

CTSDL: The Role of Cross-Training through Self-Directed Learning in Reducing the Effects of Career Concern Stressors in the Workplace

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Cross-training through self-directed learning utilizes modern technologies and resources to reduce job stress. The National Institute of Occupational Safety and Health (NIOSH) reports that career concerns, including insecurity, lack of opportunity for growth (advancement or promotion), and rapid changes for which workers are unprepared lead to job stress. These career concerns have been shown to foster negative employee perceptions of organizational culture, policies, interpersonal interactions, efficacy, control and ultimately their overall well-being. This research advances these concepts in the context of a job stress and Occupational Health Psychology (OHP) intervention.

INTRODUCTION

The Need for More Technology in Organizational Career Development

A December 2015 study by the McKinsey Global Institute on American Industry found a considerable gap between the most digitized sectors and the rest of the economy over time and found that despite a massive rush of adoption, most sectors have barely closed the gap over the past decade Because the less digitized sectors are some of the largest in terms of GDP contribution and employment, we found that the US economy, as a whole, is only reaching 18 percent of its digital potential ... The United States will need to adapt its institutions and training pathways to help workers acquire relevant skills and navigate this period of transition and churn.” Because of this notion, it is said by researchers and practitioners, that as we (America) transition from an industrial-age economy to a computer-internet-mobile-broadband-driven economy or supernova (cloud technology) driven economy, a broad range of new discoveries around health, and learning..... will drive growth (Freidman, 2016, p. 103).

There is a pronounced international need for workforces adroit at handling change driven by technological advances and competitive advantage pressures (Bang & Reio, 2017). A major impediment to being able to address these needs, however, are career concern stressors; that is, job insecurity, lack of

opportunity for growth (advancement or promotion) and rapid changes for which workers tend to be unprepared (cdc.gov, 2017). Career concern stressors are potentially influenced by environmental variables like underused or slowly implemented technology in the organizational career development process. The purpose of this research is to explore the potential benefits that cross-training through self-directed learning (CTSDL) might offer in reducing the stress employees experience from career concern stressors.

Through our research, we aim to make salient how CTSDL (cross-training through self-directed learning) can use technology to offer career development solutions that may aid Human Resource Management/Development (HRM/D) professionals in providing adequate skills acquisition resources that lead to more employee career progression opportunities and reduced job stress. Job stress is considered the harmful physical and emotional responses that occur when requirements of the job do not match the capabilities, resources, or needs of the worker and can lead to poorer health, injury and potentially resignation or termination (Bang & Reio, 2017; cdc.gov, 2017).

The Use of MOOCs on Cloud Technology

Vignette: "The new social contract is that you can be a lifelong employee, if you are ready to be a lifelong learner," ---- Jon Donovan, CSO (Chief Strategy Officer) at AT&T (Friedman, 2016).

This statement has wide ranging implications for the entire world of education; more specifically employee training and career development (Friedman, 2016). Consider the case of AT&T and Udacity, which built the online low-cost master's degree in computer science with Georgia Tech; costing \$6,000 in comparison to most programs that are in the \$40,000 to \$60,000 price range (Friedman, 2016). The business Udacity created with AT&T enabled Udacity to offer educational assistance to the world at large; planting the seeds for our discussion of CTSDL. Udacity advised AT&T on how mini-online courses or non-degree specializations and certifications, now known as MOOCs (Massive Open Online Classes), could elevate its workforce by teaching the latest technologies and skills (Friedman, 2016).

Since Udacity's AT&T involvement, it has worked with companies like Google to provide courses in computer science learning and development globally to individuals who need to be (cross)-trained for employment sustainability or advancement (Friedman, 2016). Unfortunately, these technologies are often underused by organizations because companies widely train their workforce through traditional proprietary programs that include internal learning management systems (LMS) and traditional post-secondary programs (e.g., colleges, universities, vocational) that impart knowledge and shape technical skill acquisition. Bandura and Locke (2003) cautioned, though, that organizations locked into more traditional technologies and products may have been sufficient to produce their past success, yet often fail to change fast enough to adapt successfully to the technologies and marketplace demands of the future (Bandura & Lock, 2003).

