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Application of student development theory: Phenomenological study of needy students

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Abstract

In this qualitative phenomenological study, the researcher explored the development of needy students based on the lived experiences of the participants. Purposive and snowball sampling techniques were used to select ten needy students, made up of five males and five females, from a university in Ghana for the study. Thick description was used to capture the upbringing and developmental life situations and self-discovery of the participants. In this exploratory study, the major themes that epitomized the findings were: managing emotions, societal influences, mentoring, working to financially support education, poor parenting, authenticity and spirituality, and feeling of inferiority complex. It was revealed from the study that female adolescent needy students indulge in sexual intercourse earlier than their male counterparts.

Keywords: Phenomenology, student, development, Theory, Phenomenon

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1. Introduction

The development of a person is associated with changes that can be described using some theoretical frameworks. The individuals change because their developments enable them to create a sense of self; perceived to be well grounded and stable, especially during the adolescent stage of their lifetime as students. Knowledge of the application of development theories are grounds for analysis of the changes in poor students' behavior as they develop. The application of student development theory emerged as a result of an investigation into how people get developed. The main theories that describe the development of an individual, according to Chickering and Reisser (1993), are person-environment-interaction theories, cognitive theories, psychosocial theories, and typology theories.

2. Person-Environment-Interaction theory

The Person-Environment- Interaction theory, with Chickering as the main proponent, posits that individual personalities are influenced by their interactions with the environments. The interactions contribute to shape their way of life as they develop. Because of different developmental processes that contribute to mold a person from different environments, when students are brought up from their various environments and are later on put into another different environment together, they experience it differently. Even though the environment plays an extensive role in shaping a person, there are other factors which also explain the development of students, especially poor parenting resulting from abject poverty.

According to Torres et al. (2003), Chickering, in describing the person-environment-interaction theory, propounded *the seven vector model* of development to describe the various factors that affect the formation of identity of individuals as they interact with the immediate environment. During the development of students, the individuals move through the first three of *Chickering Seven Vectors*, at different rates depending on their interactions with their immediate environment. Adolescents and young adults, who are usually college students, seek stabilization and establish individual identities; depending on the movement of the students along the first three vectors of Chickering model (Chickering and Reiser, 1993, p. 23). The vectors build on one another and lead to greater stability and integration. The seven vectors as found in Chickering and Reiser (1993, p. 35) are:

- Developing intellectual and interpersonal competence.
- Managing emotions through the development of the ability to accept, express and control emotions.
- Moving through autonomy toward interdependence which results in increased emotional independence, self-esteem and prestige.
- Developing mature interpersonal relationship resulting from the development of the individual's sense of self.
- Establishing identity based on Ethnic background and sexual orientation of the individual.
- Purpose development through vocational goals, commitment to strong interpersonal and specific personal interest.

- Developing integrity based on humanizing and personalizing values.

According to Evans et al. (1998), students go through certain well-structured academic programs that nurture them in certain ways. The person-environment-interaction theory provides that individuals derive their satisfaction and stability when their personality and the environment from which they are brought up interact smoothly. The theory also stipulates that individuals derive dissatisfaction and change their behavior when they face some discrepancies. The theory has contributed a lot to the identity of individuals during their development. Nevertheless, it can be criticized for lacking specificity and being culturally bound.

