Spirituality in Vocational Training of Information and Communication Technology Professionals in the Light of David Hay’s Conception

Muhammad Kamran
University of Warsaw, Warsaw, Poland
COMSATS University, Islamabad, Pakistan
Tomasz Ochinowski
University of Warsaw, Warsaw, Poland

The key objective of this article is to use the David Hay’s conception of spirituality in the vocational training of Information and Communication Technology (ICT) professionals. The purpose of this research is to investigate the connection between spirituality and vocational training of ICT professionals. The spirituality model founded by David Hay has been used in this research article which contains awareness sensing, mystery sensing, and value sensing. The paper has used qualitative methodology and instruments for data collection are biographical interview. Qualitative data have been analyzed by using Nvivo 11. Initial results show the preliminary picture of the role of spirituality in vocational training of ICT professionals.

Keywords: ICT professionals, spirituality, David Hay’s Spiritual conception, vocational training

Introduction

Over the past 20 years, there is evidence of dramatic shift in the research patterns around the world. This shift has not only altered the economic structure of societies and social life but also knowledge, skills, and capabilities required in various fields of life (Mitchell & Ward, 2010; Dempsey, 2013; Baker, Bloom, & Davis, 2012). The motivational factors behind this dramatic shift include transition from agriculture to industrial ages and to the knowledge era. Other factors responsible for this shift include advances in technology that has enormously changed the social and economic life, globalization of communication, and trade and changes in social and development patterns which are outcomes of demographic changes (Guthrie, Perkins, & Mitchell, 2005). However, the state of continuous unemployment indicates that existing education system is unable to educate and train people in line with social expectations (Dempsey, 2013). In this regard, Cornford, Athanasou, and Pithers (1996) are of the view that lifetime learning is the commendable strategy to deal with the challenges of contemporary societies and it is highly associated with VET sector. This has made improved training quality...
as the most stimulating task for VET institute and policy makers to meet the rising demand for skilled and technical workers (Guthrie, 2010; Wheelahan, 2011). In learning environment performance of trainees should be studied from psychological, physical, and spiritual dimension. Although, literature has measured the physical and psychological dimensions very comprehensively, the measurement of spirituality has been lacking from several years (Walt, 2007). Furness (2012) and Furman, Benson, Grimwood, and Canda (2004) have presented a claim about British social workers and British social work students that they have rarely analyzed with respect to spiritual dimension. Having discussed the above-mentioned facts, it is obvious that there is a dire need to explore the spiritual dimensions from the view of vocational training.

There is an enormous practical evidence available in literature that emphasizes the significance of spirituality in various areas of studies like counselor education, psychology, marriage, and family therapy and supervision (Uota, 2012; Weber & Pargament, 2014; Cappellen, Toth-Gauthier, Saroglou, & Fredrickson, 2014). Young, Wiggins-Frame, and Cashwell (1998) claimed that spirituality is considered as an important aspect in the lives of two thirds of Americans. Therefore, it is apparent from the literature that spirituality contributes significantly to people’s lives and affects the way of living a life, work, and their behavior or conduct. Studies have found positive association of organizational work attitudes (Milliman, Czaplewski, & Ferguson, 2003), and organizational performance (Neck & Milliman, 1994) with spiritual well-being, individual spirituality, and workplace spirituality. These studies highlighted that researchers who have focused on workplace spirituality, have talked about spirituality at individual as well as group and organizational level. Moreover, outcomes of these studies illustrate that psychological welfare of human being is significantly affected by spirituality. There are classical theories which are not only well known for students but also inspirational for researchers. Viktor Frankl, the initiator of Existential Analysis Logotherapy, has particularly focused on “meaning of life” (Frankl, 1959) which is a spiritual dimension. Furthermore, Walt (2008) has claimed that Maslow’s (1954) esteem and self-actualization needs are linked with Herzberg’s (1966) motivators, and Alderfer’s (1972) growth need and these “need” theories are proved to be strongly associated with spirituality.