The advent of MOOCs signals revolution and evolution in adult education, training, and career development, especially when using cloud technologies (Friedman, 2016). MOOCs allow companies like Udacity, edX, Coursera, LinkedIn Learning (Lynda.com), and Business Acumen Learning (which initially provided its resources only to Fortune 500 companies) to compete in the market of educating a company's entire workforce. However, employees suffer negative managerial perceptions and are frequently overcome by suppressive and traditionally agentic environmental norms, like elite succession planning through HiPo (high potential) leadership programs and managerial attribution error (mismatched managerial perceptions of employees' competency, capacity and capableness (Bang & Reio, 2017). Arguably, managers' negative perceptions and actions are part of an employee's environment and are often prejudiced or biased by socio-economics, collegiate hierarchy, favor or other cultural differences that can lead to career advancement disapprovals and inaccessible pipeline resources. Managerial disapprovals and inaccessible pipeline resources are often appraised as barriers or threats and become job stressors (Lazarus, 1991).

Lazarus (1991) details four types of primary appraisals: harm/loss, threat, challenge and benefit (Dewe, O'Driscoll & Cooper, 2012). The argument in this research hinges on a cognitive-motivational-relational concept, which states that employee stress depends on the balance of power, as judged subjectively (appraised individually) between constraints, resources, the ability of the person to manage them, and environmental demands (Lazarus, 1995). Often, job loss, poor evaluation, a failure to be promoted or disapproval by management incites negative appraisals by the employee (Dewe et al., 2012; Lazarus, 1991). However, managerial perceptions and actions are not the single variable for inducing employee stress. Stressors require two collectively irreducible elements: person and environment (Dewe et al., 2012; Lazarus, 1991). A stressor is a condition or situation that requires an adaptive response from a person (Spector, 1998).

When perceiving a threatening environment of stressors, employees' negative appraisals of fairness, self-efficacy, control and social support are equally important because they may foster counterproductive work behaviors (CWBs; Fox & Spector, 2006) or other maladaptive coping behaviors (aggressive acts—bullying, incivility and conflict; see Trudel & Reio, 2011). In the Stressor-Emotion model to CWB, an employee can perceive and interpret objective job conditions, as constraints, conflicts, barriers, or a challenge to his or her goal achievements, such as career advancement (Fox & Spector, 2006). Toxic work environments lead to CWBs that demotivate employees, instigate interpersonal conflict and withdrawal, dampen self-efficacy and stimulate voluntary turnover (Fox & Spector, 2006). The costs associated with turnover are notable, in that they can range from 16% to 21% for jobs earning less than \$30,000 to those around \$75,000 annually (Boushey & Glynn, 2012; Merhar, 2016). Therefore, reducing costly turnover is a matter of economic utility for the organization; being mindful of employee career development needs and their well-being would be a means for treating employees fairly and thereby helping manage potential turnover more effectively. Implementing a CTSDL employee career counseling program that incorporates stress reducing strategies and attention to career development and fair organizational treatment may be a promising means to manage turnover.

BACKGROUND TO THE PROBLEM

Job Stress: A Global Occurrence

Job Stress is a Global Occurrence

In 2014, National Institute for Occupational Safety and Health (NIOSH) report revealed that 40% of Americans say their job is very or extremely stressful, and 29% are extremely stressed at work, and the APA (American Psychological Association) report 75% of workers today have more on-the job stress than a generation ago (Richardson, 2017; gostress.com, 2017).” Six out of ten workers in major global economies experience increased workplace stress (gostress.com, 2017). The Regus Group reports, China has the highest rise in job stress at 86%. Medibank notes that Australian employees are absent for an average of 3.2 working days each year due to workplace stress and cost the Australian economy approximately \$14.2 billion; and the National Institute for Health and Clinical Excellence says, approximately 13.7 million working days are lost each year in the UK because of work-related illness at a cost of £28.3 billion per year. (gostress.com, 2017;

We deduce, therefore, that stress is becoming globally ubiquitous in the workplace (Dewe et al., 2012; Gatchel & Kishino, 2012).

The focus on stress, for this research, is placed in relation to current times (the age of acceleration and automation) where slow implementation of computer and cloud technology has been an obstacle to optimal employee career development. Furthermore, stress viewed through a career development lens will be linked to the CTSDL conceptual framework, as well the notions of control and self-efficacy and their added benefits to stress reduction.

What is CTSDL?

