of taking account of the individual general context, aging, in organizations.

Self-efficacy, and individual level proxy efficacy, beliefs typically may be categorized as elements of idiosyncratic individual contexts. However, they are other elements that are likely to be worthy of our attention in this chapter. At this point it seems a good idea to pause

and clarify our thinking. Regularly in organizational studies, researchers tend to portray linear, pseudo-causal relationships, often conceptually consistent with SCT, but potentially misleading because of oversimplification. For example, job satisfaction has been found to predict self-efficacy beliefs (Borgoni et al. 2010). However, in such a case it may be just as reasonable to assert that self-efficacy predicts job satisfaction. Indeed, if we put the establishment of causality aside, it is likely that there actually are mutual effects; increased self-efficacy leads to increased job satisfaction and increased job satisfaction leads to increased self-efficacy, and so on. So, analytically, self-efficacy (in a relevant domain) may be conceptualized as a dependent variable and job satisfaction as an independent variable. In our terms, job satisfaction can be an element of idiosyncratic individual context. We do not assert that this argument should change analytical approaches, but add our voices to others counseling caution in interpreting correlational results (Holland 1986).

There has long been a focus on personality traits in psychology. In relatively recent times, the Big-Five (Goldberg 1990) model and five factor model (FFM) seem to have emerged as the dominant global approach to personality (McCrae and Costa 1985). The global approach is not without critics (for example, Paunonen and Jackson 2000). Notwithstanding, it suits our purposes in this chapter to focus on this approach because it has been argued that the five personality factors are relatively stable, heritable and they overlap considerably with most other psychological constructs (McCrae and Costa 1985). Hence, personality factors may be argued readily to fit under the rubric of idiosyncratic individual context. More importantly, these personality factors have been shown to be related to self-efficacy in various domains. For example, Judge et al. (2007) carried out an extensive meta-analysis of studies of Big-Five personality traits, work performance and self-efficacy, finding in several instances that the relationships between self-efficacy and work performances were attenuated when personality traits were taken into consideration.

Our discussion of idiosyncratic individual contexts has not, by any means, been exhaustive. However, the last element of idiosyncratic individual context that we discuss, perception, is pervasive, and likely to play a role in all contexts, but we argue perception deserves some attention at this point. Indeed, attention, or lack thereof, is critical for perception formation, and hence, efficacy belief formation (Bandura 1997). People need to attend to sources of efficacy beliefs in order to form accurate judgments of capabilities, and hence, efficacy beliefs. Indeed, ‘mastery experiences’ does not refer to some objective assessment of mastery, but to a subjective assessment. People gain information about their capabilities from observing comparable others. However, they must first perceive these others to be relevant, and attend to their relevant behaviors. The value of positive feedback is well recognized in organizational settings for its motivational (encouragement) benefits. There may be longer-term value in positive feedback for the development of accurate self-efficacy beliefs, although this will be discussed further in a later section. Similarly, people need to perceive physiological and affective changes, and associate them with their capability beliefs.

Perception and attention are fundamental to proxy efficacy and collective efficacy. We can only have proxy efficacy beliefs if they are associated with an entity perceived as a proxy. Similarly, the perception of a collective is a precondition for the existence of collective efficacy. Teams that exist in name only are not unheard of. Role clarity and goal setting (Wood and Bandura 1989), specifically tailored for efficacy beliefs, are likely to assist the identification of workers with proxies and teams, and lead to enhanced efficacy beliefs and performances.

In this section we have focused on the individual context for application of SCT in organizational settings. The primary approach has been to distinguish idiosyncratic and general individual contexts, and provide arguments for adopting this kind of thinking. Of course, in reality, individuals generally do not operate always in isolation from each other in

organizations, or in the wider community. Hence, we proceed to discuss the other broad proto-contexts of team and culture. It is important to remember, however, that these contexts are interdependent and it may be misleading to forget that individuals can be located within teams and cultures, and teams within cultures.

TEAM CONTEXT

Although it has been suggested that there are some distinct differences between a ‘group’ (or work group) and a ‘team’ (Katzenback and Smith 1993), these terms have been used interchangeably in some organizational literature (Kozlowski and Bell 2003). We use ‘team’ as it appears this term is more prevalent in current organizational research literature. A team can be defined as an identifiable set of two or more individuals who together work to achieve team goals. The three general categories of efficacy beliefs (self, proxy, collective) may be expected to play a role in how employees within organizations operate in team contexts.

