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Preface

As the pace of globalization and the need for international understanding increases, this issue opens with a paper that explores the historical development of the concept of self-directed learning in Italy through the eyes of Chiara Biasin, of the Facoltà di Scienze della Formazione (Faculty of Education and Training), Padova University, Italy. She begins with a helpful discussion of the commonalitites and differences of the terms *self-directed learning* and *autoformazione* and traces shifts in their meaning as well as the expansion in educational emphasis from a narrower focus on assisting children to become self-directed learners to a broader concern with self-development of the whole person throughout the lifespan.

Kenneth Muller expands our horizons in the psychological realm, examining correlations of readiness for self-directed learning and emotional intelligence among managers in a nonprofit medical system. He also explores interrelationships between these constructs, degree of change in the work, and degree of problem solving needed. Also exploring connections, but through a literature review rather than a statistical approach, Jonathan Taylor gathers information on fostering self-directed learning and transformative learning. He then presents commonalities between the two and poses questions for the field based on his findings.

Peter Zsiga explores the relationship between self-directed learning readiness and leader effectiveness among directors of a large U.S. nonprofit and examines a variety of variables for possible moderating effects. Finally, two Malaysian researchers, Nik Azida Abd. Ghani and Tengku Ahmad Badrul Shah Raja Hussin examine the antecedents of psychological empowerment and the influence of these antecedents and psychological empowerment on innovative behavior: "When [faculty in higher education institutions] view their work environment as providing opportunities for, rather than constraints on, individual behavior, they feel empowered, and opportunities for self-directed learning and individual initiatives are enhanced." They identify four dimensions of psychological empowerment: meaning, competence, autonomy, and impact, revealing links worthy of further research.

Lucy M. Guglielmino and Huey B. Long, Editors

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CONTENTS

SELF-DIRECTED LEARNING IN ITALY: PROBLEMS AND POSSIBILITIES

Chiara Biasin

This article presents the evolution of the idea of self-directed learning in Italy through three major phases, beginning with its socio-historical roots in childhood education and its identification with the concept of self–education in a scholastic context throughout most of the twentieth century. At the end of the twentieth century, during a phase of about twenty years, self-directed learning became identified with techniques of self-instruction for adults unable to complete a regular course of studies. Today, self-directed learning emerges as the most significant issue in rethinking adult education in the perspective of lifelong and lifewide learning. Italian usage of the term self-directed learning represents two main concepts: the cognitive task, in reference to the mental processes used by adults to direct their own learning and the evolutionary task, centered on projects of individual growth or professional development brought to birth in the first person by the adult self.

In Italy self-directed learning is a topic of great impact encompassing the interests of many areas of study, especially the educational sciences, with their emphasis on the importance of autonomy and individual responsibility in adult education. This historical-philosophical essay concerns the fundamental aspects and phases of self-directed learning in Italian educational culture. The aim is to offer a picture of the recent developments in self-directed learning in Italy in order to promote a critical discussion that might contribute to delineating a larger and more complex perspective within the international debate on the subject.

Self-directed learning has its semantic correspondent in the Italian word *Autoformazione*. The two concepts are only partially equivalent, coming as they do from different social and cultural milieus and originating from differing theories. In general, the ideas of self-directed learning and *Autoformazione* share a common focus on the power of individuals to be the authors of their own educational projects and to be responsible for their own learning, but the development of the concept has taken different paths in Italy and in English-speaking countries. In English speaking areas since the 1960's, self-directed learning has been explored with an attempt to identify the broad range of theories, models and applications in education and training that contribute to the development of this specific field of study (Brockett & Hiemstra, 1991; Candy, 1991; Guglielmino, Long, & Hiemstra, 2004; Knowles, 1975; Merriam & Caffarella, 1999). In Italy, the concept has had a very different scientific and cultural development. Until the end of the 1960's, self-directed learning was considered synonymous with self-education and was viewed as the end result of the process of scholastic

education. In the last ten years, self-directed learning has emerged as the principal means of rethinking adult education as well as professional training and lifelong learning because it suggests an approach different from the widespread habit of using standard educational packages for adults in organizational and vocational training situations (Quaglino, 2004). In Italy today, self-directed learning includes two principal trends. One primary direction of meaning focuses its attention on the processes and the strategies that allow adults to direct and personalize their own learning. A second line of thought refers to the wider process of life growth or professional development pursued by an adult. The semantic configurations agree in defining the idea of individual autonomy as a required strategic competence in the face of the continuous change, technological division, and globalization typical of contemporary societies and cultures. A proficient and active lifelong learning ability - with a conscious responsibility in making choices and organizing a personal or professional educational project - is not negotiable. For this reason this topic is receiving major scientific interest and new methodological interpretations both in the United States and Italy.

IN THE BEGINNING WAS SELF-EDUCATION

The concept of self-directed learning in Italy has its roots in the Italian educational culture of the early 1900's. It was included in the idea of self-education (*Autoeducazione*), with which it became synonymous. Both concepts referred to the highest moment of the educational process whereby the student has become independent from the teacher. Both concepts denoted the end result of a scholastic path, and were presented as the ideal goal toward which a child must aim. Self-directed learning as self-education became utilized according to this interpretation by the two main authors of educational theory at that time, Maria Montessori (1916/1962) and Giovanni Gentile (1912/1942). These two writers, though coming from diverse perspectives on pedagogy, neo-positivism and neo-idealism, each placed the concept within childhood education.

These were the two main driving thoughts in Italian education until the second half of the 20th century (Cambi, 2005). In both theories, self-directed learning is closely connected to the philosophical system. Naturalism for Montessori (1916/1962) and spiritualism for Gentile (1912/1942) are the perspectives through which their theories, their practices and their methods of self-directed learning are defined. In many ways, these two philosophies are based on anthropological and educational views so different they are incompatible; yet they did converge in the notion of a child being activated by didactic materials (Montessori) or by a relationship with a teacher (Gentile). In both philosophies the true protagonist remains the teacher, the one who supports or directs the child's education and utilizes the idea of self-education as a possible future target or an ideal outcome (Biasin, 2008).

In these two foundational theories the meaning of self-directed learning is very different: Montessori (1916/1962) focuses mainly on its creative nature; Gentile (1912/1942) identifies it with the absolute spirit. Still, in both theories the significance of self-directed learning emerges, being proposed as the leading edge of a larger scenario: a renewal of education intended to reconfigure the Italian culture and society of that time. For Maria Montessori (1870-1952), self-directed learning is based on nature. This educational model influenced

both Italy and the United States, finding its American implementation in Dewey's pragmatism.

After becoming the first woman to graduate in Italy as a medical doctor in 1896, in the early 1900's Montessori (1916/1962) re-founded educational theory as a science according to the neo-positivistic approach in Italy. For her, self-directed learning represents the milestone, the highest form of human education. She accepts freedom as the primary tenet of the psychology and physiology of continuous development because it is the only instrument of nature as a creator (*natura creatrice).* She does not refer to the concept of self-actualization that the psychology of Maslow (1943) and Rogers (1973) reflect; Montessori talks about an interior tendency to allow our lives to function freely that manifests itself in the development of our unique selves.

These concepts of respect of the individual nature and support for the free personal growth written into everyone at the moment of creation are in consonance with the theoretical thought and teaching of the 18th century enlightenment philosopher Jean Jacques Rousseau. The child, according to Montessori (1916/1962), must be left free to initiate the work of the creation of oneself as a free human being (*uomo nuovo)* (p. 21). Montessori stirred up a strong critique of education in her times, an education based on social rules predetermined by traditions and employed to make children into imitation adults. In *L'Autoeducazione nelle scuole elementari*, first published in 1916, Montessori claimed the rights of a child to self-education, and she diminished the role of the educator, who was no longer responsible for the results of education but must prepare and organize the tools corresponding to the primary impulse (*impulso primario)* that naturally pushes children to search for and to reveal their personal interior form (*forma interiore*). Montessori's words imply that the adult does not force nor trouble a child's development but is there to go with them, creating a milieu that will support their games and their self-directed lessons. This approach is not abandonment, nor does it leave the educational process to chance or accident. Montessori's central strategy is to respect the vital force of the child; it requires a scientific and experimental training of teachers and a focused psychological study of each child's evolution so stimulation with external tools will serve as a ladder that, from step to step, helps the child to climb. The self-directed work that each child must do - by oneself and for oneself - suggests an evolutionary, upward and improving vision of human development that Montessori compares metaphorically to an upside-down cone. In her educational theory, this process of working from inside to outside reveals what is already and originally engraved in every person by the creative action of nature.

The meaning of self-directed learning in the theory of the neo-idealistic Giovanni Gentile (1875-1944) is quite different. This Italian philosopher exerted a strong influence on Italian education because his educational theory inspired the 1923 fascist school reform, and some principles and practices of this Riforma Gentile endured in Italy's school system until the 1990's. The writer of *Sommario di Pedagogia come Scienza Filosofica* (1912-1913/1942) links his educational thought to the philosophy of Hegel, whose idealism renewed European culture, in particular the art and literature of Romanticism. From Hegel's viewpoint, philosophy is the principal science because it is the expression of the spirit and of the divine, and so allows the human to be in contact with the absolute, to which we intrinsically aspire

and without which human life would have no sense or value.

Gentile (1912/1942) develops this idea by stating that philosophy of education orients the human toward the spirit (Carlini, 1958). For Gentile, human formation does not have to aim toward any physical, material, historical or vocational qualifications; but it must promote the vocation of the soul to realize itself according to its superior nature. Here the aim of self-education is the consciousness of oneself as spirit, educational homework that lasts a lifetime. Gentile requires the direct intervention of an educator who is obliged to insert herself or himself into the student's interior development process; the necessity is to lead the child, through the spiritual communion shaped in the educational relationship, to attain his or her true form. Gentile's spiritualism considers self-directed learning as the highest achievement of self-education; perhaps not completely attainable, but judged indispensable. The teacher's direct action on the child's soul works as a guide for forming the child's character, mind, and will in order to affirm his or her "true" education, which manifests from the absolute spirit (Carlini, 1958).

From these two paths of thought we can infer that the idea of self-directed learning was incorporated into the scholastic culture of Italy and applied to the education of children. In the neo-positivistic version of Montessori (1916/1962), as in the neo-idealistic version of Gentile (1912/1942), the prior perspective of interpretation was philosophical. In both cases, self-directed learning is proposed as the goal of education.

SELF-DIRECTED LEARNING AND ADULT EDUCATION

Until the second half of the last century, the two main trends of the Italian educational thought identify the concept of self-directed learning with the concept of self-education. In a philosophical perspective, either the neo-positivism of Montessori (1916/1962) or the neo-idealism of Gentile(1912/1942), this idea belongs to the field of scholastic and infancy education. A significant shift of the interpretative horizon registers between the 1970's and the 1990's; during these two decades, a new paradigm emerges that proposes a different conceptualization of education, no more centered on a philosophical vision. The new approach dissociates itself from the philosophy of Gentile, which is strongly criticized, and orients itself toward an interdisciplinary and scientific direction.

The passage from the philosophic educational theory to the educational sciences develops in the cultural frame of the debate about method, about epistemology, and about the theory of systems. In Italy, the works of Popper (1970) and Kuhn (1978) are published, and they have a capital importance in this transition; the divulgation of the French pattern of educational sciences of Mialaret (1978) contributes to the affirmation in Italy of a scientific model that studies education according to a pleuridisciplinary encyclopedia (Visalberghi, 1978).

In this context, the concept of self-directed learning shifts in the frame of the processes of instruction and learning of educational science. This new alignment implies a split with the philosophical roots of self-education and a change of the contexts of use; self-directed learning becomes precise at the didactical and methodological level as a studying and

learning technique of the scholastic curricula, more or less supported by the use of audiovisual and technological instruments.

Laeng (1989) argued that in the *Enciclopedia Pedagogica,* one of the main semantic and communicative reference instruments issued at the end of the 1980's, it is possible to observe the shift of the conceptual field from the philosophy of education to self-instruction; in other words, to the capacity of using the tools and resources for self-paced learning. In this scenario, self-directed learning is transferred from the domain of scholastic infancy instruction to the field of adult learning; however, in this applicative extension, it takes a negative sense. It is given a compensative and reparative meaning, associated with people unable to complete a regular course of studies. This is a devaluing vision that aligns self-directed learning with achievement of literacy and numeracy or that tends to limit it to the practices of adults who, in order to emancipate themselves from a marginal socio-cultural condition, take low-level professional qualification courses. In contrast with its philosophical roots, self-directed learning during this period is identified with solitary learning even in extra-scholastic contexts; it is reduced to simple study contents for adults developed at a basic informational level, without requiring a reflective or meta-cognitive elaboration on subjects (informatics, Italian language, foreign language, economics).

TOWARD A WIDER PERSPECTIVE

A radical shift in the vision of self-directed learning happened, in Italy, between the 1990's of the last century and the beginning of the new millennium. At the base of this change of perspective there is the rethinking of the idea of adulthood as the definitive attainment of stability, maturity, and fullness (Demetrio, 1999; Demetrio & Alberici, 2004). Adulthood came to be seen instead as a dynamic existential and psychological condition, reflecting the need to learn, adapt and change throughout the lifespan (Demetrio, 2003). Put in the frame of this paradigm, self-directed learning concerns the adult instead of the child; and it no longer concerns only the maintenance or the acquisition of basic knowledge; it opens to a perspective of wider development and learning that pervades all the life domains: socio-relational, personal, professional. It is seen as the emblematic idea of educational continuity that is at the basis of the intentional effort of adults to keep and strengthen their own identities, to direct their own learning and, toward a wider perspective, their own formation (*Autoformazione*).

Two factors are responsible for this paradigm change. One primary aspect is the diffusion of the psycho-educational literature and of the international research on meta-cognition and constructivism. The Italian translations of some classic texts on adult education, such as those of Knowles (1996) and Mezirow (2003), as well as translations of books on organizational science by Argyris and Schön (1998) constitute a significant contribution to the paradigm change. This is a new vision – reflective, active, critical and constructive – that offers a different point of view from which to conceive the adult process of learning and of formation, focussing directly on the person, the direct actor according to the psycho-cognitive, social and existential views. For instance, the writings of Knowles (1996), diffused in Italy more than twenty years after their publication in the United States, have profoundly

modified the Italian approach to professional development, but this delay in publication determined the slowness of the penetration of the topic of self-directed learning in the Italian culture. Works of other important authors such as Long, Hiemstra, and Brockett were never translated in Italy, compromising the development of this sector of research. To prove this point, in the catalogue of Italian books for sale, there are to date less than 15 publications on self-direction in adult learning.

The second factor behind the paradigm change is the educational and cultural politics of the European Union, which give a central role to the idea of educability in the paradigm of lifelong learning for promoting a learning society. The *Memorandum on Instruction and Lifelong Learning* (CCE, 2000) defines a European model of social and cultural development founded on lifelong learning that has repercussions on many fronts–on scholastic approaches, on active citizenship, on professional and everyday life. In particular, the new architecture of the European formative system refers to an idea of the adult self-directed learner, able to pursue his/her own project of growing and learning in order to face the fast changes of either the socio-cultural reality or existential difficulties. Formal learning is connected, as a continuum, to non-formal and informal learning, creating a global formative process that permeates every level of existence and of the adult world, characterized by autonomy and freedom in learning.

In Italy, this European publication is a turning point in theory, in practice, and in national politics of adult development and vocational or continuing training; self-directed learning has now the traits of a positive attitude of consciousness and internal control that the adult implements in relation to his/her knowledge. Self-directed learning becomes a way of being and of living, an educative posture that pervades one's existence as a whole.

