



Research Report: Understanding Developmental Readiness

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Understanding Developmental Readiness

Introduction

Although many organisations devote a lot of resources to leadership development and often equate participation in the developmental interventions with the development of effective leadership skills, the reality is that such developmental interventions often yield varying levels of success regardless of the rigour put into designing the content of their content and delivery. Thus, it is important to consider other factors that influence the success of developmental interventions, and one of the key factors that have emerged from the research is an individual's level of readiness to be developed, which determines learning outcomes such as the acquisition of knowledge, reactions to learning, programme completion rate, and improvement in performance, just to name a few (Colquitt, LePine, & Noe, 2000; Holton, Bates, & Ruona, 2000). This readiness to be developed also facilitates learning outside the context of formal developmental programmes, and influences how much an individual can gain through work and life experiences in general.

Despite the interest in leadership development, from the perspective of developing the individual as a leader, there is a lack of a validated or widely accepted framework and theory for leader development, and limited information on developmental readiness. Hence, to better understand the construct of developmental readiness, particularly leader developmental readiness, we took reference from literature on leader and leadership development as well as literature on general training models, adult learning theories, coaching and behaviour change therapy. In this paper, we will explore the concept and impact of developmental readiness, share key themes that have emerged about the individual factors associated with developmental readiness and the situational characteristics that influence developmental readiness. This will be followed by a discussion on the implications of the findings, as we consider how it might be possible to influence and enhance the developmental readiness of leaders so that there are more successful outcomes for developmental interventions. Finally, we will raise some questions for future research which would provide further insight into the topic.

What is Developmental Readiness?

Development, in the transformative perspective, is essentially about a 'metamorphosis in actions, habits, or competencies associated with leadership effectiveness' (Boyatzis, 2008) and people differ in their readiness to develop. The concept of developmental readiness can be seen as an extension of similar concepts in the general training literature of 'trainability' and 'learner readiness'. 'Trainability' refers to the 'degree to which training participants are able to learn and apply the material emphasised in the training programme' (Noe & Schimitt, 1986), while 'learner readiness' refers to the extent to which individuals are prepared to enter and participate in training' (Holton et al, 2000). The key difference between developmental readiness and the concepts of learner readiness and trainability is the nature of

the learning. Unlike training, which focuses narrowly on enhancing the individual's skills, attitudes and/or knowledge in a particular area for a specific purpose and with an emphasis on correct responses, development focuses more broadly on expanding an individual's overall capacity to be effective and developing a more well-rounded individual (Van Velsor & McCauley, 2004; Wilson & Madsen, 2008; Paauwe & Williams, 2001).

Developmental readiness is a multi-faceted construct comprising ability and motivational components. Hannah & Lester (2009) defined developmental readiness as 'the ability and motivation to attend to, make meaning of and appropriate new knowledge into one's long-term memory structures'. We interpret ability as the resources that the individual has which support development; while motivation influences the direction, focus and level of effort in participation in a developmental activity (Noe & Schmitt, 1986). In addition, Harris & Cole (2007) argued for the expansion of the concept of motivation to include willingness for personal change. In this paper, we adopt a more holistic definition of developmental readiness that takes into account all these different dimensions that have been identified. While we will be exploring the individual and situational factors that influence developmental readiness as a whole, some of these factors might relate more to the ability component of developmental readiness, others might relate more to the motivational component of developmental readiness, and a few might relate to both.

Key Findings on Developmental Readiness

Further exploration of the individual characteristics influencing developmental readiness suggests a number of cognitive and meta-cognitive abilities, beliefs and attitudes, personality-related variables, and self-constructs are important. In summary, a few themes about developmental readiness have emerged from the literature.

1. Personal Aspirations

A crucial element in developmental readiness is that the individual has discovered a meaningful career or life goal that he aspires towards, is committed to and identifies with. In the leader development context, this includes making the intentional choice to be a leader and having the self-identity of a leader (Boyatzis, 2008). With this end goal and self-image in mind, the individual would then be more motivated to invest time and energy in developing himself (Boyatzis, 2008) and seek out relevant developmental opportunities (Day & Harrison, 2007). Development may also be perceived to lead to self-fulfilment and greater self-worth, and such intrinsic motivators are more likely to sustain developmental changes in the longer term than extrinsic motivators (Wilson & Madsen, 2008).