Although stated at the beginning of the chapter, we believe it worthwhile to emphasize again that efficacy beliefs are domain-specific, and to provide definitions consistent with the team context.

Individual context (general and idiosyncratic) as discussed earlier is likely to play a part in a team’s context. Analogously, team structure also may be identified as salient in most team contexts. In terms of self-efficacy beliefs in team contexts, several researchers (Eby and Dobbins 1997; McClough and Rogelberg 2003; Haines and Taggar 2006; Staples and Webster 2007; Alavi and McCormick 2011) have focused on self-efficacy for teamwork, which refers to an ‘...individual’s perceptions of his or her ability to perform generic teamwork behaviors’ (Tasa et al. 2007, p. 19). This construct is concerned with process

aspects of teamwork, and has been found to relate to a range of teamwork behaviors, including cooperation (Eby and Dobbins 1997), conflict resolution, assuming leadership, and keeping on-task (Tasa et al. 2007). Self-efficacy for teamwork has also been found to correlate with employees' ability to cope, and commitment to, and satisfaction with, the team (Staples and Webster 2007). Aside from the process aspects of teamwork, self-efficacy for the team's task, that is, a team member's belief of her or his capability for using specific content knowledge to successfully complete the relevant team task is also likely to be important. Despite the acknowledged importance of task-relevant knowledge in teams in organizational settings (LePine et al. 1997; Tasa et al. 2007), it appears that studies of self-efficacy for the content aspect of teamwork have been examined principally in educational settings (Moriarty et al. 1995).

Turning to proxy efficacy, it has been theorized that this form of efficacy may play a key role in the motivational processes that underlie teamwork in organisational settings (Alavi and McCormick 2011). Although researchers have yet to gather substantial empirical data on the role of proxy efficacy in team contexts, Alavi and McCormick (2011) developed a novel theoretical framework that posited potential relationships involving proxy efficacy and team-related outcomes. They defined proxy efficacy in the team context as 'an individual's belief in another person's or group's capabilities to organize and execute courses of action on her, his, or its behalf, to produce given levels of attainment' (2011, p. 2).

A structural attribute of many teams in the workplace is that each team member is designated a specific role. This role likely involves carrying out tasks on behalf of other team members and the team in general. For example, a team leader may be responsible for carrying out tasks on behalf of the team, such as communicating with upper levels of management and relaying responses from upper management to team members (boundary spanning). In this example, team members generally are likely to have relatively high proxy efficacy for a team

leader with perceived strong communication skills, and relatively low proxy efficacy for a team leader with poor communication skills. It is perhaps obvious, but nevertheless important, to emphasize that a necessary condition of proxy efficacy is that team members must be perceived to act as a proxy on behalf of other team members (individual level) or the team as a whole (team level). So, for example, an individual within a team may perceive another team member to be capable of operating a specific piece of software, however, he or she may not have proxy efficacy for that member in that domain if the operation of the software is not perceived to be on behalf of the team or team members.

Arguably collective efficacy has been the most salient efficacy belief investigated in team contexts (Gully et al. 2002; Stajkovic et al. 2009; Goncalo et al. 2010; Budworth 2011). According to Bandura (1997), collective efficacy may predict the choices that team members adopt as a team, the amount of effort a team will exert as a collective and the perseverance of a team when confronted with challenges. Findings from empirical studies (including meta-analysis) have found that collective efficacy predicts team performance (Gully et al. 2002; Stajkovic et al. 2009), and mediates the training-performance relationship (Brown 2003; Budworth 2011). An interesting study involving undergraduate teams (Goncalo et al. 2010) found that ‘premature’ emergence of collective efficacy can have adverse effects, such as suppressing the discussion of alternative ideas during team problem-solving.

In this section, we have chosen three contextual factors from the large number extant; they are the nature of the task (task interdependence), the degree of affiliation between team members (friends versus acquaintances), and the mode (virtual versus face-to-face teams). A common aspect of these factors is that they are likely to shape team contexts in ways that are central to how employees interact in team environments. In particular, they are likely to be important for self-efficacy, proxy efficacy and collective efficacy.