In views of Dempsey (2013), Vocational Education and Training (VET) is of fundamental significance in the design of social and economic policies in world economies. In Europe 2020 development strategy, VET has given the importance (Deaconu & Mocanu, 2016). The European Centre for the Development of Vocational Training (CEDEFOP) in its report has highlighted the implication of VET in European nations (CEDEFOP, 2011). Hoffman and Schwartz (2015) in their research have found that VET serves an important part in the training of high skilled labor force in Switzerland and presented that there is a strong link between broader Swiss education system and VET. Apart from Europe, there is evidence that VET is strongly linked with job performance in UK and Australia (Dempsey, 2013). In developing nations, VET is taken as an explanation to the academic issues (Tilak, 2002). Mustafa, Abbas, and Saeed (2005) in their study have highlighted that Asian economies have given particular attention to VET in non-formal and formal education system. VET is imperative to employers, individuals, and government of different political influences. According to NCVER (2010), in Australia VET is responsible for the betterment of skilled workers and their practical skills. In China, considering the significance of VET, government is accountable to provide a quality assurance framework where public and private VET suppliers will work (Hillier, 2012). When theoretical connectivity of VET is considered, Human Capital Theory presented by Becker (1962) has focused on role of individual’s training and
education on organizational productivity and it is also connected with labor market structure and its institutions. Many empirical studies have come up with the same findings that Human Capital Theory is strongly connected with VET (Becker, 1962; Mincer, 1974; Nilsson, 2010; Schultz, 1961).

**Literature Review**

**Spirituality as a Social Science Concept: Overview**

The word “spirituality” is abstract in nature. It is necessary to describe the theory of spirituality to attain its applied implication at workplace. The rationale for initiating this study is the investigation of theory of spirituality. In presently existing literature, there is a lack of recognized conceptual and operational definition of spirituality. Dent, Higgins, and Wharff (2005) are also of the same view that spirituality is lacking in theoretical clarity. In view of Kolodinsky, Giacalone, and Jurkiewicz (2004), there are quite a few methods and definitions of workplace spirituality have been presented in literature, which are mostly inexact. The rationale for conducting the present research is to contribute in the existing knowledge of spirituality processes.

As stated by Wheat (1991), the effective definition of spirituality is

> …the personal valuing, experiencing or behavioral expression of (a) a larger context or structure in which to view the events of one's life, (b) an awareness of and a connection to life itself and other living things, and (c) a relevant compassion for the welfare of others…

The foremost features recognized by Wheat (1991) are of broader framework comprising of characteristics like self-sacrifice, truth, righteousness or ethics, and meaning in life; awareness of life, such as personal growth and completeness. Wheat (1991) recommended an organized and practical description of spirituality. David Hay (2001) emphasized that awareness sensing, mystery sensing, and value sensing are significant dimensions of spiritual understanding and are useful to realize the idea of spirituality. The authors have used David Hay’s concept of spiritual sensitivity as an initial argument of discussion concerning spirituality in the present research. David Hay is of the view that spirituality brings trust and truthfulness in an organization.

**Relationship Between Spirituality and Vocational Training**

Learning is a course of forming, executing, reflecting upon, and regulating actions (Edmondson, 1999) and it takes place at individual, group, and organizational level (Marsick & Watkins, 2003; Casey, 2005), while spirituality relates to searching for purpose or higher meaning in life, inner life, connectedness and transcendence (Petchsawang & Duchon, 2012; Miller & Ewest, 2013). Identical to learning, spirituality at workplace has also considered at both the individual and group levels (Kolodinsky, Giacalone, & Jurkiewicz, 2008; Giacalone & Jurkiewicz, 2003). Since, vocational training is one source of learning, so it can be said that VET could have linked with spirituality. Vocational training institutes offer various programs and subjects which comprise of paraprofessional and professional studies, traditional trades, elementary employment programs, and advanced technical training (Dempsey, 2013). Among all these programs, information and communication technology (ICT) training is a fundamental vocational training program which is widespread in industries and academia likewise.