Consistent with the above, a review of the training literature by Cheng & Ho (2001), and a meta-analysis by Colquitt et al (2000), concluded that career exploration efforts (such as examining one's career goals and interests), career planning, commitment to the organisational goals and values, are all associated with greater learning motivation and a variety of learning outcomes, including reaction to training, transfer and job performance. In addition, those who are highly involved in their job, in that they

identify psychologically with work and work is important to their self-image, are more motivated to learn and change their behaviour. It is also reported that leaders who seek to realise their potential through continued personal growth are more willing to persist in working towards their goals, and tend to be more coachable (Sharratt, 2008).

2. Awareness of Need for Change

Having an accurate assessment of one's current state is central to developmental readiness. Importantly, the individual needs to recognise that there is a gap between his current state and the ideal that he aspires to, and as a result of this, gain insight into the areas of developmental needs and be willing to engage in personal change.

Both Boyatzis (2008) and Peterson (2006) highlighted that the realisation of a gap between one's current and ideal selves could be a powerful motivator for personal change. Similarly, in the Conscious Competence model of learning that is widely used, it is proposed that people develop competence only after they have recognised their own incompetence in an important skill area, and that there is a logical sequence in the progression of learning (Chapman, 2010). In the first of four stages of learning, the stage of unconscious incompetence, the individual is unaware of or denies the existence or relevance of the skill area, or is not aware of or denies that he has a deficiency in the area. In the second stage, the stage of conscious incompetence, the individual becomes aware of or accepts the existence and relevance of the skill area, or becomes aware of or accepts that he has a deficiency in this area. It is only when an individual has progressed to this phase of learning that he would be committed to learn and practise the new skill, which would then lead him to progress to the stage of conscious competence, where he can perform the skill reliably without assistance, but needs to concentrate deeply in order to perform the skill, and finally to the stage of unconscious competence, where the skill has become so well-practised that it is 'second nature' and enters the unconscious parts of the brain.

Studies of behaviour change across a variety of problem behaviours have likewise found that individuals need to be aware of the need for change and be seriously contemplating change before they would initiate and maintain changes in behaviours (Prochaska & DiClemente, 1982; Prochaska, DiClemente & Norcross, 1992). If individuals are naively unaware of or actively resist awareness of the need for change, then they would have no intentions of changing in the foreseeable future, and attempts to get them to change would be futile (Harris & Cole, 2007). This is applicable to training and leader development, which often entails getting individuals to change their behaviours.

Consistent with the above ideas, Noe & Schmitt (1986) found that when trainees were assigned to attend training based on their skill-weaknesses, those who agreed with the assessments of the skill weaknesses were more likely to perceive the training to be useful and helpful for skill improvement. Hence, how individuals develop an understanding of their developmental needs and how they take action to seek feedback could be a critical influence on motivation and learning outcomes (London & Mone, 1999). More specifically, there is some evidence that when leaders perceive a need for personal change, their leadership skills are more likely to improve (London & Smither, 2002). Summarising existing evidence of coaching success, Sharratt (2008) also reported that leaders who are more coachable tend to

be willing to accept feedback from multiple stakeholders and have a more realistic awareness of their strengths and limitations.

3. Perception of Developmental Experience

Developmental readiness encompasses a motivational component, and consistent with the motivational model proposed by Vroom (1964) the motivation to develop often hinges on whether the individual believes that personal change is possible, whether the developmental experience in question is able to bring about this change, and whether the change would lead to desirable outcomes. To the extent that the individual believes that his ability and personal attributes are malleable, he would be motivated to commit to developmental efforts (Summers, 2010). In addition, expectations that learning leads to desirable outcomes such as increased skills levels, job performance and feelings of self-worth, are strongly associated with motivation to learn and some training outcomes (Cheng & Ho, 2001; Elangovan & Karakowsky, 1999; Noe & Schmitt, 1986). Furthermore, according to adult learning theory, adults learn best when the learning is perceived to be relevant and practical in helping them cope effectively with real-life situations (Forrest & Peterson, 2006; Knowles, 1989; Wikibooks, 2010). Hence, individuals who perceive that a developmental experience would help them close the gap between their current and ideal states and can lead to potential benefits would be more motivated to commit to the developmental experience. Indeed, there is much evidence in the general training literature that when trainees perceive that the training is relevant and useful for their job and/or career, they would be more motivated to learn (e.g. various studies reviewed by Monk, 1996; Cheng & Ho, 2001; Tsai & Tai, 2003), and more likely to transfer what they have learnt to the workplace (Goldstein, 1986; Axtell, Maitlis & Yearta, 1997).