In the workplace, the nature of the task that teams are assigned can vary in multiple ways. Task interdependence is concerned with the extent to which assigned workplace tasks require members of a team to work interdependently (Gibson 1999). Thus, conceptually, task interdependence exists on a continuum from low interdependence, wherein each team member carries out her or his role with minimal interaction with other team members, and high interdependence in which the work and role of each team member is intimately intertwined with the work and roles of other team members (Katz-Navon and Erez 2005).

The relationship between efficacy-beliefs and team performance has been found to be mediated by task interdependence. Katz-Navon and Erez (2005) investigated the relationships between self-efficacy and team performance, and collective efficacy and team performance in low and high interdependent team task conditions. Their results suggested that self-efficacy predicted team performance in low interdependence conditions but not in high interdependence conditions. Collective efficacy only emerged as distinct from self-efficacy in high task interdependence conditions, when it predicted team performance. Collective efficacy is an 'emergent' property of teams (Bandura 1997), and Katz-Navon and Erez (2005) argued that low interdependence conditions by their very nature limit interaction between team members, which are likely to be integral to the development of collective cognitions about the team's capabilities. They explained that collective efficacy likely overrides self-efficacy as a predictor of performance in high task interdependence conditions because '... as tasks become more interdependent, it is harder for a person to separate his or her own performance from that of the team' (Katz-Navon and Erez 2005, p. 459).

The relationship between proxy efficacy and task interdependence has yet to be empirically investigated. It is important to be clear about to which proxy we are referring. A team member can be a proxy for another team member. In this context, low task interdependence could mean that team members are unlikely to assist other team members to

complete their tasks, hence, they would be unlikely to act as proxies and there would not be proxy efficacy beliefs. On the other hand, high task interdependence could mean that team members could depend on other team members to act as proxies in order to complete tasks, resulting in proxy efficacy for the tasks, the strength of which would depend on the perceived capabilities of the proxies to assist the team member. However, team members can also be proxies for the team. In this case, team proxy efficacy is an emergent, shared belief in the capabilities of a proxy to assist the team to achieve its goals. Task interdependence is unlikely to be as important in this context. Some sales teams provide ready examples. Individual sales people independently strive to maximize their sales; there is no interdependence in their work, but they additively contribute to the team's success, which could have ramifications for the retention of a branch or division in an organization.

One can predict that team members' proxy efficacy for other team members will be related to the collective efficacy of a team. If team members do not believe other team members are capable of carrying out tasks on their behalf, it is unlikely they will have positive beliefs about the team's capabilities to achieve its goals.

Workplace relationships are likely to be an important component of organizational processes (Sias 2009), and employees distinguish between co-workers whom they consider friends and those whom they consider acquaintances (Jehn and Shah 1997). A workplace friendship represents a distinct type of relationship in organizations that differs qualitatively from other workplace relationships in at least two important ways (Sias et al. 2012). First, workplace friendships are voluntary, and second, co-worker friends are likely to interact in ways that extend beyond their organizational roles (Sias et al. 2012). Relationships between acquaintances on the other hand, may not be voluntary or extend beyond their organizational roles, and as such, tend to be marked by limited familiarity.

Differences in the nature of co-worker friendship and acquaintance relations have been found to impact team-related processes (Jehn and Shah 1997). Although some workplace friendships can have adverse effects (see Litwin and Hallstein 2007), empirical research suggests that co-worker friendships can have favourable outcomes for both employees and organizations (Berman et al. 2002; Sias 2005; Tse et al. 2008). In a study comparing team processes of co-workers who were friends and co-workers who were acquaintances, Jehn and Shah (1997) found that friendship teams generally were more communicative, cooperative, and encouraging than acquaintance teams. These process differences were identified as factors underling the superior performance of friendship teams over acquaintance teams in Jehn and Shah's (1997) study.

With respect to efficacy beliefs, studies of school-based learning groups have found that self-efficacy developed in the friendship context is distinct from the acquaintance context (Hanham and McCormick 2009). Furthermore, they argued that the initial development of self-efficacy for group work (teamwork) likely occurs in the friendship context and then may generalize to some extent to the acquaintance context (Hanham and McCormick 2009, 2010). An important implication of this finding is that managers should consider initially placing employees, with limited mastery experiences of working in groups/teams, with friends when working on team tasks. Subsequently, after attaining sufficient mastery experiences working in this context, the employees could be moved to working in teams with acquaintances.