CTSDL is the amalgamation of two theoretical concepts: cross-training and self-directed learning. Potentially, CTSDL is utilitarian in nature; that is, it uses stress-reducing mechanisms to improve employee and organizational efficacy, create more opportunities for career advancement and foster new employee and organizational goals and career achievement standards. CTSDL can serve as a multi-leveled stress and career counseling intervention used to prevent and moderate the effect of career concern stressors and fear (perceived workplace threats), while promoting the perception of organizational-wide succession planning and career development opportunities. Positioning CTSDL as a multi-leveled intervention is a holistic approach to addressing career concern stressors that employees experience on the job daily. CTSDL strategically develops employee-organization partnerships through offering increased social support, the promotion of positive and consistent organizational contingencies (policies and procedures), and the utilization of additional and readily available resources that may promote positive employee perceptions and experiences.

CTSDL's secondary level serves as an SMI (stress management intervention) component, which tends to focus on restoring resources depleted by the work environment and addresses career concern stressors experienced by tenured employees who have been previously denied promotional opportunities (Richardson, 2017). On the other hand, the wellness program or primary level of CTSDL will serve more as a preventative and enhancement of job and personal resources for all employees, specifically new hires and tenured employees seeking promotional opportunities for the first time. When split into two standalone levels, research alerts us to decided gaps in the primary and secondary intervention levels. At the primary level, the individual is the prime target for organization intervention, yet this attention tends to create a counterproductive dilemma of "blaming the victim" because employees seem deficient in some way by managers if they need a stress intervention. Further, at the secondary level, stress management is limited in reducing organizational stress because little effort is made to restoring lost resources or working with those who previously were denied promotions (stress.org, 2017; Schelvs, Wiezer, van der Beek, Twisk, Bohlmeijer & Hengel, 2017). Consequently, as a result of negative perceptions concerning the inadequacies in standalone levels of intervention, a trend toward incorporating stress management as a component of holistic workplace wellness programs is growing (Richardson, 2017).

A 2008 meta-analysis of research on the efficacy of organizational wellness programs shows participation in a holistic wellness program is associated with lower absenteeism and higher job satisfaction (Parks & Steelman, 2008) "For absenteeism, the mean effect size was $-.30$ ($p < .00$) with a confidence interval of $-.48$ to $-.22$ and for job satisfaction the mean effect size was moderate (Cohen, 1969; $d = .42$, $p < .03$) with a confidence interval of $.05$ to $.80$ " (Parks & Steelman, 2008). Consequently, CTSDL will be advantaged by being multileveled (primary and secondary), rather than standalone levels because it focuses not only on changing stressors in the work environment by altering aspects of the organization (e.g., roles, policies and structure), but also by providing employees the necessary skills to respond to stressors in a way that reduces the impact of perceived work-related problems (Leka & Houdmont, 2010; Schelvs et al., 2017). CTSDL will be beneficial to both the organization and employee because it is considered a stress reducing medium designed to stop negative experiences and grow positive experiences in the workplace (Richardson, 2017).

Current Use of Cross-Training

CTSDL is a stress reducing medium and career counseling intervention that will resonate with HRM/D leaders because it improves upon their need to attract, develop, retain, and promote employees through active career development and succession planning and management. Active succession planning and management should include the consideration of organizational processes that can be maintained through developing a team approach to work tasks, building a robust data system, creating job manuals, conducting regular cross-training and embedding these processes into the organizational culture (Hall-Ellis, 2015). Cross-training, synonymous with multi-skilling, is essential because organizations aiming for competitive advantage must be efficient, quality-oriented, innovative and responsive to

customer needs (Bokhorst & Slomp, 2007; Ferguson & Reio, 2010). Thus, improvements should focus not only on the efficiency and effectiveness of technical processes, but also on helping workers become better prepared to handle both technical (e.g., new computer skills to handle constantly evolving computer software updates) and interpersonal (e.g., coping strategies to handle stress) contingencies generated by pressing workplace demands (Bokhorst & Slomp, 2007).

Cross-training (CT) is a utilitarian process that is both a workforce development strategy and a means to increase productivity skill repertoires or competencies of workers (Abrams & Berge, 2010). These competencies are synonymous with being efficacious in a specific area and improves employees' abilities to work in more than one narrowly defined occupational specialty (i.e., capable of performing more than one task or various relative skills) (Adams & Berge, 2010; Devine, Devine, & Devine, 2010). CT encompasses two principles or goals: (a) improving workplace competencies and (b) helping workers apply newly developed competencies optimally (Devine et al., 2010). CT has been identified then as a source of workforce flexibility in that cross-training employees in (various) work categories can result in significant cost savings (Brusco & Johns, 1998).