3. Cognitive theory

As a person develops there are certain structures in the mind, known as schemata, that change, expand and become complex as a result of assimilation and accommodation of events and ideas from the environment (Merriam et al., 2007). These cognitive changes, as explained by the cognitive theory, enable an individual develop from abstract ideas through active model to a reflective, internalized way of thinking (Piaget, 1932 in Chickering and Reiser, 1993). Cognitive theories describe the changes in thinking (reasoning) due to the evolving frames of reference that structure values, beliefs, and assumptions (Chickering and Reiser, 1993). Ericsson (1996 in Masunaga and Horn, 2000) indicates that, reasoning comes about as a result of our perception of complex relationships among the various stimuli received. In the course of reasoning, people draw inferences from these perceptions and extrapolate the relationships that are solutions to problems. Human memory is said to be an adaptation, shaped by natural selection, as an individual develops (Miller, 2011). For instance, a student who becomes a member of an ethnic group on campus may initially learn to cope with the norms. Through the association tempers may rise and that student may learn how to manage emotions which may encourage the development of autonomy and establishment of identities. Through extra-curricular program at an institution of higher learning the development process of a student gets enhanced. A student may even learn to become a leader of an association where integrity may be developed (Kuran, 2011). Baxter Magolda (1992 in Bock, 1999), in describing longitudinal study of cognitive development, came out with six principles that explain the process of cognitive change as follows:

- The making of meaning of situations by a person is affected by that person's worldview and that person's interpersonal relationship with others; depending on the context of that individual's experience.
- Ways of knowing come through the principles of naturalistic inquiry that helps to preserve the integrity of an individual's stories and experiences.
- Reasoning patterns are mutually exclusive and change over time.
- Patterns are not dictated by gender, even though pattern and gender are related.
- Stories of students and their interpretations of patterns, contextually, cannot automatically be generalized.
- Ways of knowing and the pattern of reasoning within the ways are demonstrated as patterns in an attempt to describe the predominant ways of knowing.

4. Psychosocial and identity development theories

According to the psychosocial and identity development theories, the attitudes of people are related to the developmental issues experienced. Individuals respond to issues confronted differently based on the influences from the immediate environment, the culture, and even gender (Widick et al., 1980 in Evans et al., 1998). The psychosocial theory posits that as people progress in life, successive sequential stages linked to age, relationship and developmental tasks that propel them to seek ways of resolving issues brought about by their developmental task are confronted (Erikson, 1959 in Evans et al., 1998). The development of a person is seen as a series of developmental tasks that reflect in the changes of the individuals thinking, feeling, valuing and relationship with others (Chickering and Reiser, 1993).

5. Typology theories

Typology theories are not developmental theories per se but describe certain distinctive features that have impact on a person depending on the type. These theories provide a framework for how institutional challenges influence different types of students. According to Kolb (1976 in Chickering and Reiser, 1993), these theories describe the differences in learning style, personality types, temperament, or socioeconomic backgrounds of an individual. Kolb outlined four different ways of learning due to individual preferences as concrete experiencing, abstract conceptualization, active experimentation, and reflective observation. In Myers Briggs type indicator model, four measures of individual perceptual differences as sensing, intuition, thinking, and feeling were measured (Merriam et al., 2007). Briggs described how the attitudes and behavior of an individual can be measured to determine the psychological type of that person using perception and judgment that govern a greater aspect of the total mental activity of an individual.

Josselson (1987 in Evans et al., 1998), in a research on women's identity, concluded that the adolescents who engage in active exploration into an identity develop achieved identity. According to Schlossberg et al. (1995 in Evans et al., 1998), in a transitional situation the ability of an individual to cope depends on four main factors which are situation, self, support, and strategy.

6. Cultural factors affecting individual development

Even though the main students theories did not lay emphasis on cultural factors, in discussing life events one cannot rule out the cultural factors that contribute to the development of an individual (Chaudhari and Pizzolato, 2008). In certain cultures, such as the Kantian tradition, the development of an individual is constructed by moral laws in situations that make moral principles bounded by rationality (McDonough, 2005). In a research on culture and life satisfaction in developed and less developed nations it was realized that the influence of cultural values on life satisfaction of an individual, as the individual develops, depends on the family ties, religion, and interpersonal trust as practiced in the context of either developed or less developed economies (Lange, 2010; Hifazatullah et al., 2011). For instance, in the Western culture, emotions

play significant roles in life satisfaction and individuals are expected to be self-reliant during adulthood. However, in the Eastern world including China, Korea, and Japan, collectivism plays significant value which is rooted in the cultural heritage of Confucianism (Liao et al., 2005).