In terms of future research, we argue that it would be of value for researchers to examine the roles of proxy efficacy and collective efficacy in explicit friendship and acquaintance contexts. As friendship relationships are marked by a higher degree of familiarity than acquaintance relationships, it is likely that, at least in the initial stages of teamwork, employees may be expected to have proxy efficacy beliefs about team members who are friends but not necessarily those team members who are acquaintances. Furthermore,

we predict that collective efficacy would likely emerge more quickly in teams comprising friends than teams comprising acquaintances.

Arguably one of the most far-reaching workplace changes of the last decade has been the increase in the number of virtual teams within organizations (Ahancian and McCormick 2009; Turel and Zhang, 2010; Kahai et al. 2012). Traditionally, teams have tended generally to exist in the same geographical location, because distance precluded meaningful and effective interaction of team members. However, responding to globalization and technological advances in recent years, in some organizations face-to-face contact of team members has not only become inconvenient, but the cause of unnecessary expense. A good example of this phenomenon is provided by field service teams, which spend most of their work time away from 'the office' (Schepers et al. 2011), but members of which need to take a team approach to service provision.

Logically, working successfully in a virtual environment may require different skills to working in a traditional team setting that are likely to lead to the development of specific efficacy beliefs. Perhaps the most apparent skill sets are working with computers, and working in a networked structure. It follows that the relevant self-efficacy for computer use of team members is likely to be an important, but certainly not unique, (individual level) contextual variable for team functioning. However, at the team level, virtual team efficacy beliefs are likely to be the most salient to team goal achievement.

Due to the nature of virtual teaming, in which there may be relatively less contact with peers, the mechanisms of efficacy belief formation may operate differently from traditional team operations. For example, in a study of frontline employees working in virtual teams, Schepers et al. (2011) concluded that the limited direct contact with supervisors and peers explained the result that virtual team efficacy was likely to have been more influenced by external factors, such as perceptions of the virtual team's technology by competitors and

customers, than by feedback or encouragement from peers and supervisors. This suggests the importance of providing virtual teams with high quality technology, and communicating to them the positive feedback of customers. Kahai et al. (2012) empirically found a related, but different, result in an experimental study involving 34 ad hoc groups of undergraduate business students in a decision-making exercise. They found that positive feedback positively predicted group efficacy, but negatively predicted decision quality. Although causality was not established, enhancing team efficacy may not have led to improved team performance.

Thus far, applying SCT in virtual teaming contexts probably has raised more questions than it has answered. Nevertheless, the limited evidence suggests that it has applicability, provided the context is taken into account. Indeed, it may be that context is more critical for virtual, than for traditional teams. This provides justification for further SCT research in the virtual teaming context.

CULTURAL CONTEXT

It has been argued that some psychological and management theories and models may not be universal and are based on cultural assumptions (Hofstede 1980, 1993, 2001; Leung and Bond 1989; Dastmalchian et al. 2001; Berry et al. 2002; House et al. 2001). For example, some have suggested that even similar psychological attributions across cultures may manifest differently, and be consistent with cultural contexts (Berry et al. 2002). This suggests that aspects of psychology and management theories and models, which have come from western countries, may not completely be consistent with the cultural characteristics of other countries, and vice versa.

It has been well established that cognitive and behavioral factors are related (Bandura 1986, 1997; Levine et al. 1993), and both are fundamentally influenced by social context (Levine et al. 1993). Culture is an important contextual factor that can influence both cognition and behavior (Bandura 2002). Bandura (2002) argued that SCT can relate to culture in different ways:

‘Although efficacy beliefs have generalized functional value, how they are developed and structured, the ways in which they are exercised, and the purpose to which they are put vary cross-culturally.’ (Bandura 2002, p. 273)

Bandura (2002), referring to Earley’s (1994) study, argued that self-efficacy is a universal psychological attribute that is important in every cultural context, and

‘... vital for success regardless of whether it is achieved individually or by group members putting their personal capabilities to the best collective use.’ (p. 273)

In this section, SCT is discussed in terms of how it may vary in different cultural contexts. We acknowledge that culture may be discussed using different dimensions. Nevertheless, individualism and collectivism are the main cultural concepts incorporated into the following discussion, given that they have been widely accepted as basic dimensions in several cross-cultural studies (Hofstede 2001).