Moreover, CT adds further benefit beyond utility. CT's resultant flexibility is linked not only to organizational perceptions of its employees being more capable and competent to perform other tasks, but also the employees' own perceptions of being more efficacious about their own abilities to perform such tasks. We contend that these efficaciousness perceptions where employees believe they are better prepared and able to perform newly learned skills will reduce counterproductive employee stress. Moreover, highly efficacious employees will be more likely also to attain job security and well-being goals (Bandura, 2002; Bandura & Locke, 2003).

CT & Person-Environment (P-E) Fit

The benefits of CTSDL include better P-E fit, stress reduction and employee well-being. P-E fit focuses on human behavior or adaptive response behavior being caused by attributes of the environment and psychodynamic approaches conceptualizing behavior as emerging from personality characteristics or traits (Dewe et al., 2012). P-E fit assists in lowering strain levels and is necessary for effective human functioning (Dewe et al., 2012).

When assessing CTSDL and its links with P-E fit and the reduction of stress or strain, we must examine P-E fit's two components: (a) demands-ability fit, the degree of match, congruence or correspondence between the demands people confront at work and their abilities to meet those demands and (b) needs-supplies fit, the match, congruence or correspondence between the person's needs (including physical and psychosocial needs) and the resources available to them (Dewe et al., 2012). Demands-ability fit can be met under a CTSDL intervention because although employees may endure stress at work due to feeling unprepared to perform challenging new work functions (Dewe et al., 2012; Fox & Spector, 2006), it can provide a variety of cross-training or multi-skilling options that may assist employees in adjusting to the needs of these job demands (e.g., mergers, acquisitions, downsizing, layoffs, etc.) (Abrams & Berge, 2010; Brusco & Johns, 1998).

CT, P-E Misfit and Control

Besides assisting with improving demands-ability fit, CTSDL can also satisfy needs-supplies fit by providing the employee control (autonomy) and responsibility for their own learning (i.e., self-directed learning [SDL]; Knowles, 1975) and a wider range of opportunities and resources to address self-identified skill gaps at their own pace. This implies that employees' career aspirations (future job roles) and career-pathing (the route to acquiring future jobs) should be guided to some degree, but not controlled by the organization. More importantly, employee career aspirations and their chosen learning and development resources should be aligned with organizational resources and needs (Knowles, 1975), using job forecasting to assure best fit.

Cross-training or multi-skilling on a voluntary or participative basis through SDL activities facilitated by the organization affords employees greater opportunity to manage or control their career pathing according to their own interests and lowers the perception of threats or the effects of stressors (Abrams &

Berge, 2010; Fox & Spector, 2006). Thus, CTSDL can provide employees what they need in an autonomous, self-directed nature, thereby lowering the chance occurrence of voluntary withdrawal from mismatch or P-E misfit (Dewe et al., 2012).

We cannot overlook, however, how employee motivation is a major tenet of the transfer of learning to the job site and even more important to workplace learning, is the utility factor of learning to the organization (Blanchard & Thacker 2013). Utility can be deduced to this simple equation: $P = M \times KSA \times E$; Performance = motivation x knowledge, skills and attitudes x environment (Blanchard & Thacker, 2013). Each of these variables is aligned with P-E fit, but special focus is required for the latter part of this equation (environment); this is where the resources needed to best perform should be originated and where the perceptions (appraisals) of external threat, challenge, benefit or harm to the employee will be derived (Blanchard & Thacker 2013; Dewe et al., 2012; Lazarus, 1991).

Offering employees opportunities to participate in CTSDL where they take the control and responsibility for their own learning lessens the impact of environmental stressors, consequently making the transfer of learning (knowledge and skills) less stressful for the employee and more easily transferred to the job (Blanchard & Thacker, 2013). CT provides employers a means then for greater organizational synergy, a less strained workforce, better efficacy, increased innovation, and a more knowledgeable workforce that is less troubled by fear or perceived threats to their career development and well-being (Fox & Spector 2006; Michelsen, 2007):

CT and COR

CTSDL resonates with industrial-organizational psychological researchers because of its connection with psychosocial constructs like COR (conservation of resources), which has similarities to P-E fit (Dewe et al., 2012). A difference between the two is that P-E fit theory focuses predominately on people's perceptions of fit, whereas COR theory incorporates more objective indicators of actual fit (Dewe et al., 2012). The essential precept of COR theory is that individuals endeavor to obtain, retain, protect and nurture those things that they value (Dewe et al., 2012). In other words, individuals strive to both preserve and accumulate resources for the purpose of better navigating their way through life's demands and challenges (Dewe et al., 2012). Imperative to understanding CTSDL's relation to COR is the attention it casts on the availability of resources and an employee's cognitive, psychological and decision-making processes, each pertinent to career advancement within their organizations. Resources are anything that are important to the employee and contributes positively to their well-being, facilitating expeditious adjustment to environmental stressors (Dewe et al., 2012). CTSDL considers benefit appraisals and the conservation of resources as rational because of its voluntary or participatory nature. In effect, CT can become a motivating mechanism for preparedness and job security.