LEARNING BY ONESELF AND FOR ONESELF

In the domains of adult education and continuing professional education, the Italian debate on self-directed learning is increasing; even so, a larger literature on the subject does not yet exist in Italy. Some trends in research were developed based on the idea of responsibility and autonomy in adult education, focusing on the freedom and the power of individuals to choose and to direct their own learning. Self-directed learning assumes the characteristics of an intentional project in humanization of the self and coincides with the realization, still growing, of lifelong evolving, orienting, and transforming (Grimaldi & Quaglino, 2004).

In the most recent debate, self-directed learning is associated with the concept of self-management; and, recovering an idea from the psychology of Rogers (1973), with the idea of self-actualization. It is aligned with the educational theory of learning by oneself and for oneself, always contextualized in the specific confines of individual and social existence, through which its applicative value is brought to light: the life of each day, the professional context, the psychological dimension of individual well-being, the world of interpersonal relations, the participation in social affairs (Demetrio, 1999; Fontana, 2004).

The philosophical approaches of the past, both the neo-positivistic model of Montessori

(1962) and the neo-idealistic model of Gentile (1942), have been definitively overturned; today a paradigm with a strong psycho-social character prevails. Today's paradigm reflects particular attention to the psychological processes of self-control, self-direction, self-reflection and motivation as applied in scholastic and organizational domains. Still lacking is a specific and settled epistemological reflection on the topic (Pineau, 2006) that could bring together in a theoretical synthesis contributions arriving from diverse subject environments that share the themes of individual autonomy and responsibility in the matters of each individual's own learning and the planning of their own self-formation.

One problem is that the psychological studies, especially ones with a cognitive and constructivist orientation, look at self-directed learning as an applicative aspect of research on motivation or self-efficacy, which fails to give the topic enough room for deepening discussion. Also, in studies of adult education, self-directed learning tends to be viewed in a generic way or criticized because of its identification with a pedagogic individualism that disrupts the role of the teacher/educator. In the educational culture of Italy, then, the idea of self-directed learning shows strong signs of change as compared to its past. At this moment the idea is very permeable, and open to greater international debate. Self-directed learning is an open concept in which we can find traits from elements of traditional learning, elaborations of new meaning, and contaminations with knowledge from different frames, especially from the Anglo-American and Francophone areas.

The attempt to build a foundational model in order to configure the different perspectives in self-directed learning focuses the Italian research towards a unified paradigm centered on the adult and his/her autonomy project in lifelong/lifewide learning (Biasin, 2009). From this core, in the Italian debate, there are two main lines of thought. A first thematic trend focuses specifically on the cognitive and meta-cognitive processes of the individual. This emerging focus brings the Italian idea of *Autoformazione* nearly parallel to the idea of self-directed learning as presented in the dominant lines (particularly North American) of the international debate. The development of the capacity for self-regulation and the process of self-determination in learning is being examined in specific themes relative to the processes of controlling direction, intrinsic motivation, self-evaluation, and intentionality of action. The autonomous ability to manage the learning process is connected to the broader capacity of perceiving one's self as the source of one's own decisions and actions (Pellerey, 2006).

The emphasis is put on the relation between the meta-cognitive processes of the individual and the implications of these processes for personal growth on many levels, not only the cognitive one. In this formulation, the autonomy of the learning process is put into action not as a technique to know more or know better, but manifests as consciousness of one's own expectations and perspectives on the different contexts of life (Quaglino, 2004). In this way self-directed learning implies also the capacity of the individual to know how to interact with various levels of influence and in various environments (socio-relational, scholastic, professional) to gain advantages in terms of positive and constructive personal growth. The outcome of this approach to study shows an interesting educational emphasis; this educational element is the determinant impeding or assisting the development of the individual capacity for self-determination in learning, and more generally, in life itself.

This interpretation shows similar characteristics to the second line of research, which in Italy finds a large consensus, above all in the organizational field and in vocational/continuous training. In this case self-directed learning distinguishes precisely the cognitive tasks of learning from the developmental aspects tied to confronting the challenges of life: individual, social and professional (Baldassarre & Bonani, 2004; Baldi, 2005). Concentrating on this second aspect, the definition of self-directed learning shifts neatly to the new general vision of adult education as training for (everyday) life. Autonomy and responsibility, still conceived as central in the learning process, are used in pursuing a more comprehensive development of the individual, conceived as self, in the quest for identity/identities.

The point of view of the individual becomes developed in the existential and vital outcomes of focus on the interior processes of the quest for self, of profound consciousness, of the improvement and care of the self. Self-directed learning is characterized, therefore, as a proper self-formation of the person and is practiced within social and organizational contexts putting vital transformations into focus within a perspective of change.

The quest for individual identity/identities in a life course perspective made possible by this existential self-directed learning is open to the viewpoint of the community of practices, open to the perspective of sharing experience, of life history and of the social network, not closed and isolated from others. A specific attention in the studies of this field is reserved to the facilitators and to their role of accompanying and supporting the adult, through instruments, technologies, and effective and personalized relationships.

CONCLUSIONS

The Italian discussion on self-directed learning today presents many streams of confluence joining the larger currents of the international debate, showing significant links with other important studies on self-direction in learning (Carré 2005; Long, 2007; Guglielmino 2008) and with the themes of the French-speaking and Canadian research focusing on socio-existential aspects (Carré & Moisan, 2002; Dumazedier, 2002; Tremblay, 2003; Pineau, 2006).

The principal tendencies of Italian research now reject the philosophical-educational matrix of self-education begun early in the last century and are now characterized by a common interpretive frame of a psycho-social type. In Italy the concept of self-directed learning is focused on the meta-cognitive aspects of learning and now also extends to more general processes that, united by a goal of reflection and consciousness, (emotional, social, relational, etc...) allow a course of continual adult growth (Biasin, 2008). Self-directed learning is oriented toward the process of development in the adult aiming to gain access to better existential conditions. More than a technique of learning, self-directed learning is seen as a process of education/formation that the individual follows for himself and herself, a process that can lift the resources of learning into effective partnerships.

In this sense, self-directed learning in Italy presents an educative theme proposed as the acquisition of a proper self-formative and self-reflective attitude in the adult (Biasin, 2009).

Rather than suggesting the use of specific materials, it develops as a process based on the adult; on one-self model; on the intentionality of the goals/projects; and, finally, on an open setting, methodologically situated between the knowledge of oneself (critical) and the care of oneself (clinical) (Quaglino, 2004). The goal is to define one's own existential priorities, to attain a larger consciousness of one's self, and to direct one's own learning.

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SELF-DIRECTED LEARNING AND EMOTIONAL INTELLIGENCE: INTERRELATIONSHIPS BETWEEN THE TWO CONSTRUCTS, CHANGE AND PROBLEM SOLVING

Kenneth E. Muller

An investigation into relationships between self-directed learning and emotional intelligence in healthcare managers surveyed using the *Learning Preference Assessment* and the *Emotional Quotient Inventory* revealed a strong positive association between the constructs of self-directed learning and emotional intelligence ($r = .59$, $p < .05$). Significant interrelationships were also found between the constructs, change in the job, and level of problem solving ability needed by the individual.

The healthcare industry is undergoing rapid and varied change; supervisors and managers must consistently seek out ways to maintain efficiently functioning organizations and remain abreast of ongoing trends and potential changes. The healthcare manager of today is faced with a juggling act of controlling costs while striving to provide high quality care with the most current technology available; and, at the same time, focusing on an atmosphere that fosters employee growth and development.

The shortage of health care workers has reached crisis levels. This crisis is only exacerbated by the aging population of baby boomers and the increased demand for services. Herman, Olivo, and Gioia (2003) report,

> Looking at the problems in the industry, fewer young people are encouraged to enter healthcare professions. In fact, 40 percent of nurses surveyed in 2001 by the American Nurses Association would not feel comfortable having their loved ones cared for in a facility where they worked. Almost 55 percent of nurses surveyed actively discourage people from entering the field and 55 percent would not recommend healthcare as a career choice. The attitude is disheartening, when we remember that the best recruiters are usually your own employees. (p. 149)

Since the successful completion of undergraduate and graduate degrees as well as completion of credentialing exams is a job requirement, the manager of today is assumed to have the minimal level of competence needed to survive. However, in today's healthcare arena, cognitive intelligence and achievement are no longer adequate. The rules have changed because managers are now being judged not only on training and expertise, but increasingly on how they handle themselves and others in different situations (Goleman, 1998). These new rules take for granted that one has the intellectual ability and technical know-how to do

the job; the focus must now be on personal qualities needed in order to succeed. Research suggests two other important influences on one's ability to succeed in a complex and changing organizational setting: self-directed learning and emotional intelligence.

The literature related to self-directed learning and emotional intelligence reveals numerous commonalities in the concepts. A clearer understanding of these constructs could facilitate the design of managerial preparation and development programs. Although both constructs have been used by organizations for varying reasons and contain several commonalities, self-directed learning and emotional intelligence have yet to be explored side by side.

Guglielmino (1978) describes a highly self-directed learner as:

> . . . one who exhibits initiative, independence, and persistence in learning; one who accepts responsibility for his or her own learning and views problems as challenges, not obstacles; one who is capable of self-discipline . . . has a strong desire to change and is self-confident . . . one who enjoys learning and has a tendency to be goal oriented. (p. 73)

Brockett and Hiemstra (1991) proposed the *Personal Responsibility Orientation (PRO)* model of self-directed learning. Their model similarly suggests that self-directed learning emphasizes the personality characteristics of the learner. The learner makes the conscious decision to be self-directed, whether in a more formalized instructional context or a more individual approach. The model also suggests that specific learning projects can take both routes at the decision of the learner. This notion of personal responsibility is defined as "individuals assuming ownership for their own thoughts and actions" (p. 26). Brockett and Hiemstra go on to recognize the importance of social and situational factors in the self-directed learning process.

The literature provides support for the argument that organizations need to support education of the workforce to promote the development of self-directed learning (Durr, Guglielmino, & Guglielmino, 1996; Guglielmino & Murdick, 1997). High levels of self-directed learning have been linked positively to job performance, with stronger relationships in jobs that involve a great deal of change (Durr, 1992; Guglielmino, Guglielmino, & Long, 1987; Roberts, 1986).

Emotional intelligence appears to have a number of commonalities with self-direction in learning. Bar-On (2004) describes emotional intelligence as "an array of non-cognitive competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p. 14). He proposes that emotionally intelligent persons are self-reliant in planning and making important decisions. They may seek other opinions before making the right decision; however, they do not feel consulting others is a sign of weakness. One of Bar-On's 15 competencies of emotional intelligence, independence, is described as the ability to be self-directed in one's thinking and actions (Bar-On, 1997)

Boyatzis and Van Oosten (2002) describe a MBA program for executives designed to improve emotional intelligence in organizations by guiding participants through a process of

discovery called self-directed learning. The Boyatzis theory of self-directed learning leads the individual through a process designed to discover the ideal self (the person we want to be) through a series of processes examining the difference between the ideal and the real self (the person we actually are now). Boyatzis (2004) states that the self-directed learning process yields intentional behavioral change that is sustained over time.

RESEARCH METHODOLOGY

This was a quantitative study using the *Emotional Quotient Inventory* and the *Learning Preference Assessment*. Healthcare managers and supervisors of a community-based healthcare organization in Southeast Florida comprised the sample for this study. This site, herein referenced as CHS (Community Health System), has approximately 3,000 employees in all facets of healthcare, including acute care, elective surgical care, diagnostics, prevention, and rehabilitation. This healthcare organization employs approximately 240 managers and supervisors. As it is a prerequisite for a supervisory position, all individuals sampled had the minimum education of a bachelor's degree in some field of study related to healthcare or management. The sample consisted of both males and females, and no age group was excluded. Since a bachelor's degree is required for a supervisory role, the assumption was made that the participants would all have an age greater than 20 years.

Instruments

Emotional Quotient Inventory

The *EQi* reflects a trait-based model of emotional intelligence that was developed in 1997 by Bar-On and was the first published instrument to measure emotional intelligence (Bar-On, 2004). The *EQi* is a self-report, web-based measure consisting of 125 questions. It uses a five-point Likert-type scale ranging from *very seldom* or *not true of me* on one side of the scale *to very often true of me* or *true of me* on the other side of the scale. The reading level of the *EQi* has been assessed at the sixth grade level. It is appropriate for individuals over the age of 17, and it takes approximately 40 minutes to complete (Bar-On). The average score on the *EQi* is 100 and the standard deviation is 15. Based on this scale, normal EQ scores can range from 85-115 (Bar-On, 1997).

Self-Directed Learning Readiness Scale (SDLRS)

The *SDLRS* was developed by Guglielmino (1978). It is a 58-item, self-report measure with Likert-type response options. The *SDLRS* is designed to measure skills, attitudes and the characteristics of an individual that support self-directed learning. The self-scoring form of the *SDLRS*, called the *Learning Preference Assessment (LPA)*, was published in 1991 (Delahaye & Choy, 2000).

Of the 58 items on the *LPA*, 41 are positively phrased and 17 are negatively phrased. The *LPA* yields one total score ranging from 58 to 290, with an average of 214 and a standard deviation of 25.59, takes between 20 and 30 minutes to complete, and can be interpreted against a norm. The total score yielded by the instrument is then converted into categories of, "high, above average, below average, and low" (Delahaye & Choy, 2000). The *LPA* has

been translated into at least 12 different languages and is a widely used method to measure self-directed learning readiness in both business and industry (Delahaye & Choy, 2000).

Brockett and Heimstra (1991) report:

> At present, the SDLRS has been used in two major ways. First, it has been utilized to explore relationships between self-directed readiness and other personological variables through experimental, quasi-experimental, and correlational research designs. Second, it has been used as a diagnostic tool for assessing learners' perceptions of readiness for self-directed learning. (p. 56)

Procedures

Each participant was asked to complete the *Emotional Quotient Inventory* and the *Learning Preference Assessment*. With the permission of the designer of the *LPA*, four questions were added to the survey. Participants were asked to self-report the score on their last annual performance review as *outstanding, more than satisfactory, satisfactory, less than satisfactory* or *do not know*. Participants were also asked to rate the level of problem solving ability needed for their jobs, to rate the degree of change confronting them in their jobs, and to indicate how many years they had been in a supervisory role with the CHS. These questions mirrored those use in a number of previous studies using industry samples (Guglielmino, Guglielmino, & Long, 1987).

This study was guided by the following research questions:

1. Is there a correlation between self-directed learning readiness and emotional intelligence in healthcare managers?
2. Can the level of managerial (job) performance be predicted from variables of emotional intelligence and self-directed learning readiness?
3. Is the relationship between self-directed learning readiness and emotional intelligence moderated by the level of problem solving needed for the job or amount of change facing the individual in the job?

An email communication was sent out to a total of 234 associates who were identified as managers and supervisors of the community-based healthcare organization. This population consisted of 191 females (81%) and 43 males (19%). A follow-up email was sent out five days later in an attempt to encourage a greater level of participation. A total of 109 completed surveys were received. The sample, which represents 47% of the managers and supervisors of the CHS, consisted of 86 females (79%) and 23 males (21%). Since the total number of managers and supervisors represented similar gender proportions, the sample was considered to be a fair representation of the gender of the population.

RESULTS

Ages of the subjects (N=109) ranged from 26 to 64 with a mean age of 46.56 years (SD = 8.76).