The empirical evidence spanning from Moore (1934) to Marzano (2003), educationalists, philosophers have been studying and sharing quality practices for growth of student performance (Wright, 2016). Spirituality is considered for learning at individual-level (e.g., Tisdell, 2008; Dirkx, 2013). Pandey, Gupta, and Kumar (2016) discovered that spiritual environment is very helpful in learning. Nevertheless, research has not been
conducted so far on analyzing a link between learning and spirituality in vocational training institute and most importantly in ICT professionals. From last two decades, research in positive psychology, counseling, and medicine has given importance to student spirituality and school-based counseling which relate spirituality with positive student performance including psychological, physical, and mental health (Cleveland, 2016). However, to better understand performance in learning environment, trainees must be analyzed from psychological and physical dimensions and spiritual dimensions in particular. There is comprehensive research on measurement of psychological and physical dimensions at work (Walt, 2008) but there is a need to consider spiritual dimensions in vocational training of ICT professionals as well which have been ignored for several years (Walt, 2007).

**David Hay’s Conception**

**Awareness sensing.** The word “awareness” is the most frequently used word in the work of spirituality. According to Hay and Nye (2006) “awareness” is described as a state of high alertness. This can happen involuntarily i.e. when a person suddenly finds himself in danger or it may arise when we are “paying attention” to what is happening. David Hay’s understanding of “awareness” includes when a person is attentive to what tasks he is performing practically and “being attentive to one’s attention or being aware of one’s awareness” (Hay and Nye, 2006). This form of awareness is of immense importance in spirituality. David Hay has used four examples to describe the generality of this phenomenon which includes Here and Now, Tuning, Flow and Focusing.

**Mystery sensing.** This is a feeling of amazement for something. Otto R. (1958) highlights two aspects of mystery of the sacred i.e. fear or awe and fascination or wonder. If someone sees rivers, mountains, and beautiful natural sceneries, then he says wow, wonderful, awesome, what a beauty the God has created. In this way, people praise the God’s invincible power in creation of these things which means there is a feeling of mystery of the sacred (secrets of God). God’s creation of humans itself is a big source of wonder and awe. Human beings have so much wisdom and knowledge that they have discovered so many hidden truths about this universe, for example, man has stepped on to the moon and now planned to reach the Mars. This gives us a sense of wonder, surprise, and feeling of amazement about what humans have achieved so far by using their intellects and brainpowers which God has given them. When the consideration given to the vastness of this universe, it creates feeling of awe in a person (Hay & Nye, 2006). David Hay has used four examples to describe the generality of this phenomenon which includes Wonder and Awe, and Imagination.

**Value sensing.** The term “value sensing” was first introduced by Margret Donaldson (1992). Value sensing relates to the significant human emotions. Things with which individuals are connected the most, become associated with their deep feelings. Feelings could be structured according to line between delight and despair. Feeling of delight refers to the emotions when a person feels happy, relaxed, excited due to some reasons. This feeling of delight specifically comes from the awareness of presence of higher being/transcendence, which means that a person feels himself connected with higher being in a way that he believes whatever good happens to him, it is transcended from a higher being (Hay & Nye, 2006). David Hay has used four examples to illustrate this phenomenon which includes Delight and Despair, Ultimate Goodness and Meaning.

**Research Problem**

The above-mentioned literature represents the significance of spirituality in ICT and learning environment but research is lacking in connecting vocational training of ICT professionals and spirituality. The researchers try to investigate the connection between spirituality and vocational training of ICT professionals in David
Hay’s conception of spirituality.

**Purpose of the Study**

The main purpose of this research article is to explore the form of relation in David Hay’s conception of spirituality and vocational training of ICT professionals.

**Research Methodology**

An appropriate applied methodology in research is based on the nature of research question. Robson and McCartan (2016) observed that researchers have varied beliefs about the type of information and the process through which knowledge is obtained and verified.