Job roles previously perceived as "secure" are now more insecure and likely to be appraised as potentially threatening (e.g., loss of income, loss of job, and security). For example, in 2017 Amazon purchased Whole Foods Grocery Stores and rumors swirled around the notion that 100,000 workers could be impacted (lose their jobs) and displaced by automated check-out lanes (Thomas, 2017; Wilkie, 2017). Similarly, Uber recently fostered the perception of global stress amongst taxi drivers who rushed to redesign their job roles by incorporating new technologies. Uber did not stop there, as they are now aiming to begin releasing automated cars to the chagrin of the independent contractors now driving "taxis" for the company (Kanto, 2017). Aviation workers are under the same distress because of Uber's air taxis being tested in Los Angeles for commercial release (bloomberg.com, 2017; Kanto, 2017). CTSDL can provide reasonable answers to these new environmental job demands by multi-skilling these employees and therefore making them better prepared for adaptive change. However, this is still not a simple fix because HRM/D forecasting is limited by organizational need and the notion that every employee may not fit into new or available job roles so easily.

Employees will be able to use CTSDL as a resource, helping them to preserve and enhance that which matters most; their careers and quality of life, through additional job security. Cross-training allows employees to become more resourceful in conserving and improving their quality of life by stabilizing and broadening their ability to maintain or transition newly acquired skills across jobs in times of

organizational change and crises (Abrams & Berge, 2010). Therefore, quality of life and job security to maintain it are considered resources. CTSDL will potentially provide employees the ability to navigate and adjust to the use of new technologies, new and present job demands, and life's increasing challenges.

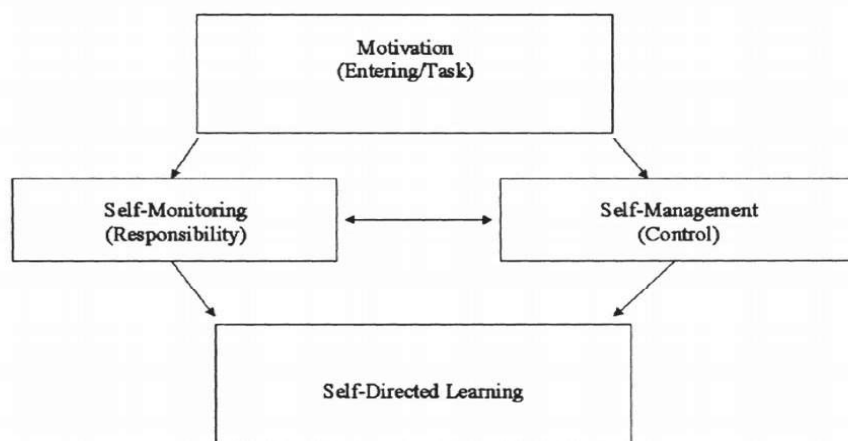
SDL, COR, and Opportunity

As a tenet of CTSDL, SDL is imperative to review for its relevance to psychological concepts like COR. Knowles (1975) proclaimed SDL as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (Karakas & Manisaligil, 2012). In contrast, COR emphasizes the outcomes of learning new skills and the ease in achieving the learning goals through human and material means.

Considering COR and SDL, resources are quite relevant to employees' personal values or importance of achievement (Dewe et al., 2012). Importance of achievement is key to the appraisal of the learning process, especially in SDL. Arguably, in COR there is more focus on resource losses (negative appraisals) than resource gains (positive appraisals) because of the perceived lack of preventative resources; rendering employees' negative work experiences threatening to their ability to survive, achieve, and thrive in the workplace (Dewe et al., 2012). However, resource losses, as well as gains, are aligned with CTSDL because they both are concerned with preserving jobs and careers, creating new social contracts (potential lifelong employees and learners), and contributing to an employee's development and overall level of well-being (Dewe et al., 2012; Friedman, 2016).