4. Psychological Resources

Once an individual is committed to embark on the developmental experience, he needs to commit to putting in effort to learn and practise new skills—new ways of thinking or behaving that are more effective. Studies of expertise have shown that it is through putting in approximately 10,000 hours of deliberate, mindful practice that individuals become experts, with such practice often involving deliberately working at what one is not good at so that one could extend the reach and range of one's skills (Ericsson, Prietula & Cokely, 2007). This is not an easy process and to the extent that the individual possesses the psychological resources that would help him to learn from his experience and integrate the new knowledge into his cognitive structure, he would have a higher level of developmental readiness. In the following paragraphs, we explore the psychological resources that are important.

Openness to Challenges and Tolerance for Failure

First and foremost, development requires an openness to new, challenging experiences and being tolerant of the accompanying unfamiliarity and risk of failure when one tries to learn new skills. This is consistent with coaching literature on the attributes of coachable leaders, which finds that leaders who are coachable tend to be open to new ideas and comfortable with risk-taking (e.g. Frisch, 2005; Sharratt,

2008). On the other hand, Berglas (2009) described how some leaders might be threatened by the possibility of failure. Hence, to protect their positive self-image, they cling to outdated but tried-and-tested approaches rather than embarrass themselves experimenting with new strategies that may fail. This fear of failure could also possibly explain the negative relationship between age and learning that has been reported in some studies, because as people age, they tend to be more afraid of failure, and hence, less willing to engage in self-development (Cleveland & Shore, 1992; McEnrue, 1989).

Inevitably, during the journey of development, when failure does happen, the individual needs to be able to accept the setback and persist in spite of it. In the literature on coaching, it is reported that coachable leaders tend to display emotional resilience—they are comfortable with setbacks, and are able to de-personalise the setback and stay motivated (Frisch, 2005; Sharratt, 2008). The nature of one's goal orientation is also able to predict training outcome (Tziner, Fisher, Senior & Weisberg, 2007) and the level of leadership development achieved six to nine months after attending a leader development programme (Hannah & Avolio, 2007). Specifically, individuals who engage in tasks with a learning goal orientation are focused on learning and improving, and as a result, are more accepting of failure and persist to find ways to be more effective. On the other hand, those with a performance goal orientation are more focused on demonstrating a certain performance standard and being judged favourably, and in the face of setbacks, tend to exhibit maladaptive, helpless behaviours such as avoiding the challenge or experiencing anxiety and performing worse (e.g. Button, Mathieu & Zajac, 1996; Dweck & Leggett, 1988; Diener & Dweck, 1978, 1980).

Personality-Related Qualities

A number of relatively stable characteristics of individuals could enhance developmental readiness. In general, high levels of conscientiousness, high levels of achievement motivation and low levels of anxiety are all associated with greater motivation to learn, with the latter two qualities being associated with more positive learning outcomes as well (Colquitt et al, 2000). Having an internal locus of control, that is, believing that one can control the outcome of events, is also associated with more positive attitudes towards training opportunities (Noe & Schmitt, 1986), greater learning motivation (Colquitt et al, 2000) and transfer of learning (Tziner, Haccoun, & Kadish, 1991). Similarly, in the literature on behaviour change therapy, an internal locus of control is associated with more successful outcomes (e.g. Craig, 1984) while an external locus of control, that is, believing that the outcome of events is beyond one's control, is associated with various negative outcomes (e.g. Steel, Jones, Adcock, Clancy, Bridgford-West, & Austin, 2000).

Developmental Efficacy

Individuals differ in their degree of self-efficacy, that is, the extent to which they judge that they are capable to 'organise and execute courses of action required to produce given attainments' (Bandura, 1997). Evidence in the general training literature has consistently indicated that self-efficacy has positive relationships with both motivation to learn as well as various training outcomes (summarised in Cheng & Ho, 2001; Colquitt et al, 2000). More specifically, it is reported that developmental efficacy (the degree of confidence that one can develop a specific ability/skill) is able to predict the level of leadership

development achieved six to nine months after a leader development programme (Hannah & Avolio, 2007). Thus, having a heightened sense of developmental efficacy would enhance developmental readiness.

Cognitive Ability

A meta-analysis of the literature on training has found that cognitive ability is a primary determinant of training success across a wide variety of jobs because the acquisition of knowledge and skills depends largely on general cognitive ability (Colquitt et al, 2000), and the ability to transfer learning is also affected by knowledge acquisition during training (Elangovan & Karakowsky, 1999). Thus, a higher level of cognitive ability could enhance developmental readiness because the individual is likely to learn and utilise new skills and knowledge quicker. Another aspect of cognitive ability that could promote development is the ability to think strategically. Individuals who are better able to think strategically tend to engage more in self-directed efforts to learn and develop, and both strategic thinking and self-directed learning skills are reported to support leader effectiveness (Zsiga, 2008).