Subjects were asked to classify the performance rating they received on their most recent performance review. Performance review scores were converted to a 5 point scale with *outstanding* = 1, *more than satisfactory* = 2, *satisfactory* = 3, *less than satisfactory* = 4, and *do not know* = 5. Fifty-four percent of respondents rated their last performance review as outstanding, 35% as more than satisfactory, 4% as satisfactory, 2% as less than satisfactory, and 5% stated they did not know their rating. Figure 1 depicts the distribution of performance review scores as they were reported by the managers.

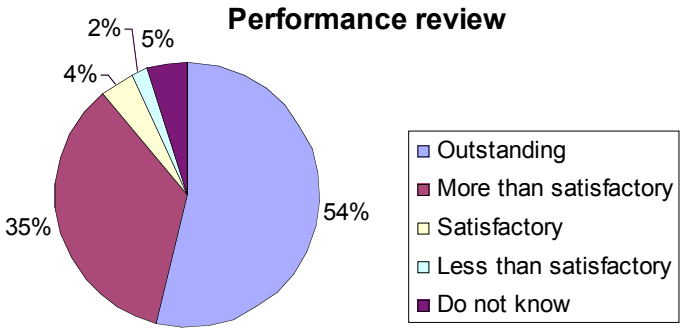

Figure 1. Self-reported performance review scores of the CHS sample.

Participants were also asked their opinion of the level of problem solving ability needed in their job. Choices consisted of *very high, high, moderate, low* and *very low*. Scores were converted to a five point scale with very high = 1, high = 2, moderate = 3, low = 4 and very low = 5. Sixty percent reported the level of problem solving ability needed in their jobs as very high, 26% high, 10% moderate, 2% low, and 2% very low. Figure 2 depicts the distribution of problem solving ability needed in the participants' jobs.

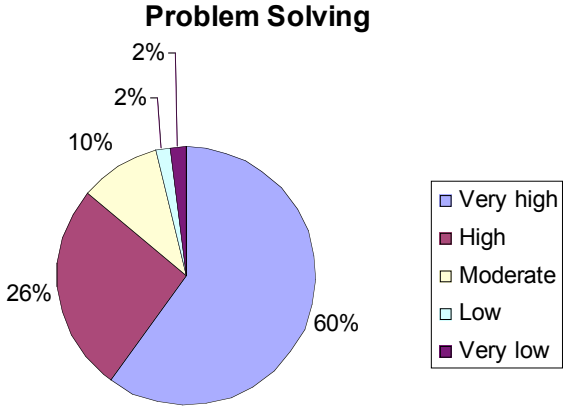

Figure 2. Self-rating of degree of problem solving needed in the job

Participants were also asked to indicate the degree of change confronting them in their work. Choices consisted of *very high, high, moderate, low* and *very low*. Twenty-one percent reported a very high degree of change in their work, 43% high, 25% moderate, 10% low, and

1% very low. Scores were converted to a five-point scale with very high = 1, high = 2, moderate = 3, low = 4 and very low = 5. Figure 3 depicts the distribution of reported change confronting participants in their work.

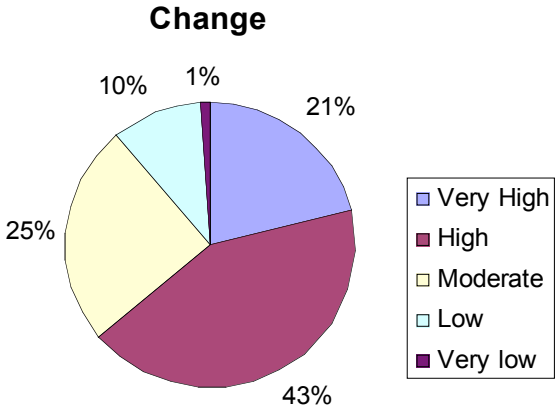

Figure 3. Self-report of degree of change confronting participants in their work.

Each participant completed the *Emotional Quotient Inventory* (*EQ-i)* and the *Learning Preference Assessment* (*LPA*). Scores on the *LPA* ranged from 189 to 279 with a mean of 243.64 and a standard deviation of 20.38. Scores on the *EQ-i* ranged from 83 to 127 with a mean of 104.0 and a standard deviation of 10.646. Table 1 depicts subjects' *LPA* and *EQ-i* scores.

Table 1. *Distribution of LPA and EQ-i Scores*

	Range	*SD*	*Mean*	*Number*
EQ-i	83-127	10.646	104.0	109
LPA	189-279	20.38	243.64	109

Null Hypothesis 1

There is no correlation between self-directed learning readiness and emotional intelligence in healthcare managers.

Scores from the *LPA* and *EQ-i* were compared using a Pearson correlation. The correlation between *LPA* and *EQ-i* was positive and significant ($r = .587$, $p < .01$). Null hypothesis 1 is not accepted. Results support the alternative hypothesis that there is a correlation between self-directed learning readiness and emotional intelligence in healthcare managers.

Null Hypothesis 2

The level of managerial performance cannot be predicted from the variables of emotional intelligence and self-directed learning.

A multiple regression was used to explore the predictability of managerial performance from emotional intelligence and self-directed learning readiness. Based on the results from this study, *LPA* and *EQ-i* combined do not significantly predict level of managerial performance (F change = .851, Sig. F change = .430). Table 2 depicts the Pearson correlation and the *F* change of *EQ-i, LPA,* and managerial performance taken from the regression results.

Table 2. *Pearson Correlation of EQ-i, LPA, and Managerial Performance*

	LPA score	*EQ-i score*	*F change*
Performance estimate	.125	.065	.851
Significance	.097	.249	.430

Null hypothesis 2 is not rejected for this study. These results support the null hypothesis that the level of managerial performance cannot be predicted from the variables of self-directed learning readiness and emotional intelligence.

Null Hypothesis 3

The relationship between self-directed learning readiness and emotional intelligence is not moderated by the degree of problem solving needed in the job or the amount of change confronting the individual in the job.

A multiple regression was performed to examine degree of problem solving needed in the job as a moderator of the relationship between self-directed learning and emotional intelligence. *LPA* scores were the dependent variable and were measured against problem solving and *EQ-i* scores as predictors, as well as a third predictor representing the product of *EQ-i* and problem solving. The *t* value comes from the product term. The results demonstrated a significant relationship ($t = 2.71$, $p = .008$). The Beta (+3.36) indicated a positive relationship.

A multiple regression was performed in a similar manner to examine degree of change in work as a moderator of the relationship between self-directed learning and emotional intelligence. *LPA* scores were the dependent variable and were measured against change and *EQ-i* scores as predictors, as well as a third predictor, the product of *EQ-i* and change. The *t* value comes from the product term. The results demonstrated a relationship significant below the .05 level ($t = 2.13$, $p = .047$). The Beta of +2.13 indicated a positive relationship. Table 3

illustrates the significance of the degree of problem solving ability needed in the job and degree of change confronting participants in their work as moderators of the relationship between self-directed learning and emotional intelligence.

Table 3. *Problem Solving and Change as Moderators of the Relationship Between Self-Directed Learning and Emotional Intelligence*

	t	Sig.	Beta
Problem solving	2.71	.008*	3.36
Change	2.01	.047*	2.13

- significant <.05

Testing revealed that problem solving needed in the job and change facing the manager in the workplace are significant moderators of the relationship between self-directed learning and emotional intelligence. Null hypothesis 3 is rejected for this study. The results support the alternative hypothesis that the relationship between self-directed learning and emotional intelligence is moderated by the degree of problem solving needed in the job and the amount of change confronting the individual in the job.

DISCUSSION

A main purpose of this study was to explore a possible relationship between self-directed learning and emotional intelligence. There have been inferences of a relationship between the two constructs (Boyatzis, 2004; Boyatzis & Van Oosten, 2002; Dearborn, 2002; Gray, 2004); however, the two have never been analyzed side by side. Each of the 109 subjects in this study was asked to complete two self-report surveys, *The Learning Preference Assessment* and *The Emotional Quotient Inventory*. Scores were analyzed using a regression analysis. The mean *LPA* score for this sample was 243.64 with a standard deviation of 20.38. Delahaye and Choy (2000) report a normed, average score on the *LPA* of 214 with a standard deviation of 25.59. Guglielmino and Klatt (1994), in their study of 162 CEOs from Fortune 500 companies, reported an average score of 248.6. In 1996 Guglielmino examined self-directed learning of top female corporate executives and reported an average score of 257.8. Since the population sampled represents managers, with a great majority of them female, the results are congruent with prior research.

The mean *EQ-i* score for this sample was 104 with a standard deviation of 10.64. Bar-On (1997) reports a North American, normed average score of 100 with a standard deviation of 15. Goleman (1995) claims that emotional intelligence, unlike cognitive intelligence, does peak early in life and continues to grow until the around the age of 48. Since the average score of this population was 104, and the average age was 46.56, the results appear to be congruent with prior studies.

A Pearson correlation analysis of the *EQ-I* and *LPA* results demonstrated a significant positive relationship between self-directed learning readiness and emotional intelligence (r = .587, p<.01). Cohen (1992) stated that correlations greater than .50 demonstrate a relationship that is not only statistically significant but is also practically significant. When the questions on the *LPA* and the *EQ-i* are compared, commonalities can be found. The following questions are taken from the *Learning Preference Assessment*: "*I don't work well on my own"* (reverse scored item); *"If I discover a need for information that I don't have I know where to go to get it"* (reverse scored item); *"I can learn things on my own better than most people"; "I become a leader in group learning situations."* As the questions from the *EQ-i* are compared, questions with common themes are noted. The following questions are taken from the *EQ-i:* (all reverse scored items) *"I prefer a job in which I'm told pretty much what to do"; "I prefer others to make decisions for me"; "I seem to need other people more than they need me"; "I'm more of a follower than a leader."*

These four questions taken from each of these tools display a common underlying theme of independence threaded throughout the questions. Both tools also have other questions in common; two address the theme of problem solving. The *LPA* item, *"I think of problems as challenges, not stop signs"* compares to, *"When facing a problem, I first look at each possibility and then decide on the best way,"* from the *EQ-i.* In addition, both tools address optimism. *"I am happy with the way I investigate problems,"* from the *LPA,* is similar to: *"I feel sure of myself in most situations,"* from the EQI. These questions as well as others may be part of the explanation of the high correlation between the two tools.

This study failed to establish a link between emotional intelligence, self-directed learning and managerial performance. Several studies have reported a correlation of performance with emotional intelligence or self-directed learning readiness (Aydin, Leblebici, Arslan, & Oktem, 2005; Bar-On, 2004; Boyatzis, 2001; Day & Kelloway, 2004; Durr, 1992; Goleman, 1995, 1998; Guglielmino, Guglielmino, & Long, 1987; Guglielmino & Klatt, 1994; Roberts, 1986). One reason for the inability to establish a link may lie in the performance review structure of the CHS. After the data were collected a number of problems related to the performance data emerged.

Over 50% of the participants reported themselves as receiving an outstanding performance review. This unusually high percentage prompted investigation, as a normal percentage receiving "*outstanding"* ratings would more likely be around 20% (P. Guglielmino, personal communication, February, 11, 2007). Guglielmino, Guglielmino and Long (1987) examined the self-reported performance reviews of 753 individuals from a large American utility company and stated that 25% of the respondents reported outstanding performance reviews while 39% of the respondents reported reviews that were more than satisfactory. Fifty-four percent of the respondents of this study reported outstanding performance reviews while 35% reported reviews that were more than satisfactory.

The performance evaluation used by the CHS is customized by each department. In all cases, it includes two parts, one of which consists of an overall evaluation based on a simple dichotomy. An associate either *meets standards* or *does not meet standards* as the result of the evaluation. This is the criterion used to determine whether or not the associate receives a

merit increase. In the other portion of the evaluation employees receive a behavioral assessment that includes five categories of performance congruent to the categories asked in this study. It is the responsibility of the administrator to give feedback to the associate on performance; however, this process does not appear to be a standard throughout the CHS. For several reasons, it became clear that employees might not be aware how they performed on the five-category portion of the evaluation, but were fairly certain to remember their status on the dichotomous standard. The dichotomous standard, *meets standards* or *does not meet standards* was the one used to determine the employee's eligibility for a merit increase, and the merit increases are not paid on a sliding scale. Once a person qualifies, he or she receives the same increase as everyone else. This practice tends to de-emphasize the importance of the rest of the evaluation.

Many healthcare organizations are also in a time of severe personnel shortages in many key positions. Healthcare administrators are constantly facing the "warm chair or empty chair" phenomenon (Herman, Olivo, & Gioia, 2003) and are unwilling to give an employee the impression his or her review is average, fearing the employee may consider looking elsewhere for employment. Many healthcare administrators are in a position of need rather than a position of strength with human capital. Conversations with several participants formulated a theme that many feel uneasy giving truthful critique in an annual performance review and merely say, "You are doing a great job." This may create a misperception by the employees as to their true performance.

Herman, Olivo, and Gioia (2003) report that there will be a shortfall of 1.5 million nurses and other health care professionals nationwide by the year 2020 and state that monetary solutions alone will not improve the situation; organizations must work to improve the environment of the workforce. They go on to state that, as training and development improve within the organization, the rate of turnover decreases radically and employee pride improves. This study revealed significant positive relationships between self-directed learning, emotional intelligence, problem solving ability and degree of change in the work place. By focusing on organizational and staff development and enhancing self-directed learning or emotional competencies, this organization may be able to mitigate some of the factors contributing to the current state of turmoil existing within the health care environment.

This study revealed significant relationships in degree of change in an individual's specific job and the amount of problem solving needed in the job as moderators of the relationship between self-directed learning and emotional intelligence. Two of the fifteen emotional competencies described in the *EQ-i* related directly to problem solving and flexibility. Of the 125 questions in the *EQ-i* a total of sixteen questions deal directly with problem solving and flexibility.

The *LPA* also contains questions that directly relate to problem solving and change. Of the 58 questions on the *LPA,* two questions are directly related to investigating problems and two are related to challenging new situations. The integrating problem solving and change theme apparent in both constructs possibly account for the their moderation of the relationship between the two constructs.

CONCLUSION

This study documented a strong positive relationship between self-directed learning and emotional intelligence of healthcare managers and supervisors in a large, nonprofit organization. This research was unable to establish a link between performance, self-directed learning and emotional intelligence, perhaps due to the merit structure and the amount of subjectivity in the performance review process of this health system; however, significant relationships were found between self-directed learning readiness, degree of change in the job and level of problem solving ability needed to perform the job.

This topic merits requires further investigation in circumstances in which the performance assessment system is more likely to provide accurate and precise knowledge of the level of performance. Because the study was limited to healthcare managers in a single large organization, the results may not be generalizable to other groups.

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FOSTERING SELF-DIRECTED LEARNING AND TRANSFORMATIVE LEARNING: SEARCHING FOR CONNECTIONS

Jonathan E. Taylor

For this study, literature reviews were conducted in the areas of fostering self-directed learning (self-directedness) and fostering transformative learning. Lists of "steps" or characteristics were compiled from studies in each of the areas and a comparison made of the two lists to see what, if any, common "steps" or characteristics can be found. A large number of characteristics were found to be common to both learning approaches. While most have a direct relationship with one another, there are many others that are possibly indirectly related. The purpose of this paper is to look for the possible connections between fostering self-directedness and fostering transformative learning and to develop questions for further research.