Garrison's (1997) model of SDL makes salient numerous appraisals of harm/loss and gain. We employ the Garrison SDL model, displayed in Figure 1, and Spear (1988) and Tough's (1971) SDL models to close the gaps in our understanding of how stress is related to SDL. The Garrison SDL model is a multidimensional interactive model, integrating three cognitive areas: self-management (contextual control), self-monitoring (cognitive responsibility) and motivation(al) (entering/task) (Garrison, 1997).

FIGURE 1
GARRISON' DIMENSIONS OF SELF-DIRECTED LEARNING MODEL



Adapted from "Self-directed learning: Toward a comprehensive model" by Garrison, D. R., 1997, *Adult Education Quarterly*, 48, 22. Copyright 1997 by *Adult Education Quarterly*

Garrison's entering/task motivation invokes Tough's (1971) SDL model; detecting barriers to learning and the need for control (Garrison, 1997). Moreover, employees' appraisal of harm/loss or benefit (gain) is considered throughout the employee's development and learning process. The onus of achieving becomes a personal matter to the employee and is no longer a threatening barrier or negative

perception of the organization; instead, it motivates advancement. Understandably, the employee must consider their resources (self and organizational) to enter and complete the learning task; making themselves readily prepared and available for promotional opportunities. Through CTSDL, employees can focus on both harm/loss appraisals (What opportunities have been lost [poor job evaluations, failure to be promoted or disapprovals by management]?) and benefit appraisals (What opportunities can be gained [raises, good job evaluations, preparedness for promotion, job security and career advancement]?) (Lazarus, 1995).

Opportunity is essential to the Spear (1988) SDL model, which rests on three elements: (a) the learning opportunities employees find in their work environments, (b) past or new knowledge, and (c) chance occurrences. Engaging in CTSDL will increase learning opportunities and new knowledge, and support more chance occurrences for employees to learn and develop. Implementing policies that make succession planning a fair career development process and creating career counseling opportunities based on employee need (aspirations), problem-focused coping strategies and job forecasting would support the employee development process.

Through these organizational shifts in policy, CTSDL provides HRM/D professionals opportunities to counsel employees and positively shape their perceptions of the work environment, themselves, their aspirations and career opportunities within the organization. CTSDL can provide navigational routes to accomplish these goals; using career development and technological learning solutions, like MOOCs. MOOCs are a great resource to employees and organizations, useful to HRM/D professionals in creating skill-varying SDL projects (SDLP). Our modern understanding of the SDLP concept is based upon Tough's (1971) seminal work (Artis & Harris, 2007).

The SDLP term is conceptualized as a central unit of analysis for much of the self-directed learning research and, for the purposes of this research, is interchangeable with SDL (Fleming, Artis, & Harris, 2012). SDLPs are deliberate, related (associated), and identifiable learning episodes (Artis & Harris, 2007). SDLPs are designed for employees to gain specific knowledge and skill or produce a lasting change in the person (Artis & Harris, 2007). By using MOOCs in collaboration with traditional proprietary LMSs to create SDLPs, for example, HRM/D professionals can improve employees' perceptions of control. Further, by having the option to select from a wider range of viable job opportunities and having more career decision latitude, employees feel more a part of the selection process. This joint individual-organizational action allowing employees to take responsibility and control over their learning and development supports learning of course, but also retaining and developing current employees because they become less likely to search elsewhere to fulfill career aspirations.

There were four types of SDLPs (induced, synergistic, voluntary, and scanning) proposed by Clardy (2000) that describe the initiator of the project and the learning involved. The fourth type, induced SDLP, is involuntary (required by the firm) and lacks employee control; therefore, it is not conducive to the CTSDL model (Fleming, Artis, & Harris, 2012). Perceived control and skill acquisition through CT- and SDL-related activities increase employees' self-efficacy and are most applicable to the CTSDL stress and career counseling program through the three remaining types of SDLPs (Abrams & Berge, 2010; Fleming et al., 2012; Garrison, 1997).

1. Synergetic - SDLPs are projects considered "gateway opportunities" and the educational materials are provided by the organization, but the employee chooses whether to participate and decides what to study (Fleming et al., 2012). A synergetic SDL project is most useful when employees are aware of what knowledge is needed, but do not know how or where best to find the information. The synergetic type of SDLPs may serve employees that are performance driven because only the employee assesses the learning (Fleming et al., 2012).
2. Voluntary - SDLPs are entirely enacted by employees and occur when workers know what knowledge is needed, where to find the necessary information, and how to evaluate what they learned (Fleming et al., 2012). For instance, the voluntary SDLP type may be most useful for an employee looking to gain a relative skill that enhances their performance, broadens their CV (curriculum vitae) or resume, and increases chance opportunities for promotion.