Self-Concepts

The prior life and work experience an individual has could enhance developmental readiness as well because learning and development essentially build on, examine and expand the base of experience (Forrest & Peterson, 2006). More importantly, it is proposed that an individual's interpretation of his experiences could influence his self-concept (broadly defined as the individual's perceptions of 'self' on various attributes), which then becomes the lens through which he views future experiences (Hermans, 2002). Thus, leaders with greater self-awareness, that is, greater clarity and certainty in who they are, may be better able to make meaning of their experience because they are better able to reflect on how to adjust their self-concept to be a more effective leader (Avolio & Hannah, 2008). This could explain why one's level of self-awareness is able to predict leaders' level of confidence to influence others and transformation leadership ratings six to nine months after a leader development programme (Hannah & Avolio, 2007). It has additionally been argued that self-complexity—defined by Linville (1987) as the number of dimensions or aspects that an individual uses to view who he is, where these aspects are self-representations that correspond to various roles, relationships, contexts or activities—could have an impact on developmental readiness in that those with greater self-complexity have a richer set of knowledge and greater personal resources they can tap on to 'visualise a greater breadth of potential successful developmental outcomes' (Avolio & Hannah, 2008). However, there is as yet no empirical evidence to support this as research is still underway (Avolio & Hannah, 2009).

Reflection and Metacognitive Ability

As transformative learning and development occurs when individuals engage in analysis and reflection (Mezirow, 2000; Wikibooks, 2010), it has been proposed that metacognitive ability could enhance developmental readiness, where metacognitive ability broadly refers to higher-order thinking and includes the awareness of one's cognitive processes, cognitive self-regulation and capacity for examining own self-concept (Avolio & Hannah, 2008). This process of metacognition that helps in development is partially described in Ericsson et al (2007). Tracing the thought process of experts in their research, they noted how the experts are introspective: 'when a course of action does not work out as expected, the experts will go back to their prior analysis to assess where they went wrong and how to avoid future errors. They continually work to eliminate their weaknesses.' In addition, reflecting on how the experience itself alters or builds on one's self-concept is also central to leadership development (Avolio & Hannah, 2008). In a review of the training and development literature in the preceding decade, Aguinis & Kraiger (2009) concluded that there was much evidence suggesting that metacognitive activities and self-regulatory processes mediate the relationship between training and learning. This is consistent with observations in the coaching literature on the importance of introspection for coaching success (Frisch, 2005), as well as studies of expertise which emphasise the importance of mindful practice (Ericsson et al, 2007).

5. Personal Capacity

Given that development requires much commitment from the individual, the personal capacity of the individual to engage in developmental work is another important aspect of developmental readiness. The individual needs to have the time, energy and mental space in their work and personal lives to develop. Under stress, individuals would be inclined to revert to their past patterns of behaviours and familiar skills, which would inhibit their ability to learn (Musselwhite & Dillon, 1987; Van Velsor & Musselwhite, 1986). Thus, individuals who are experiencing personal, family or work upheavals that drain their time and emotional reserves have been found to be less ready to benefit from various developmental interventions or transfer learning to the job (Frisch, 2005; Holton et al, 2000; Musselwhite & Dillon, 1987; Van Velsor & Musselwhite, 1986). Such upheavals may include business challenges, hectic workload, new responsibilities, personal health problems and changes in family circumstances.

Developmental Readiness is Not a Fixed Entity

While developmental readiness is essentially a personal quality, it is not a fixed entity and can be influenced by various situational variables through their impact on individual characteristics and behaviours toward learning. We will look at these situational variables in the following section.

1. Trigger Events

Trigger events, which could be positive or negative, may change the individual's leadership potential by creating 'points of disequilibrium and heightened self-awareness that can lead the individual to challenge his/her basic beliefs and assumptions' (Avolio & Luthan, 2006). These disorienting experiences or events may potentially evoke a sense of introspection within the individual on his identity and competence, all of which may generate an awareness of developmental needs and the need for change, leading individuals to become more open to feedback, and hence more developmentally ready to learn and grow (Musselwhite & Dillon, 1987; Sargent & Schlossberg, 1988). Zemke & Zemke (1995) term these 'teachable moments' and they may be triggered by work-related events such as career transitions; times of decreased job satisfaction; and presence of organisational stress, or general life events such as mid-life crisis; a life stage that creates self-doubt; and personal re-examination (Musselwhite & Dillon, 1987; Van Velsor & Musselwhite, 1986). More specifically, research scholars have found that readiness to learn and transfer of learning is greater when participation in leader development programmes is timed to take place approximately six to twelve months after a promotion or increase in job scope (Musselwhite & Dillon, 1987; Van Velsor & Musselwhite, 1986). During this period, the individual is likely to have had sufficient time to be initiated into the new role and to become cognisant that his past experiences and perspectives are no longer applicable to the new situation he is in, and this awareness precipitates a real or perceived gap between his current skills and the demands of the new job.