The first question that may come to mind is the extent to which self-efficacy may vary across cultures. Schwarzer (1999) found that some Chinese students demonstrated lower general self-efficacy than some students from European countries. Moreover, low general self-efficacy was more evident in Chinese women (Schwarzer et al. 1997). Schwarzer (1999) also found that general self-efficacy differed across 14 countries. Of the cultural groups

surveyed, Costa Ricans (Spanish Questionnaire Version) had the highest mean score, and Japanese the lowest. Although this variation may also be related to the language of the questionnaire in the target sample, Schwarzer suggested that the variation may partly be related to cultural differences and the impact of cultural differences, particularly individualism and collectivism, on self-understanding. In individualistic cultures, there may be greater emphasis on personal agency than collective agency, and hence, individuals may be more likely to develop self-efficacy beliefs in such cultures (Bandura 2002). Earley (1994) found that the performances of individuals from an individualistic culture working in an in-group or out-group was lower than when working alone, whereas, performances of individuals from a collectivistic culture generally were lower in individual or out-group contexts than in-group contexts. In addition, Klassen (2004) critically examined 20 studies that had investigated self-efficacy beliefs through cross-cultural comparisons. He found efficacy beliefs generally were lower for non-Western cultural groups in these studies.

Another issue worth discussing is how self-efficacy is shaped in different cultures. Oettingen (1995) proposed that both the strategy one uses for choosing among sources of self-efficacy, enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states, and how a source relates to self-efficacy, may be related to cultural differences. This is elaborated in the following discussion.

Bandura (1986, 1997) suggested that mastery experiences are the most influential sources of self-efficacy, because these provide individuals with the most authentic evidence of the extent of their mastery. However, this idea may have cultural limitations. Oettingen (1995) found that children from the Eastern part of Berlin were more inclined to develop their self-efficacy by referring to their teachers' appraisals of their performances than from their own assessments, given the relatively higher power distance in their culture compared with children in Western Berlin, where power distance generally was lower.

It is suggested here that in some cultural and environmental contexts, there may be more opportunities for gaining more mastery experiences for some tasks. For example, Durndell et al. (2000) suggested that some gender related norms in some East European countries hinder female involvement with technology. In addition, it may be argued that gender related roles in any society, as a component of societal culture (Inglehart and Norris 2003), may provide different opportunities for the development of self-efficacy of women across different types of tasks. Adoption of some roles may be more available in Western culture for females (for example, promotion to a top manager) compared with females in Eastern cultures, and some roles may be emphasized more in Eastern cultures (for example, nurturing children or family caring) with less emphasis in Western cultures (Inglehart and Norris 2003; McElwee and Al-Riyami 2003). From this perspective, self-efficacy for a specific task may be influenced by culture and other contextual characteristics.

Vicarious experiences refer to those experiences by which people appraise their capabilities in relation to others' competencies and attainments. The information acquired from these experiences is likely to be more influential for a person's self-efficacy when the others are similar to the person. It follows that vicarious experiences may be influenced by cultural patterns such as in-group collectivism (Triandis 1995; House et al. 2001). Employees from a collectivistic culture may be more prone to assess their self-efficacy by comparing their performances with in-group members, because in-group members may be perceived similar in terms of preferences and values. In addition, in a collectivistic culture, one's success or otherwise likely relates to in-group goals and the way in which in-group members define and give meaning to success and failure (Markus and Kitayama 1991). On the other hand, individualistic employees may be expected to interpret vicarious experiences by independently comparing themselves with similar individuals who are perceived to have individualistic values.

Verbal persuasion may be influenced by cultural patterns. Gudykunst and colleagues (1996) found that independent and interdependent self-construal mediated individualism/collectivism and communication styles. They showed significant relationships between interdependence and the tendency to context-oriented behaviors such as avoiding arguments, which may hurt other's feelings or may create negative impressions (Gudykunst et al. 1996). From this perspective, feedback in collectivistic cultures may not be accurate when working in high-context environments, in which individuals may not provide each other with authentic and direct feedback. Therefore, verbal persuasion may be indirect in such cultures, or may not be sufficiently clear for the development of an authentic and independent understanding of self-efficacy. Earley, Gibson and Chen (1999) also found that the ways in which individuals develop their self-efficacy likely depends on their individualistic or collectivistic cultural contexts. While individual-based performance feedback was more effective for the development of self-efficacy for individualists, group-based performance feedback was more effective for collectivists.