**Research Design**

**Qualitative research method.** The present study employs a qualitative method that is inductive and fulfills the aim of investigation. The idea of spirituality is an abstract in nature. The notion of spirituality cannot be detected straightforwardly. Everyone may have a diverse insight and understanding about spirituality. The qualitative research method is useful for exploring the abstract concept of spirituality. The present research has made use of biographical interviews to have an idea about everyone’s insight and knowledge of spirituality in vocational training.

**Qualitative data collection.** As mentioned above, the qualitative data were collected from biographical interview. An interview is a “conversation between people in which one person has the role of researcher” (Arksey & Knight, 1999, p. 2). Interviews are categorized into structured, unstructured, or semi-structured interview. In structured interview, only standard information about the respondent is collected and interviewer is strictly required to ask questions which were scheduled in prior (Arksey & Knight, 1999). In present study, semi-structured interviews were conducted to collect the data.

**Interview participants.** Based on purposive sampling, eight participants were chosen as sample among top-level ICT professionals having more than 10 years of experience from different organizations.

**Interview administration.** Online interviews were conducted at the convenience of respondent. The time span of each interview was between 90 and 150 minutes. Interviews were recorded on audio. At the end, researcher suggested to share the results of the study and the transcript of their interview to verify.

**Qualitative data analysis.** For purpose of analysis, verbatim transcriptions of interviews were generated and further read thoroughly by three independent researchers repeatedly. After mutual discussion, themes were generated in nodes form in Nvivo 11 software. Themes were generated with mutual discussion in the forms of nodes in NVivo 11 software. Nvivo 11 software has been used to analyze the qualitative data and it is produced by QSR International. NVivo helps researchers to transcribe, save, and code audio recordings and further analyze the data thematically.

Tape-recorded audios were used to generate themes and categories of spirituality. Emerging codes were established after debriefing with thesis supervisor, Tomasz Ochinowski. The codes were further refined through analysis and organizing of interviews.

**Thematic Network**

Thematic network has been applied to the current study. The study recorded interviews of the respondents and then transforms them into the thematic networks for qualitative analysis by using the following steps.
(a) Coding the material.
(b) Identifying themes.
(c) Constructing project map.
(d) Interpreting thematic network.

Table 1 highlights the thematic network in an order from sub-indicators to main dimension.

Table 1

| Thematic Network (From Sub-indicators to Main Dimensions) |
|----------------------------------------------------------|
| **Sub-indicators**                                      | **Indicators** | **Dimension** |
| Point mode (babies have no past and future conceptions)  |               |               |
| To live in present                                      | Here and now   |               |
| Immediate experience                                    |               |               |
| Intensity and immediacy of awareness                    | Tuning         | Awareness sensing |
| Heightened aesthetic experience (e.g. listening to music) |               |               |
| Profound empathy/deep understanding                     |               |               |
| Sensitivity to the ebb and flow of experience            |               |               |
| Intense sense of belonging                              |               |               |
| Experience of alienation                                |               |               |
| Intense concentration                                   |               |               |
| Feeling confident to face new challenges                 | Flow           |               |
| Feeling of doing an activity without reward/financial benefits/improved skills |               |               |
| Experience of concentrated attention                     |               |               |
| Religious rituals can be a source of flow (flow contributes to conscious spirituality) |               |               |
| Felt sense of situation                                 | Focusing       |               |
| Body as a source of spiritual knowledge (bodily awareness) |               |               |
| Emotion of reverence and respect                         | Wonder and awe |               |
| Feeling of fear                                          |               |               |
| Feeling of admiration of sacred phenomenon                |               |               |
| Sense of connection with universe transcending consciousness |           |               |
| Mystery of the sacred                                   |               |               |
| Feeling of amazement                                     | Mystery sensing|               |
| Scientific explanation of wonder                         |               |               |
| Activity of imagining impossible                         | Imagination    |               |
| Investigation of unknown                                |               |               |
| Imagination through metaphor, symbols and stories        |               |               |
| Visualize something unseen/unreal                        |               |               |
| Awareness of presence with higher being                  |               |               |
| Feeling of loss                                          | Delight and despair |         |
| Feeling of pleasure/excitement                           |               |               |
| Feeling of being abandoned by higher being/transcendence |               |               |
| Feeling that everything is alright                       | Ultimate goodness |             |
| Having trust in someone                                  |               |               |
| To discover, who am I?                                  | Meaning        |               |
| To search for the purpose                                |               |               |
| To search of one’s connection and responsibilities       |               |               |
Figure 1. Thematic network (David Hay’s conception).
Thematic Network (David Hay’s Conception)