3. Scanning - SDLPs are ideal for both the organization and employee because they embody extended psychological contracts between both parties. Scanning projects are ongoing SDLPs with no predetermined end (Fleming et al., 2012) are most beneficial for employees seeking longer tenure and stability or climbing the corporate ladder within their organization. Each of three types of SDLPs accords the employee better perceived control over their learning and career development processes, improves their self-efficacy, and fosters their career pathing within the workplace.

SDL, Self-Efficacy and Control

Social cognitive theory (SCT) has sponsored wide-ranging programs of research with special focus on the role played by self-efficacy in occupational choice and preparation (i.e., career decision-making) (Bandura & Locke, 2003). Self-efficacy refers to one's estimates of one's fundamental abilities to meet environmental challenges, cope and perform successfully in a specific task domain, and plays a major role in mediating performance and reducing stress (Bandura & Locke; 2003; Fox & Spector 2006; Judge & Bono 2001). Five of the major findings from the SCT and SCCT (Social Cognitive Career Theory) body of research include:

1. The higher the perceived self-efficacy to fulfill educational (training) requirements and occupational roles is,
2. The wider the career options are that employees must consider pursuing,
3. The greater the interest they will have in them,
4. The better they will prepare themselves educationally for them,
5. The greater staying power they will have in meeting challenging career pursuits (Bandura & Locke 2003; Lent, Brown & Hackett, 2002).

Lazarus' (1991) threat and challenge appraisal comes to mind when an employee perceives the potential of not being promoted as a threat (an appraisal of harm that has not happened yet). A CTSDL intervention can shape the appraisal of career concerns as challenges, rather than threats. Therefore, CTSDL provides conditions of high demand in which the emphasis is on mastering demands, overcoming obstacles and growing employees' own competencies. CTSDL affords HRM/D professionals positive appraisal-shaping opportunities during career counseling sessions that foster positive perceptual control. The control people possess or believe to possess is a central variable in many models and theories of human behavior inside the workplace (Fox & Spector, 2006). Control (autonomy) is an environmental variable, a perception of that environment, or as a personality variable (locus of control) and relates to an employee's attitude, emotions, health, motivation and behavior (Fox & Spector, 2006).

CTSDL creates a strategic partnership between HRM/D professionals and employees through guided SDLPs, potentially providing appropriately balanced control (objective or contextual) between the organization and employee. Subsequently, these partnerships and guided SDLPs will foster all-too-often stressed employees much needed perceived control over their own time, learning, achievement standards and goals. Lazarus (1995) suggests people's appraisal of their abilities to meet environmental challenges (e.g., advancing in career) may motivate behavior that will reduce negative feelings (fright, anger, hopelessness, low efficacy) and enhance positive feelings (Dewe et al., 2012; Fox & Spector, 2006). SDLPs can be excellent vehicles for cross-training or multi-skilling the workforce; conceivably reducing employee stress and making employees more efficacious about their learning, development and career progression. SDL(Ps) create perceptions of positive opportunities and self-appraisals for learning and achievement (Garrison, 1997).

Organizational Social Support and the Job Demands-Control-Support Model

To effectively create a CTSDL stress reducing and career counseling intervention, we must consider the need for organizational support. The JDCS model as proposed by Johnson Hall and Karasek and Theorell is an expansion on Karasek's (1979) Job Demands Control model that uses discretion as a synonym for control (Dewe et al., 2012). Contextually, using the acronym JDCS: (JD) job demands = skills needed to feel prepared for promotion, better performance or organizational change, (C) Control =

Garrison's (1997) and Tough's (1971) SDL(Ps) provides contextual or perceived control and (S) Support = the support that HRM/D professionals (the organization) commits to the individual by proactively scheduling cognitive coping strategy or career counseling session opportunities.

JDCS suggests the beneficial effects of control will be further enhanced when the individual receives social support (either practical or emotional) from coworkers or supervisors, which serves to alleviate potentially debilitating job stress (Dewe et al., 2012). This concept draws from elements of both humanistic and positive psychology (van der Hek & Pomp, 1997). CTSDL achieves organizational support through offering career counseling sessions (secondary level interventions) to employees that present the employee with *restructuring strategies* aimed at reducing stress and *coping skills strategies* aimed at improving skills and competencies to meet the demands of job roles (current and future; van der Hek & Pomp, 1997).