2. Design of Developmental Programmes

In addition, developmental programmes can be deliberately designed or planned to influence one's developmental readiness through their direct or indirect impact on key individual characteristics related to developmental readiness. In this section, we will look at some examples of these, as demonstrated by the empirical studies available, most of which are based on general training contexts.

Participants' developmental readiness could be enhanced if they could be guided to spend time exploring their job or career commitment and leadership intention, explain or reflect on how leadership development is relevant or aligned to their goals before or during a developmental activity. If the individual recognises a gap between his current state and the ideal that he aspires to, he is likely to gain insight into his developmental needs and be more inclined to engage in personal change. Individuals' *awareness of the need for change and development* could also be influenced (Prochaska, Levesque, Prochaska, Dewart & Wing, 2001a; Prochaska, Prochaska & Levesque, 2001b) and one of the ways to bring about this awareness is through the provision of skills assessment feedback as part of the content to be delivered to participants. Specifically, a credible source of feedback with useful messaging with regard to skill strengths and weaknesses leads to favourable responses from participants (Ilgen, Fisher & Taylor, 1979). This can potentially raise participants' awareness of their need for change and development.

According to Wlodkowski (1999), there are various ways to enhance motivation during a programme or a course such as creating a learning atmosphere in which participants and instructors feel respected and connected to one another ('establishing inclusion'); creating a favourable disposition

toward the learning experience through personal relevance and choice ('developing attitude'); creating an understanding that students are effective in learning something they value ('engendering competence'); and creating challenging, thoughtful learning experiences that include participants' perspectives and values ('enhancing meaning'). For example, designers can incorporate developmental activities that challenge participants and take them out of their comfort zones to stimulate learning. While activities should be sufficiently challenging to stimulate participants' interest and desire to learn, they also have to be realistic, achievable and within the participants' developmental reach; otherwise, the participants may be overwhelmed and be unable to make sense of and learn from the experience (Day, Harrison & Halpin, 2008).

Apart from enhancing learning environments through learning designs and instructional strategies that build on participant's motivation and ultimately their developmental readiness, *management of participants' resistance* to learn or develop is another aspect that must be taken into consideration to facilitate successful outcomes in developmental programmes. According to Knowles (1989), participants' resistance needs to be discussed openly and addressed such as by acknowledging the resistance and empathising with them, using role models, and helping people to be aware of their learning needs. These suggested strategies would help participants to be more receptive to taking part in the development programmes as they develop greater *openness to new, challenging experiences and be more tolerant of the accompanying unfamiliarity and risk of failure* when one tries to learn new skills.

As described earlier, participants who *perceive the developmental experience to be relevant and important* to their job are likely to have higher levels of developmental readiness. Hence, developmental readiness could be influenced by thoughtful planning of instructional design that addresses how the newly acquired knowledge and skills will be reinforced and transferred to actual work settings (Leimbach & Maringka, 2009; Holton et al., 2000).

Another individual characteristic which can be influenced through situational factors is *developmental efficacy*. Bandura (1997) suggested that helping individuals to achieve successful outcomes on developmental activities would enhance their sense of belief about their capability to engage in subsequent developmental efforts. Also effective is demonstrating to the individuals there are similar others who have experienced success in leader development, and convincing them that they can develop in the same way as these role models. Tapping into individual interests, positive feelings and intrinsic motivation in their perceptions and interpretations of the developmental experiences would likewise enhance efficacy beliefs. A higher level of developmental efficacy is likely to drive participants to invest greater effort in the developmental experience as they expect to have more successful developmental outcomes (e.g. reviews by Avolio & Hannah, 2008).

Other efforts to enhance the developmental readiness of participants through programme design could include, for instance, targeted reflections or the provision of a psychologically safe learning environment to promote a learning goal orientation. During the programme, supportive networks or communities of peers could be formed to provide support for one another.