Figure 1 clearly describes the thematic network designed under the David Hay’s conception of spirituality. Sub-indicators mentioned at third layer of the tree have been designed by the researcher in the light of David Hay’s conception of spirituality.

Word Frequency

Word frequency query finds the most frequently occurring words or concepts. Figure 2 shows the word frequency in all the interviews which has been taken from Nvivo 11. In these interviews one can see that spirituality, learning and informatics are occurring words as their boldness and effects are more prominent (Figure 2).

Figure 2. Word frequency.

Figure 3. Nodes compared by number of coding reference.
Results and Discussions

Tree map is produced to compare different codes and themes which graphically show themes and codes against each theme (Figure 3). A tree map is a figure that presents ordered data in form of nested rectangles of different sizes. The size of each rectangle represents number of coding references for each theme. Bruls, Huizing, and Wijk (2000) pointed out that tree maps are well-organized and compressed displays, which shows size of final elements in the structure. In Figure 3, a tree map shows the assessment of coding references on each major theme, i.e. Awareness Sensing, Mystery Sensing, and Value Sensing.

The large rectangle shows that in the data most of the references are form that particular theme and that how and in which form David Hay’s dimensions of spirituality exist in the vocational training of ICT professionals. Major references are “identify responsibilities/moral sense”, “identify the purpose”, “discover about oneself”, “awareness of connection with higher being / trasendence” and “feeling of pleasure/excitement”. Among these, first three themes lie under “Meaning” dimension of “Value Sensing” whereas the last themes come under “Delight and Despair” dimension of “Value Sensing”. These references lie in the “Meaning” that is dimension of “Value Sensing”. With respect to our second dimension of Spirituality “Mystery Sensing”, Figure 3 shows the larger rectangles which represent “sense of connection with universe transcending consciousness”, “mystery of sacred”, “emotion of reverence and respect”, “imagination through metaphors/symbols and stories”, “visualize something unseen/unreal”, and “activity of imagining impossible”. Among these themes, first three themes lie under “wonder and awe” dimension of “Mystery Sensing” whereas last three themes belong to “imagination” the second form of “Mystery Sensing”. Lastly, Figure 3 represents large rectangles of our third dimension of Spirituality which is “Awareness Sensing”. This dimension of spirituality exists very rarely in ICT professionals as can be seen from the sizes of rectangles in Figure 3. However, this dimension exists mostly in form of “flow” and “tuning”. Furthermore, few themes from “flow” which exist the most are “feeling of doing an activity without reward” and “experience of concentrated attention” whereas “feeling of harmony or at one with environment” is the theme which mostly exists under “tuning” which is another form of “Awareness Sensing”.

Limitations of the Research

From the vocational training context spirituality is comparatively new field of discussion. The researcher may not be able to explore all the factors that are of some importance in this field. The present study can be extended to cross cultural comparison so that culture can also be considered while exploring spirituality.

Implications of the Research

This study tries to explore the David Hay’s concept of spirituality in vocational training of ICT professionals, which was not taken into consideration for many years. The practical contributions of this research show the relationship of spirituality with vocational training of ICT professional in David Hay’s concept of spiritually, and how this relationship can be used to enhance the quality of vocational training and to improve knowledge and skills of the trainees.