The career counseling session is not a standalone component of CTSDL; these sessions should be used in conjunction with SDLPs that are created from information gleaned from performance reviews and jointly developed (with HRM/D professional) career goals. The counseling session should be augmented also by personality trait and SDL measures. Theories, such as Costa and McCrae's (1989) Big Five and Holland's (1990) Vocational Choice, Tough's (1971) SDL, and Lent et al.'s (2002) SCCT theories should be consulted to inform goal setting related to stress and fear reduction, performance improvement and career advancement. Career counseling opportunities would aid HRM/D professionals and employees in making the best-informed decisions that match the resources needed in pursuit of employees' career goals. The career counseling session exemplifies Meichenbaum stress inoculation training, which groups educating through discussion methods to align both work and personal values, like achievement, with strategic and tactical goal settings (Leka & Houdmount, 2010; van der Hek & Pomp, 1997).

Career counseling sessions allows organizational leaders to participate in continuous positive and proactive engagement with employees, at all levels (van der Hek & Pomp, 1997). Leaders can promote the choice of additional support targeted at the individual-organizational interface level in two ways:

1. Social support groups, where employees in similar positions meet to solve common problems, support each other and improve skills (van der Hek & Pomp, 1997). This may be essential for employees that struggle with the concepts or skills being acquired via their selectively approved resources.
2. Expanded social support, which is a network of colleagues that are tenured and more experienced in the specified domain of interest. ESS is equivalent to individual on-the-job training, mentoring, or apprenticeships; guided, scheduled and approved by an HRM/D professional to enhance achievement.

The implications related to organizations supporting CTSDL for their employees is profound. Employees will refine current and/or acquire new skills (through cross-training or multi-skilling) by exercising control and self-directing their learning through a collaborative formalized SDLP, creating greater social support from their organization. HRM/D practitioners need to take more proactive approaches to succession planning, especially when actively recruiting in global and high attrition organizations (Luthans, Kemmerer, Paul, & Taylor, 2016). The JDCS instrument can also be an essential tool in redesigning the HRM/D job role and task characteristics by identifying skill variety, task identity, task significance, autonomy, feedback from the job itself, and feedback from employees, management and colleagues (Luthans et al., 2016).

FUTURE IMPLICATIONS

Although research suggests that CTSDL improves an employee's perceived control and efficacy, thereby moderating the worry employees experience from career concern stressors, additional research is required. Phenomenological research should be designed and implemented that gets at the experience and meaning of CTSDL to employees. Based upon what we learn from the phenomenological research, a more comprehensive model could be developed that informs how CTSDL should be implemented and the results that should be expected (e.g., less voluntary turnover). The model should then be tested and the

research replicated in organization settings internationally. Gender, ethnicity, personality trait, career stage, job type, and industry differences should be explored as well. Studies also need to be conducted that examine the link between perceived efficacy, perceived control, stress and fear and how they uniquely and in combination predict learning, performance and turnover. Finally, experimental research needs to be conducted to authenticate the efficacy of CTSDL program interventions.

CONCLUSIONS

Using the Tough (1971), Spear (1988) and Garrison (1997) models of SDL, we can see the need to minimize organizational barriers to learning and development and achievement. One organizational means to doing so would be through the use of a structured and systematic CTSDL career counseling program that integrates stress coping techniques. Thus, CTSDL is potentially a stress reducing and career counseling intervention, employing the use of modern technologies to target all levels of the organization and improve employee self-efficacy, perceived control and social support. Although beneficial to employees, the organization indeed shares in the benefits because CTSDL increases employee multi-skill and career development and decreases employee stress that can lead to uncivil behaviors, and costly performance decrements, absenteeism, and turnover.

CTSDL also benefits management because it supports redesigning the HRM/D professional job function in hopes of effectively reducing the stress they feel from recruiting, hiring, training, and retention, as well as succession management and planning efforts. An accurate measure of CTSDL's effectiveness is still under-researched, as well as its true utility. The stress literature indicates that CTSDL can enhance learning, career development and advancement within organizations through enhancing skills that make employees feel prepared to meet the challenges of today's workplaces, and reducing stress and fear through creating more promotional opportunity occurrences (i.e., designed and chance) that improve the fit the employee feels with their respective jobs and organization. Cross-training and SDL therefore lead to the perceptions of preparedness and fit that enhance the employee general well-being that can reduce the likelihood of voluntary turnover.

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