Self-directed learning (SDL) and transformative learning (TL) are two of the most heavily researched approaches to learning in the field of adult education. Library shelves and databases are filled with a voluminous amount of scholarship on each of these aspects of adult learning, providing new ideas, critiques of current prevailing thought, and suggestions for practical application. When reading the literature related to either of these two approaches, one will almost certainly come across multiple sets of directives for fostering self-directedness and/or transformative learning in a wide array of contexts. While there is a great deal of literature in each field on how to facilitate or foster self-directedness or transformative learning, there is very little to be found focusing on the interrelatedness between the two. While some scholars have addressed the possible connections (Cranton, 1994; Pilling-Cormick, 1997; Mezirow, 1985) there does not appear to be any examination of the potential overlap of characteristics of, or steps for fostering both self-directedness and transformative learning in individuals.

The purpose of this study was to examine some of the leading literature on fostering self-directed learning and fostering transformative learning, to identify some of the most commonly advocated "steps" for fostering each of these two types of adult learning respectively, and then to identify what, if any, overlap there might be between the two. The benefit of identifying overlap between the two would be three-fold. First, such overlap, if existing to a significant degree, would present a strong case for an almost inseparable connection between the two approaches, and the benefits of each. Those currently interested in, or knowledgeable in one approach, but not the other, might be motivated to broaden their

knowledge of teaching or adult learning by realizing that connections exist between the two. Second, by focusing on the overlap between the two approaches, an educator's views could be reframed to see both approaches as a subset of a larger philosophy of adult teaching and learning rather than two separate dichotomous ways of teaching and learning. Third, the discovery that there are many steps that educators can take to facilitate both self-directed learning and transformative learning simultaneously, and the identification of such connections, could lead to a much higher level of efficiency in facilitating adult learning.

The arrangement of this paper is such that the first section briefly introduces self-directed learning and self-directedness as they are conceptualized by the author, the second focuses on what the literature has revealed regarding the fostering of self-directedness, the third section introduces the theory of transformative learning, the fourth provides an overview of steps for fostering transformative learning, and the fifth section draws all of the material together in an analysis of the connections between the two types of learning.

SELF-DIRECTED LEARNING

Self-directed learning has been defined in many different ways by many different scholars over the past several decades. While these definitions vary to some degree, often related to contextual factors or the philosophical base of the writer, almost all refer to a way of learning in which the learner takes the initiative to in some way plan, direct, and evaluate his or her own learning, often with the assistance of a facilitator or some educational agent.

In the quest to concretely define self-directed learning, a distinction has often been made between the *process* of learning, and the aspect of *personality* as possessed by the learner (Boshier, 1983; Brockett & Hiemstra, 1991; Brookfield, 1984; Candy, 1988; Fellenz, 1985; Kasworm, 1983; Oddi, 1984, 1985). For the purposes of this paper, self-directed learning will be viewed broadly as referring to "both the external characteristics of an instructional process and the internal characteristics of the learner where the individual learner assumes primary responsibility for a learning experience" (Brockett and Hiemstra, 1991, p. 24). This definition has been chosen because it encompasses both the instructional process and the personality of the learner. Viewing SDL from both of these perspectives is important in this context because although the traits held, and the actions taken by the learner are central to the idea of SDL, one of the primary focuses of this paper is the facilitation of such learning, which is indicative of the instructional process. Other terms such as *self-directedness* and *learner self-direction*, are used in this paper to refer specifically to the personality or individual aspect of SDL rather than the process.

FOSTERING SELF-DIRECTED LEARNING

The idea of fostering self-directedness in learners has been the focus of a great deal of attention in past years, most likely because of the strong focus on practice in the field of education. This section examines some of the steps or facilitator characteristics presented in the literature for enhancing, developing or fostering self-directedness in individuals.

While the phrase "fostering self-directedness" did not become frequently used until recent years, the needs related to SDL of both learners and educators were addressed prolifically early in the field of adult education, including some seminal works (Knowles, 1980, 1984; Tough, 1971). A complete list of prescriptions for fostering self-directedness would be far outside the scope of this paper; what follows is a list of some the commonly advocated characteristics of the facilitator, characteristics of the learner, and approaches to facilitation.

Allen Tough (1979) in his seminal work *The Adult's Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning,* provided what he considered were the characteristics of an ideal facilitator of adult learning. Those characteristics included warmth, love, caring, and acceptance of learners; high regard for learners' self-planning competencies; the view of being a participant in a dialogical process with learners; and an openness to change and new experience.

One year later, Malcolm Knowles (1980, 1984) provided a list of 16 principles of teaching, which include such basic tenets as the provision of a learning environment which is safe, mutually respectful, physically comfortable, and conducive to learning; encouraging students to utilize their personal life experiences; and involving students in the process of determining learning goals and objectives, often through the use of learning contracts.

In *Understanding and Facilitating Adult Learning*, Brookfield (1986) devotes an entire chapter to facilitating self-directedness. In this chapter he cites many of the characteristics mentioned by Knowles but adds others, the most noteworthy perhaps being that in order to facilitate self-directedness, one must help the learner become aware of his or her own unique learning styles. He writes:

> A degree of self-knowledge regarding the way one typically sets out to plan intermediate and final learning objectives, what kinds of resources are best suited to one's learning style, what strategies one employs to make sense of abstract concepts, and how one approaches learning new psychomotor skills can all help an adult determine which educational method is best suited to his or her own style of learning. (p. 64)

This idea of self-knowledge becomes important when looking at transformative learning in later sections of this paper.

Brockett and Hiemstra (1991) advocate two distinct lists, one including suggestions for the facilitator and the other listing suggestions for the learner. Because of the context of this paper, the suggestions for the facilitator receive specific focus. This list of 13 admonitions includes many of the characteristics cited above, but also includes helping learners develop attitudes and approaches to learning that foster independence; promoting discussions, raising questions, and facilitating small group activity to stimulate interest in the learning experience; and managing learning processes that include activities such as continuous diagnosis of needs, acquisition of continuous feedback, and fostering learner involvement.

Gerald Grow (1991) introduces the Staged Self-Directed Learning model to counter overt

resistance to a SDL instructional approach. Grow's model was based on the situational leadership model of Hersey and Blanchard (1988) and advocates a more gradual, stage-like approach to fostering self-directedness in learners. In this model, facilitators (and learners) progress over time through four stages and begin with more traditional teaching techniques such as coaching with feedback, drill, and informational lectures, shifting toward more and more student autonomy until the final stage, "self-directed," in which the facilitator acts as a consultant and assists the learners in their own guided pursuits. Clearly, Grow's contribution is the caution against rapid deployment of SDL instructional techniques without acknowledging the current mindset of the student, meeting them where they are, and then leading them toward a more self-directed learning experience.

In Lawler (1991) we see an additional list of personal characteristics or steps that teachers can take to foster self-directedness. This list includes many aspects already prevalent in some of the authors mentioned thus far (Brockett and Hiemstra, 1991; Knowles, 1980, 1984; Tough, 1971) but also includes the following:

1. Encourage collaborative modes of learning.
2. Foster critically reflective thinking.
3. Include learning which involves examination of issues and concerns, transforms content into problem situations, and necessitates analysis and development of solutions.
4. Value learning for action.
5. Generate a participative environment.
6. Pay attention to emotional aspects of learning.
7. Treat the learning process and results as a social phenomenon.

Lawler also suggests that facilitators move gradually to student regulation of the complete learning process, a suggestion that sounds very similar to the concepts that Grow (1991) uses the Staged Self-Directed Learning Model to flesh out.

The characteristics that are listed in the above paragraphs are certainly not exhaustive but represent a short summarization of what some of the foremost scholars have advocated over the past 40 years. In recent years, there has been some emphasis on using process-oriented teaching (Bolhuis, 2003), as well as problem-based teaching (Azer, 2004) to foster SDL. Cho (2002) has taken a look at the connection between SDL and the learning organization, and Ponton, Derrick, and Carr, (2005) have examined the relationship between resourcefulness and persistence in adult autonomous learning. Others have identified characteristics and steps for fostering SDL in very specific contexts, such as a college physics class (Silverman, 1995), and in medical and nursing schools (Mammary and Charles, 2003; Regan, 2003). A detailed analysis of these very interesting inquiries has not been conducted in this paper due to their specific focus.

Hopefully, the characteristics and steps for fostering self-directedness that have been provided in this section will adequately serve our search for connections between SDL and transformative learning. In the next section, a brief overview of transformative learning theory is provided.

TRANSFORMATIVE LEARNING

Mezirow (2000) defines transformative learning as "the process by which we transform our taken-for-granted frames of reference (learning schemes, habits of mind, mindsets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective, so that they may generate beliefs and opinions that will prove more true or justified to guide action" (p. 8). *A frame of reference* is defined by Mezirow as "the structure of assumptions through which we filter sense impressions" (p. 16). Transformation in learning occurs most often when an individual is faced with some type of disorienting dilemma, and can be epochal (immediate and often acute) or incremental, that is, more slow and subtle (Mezirow, 2000).

Critical reflection is closely tied to transformative learning and is described by Brookfield (2000) as "engag[ing] in some sort of power analysis of the situation or context in which the learning is happening." (p. 126). He goes on to explain that the person must "also try to identify assumptions they hold dear that are actually destroying their sense of well-being and serving the interests of others: that is, hegemonic assumptions" (p. 126). Brookfield is referring to the idea that we often make our decisions about life based upon underlying assumptions that we have somehow, over time, accepted from others without question. These underlying assumptions that we possess unknowingly often were established to serve those with more power.

Three common types of assumptions that should be critically reflected upon are: paradigmatic assumptions that structure the world into fundamental categories, prescriptive assumptions about what we think ought to be happening in a specific situation, and causal assumptions about how the world works and how it may be changed (Brookfield, 1995).

The acceptance of this externally imposed frame of reference most often occurs without the conscious awareness of the learner. Transformative learning addresses the idea that when a person attempts to make a decision in any situation, he or she tends only to evaluate that decision from within a rather limited perspective. True transformational learning takes place when the individual is able to transcend this restrictive structure and think about it in a more broad and uninhibited way. For the purposes of this paper, the terms transformative learning, transformational learning, and perspective transformation will be used interchangeably.

FOSTERING TRANSFORMATIVE LEARNING

Once the idea of transformational learning was identified and developed into a theory, the next logical step was to begin asking how this type of learning could be facilitated or fostered. Early work on this idea was focused more generally (Cranton, 1994b; Mezirow, 1991), while later studies (Fisher-Yoshida, Geller, & Wasserman, 2005; Guiffrido, 2005; Jarvis, 2003, 2006; Mallory, 2003; Nazzari, McAdams, & Roy, 2005), have addressed how to foster transformative learning in specific settings or vocations such as higher education, human resource development and nursing.

Taylor (2000) conducted a review of the literature in which he examined all of the empirical studies that had been conducted related to fostering transformative learning. Taylor notes that while there has been a great deal of instructional literature on transformative learning (Anderson & Saavedra, 1995; Cranton, 1994b, 1997; Fulton, Licklider, & Schnelker, 1997; Jaiemson, Kajs, & Agee, 1996; Laiken, 1997; Mezirow, 1990, 1991; Nabben, 1995), he found only five empirical studies in the literature that inform the practice of fostering transformative learning.

Mezirow's three central interrelated components for fostering transformative learning are: the centrality of experience, critical reflection, and rational discourse (Mezirow, 1995). In the course of Taylor's (2000) review, he was able to find support for Mezirow's (1991) ideal characteristics for fostering transformative learning, which include the importance of a safe, open and trusting environment for learning; using instructional practices that support a learner-centered approach and promote student autonomy and collaboration; and the importance of activities which encourage exploration of alternative personal perspectives and critical reflection.

Taylor pointed out nine other themes relating to fostering transformative learning, six for which he provided a more thorough explanation: (a) necessity for teachers to be trusting, empathetic and caring, (b) emphasis on personal self-disclosure, (c) importance of feedback and assessment, (d) fostering group ownership and individual agency, (e) providing intense shared experiential activities, (f) developing an awareness of personal and social contextual influences, (g) promoting value-laden course content, (h) capitalizing on the interrelationship of critical reflection and affective learning, (i) recognizing the demand of time (pp. 4-6).

In addition, Patricia Cranton (2002) has recommended that learners be encouraged to act on revisions, behaving, thinking, and talking in a way that is congruent with transformed assumptions or perspectives. The practical applications of fostering transformative learning have also been written about regarding non-government organizations (NGOs) (Nazzari, McAdams, & Roy, 2005), nursing (Mallory, 2003), human resource development (Fisher-Yoshida, Geller, & Wasserman (2005), gender issues education (Jarvis, 2003), and counseling education (Guiffrida, 2005). All of these authors reiterate to some degree the steps listed above but have a significantly narrower focus due to the context of individual practice. The following section examines the possible connections between fostering SDL and fostering transformative learning.

CONNECTIONS

While some attention has been given to the connection between SDL and transformative learning (Cranton, 1994a; Mezirow, 1985; Pilling-Cormick, 1997) the approach used in this paper differs from these previous efforts. In *A Critical Theory of Self-Directed Learning*, Mezirow (1985) makes the point that critical reflection is the very key to fostering SDL in learners. Pilling-Cormick (1997) examines the transformative nature of SDL in the lives of learners, thus claiming that SDL actually leads to transformative learning experiences.

Drawing from both SDL and transformative learning, Patricia Cranton (1994a) makes her contribution to the SDL/transformative learning connection by discussing how both types of learning are vital in the training of educators and facilitators. In *Self-Directed and Transformative Instructional Development,* she joins the ranks of those that claim that some sort of critical reflection is often required for, or is a byproduct of SDL. She writes:

> The literature on self-directed learning in adult education leads us to view faculty development as a process of encouraging faculty to make their own decisions in their learning about teaching. The transformative learning approach leads us to view faculty development as a process of faculty becoming aware of their assumptions about teaching and revising these assumptions based on critical self-reflection. (pp. 741-742)

While these authors have identified connections between SDL and transformative learning, this paper aims to examine the possible overlap between the advocated steps and characteristics that foster the two types of learning with a goal of raising questions and highlighting possible implications of such an overlap. In this section, the overlap between the two collections of steps and characteristics will be reviewed and analyzed. Table 1 shows some of the more prominent overlapping characteristics. Since all of the characteristics that appear in the list have been addressed in the preceding sections, the paragraph following represents only a brief mention of the overlapping characteristics.

Table 1. *Primary Characteristics for Fostering Both SDL and TL*

Promote student autonomy/agency
Create safe, open environment for learners
Encourage critical reflection
Acknowledge affective aspects of learning (role of feelings and emotions)
Value learning for action
Facilitate learning that involves examination of issues, values and concerns
Value and include students' experience
Accentuate importance of feedback and assessment
Develop awareness of social contextual influences in learning
Encourage and support collaborative and group learning

Promoting the autonomy of students has been a foundational principle of SDL and regularly appears in the literature on fostering transformative learning (Mezirow, 1991). Also central to facilitating both types of learning is the creation of a safe and secure learning environment (Brockett & Hiemstra, 1991; Knowles, 1980, 1984; Lawler, 1991; Mezirow, 1991). As previously noted, the idea that critical reflection is necessary for SDL while also being a basic underlying principle of TL has been propounded by Mezirow (1985), Cranton (1994a, 1994b) and Brookfield (1986). The importance of acknowledging the affective aspects of learning has also been identified in both fields (Lawler, 1991; Neuman, 1996). Learning for action is essential in both SDL and TL according to both Cranton (2002) and Lawler (1991). Taylor (2000) and Lawler (1991) both write of the need to include value-laden learning

content to challenge the learner to critically reflect on course content, and Brookfield (1996) and Cranton (1994b) claim that such critical reflection is necessary for the purposes of examining the learner's ideas about learning. Placing a high value on the student's personal experience has been a long-standing principle of adult learning and has been cited by scholars in both SDL and TL as necessary for the fostering of those respective types of learning (Knowles, 1980, 1984; Mezirow, 1995; Taylor, 2000; Lawler, 1991). The importance of feedback and assessment has been clearly stated by Lawler (1991) Brockett and Hiemstra (1991), and Cranton (2002), but the case could be made that feedback is also a vital part of Grow's (1991) Staged Self-Directed Learning model as a means to remaining aware of each learner's level of self-directedness. Making learners aware of both social and cultural influences in learning has been encouraged by both Taylor (2000) and Lawler (1991). Finally, focusing on group work and collaborative learning (Brockett & Hiemstra, 1991; Lawler, 1991; Taylor, 2000) is seen as vital for both SDL and TL.