3. Extent of Organisational Support

Various researchers have discussed how characteristics of the organisation (namely, size, structure, systems complexity, leadership pattern, and goal directions) influence individual characteristics such as their perceptions, attitudes, behaviours and performance (e.g. Forehand & Gilmer, 1964; James & Jones, 1974). Rousseau (1978) and others have also suggested that influential situational factors can reside at the level of the department, job (e.g., Brass, 1981), work group (e.g. LePine & Van Dyne, 1998) or leader (e.g. Podsakoff, MacKenzie, Moorman, & Fetter, 1990) within an organisation. According to research findings, other aspects in the individual's workplace such as the climate of the organisation concerning change, and the extent to which the social context such as supervisors or colleagues of the work environment provide support, reinforcement and feedback to the participants pre- and post-training (Noe & Schmitt, 1986; Colquitt et. al., 2000) would also either facilitate or impede his developmental readiness directly or indirectly through their impact on the pertinent individual characteristics. We will look at these various aspects in turn.

Influence on Openness to Challenges, Tolerance for Failure and Readiness for Personal Change

Firstly, a supportive organisational climate provides the bedrock of facilitative conditions to enhance developmental readiness. According to Kahn (1990), a more positively focused climate that is psychologically safe is likely to enhance leader development because a culture that focuses on learning will enable participants and those around them to make sense of failures and use such incidents as developmental experiences. Individuals are therefore in better positions to manage stressful trigger events and can pursue developmental challenges without reprisals for honest failures (Avolio & Hannah, 2009). This does not imply that organisations or individuals should disregard the risks associated with potential failures. Instead, organisations must strike a balance between their openness to allow their leaders to experiment as well as take risks associated with their own development and their capacity to manage that risk effectively. Such climatic conditions are likely to encourage individuals to pursue their personal aspirations, engage in developmental activities, and experiment in personal change efforts or use their new skills because they are supported to be more open to challenges and tolerant of failures. Participants' awareness of the need for change and development could also be influenced by perceived organisational support, as affective commitment associated with positive support would promote constant contemplation and action, making pre-contemplation sentiments difficult (Prochaska et al., 2001a; Prochaska et al., 2001b).

Influence on Perception of Developmental Experiences and Psychological Resources

Organisations can influence employees' developmental readiness through their perceptions of developmental experiences (namely, whether training is relevant and useful for the job and has desirable outcomes) and ability/motivation to learn. The specific organisational level measures that may have an impact on these outcomes include the organisational message on training and the extent of provision of resources and support to apply training related activities.

The organisational expectations and message tied to a programme are pertinent in determining participants' perceptions of the developmental experience, their motivation to learn from the assignment and ultimately their developmental readiness. Influencing participants' expectations through organisational communications that development leads to desirable outcomes (including attaining organisational rewards such as recognition, higher pay or a promotion) or that the training is relevant and useful for enhancing performance on their job and/or improve their career prospects, would motivate them to learn. For instance, when mandated training is perceived as a commitment by the organisation to emphasise new skills and/or move in a different direction, and the 'programme is presented as such to the participants, participants are more likely to be highly motivated to learn from the training assignment as they perceive the training to be important to them (Mathieu & Martineau, 1997). Conversely, when lack of choice in training is perceived as manipulative, trainees will likely have little motivation to learn. Follow-up training that links individual insights gained from the training to organisational goals, values and needs have also been found to sustain the participants' initial commitment and enthusiasm to develop (Van Velsor & Musselwhite, 1986; Musselwhite & Dillon, 1987).

Positive organisational support exists to the extent that trainees perceive that adequate resources and positive consequences are present to encourage individuals to learn and support the application of training content on the job; there are opportunities to use skills and experiment with new behaviours; and there is provision of feedback on the use of the new skills or behaviours. Conversely, Noe & Schmitt (1986) highlighted the influence of trainees' perceptions regarding task constraints such as lack of equipment or financial resources, which may indirectly influence behaviour change and learning by reducing motivation to learn new skills or to apply skills acquired in training to job tasks. As the work by Peters and his associates indicates, task constraints have an inhibiting effect on individual performance (e.g., O'Connor, Peters, Pooyan, Weekley, Frank, & Erenkranz, 1984).

Extent of Managerial Support

Researchers have examined the perceived presence of *manager support* for participation in learning activities (e.g. Birdi, Allan, & Warr, 1997; Clark, Dobbins, & Ladd, 1993; Fecteau, Dobbins, Russell, Ladd, & Kudisch, 1995). For example, the study by Fecteau et al (1995) of 967 managers in departments within state government agencies showed a positive link between manager support and ability/motivation to learn.