7. Research purpose

The purpose of the current study was to use student development theory to describe the factors that best explain and promote the development of individuals from poor background. The focus is on the developmental aspects through challenges from the various environmental and socio-cultural factors affecting the life of students (Jenny, 2012). The objective of the study was to discover the developmental issues of needy students at a University in Ghana in line with the various theories on student development based on the lived experience of the research participants.

8. Research questions

In qualitative studies, researchers usually ask open-ended questions that provide answers that lead to the discovery of the reasons behind a particular phenomenon. According to Creswell (2007), questions asked must leave room for elaboration. The type of questions usually used for exploratory field work mostly begin with "how" or "what." The researcher is to avoid or minimize asking questions involving: relate, influence, impact, and cause. In trying to know more about a participant, a qualitative researcher may ask questions such as "Tell me about your nationality? What is your living situation like? Have you lived here all your life?" (Thomsen, 2011). The researcher is to remain flexible and follow carefully the responses from the participant. In seeking confirmation, a researcher may also ask questions such as "Please explain further? Why? What do you think about that? These questions may provide collective insight into a particular a phenomenon. The main questions for this study were based on how to discover the developmental task that confronted the participants. During the interview, data collection, and analyses phase of the study, the research questions that guided the exploratory study included:

- How were you brought up?
- What elements were missing during your development?
- Explain the experience of your encounter with the opposite sex.
- How did you have your education sponsored
- How were you fashioned by the type of education received?
- How did you flare with your colleagues at school and back home?

In the course of the interview some of the major questions that emerged were: What was the meaning of that event to you? How did you overcome your predicament? These questions were asked to discover what was desired in the context of the study (Cresswell, 2007). Most of the responses generated some other questions relating to the development of the participants.

9. Method and design

In qualitative studies to explore the development of a student, without the use of integrative approach there may be various issues that can create doubts, such as articulation of principles which are philosophic, concreteness of thoughts that are related to the context, and criteria for rigor (Pereira, 2012). According to Giorgi (1970 in Smythe, 2012), "all knowledge is interpretation" (p. 391). This implies that in qualitative studies, researchers attempt to reach scientific status by being thorough in their approach to the studies (Megill, 1985 in Smythe, 2012, p. 391). Phenomenological studies enable a researcher employ a descriptive insight into the lived experience of a person (Sokolowski, 2000 in Jones et al., 2012). A qualitative researcher can also ensure confirmation of accuracy and relevance of themes by sending written summary of transcripts of interviews to the individual participants for confirmation and feedback (Jones et al., 2012). These reasons compelled this researcher to use qualitative phenomenological research design to explore the development of students based on student development theories.

10. Data collection and analysis

The researcher, in this current study, employed inductive approach to gather and analyze data, using "sensitizing concepts," advocated by the interactionists tradition within sociology as suggested by Herbert Blumer (1969, in Krathwohl and Smith, 2005). In exploring the developmental issues that contributed to mold the participants, the researcher used in-depth semi-structured interview as the main source of data gathering. In trying to understand the social world of the participants through personal experience in natural setting (Schram, 2006), the researcher visited the homes of the participants to observe and interview some members of the families of the participants and used direct observation to gather and analyze data in an attempt to triangulate (Bogden and Biklen, 2007). Most of the questions were developed on the spot, based on the interactions, to leave room for the participants to explore and elaborate on answers through reflection, without much interruption from the researcher's end (Cresswell, 2007; Marczyk et al., 2005).

In the course of the interview, the researcher got to know that one of the participants was initially a convert from one religion to another. In this perspective, the researcher tried to avoid making personal feeling affect the study by bracketing the researcher's own personal feelings and thoughts (Bogden and Biklen, 2007). The personal experience of the researcher, as a counselor and session clerk of the Presbyterian church of Ghana for almost six years and as a dean of faculty at a university for almost six years, was brought to bear in this study. For ethical reasons the names used were pseudonyms. These names were used to protect the identity of the persons studied. The consent of the participants was sought for and the reason for the study was well explained before it was agreed that the study should be carried out.