While this list does not cover all of the overlapping characteristics, it does provide a picture of just how connected the two types of learning might be. Many questions can be raised when contemplating these issues but three distinct questions arise which should be examined in light of this apparent overlapping of characteristics.

Can SDL take place without some sort of transformative learning experience? This is an important question, because if SDL does require transformative learning, then it would follow that no advocate of SDL can ignore transformative learning. It would be one of the primary pillars upon which the phenomenon rests. Since the assertion has been made that a learner's views about learning and about his or her own ways of learning require critical reflection and perspective transformation, it would seem that if not *always* required, transformative learning is certainly *frequently* required for SDL (Brookfield, 1986; Cranton, 1994a; Pilling-Cormick, 1997). If this is the case, scholars and practitioners wishing to utilize and promote SDL must take a long look at transformative learning and its implications for adult learning.

The second question that can be asked is *if a teacher facilitates one of these two types of learning, will the other type of learning be automatically fostered as well?* In the absence of empirical studies addressing this specific question, the answer cannot be known with any degree of certainty. Attempting to study this specific phenomenon, which Pilling-Cormick (1997) and Cranton (1994a) have discussed in their work, could render great benefit to those interested in fostering one or the other, or both.

The third and final question is *if one strives to foster both SDL and TL at the same time, might one achieve more salient results for both in a more efficient manner?* This is perhaps the most useful question because the answer, if affirmative, would provide a more rounded experience for the learners while allowing facilitators a much greater level of success in promoting a type of learning that they feel strongly supportive of, whether that be SDL or TL.

SUMMARY

While an apparent overlap between two distinct lists of characteristics does not, in itself, constitute a strong connection between two things, a close look at the nature of the overlap between the characteristics of fostering SDL and fostering TL indicate more than a subtle connection between the two. Attempting to prove a significant connection or going even further and attempting to definitively answer the questions raised in the course of this analysis is outside the scope of this paper. The purpose has been to expose some new connections, portray previously identified connections in a new way, to raise questions and to suggest potential answers.

The field of adult education would benefit from future research in this area, particularly in the form of empirical studies, which Taylor (2000) has indicated are not well represented in the TL literature, and which appear to be lacking in the SDL literature as well. A more rigorous examination of the three questions raised in the previous section would serve both facilitators and learners well in their respective and often mutual pursuits.

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SELF-DIRECTED LEARNING IN DIRECTORS OF A NATIONAL NONPROFIT ORGANIZATION

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Four hundred seventy one YMCA directors participated in a study to determine if levels of self-directed learning readiness were related to leader effectiveness in YMCA directors. Data were analyzed for correlations between the measures and for moderation of the relationships by employment, geographic, or demographic variables. The responses demonstrated that self-directed learning readiness and leader effectiveness are correlated ($r = .10$, $p < .05$), presenting evidence of a positive relationship between self-directed learning readiness and leader effectiveness. Correlations between self-directed learning readiness and leader effectiveness were not moderated by any other variable. The results indicate that leader effectiveness is supported by the possession of higher levels of self-directed learning readiness. The implications of these findings for adult education and human resource development are presented.

Identifying and strengthening any skill or trait which enhances both leadership and learning effectiveness benefits the development of individuals and organizations. The search for a conjunction of elements occupies a substantial niche in recent educational and human resource development literature. Leaders are great learners (Kouzes & Posner, 2002), with an unlimited capacity to learn new behaviors (Bennis & Nanus, 1985) in formal and informal settings (Parks, 2005). Kotter (1996) expects leadership to develop through learning over decades. Senge (1990) adds the perspective of the leader as responsible not only for personally learning, but for the learning process throughout the organization: "In essence, the leader's task is designing the learning processes whereby people throughout the organization can deal productively with the critical issues they face, and develop their mastery in the learning disciplines" (p. 345). Since learning and leadership are so closely linked it is logical to expect improvements in learning effectiveness to produce gains in leadership effectiveness in individuals.

The established link between leadership and learning has been further explored by examining the connection between performance in leadership roles and self-directed learning. Guglielmino, Guglielmino and Long (1987) found links between self-directed learning readiness and workplace performance ratings. Using a self-report of the most recent performance rating from 536 employees of a major United States electronics firm, Durr

(1992) found outstanding performers had higher SDLRS scores than those with lower performance ratings. The highest scores were for outstanding performers who reported that their jobs required high levels of creativity and problem solving. Others have added to this theme. Boyce (2004) found that individuals who are active in self-development have a higher propensity to self-develop leadership attributes. Kandarin's (2004) research indicated that executives who elevated their companies to excellence at the highest levels used self-directed learning as a key personal strategy. Connolly (2004) found self-directed learning readiness was linked to leader effectiveness and success. She reports:

> It appears that self-directed learning readiness, as measured by the Guglielmino *Self-Directed Learning Readiness Scale*, has potential as an indicator of leadership effectiveness. These findings indicate that leaders who are more ready for self-directed learning, devote more time to self-directed learning, and commit to leadership development have a greater likelihood of achieving success. (p. v)

This rich strand of research opens the potential for exploration in other areas.

Leaders as Self-Directed Learners

The separation of the field of adult education from general education began to accelerate after the publication Houle's (1961) landmark book, *The Inquiring Mind*. Houle mentored Malcolm Knowles (Merriam, 2001), who introduced his concepts and the word *andragogy* to American educators (Brockett & Hiemstra, 1992; Carlson, 1989; Kruse, n. d.; Merriam & Caffarella, 1991; Merriam, in press) through the publication of *The Modern Practice of Adult Education* (Sork, 2000, p. 172), The now well-known principles of adult learning he presented are that as individuals mature, four important changes take place:

> 1. Their self-concepts move from one of being a dependent personality toward being a *self-directed* human being.
> 2. They accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning.
> 3. Their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles.
> 4. Their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance-centeredness. (Knowles, 1980, pp. 44-45, *emphasis added*)

These assumptions helped stimulate research on and refinement of the concept of andragogy and prompted increased attention to self-directed learning in adults. Knowles' work and the work of subsequent writers elevated the importance of self-directed learning in research and publications in adult education, human resource development and workplace performance improvement.

Understanding of how leaders learn to lead requires an analysis of adult learning processes in approaching and acquiring new information and behaviors. Adults differ markedly from children in the way they view themselves and their learning needs and solutions. They make their own decisions in life and in their learning. As their maturity develops, adults grow

increasingly more self-reliant and self-directed (Knowles, 1980). This connection between self-direction and adult education, confirmed with a detailed analysis of adults' learning projects (Tough, 1979), led others to study the combination in greater detail. Guglielmino (1977) aided this study by producing and validating the *Self-Directed Learning Readiness Scale* (*SDLRS*). Her framework quantified self-directed learning by identifying practices and traits that self-directed learners exhibited more often than the general population.

Adult learning principles are foundational to any learning organization that is committed to providing encouragement and support of lifelong learning for the adult employees. Senge (1990) presented five learning disciplines leaders bring to bear in creating and maintaining learning organizations in the workplace: "Systems thinking, personal mastery, mental models, building shared vision, and team learning -- these might just as well be called the leadership disciplines as the learning disciplines. Those who excel in these areas will be the natural leaders of learning organizations" (p. 359). Others continue to confirm the unavoidable relationship between leading and learning for individuals and organizations:

> Leadership and lifelong learning are inexorably intertwined. Each new leadership challenge or opportunity brings with it the need to learn--to analyze, synthesize, and integrate ideas and information necessary to clear a path through chaos and ambiguity to make a difference. (Huber, 2003, p. 54)

Ellinger (2006, p. 471) and others made the connections to leadership and performance. "Research has shown that creating an environment conducive to learning and development can enhance individual and organizational performance."

Leader Effectiveness

The complexity of the concept of leadership is exacerbated by the ambiguity of the terms. Leadership has been defined and measured as personality traits, as implementation styles, and as outcomes (Northouse, 2004). Leaders have been represented as the titular head or the motivational source for an organization (Badaracco 2002; Kotter, 1996). Delineating leader effectiveness is no less confounding. Temporary achievements in short term tasks, creating enduring organizations and societies, and improving the lives of others are included in the list of accomplishments for those who are considered as successful leaders.

The continuing evolution of society and technology works against creating any enduring package of skills, traits and behavior to guarantee leader effectiveness. Comparing the requirements of an effective leader in an agrarian culture to those in an industrial culture only provides a spectral image of the differences which will arise as our world culture moves from a hardwired nationalistic society to hotspots of global villages and production clusters supporting and defending against pockets of the unconnected or hostile (or whatever reality emerges). In this context the diversity of the variables included as components of leadership and leader effectiveness becomes more understandable, and the value of reliable predictors more evident. Increasing uncertainty means that demands for and on leadership change as society, technology, economics, globalization and philosophical underpinnings alter the environment (Clampitt & DeKalb, 2001; Goleman, Boyatzis & McKee, 2002; Parks, 2005).

Clampitt and DeKalb (2001) indicate that, under conditions of uncertainty, successful leadership requires leaders who have *uncertainty management competencies*: the ability to cultivate awareness, the ability to communicate and the ability to catalyze action (p. 107). Within the construct of *emotional intelligence* (EI) Goleman (2002) proposed improved results from leaders who demonstrated the personal competencies of *self-awareness* and *self-management* and the social competencies of *social awareness and relationship management*. Goleman reinforced the connection between leadership and learning: "These EI competencies are not innate talents, but learned abilities, each of which has a unique contribution to making leaders more resonant and therefore more effective" (p. 38). Menkes (2005) advanced the concept of *executive intelligence* as aptitudes in three contexts: accomplishment of tasks, working with and through others, and judging and adapting oneself and one's behavior. Collins (2001) saw similar requirements in his level 5 leaders, who look internally to find solutions to leadership problems and develop and work with self-discipline and self-disciplined team members. Pisapia, Reyes-Guerra, & Coukos-Semmel (2005) asserted that for leaders to be successful in the rapidly evolving internal and external environments of this century, they have to think more strategically than their competitors. In their study of entrepreneurial leaders of successful businesses, Guglielmino and Klatt (1994, p. 163) argued that these leaders used a high degree of problem solving ability, creativity and ability to manage change. They found levels of self-directed learning readiness were higher in this population of entrepreneurs than in executives in other business settings.

Examinations of the relationships between self-directed learning levels and leader effectiveness will add to the body of knowledge with regard to self-directed learning and leadership skills and preparation. The examination of how self-directed learning readiness and leader effectiveness are related in individuals could contribute to understanding how they are associated and could also have an impact on programs of professional development. A more complete understanding of how self-directed learning is utilized by the leaders of a major nonprofit organization and how self-directed learning influences their effectiveness as leaders could have significant impact on the delivery of adult education services and leadership development programs. An early identification of self-directed learning readiness in individuals may produce alterations in processes used in the recruitment and selection of candidates for key positions in educational administration and corporate leadership.

Based on a review of the literature, there appears to be a relationship between self-directed learning readiness and leadership effectiveness. A number of other studies have linked self-directed learning readiness and the performance of leaders in corporate settings, but none examined the link between self-directed learning readiness and performance in a nonprofit organization.

The purpose of this study was to examine the relationships between self-directed learning readiness and leader effectiveness in professional employees of a large national nonprofit organization.

HYPOTHESES

Two null hypotheses were tested in the research:

1. There is no correlation between levels of self-directed learning readiness, the extent to which strategic thinking processes are employed, and leader effectiveness.
2. Relationships between self-directed learning readiness and leader effectiveness are not moderated by variables of demographics, employment or geographic region.

The null hypotheses were tested for significance at an alpha level of 0.05.

RESEARCH DESIGN

Sample

The Young Men's Christian Association (YMCA) is the largest nonprofit organization in America with combined annual revenue of $5.1 billion in 2005 (Nonprofit Times, 2006). There are YMCAs in every state, and their geographic distribution reflects national population trends. Prospective respondents were contacted through their membership in the Association of YMCA Professionals (AYP), the professional society for YMCA Directors.

The AYP mission and organizing principles are in alignment with the advancement of leadership and learning:

Mission: to advance the YMCA Profession
Organizing Principles:
Connects and Supports AYP members;
Encourages Life Long Learning;
Enhances Personal and Career Development;
Advocates on Issues of Concern to AYP Members;
Promotes High Ethical Standards and Christian Values;
Recognizes Individual Achievement and Excellence.
(AYP, 2006)

Despite the gender specificity in the organization's title, the distribution of the membership is 60.1% female and 39.9% male, based on a total of 5,726 active members as of October 19, 2006.

A survey link was electronically distributed to 5700 AYP members and 660 individuals responded. The responding participants comprised a convenience sample for purposes of the study. These responses were well in excess of the *a priori* power analysis which indicated that in order to identify a medium effect size with a power of .80 at an alpha of .05 for a two-tailed study, a sample size of at least 210 participants was required (Cohen, 1992).

There were 268 males and 203 females who were included in the study. The overwhelming majority, 93.2%, identified themselves as Caucasian, while 2.5% reported their ethnicity as African American, 2.3% Hispanic, .4% Asian or Native American and 1.1% other ethnicities. While 99.2% had at least a high school diploma, 65.2% had earned a bachelor's degree,

21.9% had a masters, and 2.6% specialist's or doctor's degrees. Program Directors, who would normally be assigned a specific area such as aquatics, fitness or childcare, comprised 22.8% of the sample, and Assistant or Associate Directors accounted for another 3.6%.

The ranges used for the collection of the data are not suitable for determining precise arithmetic means, so a profile of the most common characteristics of the participants is provided. The typical respondent in this sample was a forty-six to fifty-five year old white male executive from the Northeast with a bachelor's degree, who supervises six to ten people directly at a one- or two-branch organization with up to twenty-four total employees and a budget of one million to five million dollars. He has twenty-five or more years of similar work experience, fifteen to twenty-four years as a supervisor and as a YMCA employee, five to nine years in his current position and as a member of the Association of YMCA Professionals, and received an excellent but not exemplary evaluation in his last annual review.

The respondents reflected a wide range of responsibility and experience, but little diversity. Over ninety percent of the respondents were Caucasian and had at least a bachelor's degree, and men outnumbered women by more than thirty percent. This last statistic contrasts with the membership distribution of three women for every two men.

Instruments

Self-directed learning was measured using the *Learning Preference Assessment* (LPA) version of the *Self-Directed Learning Readiness Scale* (*SDLRS*). A self-report of the participant's most recent annual performance review served as the measure of leader effectiveness. This information was gathered along with demographic data on a participant data form.