Earley (1994) showed that managers' performances in a training course were related to how consistent their individualistic or collectivistic orientations were with the training methods used to improve their self-efficacy. Individual-focused and group-focused methods were used with managers from China, Hong Kong, and the US. Two types of information were provided in both studies during training programs, information concerning the person's own capability to perform a task (individual-focused) and information concerning the capability of the person's in-group (reference group) to perform a task (group-focused). Results showed that managers from the US achieved the highest self-efficacy and productivity with the individual-focused approach, and managers from Hong Kong and China had the highest self-efficacy and productivity with the group-focused approach. Earley suggested that these differences may be attributed to the individualistic culture of the US and collectivistic

cultures of China and Hong Kong. This suggests that efficacy beliefs appear to be enhanced when training methods are consistent with the individual's sense of self.

Theoretically, collective efficacy can also be related to cultural factors, although empirical research on this subject is limited. As Bandura (2000, 2002) suggested, collective efficacy may be particularly important in collectivistic cultures in which collective agency is important for high performance and life mechanisms. Gibson (2003), in a study of university student groups from the USA and Hong Kong, found self-efficacy, group affect and collectivism to be determinants of group efficacy. Group affect represented 'the general mood or climate of the group as a whole' (p. 2159). Collectivism referred to the extent to which group members emphasized collective instead of individual actions to perform a task. Alavi and McCormick (2008) also identified evidence in university student group contexts that groups with higher average collectivistic orientation had higher collective efficacy. These results suggest that collectivistic cultures may provide opportunities for the development of high collective efficacy if members of the collective perceive themselves members of an in-group, which may enhance attachment and cohesiveness within the collective (Triandis 1995).

Liu and colleagues (2014), investigating technology ventures in China, found that while collective efficacy positively moderated the relationships between joint decision-making and collaborative behaviors with innovation performance, it negatively moderated the relationship between information exchange and innovative performance. This may partly be related to the Chinese (collectivistic) culture, in which high context communication may hinder open communication and information exchange (Gudykunst et al. 1996). From this perspective, it is likely that in a collectivistic culture, teams with high collective efficacy may not realize information exchange to be essential for team innovation.

Power distance may also influence the formation mechanism of collective efficacy. Earley (1999) hypothesized that power distance moderated the influence of member status on

assessment of collective efficacy. Results showed when working in a high power distance cultures (Thailand), collective assessments of group capability were strongly related to high status group members' personal judgments.

Proxy agency (Shields and Brawley 2006; Bray and Shields 2007), and the extent to which it plays a role in work contexts, may be influenced by culture. As mentioned earlier, few studies have been conducted on proxy efficacy, but it arguably can be important in several work processes in which employees need to rely on another employee or manager to reach their goals (Bray and Shields 2007). Importantly, one's self-efficacy may be related to one's proxy efficacy when one relies on someone else for achieving objectives. Power distance is likely to play an important role in the formation of proxy efficacy, especially the relationship between self-efficacy and proxy efficacy. We argue that when power distance is high, employees may be more dependent on their managers for achieving their goals. Moreover, in collectivistic cultures, in-group members may depend on each other's contributions to achieve their objectives, because they may consider themselves to be interdependent in performing their tasks.

In summary, it can be suggested that the interpretations of SCT may be influenced by cultural contexts. Particularly, the ways in which efficacy beliefs are formed and play roles in work activities may be moderated by cultural dimensions such as individualism, collectivism and power distance. Although several studies have been conducted on the influence of culture on self-efficacy, further studies are required for understanding the role of culture in the formation and functionality of collective efficacy and proxy efficacy across cultures.

CONCLUSIONS

Undoubtedly, many psychological theories have contributed to greater understanding of human activity in organizations. Of these, SCT is among the most eminent. In this chapter we have issued an important caveat to the application of SCT to workplaces. In simple terms, context can make a difference to how the mechanisms of SCT work. We believe our approach does not detract from the value of SCT in the workplace, rather it emphasizes it. Moreover, we have argued for the continuing impetus of SCT research in organizations, but with more of an eye on the contexts of the research.

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