References

Alderfer, C. P. (1972). *Existence, relatedness and growth: Human needs in organizational settings*. New York: Free Press.
Arksey, H., & Knight, P. T. (1999). *Interviewing for social scientists: An introductory resource with examples*. Sage.
Baker, S., Bloom, N., & Davis, S. (2012). *Measuring economic policy uncertainty*. Munich: Munich MPRA Archive.

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*(5), 9–49.

Bruls, M., Huizing, K., & Van Wijk, J. J. (2000). Squarified treemaps. In *Data visualization 2000* (pp. 33-42). Springer, Vienna.

Casey, A. (2005). Enhancing individual and organizational learning: A sociological model. *Management Learning, 36*(2), 131-147.

Cleveland, R. E. (2016). *Spirituality & faith development issues: School-based counseling and student spirituality*. Christopher A. Sink (Ed.). Routledge: Taylor & Francis. Source: https://www.amazon.com/School-Based-Counseling-Student-Spirituality-Perspectives/dp/1138020516 isbn: 9781138020528

Cappellen, P. V., Toth-Gauthier, M., Saroglou, V., & Fredrickson, B. L. (2014). Religion and well-being: The mediating role of positive emotions. *Journal of Happiness Studies, 17*(2), 485-505.

CEDEFOP. (2011). *The benefits of vocational education and training*. Luxembourg: Publications Office of the European Union.

Cornford, I., Athanasou, J., & Pithers, R. (1996). Career counsellors and the promotion of lifelong learning. *Australian Journal of Career Development, 5*(2), 43-46.

Donaldson, M. (1992). *Human minds: An exploration*. Allen Lane/Viking Penguin.

Deaconu, A., & Mocanu, E. M. (2016). A Comparative study regarding the vocational education and training in tourism in Romania, Bulgaria and Turkey. *Euromentor Quarterly, 7*(2), 75.

Dempsey, M. (2013). Impacts of the changing nature of the Vocational Education and Training (VET) system on educators within the VET system in Australia. PhD thesis, School of Education, Faculty of Education and Arts, Edith Cowan University.

Dent, E. B., Higgins, M. E., & Wharff, D. M. (2005). Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. *The Leadership Quarterly, 16*(5), 625-653.

Dirkx, J. M. (2013). Leaning in and leaning back at the same time: Toward a spirituality of work-related learning. *Advances in Developing Human Resources, 15*(4), 356–369. doi: 10.1177/1523422313498562

Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(1), 350–383.

Frankl, V. E. (1959). The spiritual dimension in existential analysis and logotherapy. *Journal of Individual Psychology, 15*(2), 157.

Furness, S. (2012). Religion, beliefs and culturally competent social work practice. *The Journal of Practice Teaching and Learning, 5*(1), 61-74.

Furman, L. D., Benson, P. W., Grimwood, C., & Canda, E. (2004). Religion and spirituality in social work education and direct practice at the millennium: A survey of UK social workers. *British Journal of Social Work, 34*(6), 767-792.

Giacalone, R. A., & Jurkiewicz, C. L. (2003). Right from wrong: The influence of spirituality on perceptions of unethical business activities. *Journal of Business Ethics, 46*(1), 85-97.

Guthrie, H., Perkins, K., & Mitchell, J. (2005). A workforce development framework for VET practitioners 2008-2013. Perth, Australia: Western Australian Department of Education and Training.

Guthrie, H (2010). *Professional development in the VET workforce*. Adelaide, SA: NCVER.

Hay, D. (2006). Children’s spirituality—What we know already. In D. Hay and R. Nye (Eds.), *The spirit of the child* (pp. 49-62).

Herzberg, F. (1966). *Work and the nature of man*. Cleveland, OH: World Publishing Co.

Hillier, Y. (2012). *Innovation in teaching and learning in vocational education and training: International perspectives*. Adelaide, Australia: NCVER.

Hoffman, N., & Schwartz, R. (2015). *Gold Standard: The Swiss vocational education and training system*. Washington, DC: National Center on Education and the Economy.

Kolodinsky, R. W., Giacalone, R. A., & Jurkiewicz, C. L. (2004). Exploring personal, organizational and interactive workplace spirituality outcomes. Paper presented at the Academy of Management Annual Meeting. New Orleans, LA.