Just as organisational messaging of the programme has an impact on participants' perceptions of the developmental experience and ultimately their developmental readiness, managers' framing of the training predicts self-efficacy and training motivation of participants, which consequently influences their reactions, learning and transfer motivation. In the social persuasion and feedback approach suggested by Bandura (that is, manager conveying high expectations to participants and therefore inspiring them to do as well as they expected with regard to the training), managers could enhance participants' sense of developmental efficacy and therefore their readiness to purposefully learn from the experiences. Participants who receive realistic training-related information from their managers prior to the training, e.g. about training attributes, training environment, content complexity etc. were more motivated than those who did not (Tai, 2006). Supportive managers can also emphasise the utility of training to the job, thus impacting participant's motivation (Clark et al, 1993). Furthermore, clarifying training expectations and

goal-setting according to participant's needs enhances training effectiveness and training transfer (Latham & Frayne, 1989; Wexley & Baldwin, 1986). Having managers play an active role in communicating the importance and value of learning, framing the development activity as central to the organisation's goals, or articulating a clear link between the skills taught and the skills required of the participants for their career progression would set the tone for the training programme. This would help to elevate participants' perceived importance of the programme and consequently their level of developmental readiness for the programme.

In various reviews of related studies, managerial support of employees' training was found to have a positive influence on the latter's attitudes toward training (Monk, 1996). Such managerial or supervisory support may take the form of encouragement for employees to use the newly learned skills; assistance in identifying situations for applications of the skills, guidance and coaching to employees on the proper application of the new skills learnt; and positive reinforcements of the new applications and improvements (Leimbach & Maringka, 2009; Elangovan & Karakowsky, 1999).

Other more general, managerial interventions deliberately targeting individuals outside a programme context have also been suggested. For example, Hannah & Lester (2009) argued that managers can enhance the developmental readiness of their followers through assessing goal orientation, developing their learning efficacy and increasing their meta-cognitive ability, all of which lead to increased motivation to learn, and their conclusion is that managers who provide such interventions to their employees are likely to influence their developmental readiness through enhancement of the individual characteristics.

Implications for Leader Selection and Development

From a talent management perspective, job performance is determined by a combination of selection and development strategies. Selection focuses on choosing the individual with the most suitable capabilities to perform the job, while development focuses on enhancing the competence or expanding the capacity of the individual. The findings presented above help to inform our understanding of issues to consider for both the selection and development of leaders. Specifically, we are interested in understanding how to raise the general level of developmental readiness in our leaders to yield the greatest returns from the developmental experiences that they go through.

1. Leader Selection

As the workplace becomes more complex and dynamic, the capabilities required for effective job performance may evolve over time, and development becomes increasingly important so that leaders can continue to be effective at work. Therefore, it is important to select not only for existing capabilities, but also for the potential to be developed. Thus, being able to determine an individual's developmental readiness would be a great advantage at the point of selection. More specifically, in the selection context, such as the early identification of leadership talent, the assessment of potential and selection for promotion to leadership positions, it would be useful for decision-makers to evaluate a candidate's desire

to lead. This is because research has indicated that an individual who aspires to be a leader is more likely to be motivated to seek out and maximise opportunities for leader development, and to sustain his developmental efforts. Thus, such an individual would show a greater degree of readiness to develop his capacity to be more effective in leadership roles and responsibilities, which would likely help him be a better leader in the longer term.

In addition, decision-makers involved in leader selection would benefit from having greater awareness of the possible implications of the other individual characteristics that are associated with level of developmental readiness, and more focus could be given to assessing these characteristics in the candidate, such as his level of self-awareness, and his ability, motivations and beliefs about learning from challenges and setbacks. During the selection and assessment process, there could be greater probing on the extent and impact of the individual's limitations on his ability and motivation to develop and experience personal growth, and the degree to which these could be overcome through deliberate efforts and/or mitigated by other strengths. This would help decision-makers make a more informed talent decision and/or recognise the follow-up steps that might be necessary for managing and developing the individual.

2. Build Capacity for Learning and Development at an Early Stage

Developmental readiness both facilitates learning from one's experiences and results from one's experiences. Individuals may experience spurts of growth or development as a result of deliberate developmental experiences. Research has indicated that, apart from deliberate interventions, development could also take place more incidentally through work or life experiences (Paauwe & Williams, 2001). Hence, it would be important to find ways to build targeted individual's capacity for learning and development at an early stage. These could include helping the individual identify personal aspirations, enhancing an individual's level of self-awareness, enhancing his level of developmental efficacy, fostering an openness to learning and failure, developing accurate and complex self-constructs, and building up habits of metacognition. For the organisation, there are benefits in helping to enhance these as early as possible in an employee's career, so that the individual can maximise the learning from his experiences. The manager or supervisor should also be aware of the implications of these individual characteristics and be actively involved in raising the developmental readiness of their subordinates, such as through communicating expectations, providing feedback, and helping to identify learning opportunities. Such active involvement on the part of the managers may also uncover and address resistance on the part of their employees toward development activities, and targeted efforts can then be taken to enhance developmental readiness by raising awareness of need for change and development, reduce perceptions of cons and perceptions of advantages associated with development.