Self-Directed Learning Readiness Scale

The *Self-Directed Learning Readiness Scale* (*SDLRS*) was developed by Guglielmino through the use of a three-round Delphi panel of experts, including Knowles, Tough and Houle (Guglielmino, 1977), to determine the most prevalent characteristics of self-directed learners. The scale was first field tested on a sample of 307 high school and college students and refined through item and factor analysis to its present configuration. It is a questionnaire that elicits self-reports of agreement with Likert-type items. The *SDLRS* instrument is designed to elicit individual preferences and behaviors without influencing the respondents toward or away from any particular selection. Reverse items are included to reduce the danger of patterned answers and the confounding factor of experimental bias. After reading a written statement, respondents select a number from one to five that most closely indicates how accurately the statement describes their habits or preferences. This study used the *SLDRS-A*, commonly titled the *Learning Preference Assessment* (LPA) to avoid influencing participant responses. The LPA has 58 items.

The validity of the *SDLRS* was reaffirmed when Delahaye and Smith (1995) gave the *Learning Preference Assessment* (LPA) version of the *SDLRS* instrument to 200 college students in a study to determine convergent validity to a similar instrument. Redding (1997)

reported that the preponderance of studies of self-directed learning used the *SDLRS* as the instrument of choice. Moore (2000) reports that the results of more than 150 research projects and 50 theses and dissertations show *SDLRS* scores have significant correlation with psychosocial and behavioral characteristics that are associated with self-directed learning. The reliability of the scale has been measured over more than 3000 individual administrations in North America. "The latest reliability estimate of the *SDLRS*, based on a split-half Pearson product moment correlation with Spearman-Brown correction, is .91" (Guglielmino & Murdick, 1997, p. 91). The reliability of the *SDLRS* is maintained even in translation to another language. Using Cronbach's coefficient alpha, a level of 0.89 was obtained on an administration of a Chinese edition of the instrument (Chien, 2004, p. 287).

Studies conducted primarily on populations over 20 years of age have been published with a range of reliability estimates from .72 to .92 (Guglielmino & Guglielmino, 2006). Delahaye and Choy (2000) performed an extensive review of the *Learning Preference Assessment* (LPA), the self-scoring form of the *SDLRS*, and concluded that the LPA is an accurate measure of self-directed learning readiness that can be used at acceptable levels of confidence.

Self-Report of Performance Ratings as the Leader Effectiveness Measure

A standard measure of leader effectiveness that is consistent over multiple studies is an elusive concept. Leader effectiveness has been measured with a 360 degree evaluation (Connolly, 2004), a self-report in a ten question section of a broader questionnaire (Pisapia & Reyes-Guerra, 2007), by a panel of twelve knowledgeable individuals (Jurkiewicz & Massey, 1998), by perceptions that followers held of their leaders (Yasin, 2006) and by peer ratings (Atwater, Dionne, Avolio, Camobreco, & Lau, 1999). In this study the results of the most recent annual performance evaluation were used to measure leader effectiveness.

While each YMCA is independently operated and the selection of performance review tools is not mandated by any authority, there is a common reference source for evaluation processes for directors. The national association of independent agencies, the YMCA of the USA, provides consulting services to individual units. In the preponderance of cases similar tools are used in the annual review process. In nonprofit organizations, the most commonly used instruments for performance evaluation contain the response categories listed in order of progressively higher quality, for example: *unsatisfactory*, *needs improvement, fully capable, significantly exceeds expectations,* and *outstanding* (Minnesota Council of Nonprofits, 2009: YMCA of the USA, 2006). This common practice provides comparable rating categories for the majority of the directors who receive annual performance evaluations. These or comparable ratings which respondents reported were assigned values from one to five, respectively, and these ratings were examined for correlation to the *SDLRS* scores.

Procedures

Data Collection

With the assistance of their executive offices, the approximately 5700 members of the Association of YMCA Professionals (AYP) were contacted by email with an encouragement to participate and a password to allow restricted access to the survey instruments. Participants

were instructed to open a link to the survey website. An electronic consent form was presented, with the option to agree and continue or decline and close the survey website. Participants were assigned a unique identification number to ensure confidentiality of data. Each participant competed a Participant Data Form and the *SDLRS* (*LPA*). The Participant Data Form gathered the demographic data: gender, age, years of similar experience, years of YMCA experience, highest education level, tenure in position, undergraduate educational program, amount of budget responsibility, number of branches supervised, geographic region of the Association of YMCA Professionals (AYP), years as an AYP member, number of direct reports, job title, organizational level, performance evaluation deserved, total employees, years of supervisory experience, size of organizational budget, and ethnicity.

Two responses were obtained about past performance. Participants were asked to report the rating they received on their most recent formal performance appraisal and the rating they thought they should have received. While both ratings may be subject to incorrect recollections, the expectation from the literature review was that the second rating would be more likely to be inflated for reasons of ego satisfaction than the actual rating received. In a sidebar analysis, these scores actually correlated closely ($r = .56$, $p < .001$). The self-report of the most recent performance rating received was used to reflect leader effectiveness in this study. The ratings were converted to a five-point scale for purposes of statistical analysis, with five representing the highest rating and one the lowest.

Within the convenience sample of those who responded, 595 had completed responses for the *Learning Preference Assessment* (*LPA or SDLRS-A*), and these responses were used to obtain mean sample scores. The 471 participants who had scores for both instruments exceeded the minimum of 210 required for a sufficient effect size to produce reliable conclusions as determined in the *a priori* power analysis.

Data Analysis

The data were retrieved from the survey site in a comma separated value (.csv) file and saved as an Excel file (.xls). Variables in text format were coded and converted to numerical values. Individual items that were left unanswered were replaced with the mean value of the responses to the item. Results for the *SDLRS* were evaluated by the proprietary scoring service.

A Pearson correlation analysis was performed to examine the relationships between the SDLRS and leader effectiveness from the self-reported performance rating. Only the 471 respondents who completed both survey instruments were included in the full analysis of the relationships between the variables. The first hypothesis was tested by computing the Pearson *r* correlations for each variable as compared to the other variable.

To determine if any variables moderated the relationships between self-directed learning readiness and leader effectiveness, multiple regression equations were used to examine the influence of the demographics on the correlations between the SDLRS and the self-reported performance. The demographics of gender, age, years of similar experience, years of YMCA experience, tenure in position, highest education level, bachelors educational program, amount of budget responsibility, number of branches supervised, geographic region of the

Association of YMCA Professionals (AYP), years as an AYP member, number of direct reports, job title, organizational level, performance evaluation deserved, total employees, years of supervisory experience, size of organizational budget, and ethnicity were tested for moderation of the two instruments and the leader effectiveness scores. For these analyses, the demographic data were treated as the independent variables to test their influence, if any, on the reported levels of correlation between self-directed learning readiness and leader effectiveness.

FINDINGS

The SDLRS scores for the YMCA directors who responded to the survey ranged from a low of 166 to a high of 287 with a mode of 228. Their mean of 236.1 places the sample in the top 25% of those tested (Guglielmino & Guglielmino, n. d.). Mean scores reported in other studies began at 214 for the general adult population (Guglielmino & Guglielmino, 1988) and peaked at 267.8 for exemplary elementary principals (Hillard & Guglielmino, 2006). Of particular note are the mean scores of community leaders, which Phares (2006) found to be slightly higher, at 245.1. Due the nature of the organization, YMCA directors frequently interact with and often actively seek and recruit community leaders to fill policy and fund development positions as volunteers.

The mean score for leader effectiveness was calculated by using the self-report of the last performance appraisal as the measure of leader effectiveness. The analysis yielded a mean of 3.77 with a standard deviation of 1.384.

Leader effectiveness was found to correlate with the *SDLRS* scores ($r = .10$, $p < .05$). This correlation presents evidence of positive relationships between self-directed learning levels and leader effectiveness. The correlation of self-directed learning readiness to leader effectiveness remained consistently significant throughout this analysis as determined by a series of regression equations that measured variations related to the demographic variables. As reflected in Table 1, with the leader effectiveness score as the dependent variable and self-directed learning readiness, the demographic variables, and the multiplicative product of self-directed learning readiness and the demographic variables as predictor variables, the regression equation showed that the correlation of self-directed learning readiness to leader effectiveness was not moderated by any of the demographic variables.

CONCLUSIONS AND IMPLICATIONS FOR ADULT EDUCATION AND HUMAN RESOURCE DEVELOPMENT

The correlation between self-directed learning readiness and leader effectiveness was significant ($r = .10$, $p < .05$). The correlation provides evidence of a modest relationship between self-directed learning levels and leader effectiveness and produces insights into self-directed learning readiness as it affects leader effectiveness. The correlations suggest that individuals who exhibit self-directed learning tendencies can be expected to be effective as leaders; and leader effectiveness is supported by the possession of self-directed learning skills. Other researchers have also found self-directed learning readiness to be related to leader effectiveness (Connolly, 2004; Durr, 1992; Guglielmino & Guglielmino, 1988;

Guglielmino, Guglielmino, & Long, 1987; Hillard & Guglielmino, 2006; Roberts, 1986).

Table 1. *Moderation Effects on the Relationship between Self-Directed Learning Readiness and Leader Effectiveness*

Predictor Variables of Self-Directed Learning Readiness (LPA) and:		*Beta*	*t*
Years of Similar Employment (YE*LPA)		.677	1.072
Years of YMCA Experience (YY*LPA)		.472	.754
Tenure in Current Position (TC*LPA)		.873	1.569
Sex (SX*LPA)		- .242	-.411
Age (AG*LPA)		.380	.570
Branches Supervised (BS*LPA)		- .183	- .355
Current Job Title (JT*LPA)	n = 427	.163	.269
Budget Responsibility (BR*LPA)		-.395	-.692
Direct Reports (DR*LPA)		-.262	-.436
Region of AYP (RA*LPA)	n = 416	-.640	-1.046
Years as AYP Member (YA*LPA)		.485	.843
Performance Rating Deserved (PRD*LPA)	n = 425	.351	1.053
Organizational Level (OL*LPA)		-.019	-.030
Total Employees Supervised (TE*LPA)		-.193	-.345
Years as Supervisor (TS*LPA)		.177	.299
Size of Budget Supervised (SB*LPA)		-.512	-.857
Highest Educational Degree (HD*LPA)		-.312	-.475
Majority/Minority (MNNM*LPA)		.191	1.031

** Moderation is significant at the .01 level (2-tailed).
* Moderation is significant at the .05 level (2-tailed).
n = 471 unless indicated.

Limitations and Delimitations

The sample was confined to leaders within one specified nonprofit agency: Directors of YMCAs in North America. The issue of non-response bias remains a concern. Despite the sufficiency of the returns, the non-response level is unobtainable, since the number of missing responses is a combination of non-delivery, non-receipt and non-response, with no accurate means of determining the relative share of each. This inability to examine the non-response bias is an impediment to full reliance on the results from the responses that were received and evaluated. It is generally assumed that if the consistency of the returned responses is high, then the concern for the effect of the nonresponses is minimized. With any response rate less than 100% of the sample surveyed, the nonrespondents have potential to skew results since they may represent a segment of the sample that is similar in substantive ways beyond their choice of not responding to the survey or a particular question. Surveys that achieve high response rates increase confidence in the accuracy of survey results (Cobanoglu, 2001; de Rada, 2005; Viswesvaran, 1993). However, conclusions could be less certain if the nonrespondents held unexpressed views which would have resulted in variations between the sample mean and the mean of only those who did respond (Viswesvaran, 1993). In contrast, Askarany (2006) examined nonresponse bias in a survey

and found no meaningful difference between early and late responses, indicating that survey outcomes would not be likely to be influenced by nonresponse bias.

The study was subject to some self-selection bias, as all participation was voluntary and all data was gathered through self-report. In addition, since membership in AYP is a voluntary choice and may require a personal outlay of funds, the membership may have an existing tendency toward learning and personal development that influenced the results. The reliability of using self-ratings as a measure in research studies has been a reviewed by a number of writers without reaching conclusive universal consensus on their effectiveness (Harris & Schaubroeck, 1988; Atwater & Yammarino, 1992; Smither, London, Vasilopoulous, Reilly, Millsap, & Salvemini, 1995; Yammarino & Atwater, 1997; Wiesband & Atwater, 1998). Despite the lack of a full consensus, there are indications of a tendency for self-reported data to be inflated. The Atwater and Yammarino (1992) study of leadership behaviors may be the most pertinent for this study: "… It is obvious that some individuals tend to rate themselves in an inflated way relative to others' ratings and some do not. Some individuals even see themselves less favorably than others see them" (pp. 159-160).

The fact that the performance evaluation tools were comparable but not exactly the same is may have affected the results of the study. Researcher bias was a possible confounding factor, as the researcher had a prior employment within the YMCA. Statistical analysis of the instruments by the instrument developers reduced this factor in the raw data tables. The researcher relied on the data for summaries and conclusions.

Implications

Enhancing existing tendencies to acquire and use self-directed learning skills may be an appropriate strategy to generate improvement in individuals and organizations more effectively. In both for-profit and not-for-profit corporations, selection and recruitment processes for candidates for positions that require high levels of leader effectiveness may be modified to provide indications of the presence of self-directed learning readiness. In the areas of educational administration and corporate leadership, early identification and development of readiness for self-directed learning can result in more effective professional development programs and increased productivity.

Philosophical and structural revisions to training and development curricula in academic and corporate settings can enhance personal and leadership development by incorporating the use of self-directed learning skills and processes, in order to increase the effectiveness and productivity of the programs. Adult education, workplace learning, and human resource development programs should be based on and inclusive of learning strategies and techniques to increase self-directed learning readiness and application in all participants. Prior assessment of the participant pool could drive curriculum design and course selection. Assessment of course participants' growth in self-directed learning readiness through pre-and-post test administration would provide a basis for modification of teaching styles, lesson plans and course objectives.

Further exploration of the relationship of self-directed learning readiness to leader

effectiveness in other organizations and fields can increase the ability to generalize from these results. Particularly for future leaders, providing tools, strategies and techniques to develop learning organizations that produce and retain talented adult learners enhances the performance of both individuals and organizations (Ellinger, 2006). This strategy is both cost effective and necessary for nonprofit organizations, corporations and businesses, and educational institutions to survive and thrive in the future.

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THE INFLUENCE OF PSYCHOLOGICAL EMPOWERMENT AND ANTECEDENTS ON INNOVATIVE BEHAVIOR

Nik Azida Abd. Ghani and Tengku Ahmad Badrul Shah Raja Hussin

This cross-sectional study utilizing ex-post facto research methodology was carried out to study the relationship between antecedents (i.e access to information, resources, organizational support, opportunity to learn and develop, and trust) and psychological empowerment. Thie descriptive-correlational study involved a total of 312 lecturers from 25 non-university private higher education institutions (PHEIs) in Malaysia as respondents. The study findings indicate that all antecedents under study are significantly related to overall psychological empowerment. Only access to information is found to be a significant predictor of innovative behavior. This study also finds that psychological empowerment acts as a partial mediator between antecedents and innovative behavior. Second-order confirmatory factor analysis supports the existence of four dimensions of psychological empowerment as suggested by Spreitzer (1992, 1995a, 1995b): meaning, competence, autonomy and impact. Implications of the findings are discussed as well as the suggestions and directions for future research.

In 1991, the Malaysian government unveiled its Vision 2020, the year by which Malaysia would achieve the status of an industrialized and developed country. Under the rubric of Vision 2020, liberalization of education policies leads to democratization, privatization and decentralization of the Malaysian educational system. Decentralization of the educational administrative system is designed to encourage institution-based management and empowerment of teachers (Lee, 1999). According to Mohd. Majid Konting, institution-based management provides empowerment to educational institutions because the institutions' leaders or headmasters know their own needs and requirements best (Marzita, 2005).