The interview commenced with the researcher informing the participants what the study sought to explore: seeking to describe the developmental issues of students using student development theories. The interview took place at the university where the environment was serene with very little interaction.

With permission from the participants, the researcher used tape-recorder to record the interview for transcription and further analysis. The transcribed data were sent to the participant for confirmation before further analyses were made from the various codes and themes generated. The study took almost three months with occasional visits to the families, friends and the caretakers for facts finding in the first half of 2012.

11. Poor parenting and feeling of inferiority complex

It was revealed in the study that 70 percent of the participants did not have much parental care from both their biological mother and father. Due to lack of accommodation, some of them were compelled to sleep on verandas and friends at their tender age. Some of them suffered some ailments as a result of malnutrition. For example, Fusseina was born out of unexpected pregnancy and so her biological father denied her as his daughter. She was later on brought up by her mother and a step father who were all Moslems. She faced a lot of challenges growing up with her siblings and parents. She never had the affection and love needed as a young growing child and was always reminded that she was a bastard by her immediate family and most of the people she interacted with who knew of her predicaments in the neighborhood.

In trying to bring theory to bear on predicaments (Simon, 2012) as experienced by the participants, theoretical frameworks of identity development theory through Erikson's work (1964 as cited in Torres et al., 2003) indicates that "in addition to gaining a sense of who we are, our identities are formed by the process of discovering who we are not" (chap. 2, par. 3). Thirty percent of the participants, felt neglected and despised. Fusseina, for example, stated that out of frustration her mother used to yell and scold her and this made her feel neglected because she perceived that nobody loved her and not even her friends because they were all informed of her predicament. As indicated by Chickering et al. (2006), people are possessed by their own mental models as they develop. Almost all the participants felt lonely at school because of the thinking that they were inferior to their colleagues during their childhood and high school education. In their neighborhood their actions were guided by their beliefs about the world as postulated by the Theory of Mind (Links, 2008). Piaget (1932 in Chickering and Reiser, 1993) conceptualized cognitive theories to describe how students think which emanate from the world's concrete view to the formation of abstract ideas and also from active model based on egocentrism through reflection to internalized way of thinking.

Erik Erikson believes that the convergence of physical growth and cognitive maturation with environmental demands presents certain challenges (Chickering and Reisser, 1993). A participant, Kofi, was sent to a Catholic school (elementary) by his poor mother and by a dint of hard-work his academic performance was quite good. He was always among the average students of his class despite how he was traumatized and infuriated back home and in his community because of his wretched life. He started attracting favors from his friends, classmates, and teachers because of his performance in class. His conception about his peers in the neighborhood moved him to gravitate towards his school environment which favored him (Chickering and Reisser, 1993).

12. Managing emotions and struggling for independence

The circumstances surrounding the participants compelled them to sell some items to support their education from high school to the university. It was realized from the study that 50 percent of the participants indicated that apart from financing their own education, they supported their parents financially from what they realized from their business at school. The learning behavior of the participants was affected when they started working and this situation affected their academic performance at high school. Learning is a process which is shaped by the context of adult life and the environment in which one lives (Merriam et al., 2006). Due to poor academic work 70 percent of the participants could not pass either Math or English or both at the first sitting of their high school examination and they had to re-sit the paper(s) during the following sitting. Realizing that they could perform better but their schooling coupled with work at such a tender age, made them emotionally upset. Nevertheless, they learned how to comport in public very well. The poor performance of the participants relates to the identity theory which, according to Baxter Magolda (2001 in Chaudhari and Pizzolato, 2008) is based on intrapersonal dimension of self-authorship which is focused on our response to the question "Who am I."