3. Design of Developmental Programmes

Leadership developmental programmes are often designed with the assumption that participants are highly motivated and able to learn, and would value the content being delivered to them. In reality, participants come with varying levels of developmental readiness and may therefore respond differently to the same programme being presented to them. It would not be realistic to tailor the content and

approaches of developmental programmes according to each participant's level of developmental readiness. However, it would be critical for programme designers to keep these individual differences in mind so that appropriate programme elements can be incorporated to enhance participants' developmental readiness across the board as well as address their various concerns, in order to attain more positive learning outcomes.

One of the key learning design principles to take into consideration in enhancing the motivation of learners at developmental programmes is to make the case for change at the individual, organisation or even the whole-of-government level. What end do we seek to achieve when we develop our leaders and so what if we achieve this purpose? Framing these questions in the right context and answering them will help to anchor participants' learning at the programme.

Another principle to take into consideration in the design is to make clear the relevance and meaningfulness of the programme to the participants. It would be critical to show explicitly the linkage between what the organisation expects of the targeted participants and the choice of the programme content and design elements used for their development. This enables participants to draw connections between what they learn at the programme and how they are relevant in meeting the organisation's expectations of them as leaders.

The whole learning experience for participants should take place through a positive and psychologically safe environment. Making learning safe allows participants to be engaged in developmental activities and experiment with new behaviours or personal change efforts during the programme itself. Such opportunities or experimentations may give them the needed confidence to continue practicing such change efforts when they return to their workplace.

Participants' motivation to learn can also be enhanced by making the learning experience personal for them. Creating appropriate opportunities for participants to reflect on the content shared and incorporating thought-provoking questions to invite them to make sense of and applying the learning to themselves is likely to enable them to personalise and internalise the insights gained from the experience. Participants should also go into the learning experience with the understanding that their responsibilities as learners include their engagement during the programme with the purpose of developing themselves to be the most effective individual, team and organisational leader they can possibly be.

Beyond providing a meaningful developmental experience for the participants, one of the key measures of success for developmental activities is to make the learning last. The sustainability of the learning can be reinforced through follow-up activities that facilitate the transfer and embedding of new skills to the workplace such as coaching or exposing participants to challenging assignments that allow them to experiment or practice the new learning they have picked up from the developmental programmes.

4. Capitalise on Windows of Opportunity for Development

The timing of the developmental intervention is also crucial; it should capitalise on possible windows of opportunity and take into account the employees' personal capacity for development during

that period. Timing the leadership development programmes according to what is needed at the juncture of employees' careers (in terms of greater clarity of objectives and outcomes associated with the programme and how it is relevant to employees' needs) is also critical in influencing employees' readiness to participate in such developmental activities. Taking into consideration these factors when planning a leader development programme would help to bring about more positive outcomes.

5. Provide a Supportive Environment

In addition, the organisation needs to provide the necessary climate and support before, during and after the developmental intervention. Importantly, key stakeholders such as managers or supervisors need to see leadership development as a priority and be willing to provide their employees the necessary resources and support so as to help them create personal capacity to be developed (for example, by ensuring that they are not overloaded with work during training and have the time and space to focus on their development). Managers or supervisors could also position the developmental intervention in such a way as to emphasise its relevance and importance to the participants. In the post-developmental experience, interventions or opportunities can be created for employees to integrate their learning and practise what they have learnt back at their work environment (Leimbach & Maringka, 2009).

Future Research Questions

This literature review has painted a broad picture to aid us in understanding the key factors that have an impact on developmental readiness. As most of the research studies were conducted in western contexts, further research could help to form a deeper understanding of development readiness in local context, in particular within the public sector. Possible research follow-ups could include

- (1) Identifying key factors to leverage to enhance developmental readiness or bring about more positive programme outcomes
- (2) Understanding the impact of developmental readiness on participants' evaluation of a programme and learning outcomes
- (3) Surveying the levels of developmental readiness in participants of leadership development programmes (comparing e.g., organisation, organisational level, generation) so that programme design can be improved

Addressing these questions could help generate additional insight on developmental readiness so that the effectiveness of the various leader development programmes and initiatives for Singapore public sector leaders could be enhanced.

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