The rapid development and changes in education make it difficult for educational administration and management to be effectively done at the central level. Decentralization could overcome bureaucracy and enable decisions and actions, especially those that are not related to policy making, to be carried out at the lower level (Bahagian Perancangan dan Penyelidikan Pendidikan, 1995). Lecturers at the private higher education institutions (PHEIs) are not given much opportunity to be empowered. Lecturers do not have much say in the governance and management of their institutions. These private institutions are often governed by a board of governors or directors, usually comprised of representatives from stakeholders (Lee, 2004).

Empowerment is defined by the Ministry of Education as a professional practice of the

educational administration and management. The practices of empowerment already being implemented at all levels in the Malaysian Ministry of Education include those related to the smooth and efficient implementation of education policy; teachers' and teaching autonomy; and the sharing of power by the leader of the institution with its subordinates (Bahagian Perancangan dan Penyelidikan Pendidikan, 1995).

According to Zimmerman (1990), the concept of empowerment carries different meanings in different contexts. Hence, to study the concept of empowerment at the workplace, Spreitzer (1995a) used the intrapersonal concept specifically for the workplace as described by Thomas and Velthouse (1990). This psychological perspective of empowerment focuses on the perceptions of employees on empowerment (Spreitzer, 1995b, 1997; Thomas & Velthouse, 1990). When they view their work environment as providing opportunities for, rather than constraints on, individual behavior, they feel empowered (Spreitzer, 1995a), and opportunities for self-directed learning and individual initiatives are enhanced. Traditional bureaucratic social structures, which are characterized by hierarchy, formalization, and centralization, are likely viewed as constraining due to extensive rigidity (Spreitzer, 1995a).

Conger and Kanungo (1988) define psychological empowerment as the process of enhancing the feeling of self-efficacy among the members of an organization through the identification and reduction of conditions that foster powerlessness. The state of powerlessness can be reduced by formal organizational practices and informal techniques of giving self-efficacy information (Conger & Kanungo, 1988). The psychological approach to empowerment focuses on the intrinsic motivation and not on the managerial practices that are used to increase the level of power owned by the employees (Dee et al., 2003).

However, according to Kanter (1983), certain structural factors such as access to information, organizational support, resources and opportunity to learn and develop are empowering and enhance employees' power to accomplish work within an organization. These factors are referred to as antecedents to psychological empowerment. In turn, psychological empowerment is said to bring several positive outcomes or effects. Empowerment has impact on individual effectiveness and innovation in an organization (Spreitzer, 1995a). With empowerment, employees are more willing to accept changes, more innovative and are not afraid to try something new (Spreitzer & Quinn, 2001). They are more likely to take responsibility for their own learning and their individual actions in order to meet the challenges of globalization

In the private education industry, it is important for institutions to be innovative. Private higher education is a sector which is greatly affected by globalization. It is, therefore, vital to explore the antecedents of psychological empowerment and to study the role of psychological empowerment in the development of behavior.

DIMENSIONS OF PSYCHOLOGICAL EMPOWERMENT

Based on the definition given by Conger and Kanungo (1988), Thomas and Velthouse (1990) and Spreitzer (1995b) expanded the concept by identifying four main attributes or cognitions

of psychological empowerment, i.e. meaning (perceived value of work objectives), competence (feelings of self-efficacy), choice (feeling of self determination or autonomy) and impact (one's perception of his capability to influence). Conceptually, psychological empowerment is a multi-dimensional construct that comprises the four cognitions (Spreitzer, 1995b; 1996). These dimensions reflect the individual orientation towards his task role (Thomas & Velthouse, 1990) and are the basic core for psychological empowerment in the workplace (Houghton & Yoho, 2005). This study attempts to verify the existence of these dimensions through second order confirmatory factor analysis using structural equation modeling as illustrated in Figure 1.

Meaning is defined by Thomas and Velthouse (1990) as the value of work goal and purpose in relation to the individual's own values and standards. Spreitzer (1995b) defines meaning as the value of work goal and purpose as perceived by the individual in relation to his or her own personal mission and expectations. When the organizational mission and goal are congruent to their own value systems, employees will feel that their work is important and care about what they do (Spreitzer, 1995b; Thomas & Velthouse, 1990).

Through the competence dimension, employees that are empowered feel that they are efficient and able to influence their work and organization meaningfully (Spreitzer, 1995b). Competence refers to the self-efficacy specific to work: the ability of an individual to perform his/her job activities with the needed knowledge and skill (Spreitzer, 1995b). Autonomy or self-determination refers to the feeling of choice possessed by an individual in initiating and controlling his/her actions (Deci et al., 1989). Employees that have autonomy will make more rational choices and will ignite and arrange their own actions (Deci et al., 1989). Autonomy can be seen in making decisions concerning work methods, procedures, time and effort (Spreitzer, 1995b). Impact refers to the extent that individuals believe that their work can affect the overall goal achievement (Thomas & Velthouse, 1990) and influence strategic output, management and operation in the workplace (Spreitzer, 1995b). Hence, psychological empowerment can be defined as the feeling of being enabled to carry out tasks in the workplace according to an individual's own value and standard or to influence the work outcome by having autonomy and competence.

ANTECEDENTS TO PSYCHOLOGICAL EMPOWERMENT

According to Kanter (1993), an organizational structure that provides access to information, organizational support, resources, and opportunity to learn and develop is important for fostering empowerment. Trust is also vital for true empowerment and full utilization of staff potential (Cartwright, 2002). This paper identifies these factors as antecedents to empowerment.

Access to Information

Information is vital to employee empowerment (Kanter, 1983; Blanchard et al., 2001b). When leaders are willing to share information, either good or bad, they have the employees' trust. The employees will feel that they have the attention from the leader and that they are being trusted by the leader (Blanchard et al., 2001b). Employees who are empowered have to

have a clear vision (Spreitzer & Quinn, 2001; Cartwright, 2002) about the organization's goal and role. Vision will become reality when each employee feels that his/her contribution affects the organization (Blanchard et al., 2001a). Information sharing is a mechanism that enables employees to be responsible for achieving goals and to achieve them at a higher level (Blanchard et al., 2001b). Actions to limit information that is available to employees will give the impression that employers believe that the employees cannot be trusted, are unable to understand, or that they are willing to misuse the information (Spreitzer & Quinn, 2001).

Access to Resources

Resources are persons or material within the institutional community that can help the organization to achieve its goal (Saxe, 1975). These resources may be individual such as experience, expertise in the field, and teaching skill; or they may be collective such as collegial relationship with other teachers and opportunity to cooperate with other teachers (Gamoran et al., 1994). Material resources required may be in the form of funds, material, space or time (Blanchard et al., 2001b; Spreitzer, 1996). The effect of empowerment on teachers may depend on the availability of resources for the use of teachers. The easier it is for teachers to access the resources, the stronger the effect of empowerment (Gamoran et al., 1994).

Access to Organizational Support

Organizational Support Theory states that employees in an organization develop a global trust about the extent to which the organization values the employees' contributions and cares about their well-being (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). Perceived organizational support also results in feelings of responsibility to help the organization achieve its objectives, including participating in extra-role behavior such as helping other employees (Eisenberger, Armeli, Rexwinkle, Lynch, & Rhoades, 2001). An effective leader should promote a culture that supports empowerment so that employees are not afraid of making decisions and are not covering up mistakes, but are looking for opportunities to overcome problems instead (Cartwright, 2002).

Access to Opportunity to Learn and Develop

A diversity of individual needs can be satisfied through training and education. For example, exposure to effective personnel interaction skills can increase motivation and leadership skills (Ang, 1999). Training facilitative leadership, teamwork, and change management can facilitate the transfer of knowledge required in the collaborative problem solving process (Strauss, 2002). Training also can give teachers the competence and knowledge to use the learning materials available (Neagley, Evans, & Lynn, 1969). Professional development also can facilitate empowerment. Professional development includes all processes and activities designed to improve professional knowledge, skills, and teacher attitude to increase students' learning (Guskey, 2000). Maeroff (1988) believes that helping teachers to be knowledgeable in teaching and helping them to develop strategies to teach is a requirement in the effort to empower teachers.

Trust

There are several definitions of trust. For example, Spreitzer and Quinn (2001) define trust as an assumption that other people can be relied on that they will do what they say they would do. Trust also means believing that other people are honest in saying what they mean and meaning what they say. Trust has been proven to be a significant variable affecting organizational productivity (Prusak & Cohen, 2001), work attitude and job satisfaction (Aryee, Budhwar, & Chen et al., 2002).

BEHAVIORAL OUTCOME OF PSYCHOLOGICAL EMPOWERMENT: INNOVATIVE BEHAVIOR

Innovative behavior in the work context can be defined as the ignition, promotion and realization of new ideas in the intended work role (Kanter, 1988). Janssen (2000) defined innovative work behavior as the creation, introduction and application of new ideas intended in the work role, group or organization for the sake of the role, group and organization performance. The basis of all innovative improvement is idea (Scott & Bruce, 1994); and ideas are developed, proceed, and are reacted upon and modified by employees individually (Van de Ven, 1986). According to Short (1994), teachers that enjoy higher empowerment show high enthusiasm towards realizing new ideas, striving more to improve students' learning conditions and active in institutional activities and tasks.

Based on the work of Thomas and Velthouse (1990), Spreitzer (1992, 1995a) and Kanter's theory (1993), a comprehensive conceptual framework is developed for the purpose of this study (see Figure 1).

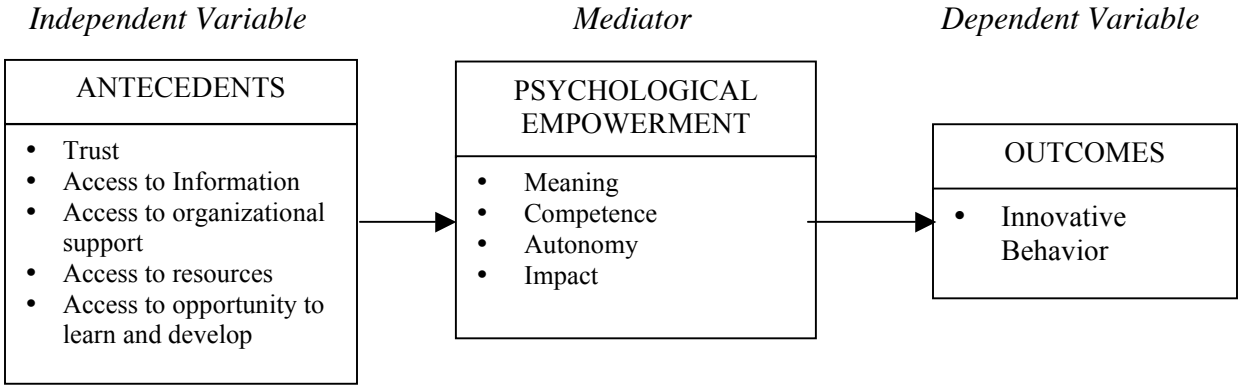

Figure 1. Antecedents and outcome of psychological empowerment.

RESEARCH OBJECTIVES

This research is carried out to:

1. Study the relationship between antecedents (access to information, organizational support, resources, opportunity to learn and develop, trust) and psychological empowerment of lecturers.
2. Identify the most effective antecedents of psychological empowerment to predict lecturers' innovative behavior.
3. Study the role of psychological empowerment as a mediator between

antecedents and lecturers' innovative behavior.
4. Study the psychometric properties of the psychological empowerment scale that is comprised of four dimensions based on Spreitzer's theory (1992).

METHODOLOGY

This cross-sectional study utilized ex-post facto research methodology. Descriptive-correlational in nature, it was carried out in 25 private higher education institutions in three Malaysian states, Penang, Kedah, and Kelantan. The sample comprised 312 lecturers. The researcher used a multi-stage sampling method to select the states, the institutions and respondents. A random sampling method was used to select the institutions from the list provided by the Department of Higher Education Institution (Private) Administration while convenience sampling was used to select the respondents. The researcher did not have any influence in the selection process.

The researchers estimated the sample size using Cochran's (1977) sample size formula as stated below:

$$n_0 = \frac{(t)^2 * (p)\,(q)}{(d)^2}$$

Based on this formula, t is the t value for the alpha level selected. The researchers use the alpha level of .05, hence the t value is 1.96. The product of $(p)(q)$ is the estimated value of variance. The value of p is the maximum possible rate or ratio, which the researchers set at .05, producing an estimated variance of .25. The value of d is the acceptable margin of error is set at .05 as this study basically uses continuous data based on Krejcie and Morgan (1970). The computation of sample size resulted in 384. The sample size not considering the correction for finite population is big compared to the size of accessible population (Lohr, 1999) i.e. 1,650. Therefore, adjustment via finite population correction formula was done and the computation yielded the sample size needed of 312 respondents.

$$n = \frac{n_0}{1 + \frac{n_0}{N}}$$

Measures

Portions of a number of previously developed measures were used or adapted for use in this study. All were used with the permission of the original authors.

Psychological Empowerment

Psychological empowerment was measured using 12 items from Spreitzer (1992, 1995b) based on four dimensions, namely meaning, competence, autonomy and impact. The scores from these dimensions are averaged to form an overall score for psychological empowerment for each respondent. Examples of the items are, "The work I do is very important to me," and "I am self-assured about my capability to perform my work activities."

Trust

To measure trust, the researchers refer to the Omnibus T-Scale by Hoy and Tschannen-Moran (2003). This instrument comprised 26 items that measure three dimensions of trust i.e. trust of faculty to principal, trust of faculty to colleagues and trust of faculty to customers (students and parents). For the purpose of this study, only the subscale of trust of faculty towards the principal is used. This construct comprised eight items involving vulnerability, benevolence, reliability, competence, sincerity and openness. The term "principal" was changed to "the administrators" to better suit the situation at PHEIs. An example item is, "The administrators typically act in the best interests of lecturers."

Access to Information

Four items from the instrument used by Spreitzer (1996) were modified to measure access to information. Items to measure lecturers' access to information about organizational strategies and goals are divided into two separate items: "I understand the strategies of the institution" and "I understand the goals of the institution."

Access to Organizational Support

For the purpose of practicality, this study measures organizational support using only five items selected and modified from the short-form scale of perceived organizational support developed by (Eisenberger et al., 1986). However, both aspects of recognition of the employees' contribution and care about the employees' well-being are included in the questionnaire. The items in the questionnaire are modified to suit the purpose of the study without affecting its psychometric and nomological characteristics. For example, the term organization is replaced with the administrators. An example from these items is, "The administrators take pride in my accomplishments at work."

Access to Resources

Three items from Spreitzer (1996) to measure access to resources were modified and two new items were added to include access to teaching materials, equipments, funds, workspace, and time as resources. Four items from Short and Rinehart (1992) were modified to measure access to opportunity to learn and develop.

Innovative Behavior

To measure innovative behavior, nine items with three subscales (ignition, promotion and realization of new ideas) based on Janssen (2000) were used.

RESULTS OF THE ANALYSES

To test the internal consistency of the dimensions of psychological empowerment, Cronbach alpha was determined using SPSS version 15.0 software. The alpha for each dimension is between .84 to .90, while the alpha for the overall scale is .86, which is higher than that of Spreitzer's (1992) scale (.74).

The findings support the suggestion by Spreitzer (1992) that psychological empowerment

comprises four dimensions. The second order confirmatory factor analysis, as shown in Figure 2 has acceptable fit indices (RMSEA = .08, TLI = .94, CFI = .96, NFI = .94, χ^2/df = 2.96). The values of factor loading as illustrated in the measurement model (Figure 2) between .34 and .85 show that the relationships among the dimensions of psychological empowerment are significant and positive. The obtained results support that psychological empowerment is the variance shared among the four dimensions, i.e. psychological empowerment is the combination of the four dimensions.