Kolodinsky, R., Giacalone, R., & Jurkiewicz, C. (2008). Workplace values and spirituality. *Journal of Business Ethics, 81*(2), 465-480. doi: 10.1007/s10551-007-9507-0

Marzano, R. J. (2003). What works in schools: Translating research into action. ASCD.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.

Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization’s learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources, 5*(2), 127–132. doi:10.1177/1523422303251341

Miller, D. W., & Ewest, T. (2013). The present state of workplace spirituality: A literature review considering context, theory, and measurement/assessment. *Journal of Religious & Theological Information, 12*(1/2), 29-54.
Milliman, J., Czaplewski, A. J., & Ferguson, J. (2003). Workplace spirituality and employee work attitudes: An exploratory empirical assessment. *Journal of Organizational Change Management, 16*(4), 426-447.

Mincer, J. (1974). Schooling, experience, and earnings. *Human Behavior & Social Institutions* No. 2.

Mitchell, J., & Ward, J. (2010). *The JMA analytics model of VET capability development*. Sydney: John Mitchell & Associates.

Moore, E. (1934). A technique for scoring honesty in classroom performance. *Journal of Educational Sociology, 8*(1), 34-43.

Mustafa, U., Abbas, K., & Saeed, A. (2005). Enhancing vocational training for economic growth in Pakistan. *The Pakistan Development Review, 44*(4), 567-584.

Neck, C. P., & Milliman, J. F. (1994). Thought self-leadership: finding spiritual fulfillment in organizational life. *Journal of Managerial Psychology, 9*(6), 9-16.

Nilsson, A. (2010). Vocational education and training—An engine for economic growth and a vehicle for social inclusion? *International Journal of Training and Development, 14*(4).

Otto, R. (1958). *The idea of the holy* (Vol. 14). Oxford University Press.

Pandey, A., Gupta, R. K., & Kumar, P. (2016). Spiritual climate and its impact on learning in teams in business organizations. *Global Business Review, 17*(3), 159S-172S.

Petchsawang, P., & Duchon, D. (2012). Workplace spirituality, meditation, and work performance. *Journal of Management, Spirituality, & Religion, 9*(2), 189-208. doi: 10.1080/14766086.2012.688623

Robson, C., & McCartan, K. (2016). *Real world research*. Hoboken: John Wiley & Sons.

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review, 51*(1), 1-17.

Tisdell, E. J. (2008). Spirituality and adult learning. *New Directions for Adult and Continuing Education, 119*(119), 27-36. doi: 10.1002/ace.303

Tilak Jandhyala, B. G. (2002). *Vocational education and training in Asia: The handbook on educational research in the Asia Pacific region*. John P. Keeves and Rye Watanabe (Eds.). Dordrecht: Kluwer Academic Publishers.

Uota, K. (2012). *The Roles of Religion and Spirituality in Recovery from Mental Illness*. UC Berkeley: Social Welfare. Retrieved from: http://escholarship.org/uc/item/9tr096r6

Walt, F. V. (2007). The relationship between spirituality and job satisfaction. Unpublished doctoral dissertation, University of Pretoria. Pretoria, Gauteng, South Africa.

Walt, F. V. (2008). The relationship between spirituality and job satisfaction. Unpublished doctoral dissertation, University of Pretoria. Pretoria, Gauteng, South Africa.

Weber, S. R., & Pargament, K. I. (2014). The role of religion and spirituality in mental health. *Current opinion in psychiatry, 27*(5), 358-363.

Wright, S. (2016). *Language policy and language planning: From nationalism to globalisation*. New York: Palgrave Macmillan.

Wheelahan, L. (2011). If laissez-faire rules, TAFE suffers. *Campus Review (June)*. Canberra, Australia.

Wheat, L. M. (1991). Development of a scale for the measurement of human spirituality. Doctoral dissertation, College Park: University of Maryland.