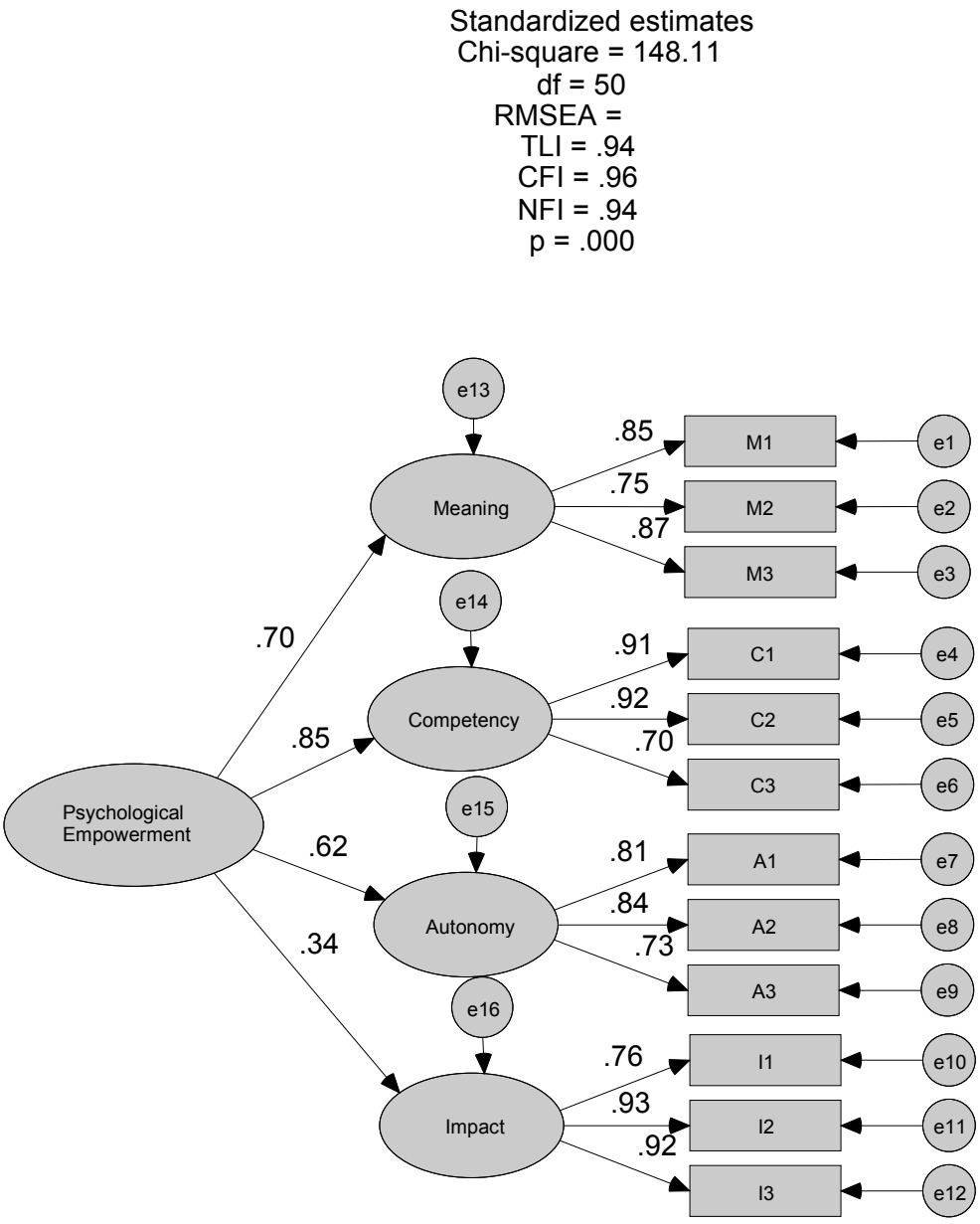

Figure 2. Psychological empowerment: Second-order confirmatory factor analysis.

Analysis of the correlations reveals that all antecedents under study have a significant relationship with psychological empowerment ($p < .01$). As displayed in Table 1, trust, access to information and access to organizational support have a low positive relationship (r = .20, .24 and .26 accordingly) with psychological empowerment while access to resources and opportunity to learn and develop have a moderate positive relationship (r = .34 and .35 accordingly) with psychological empowerment.

Trust does not have a significant relationship with meaning and competence, but has low positive relationships with autonomy (r = .24) and impact (r = .20). Similarly, access to organizational support does not have any significant relationship with meaning and competence but has low positive relationships with autonomy (r = .21) and impact (r = .29). Access to information has low positive relationships with meaning, autonomy and impact (r = .19, .19 and .23 accordingly) but does not have any significant relationship with competence.

Access to resources has a moderate positive relationship with autonomy (r = .34) but low positive relationships with meaning (r = .23), competence (r = .19) and impact (r = .22). Access to opportunity to learn and develop has a moderate positive relationship with impact (r = .30) but has low positive relationships with meaning (r = .21), competence (r = .19) and autonomy (r = .29). All five antecedents under study have significant relationships with the dimensions of autonomy and impact. Table 1 illustrates the Pearson correlation coefficient of the antecedents in relation to the dimensions of psychological empowerment and overall psychological empowerment.

Table 1. *Pearson Correlation Coefficients of Antecedents*

	Psychological Empowerment				
Antecedents	*Overall*	*Meaning*	*Competence*	*Autonomy*	*Impact*
Trust	.20(**)	.08	- .01	.24(**)	.20(**)
Access to information	.24(**)	.19(**)	.07	.19(**)	.23(**)
Access to organizational support	.26(**)	.10	.07	.21(**)	.29(**)
Access to resources	.34(**)	.23(**)	.19(**)	.34(**)	.22(**)
Access to opportunity to learn and develop	.35(**)	.21(**)	.19(**)	.29(**)	.30(**)

** correlation is significant at .01 level (2-tailed).

The regression analysis finds that the antecedents have significant relationships with innovative behavior, $F_{5, 306} = 9.05$, $p < .001$. The multiple correlation (R) = .36 and R^2 = .13, while adjusted R^2 = .12. The multiple regression analysis shows that access to information ($t_{311} = 4.86$, $p < .001$) is the only significant predictor of innovative behavior, β = .42. Trust, access to organizational support, resources and opportunity to learn and develop are not significant predictors of innovative behavior, β = - .17, - .03, - .02 and .14 and t = -1.66, - .25, - .23 and 1.80. Table 2 shows the result of the regression analysis.

Table 2. *Multiple Regression Analysis: Antecedents to Innovative Behavior*

Variable	*B*	*β*	*t*	*p*
Constant	2.91		9.00	.000
Trust	-.15	-.17	-1.66	.099
Access to information	.39	.42	4.86	.000
Access to organizational support	-.02	-.03	-.25	.804
Access to resources	-.02	-.02	-.23	.822
Access to opportunity to learn and develop	.15	.14	1.80	.072

$R = .36$
$R^2 = .13$
Adjusted $R^2 = .12$
Standard error = 1.07

Note: Innovative behavior is the dependent variable.

To prove that psychological empowerment functions as a mediator between antecedents and innovative behavior, the researcher uses the multiple regression analysis as suggested by Baron and Kenny (1986). Figure 3 shows the path diagram as a model for depicting a causal chain as suggested by Baron and Kenny (1986, p. 1176). The model assumes a three-variable system with two causal paths feeding into the outcome variable (path b and c). There is also a path from the independent variable to the mediator (path a). In this study, antecedents are the independent variable, the mediator is psychological empowerment and innovative behavior is the outcome variable.

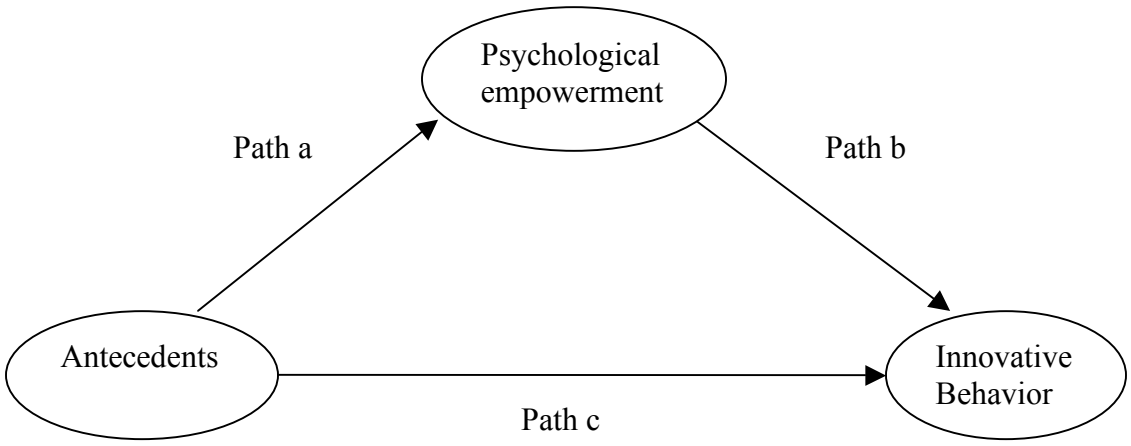

Figure 3. Assumed mediating effects of psychological empowerment.

First, when psychological empowerment is regressed to antecedents, unstandardized beta value ($B = .218$) relating to the effect of antecedents on psychological empowerment is significant ($t = 5.98$, $p < .001$). Therefore, path a in this study is significant, showing that the

condition of significant relationships between predictor (antecedents) and the presumed mediator (psychological empowerment) is met.
Second, the output variable is regressed to predictor (antecedents) to test for the mediating effect. Unstandardized beta value (B = .310) relating to the effect of antecedents to innovative behavior is significant *(*t = 5.05, p < .001). Therefore, path c in this analysis is significant. The condition that significant relationships exist between predictor (antecedents) and output (innovative behavior) is met.

Third, when the regression is run simultaneously between innovative behavior and psychological empowerment and antecedents, unstandardized beta value (B = .454) relating to the effect of mediator (psychological empowerment) to innovative behavior is significant *(*t = 4.92, p > .001). Therefore, path b in this study is significant. The condition that significant relationships exist between the presumed mediator (psychological empowerment) and outcomes (innovative behavior) is met. The third step also provides estimates for path c' i.e. the relationship between antecedents and innovative behavior while controlling psychological empowerment. According to Baron and Kenny (1986), if path c' is zero, complete mediation exists. Unstandardized beta value, B = .211 relating to the effects of antecedents to innovative behavior is significant (t = 3.38, p < .01). Therefore, path c' in this study is significant. Baron and Kenny (1986) state that the influence of independent variable on dependent variable must be less in the third equation than in the second. As B value decreases from .310 to .211, then this condition is met. It can be concluded that psychological empowerment functions as a mediator between antecedents and innovative behavior of lecturers. Table 3 displays the result of the multiple regression analysis carried out to test the mediating effect of psychological empowerment between antecedents and innovative behavior of lecturers.

Table 3. *Testing the Mediating Effects Using Multiple Regression: Innovative Behavior*

Test Steps	*B*	*SE B*	*95% CI*	*t*	*β*
First step: (Path a)					
Mediator: Psychological empowerment					
Predictor:					
Antecedents	.218**	.036	.15, .29	5.98	.32
Second step: (Path c)					
Output: Innovative Behavior					
Predictor:					
Antecedents	.310**	.061	.19, .43	5.05	.28
Third step: (Path b and c')					
Output: Innovative Behavior					
Mediator:					
Psychological empowerment	.454**	.092	.27, .64	4.92	.27
Predictor:					
Antecedents	.211*	.062	.09, .33	3.38	.19

Note: ** $p<.001$
* $p < .01$

To determine if the reduction in *B* value from .310 to .211 is significant, the researchers use the method suggested by Baron and Kenny (1986). As the reduction in *B* value of .099 is equivalent to the product of regression coefficient *B* for path a and b, the significance of the difference between path c and c' is determined by testing the significance of path a multiplied with path b. The product of path a and path b is then divided by the value of standard error. The value of standard error for indirect effect or ab is determined using the square root formula for the sum $b^2s_a^2 + a^2s_b^2 + s_a^2s_b^2$ as outlined by Baron and Kenny (1986). The value of a and b is the unstandardized regression coefficient for path a and b while s_a and s_b is the standard error value for path a and b. In this analysis, the standard error value for the indirect effect is .026.

The mediating effect in this analysis is the product of the correlation coefficient for path a and b, i.e .218 multiplied by .454, which produces .099. This mediating effect (.099) when divided by the value of standard error for indirect effects (.026) produces a *Z*-score of 3.808, which is more than 1.960. Therefore, the reduction of *B* value from .310 to .211 is significant. This finding indicates that psychological empowerment is a partial mediator between antecedents and innovative behavior.

DISCUSSION

The obtained results support the validity and reliability of the psychological empowerment scale (Spreitzer, 1992) in the work context of private higher education institutions. This finding is consistent with those empirical studies of Spreitzer (1995b, 1996), Kirkman and Rosen (1996), and Carless (2004). Therefore, this finding indicates that the scale developed by Spreitzer (1992) can be used in the context of private higher education institutions in Malaysia. It is important to note, however, that the overall effect size of the examined antecedents to innovative behavior ($R^2 = .13$) is small, suggesting that other variables need to be investigated.

The findings of this study suggest that educational managers evaluate the level of psychological empowerment at their institutions to gather the lecturers' perceptions of the level of psychological empowerment. The management should also examine each dimension of psychological empowerment and play an active role to increase psychological empowerment by focusing on dimensions that are poorly evaluated by lecturers.

According to Thomas and Velthouse (1990), psychological empowerment can be increased by changing the psychological environment or climate. This statement is supported by Spreitzer (1992) who notes that empowerment is a dynamic phenomenon that is influenced by the context surrounding an individual. The feeling of empowerment can be encouraged or constrained by the things that happen in the environment (Spreitzer, 1992).

This study finds that access to information is the only significant predictor to innovative

behavior. Therefore, the management can encourage innovative behavior by giving lecturers more access to information. Discussions and fora can also be held from time to time to facilitate the sharing of knowledge and brainstorming among lecturers. An open channel of communication such as periodical bulletins, newsletters and notice boards can facilitate the flow of needed information to increase the level of lecturers' knowledge.

SUGGESTIONS FOR FUTURE RESEARCH

This study was carried out in three states in Peninsular Malaysia. The same study should be carried out in other states as well as in Sabah and Sarawak in order to enable generalizations made to all private higher education institutions in the country. Future studies should also consider other antecedents based on the literature review. Future researchers should combine quantitative and qualitative methods to gather holistic information on certain variables. Innovative behavior, for example, can be verified through observations. This can reduce bias in data collecting and findings with higher validity and reliability can be produced. Future research could also compare the level of psychological empowerment and innovative behavior of lecturers from private higher institutions with those from the public higher education institutions.

CONCLUSION

This study supports the theory of Spreitzer (1992) that psychological empowerment comprises four dimensions: meaning, competence, autonomy and impact. All antecedents under study were found to be significantly related to overall psychological empowerment. Among the antecedents, only access to information was found to be a significant predictor of innovative behavior. This study also finds that psychological empowerment acts only as a partial mediator between antecedents and innovative behavior. The management of private higher education institutions should carry out intervention programs based on the findings to increase lecturers' innovative behavior and, hence, strengthen the competitiveness of the institutions in the global market of education.

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