According to Marian, a participant, through a vote-of-thanks rendered at a function, which was amazing to all the people at that meeting, a member of the Rotary Club of Ghana came out of his own volition and decided to take care of her needs and sponsor her education as a philanthropist (Walton and Gasman, 2008). In her emotions as she narrated her story, she said, "How he even remembered me were a miracle and a mystery that I am yet to unravel. He sponsored my remedial classes and took me to his family and that was where I started experiencing love. They showed me so much love and affection. I even wept…the man is still sponsoring me at this university."

According to the participants, they got admission to the university to pursue undergraduate programs through overcoming some major economic challenges and by a dint of hard work. In Ghana, university undergraduate students are entitled to receive loans from the government, through Ghana Students' Loan Scheme, to support their university education. The loans are redeemed after graduation when the borrower starts working. All the participants applied for the government loan and their applications were upheld. With the granting of their loan applications they felt somewhat financially relieved. The financial support from the government of Ghana enabled them to concentrate on their studies in a better way than their situations were. This brought about improvement in their academic performance. They were then able to relate in a better way with their peers than as their situations were before entering the university as students of an institution of higher learning. Their better performance at the university confirms Marcia Baxter Magolda's Epistemological Reflection Model which is "grounded in the assumption that ways of knowing are socially constructed and context bound" (Merriam et al., 2007, p. 338). The changes in their ability to perform creditably well at the university, coupled with their new peace of mind as described, were in-line with Jean Piaget's Cognitive Model which reflects on "qualitatively different ways of making sense, understanding, and constructing knowledge of the world" (Tennant, 1988, p. 68 cited in Merriam et al., 2007, p. 326).

13. Self-discovery

In narrating their ordeals in connection with their sense of spiritual calling, the participants were highly influenced by the school and churches attended. Their authenticity and spirituality were developed by the doctrines received which changed their thoughts, belief, values and attitude (Chickering et al., 2006). For instance, though born into a Moslem family, Fuseina's way of life changed after she had been taken through the bible and Christian doctrines at a Christian faith-based school near her residence, where she had her elementary education. This was because her mother could not afford paying for her commutation to an Islamic school which was at a distance from their residence. According to her, at age 13 after she had been taken through the bible through her education at the Christian Missionary elementary (Catholic) school, she started having strange dreams, visions and revelations which gave her a deep conviction that she had to abandon her Islamic faith and become a Christian. The strange dreams, visions, and revelations could be explained using cognitive theories such as memory theory which could be traced to Atkinson and Shiffrin (1960 in Miller, 2011). This theory stipulates that "human memory is an adaptation shaped by natural selection" (p. 117). The theory indicates that human memory turns sensory experiences into codes that are stored and retrieved. Dreams, visions, and revelations are some of the means through which the human body transfers unconscious knowledge to the realities of consciousness. This transference is carried out through the *imaginal* realm: an arena through which our egos tap our unconscious body wisdom to construct the narratives that become our lives through pre-reflective experience, as observed by Freud (Bausch, 2011). The change of Fusseina's behavior is due to life events and convictions playing an essential part in psychosocial development of a person, as explained by Chickering's theory of identity development (Evans et al., 1998). This change can also be explained using the Typology Theory which states that a human behavior does not only happen by chance but rather caused by differences in mental functioning (Evans et al., 1998). The authenticity, purpose, meaning, integrity, wisdom and values of a person are expressed in how we interact and communicate (Chickering and Stamm, 2002).

14. Developing intellectual competence

The intellectual development of an individual goes through some stages; from post formal cognitive development stage through cognitive ageing, crystallized intelligence to research learning stage (Kuran, 2011). According to the participants, their inspiration came from God and the people who had made it in life. The reflective thinking of people, from adolescence through adulthood (Merriam et al., 2007), motivate them to remain focus on their aspirations. The participants had the view of becoming rich people by holding highly responsible positions in Ghana through their education.

This new development can be traced to the epistemological development model that is based on strong internal sense of self (Chaudhari and Pizzolato, 2008). All the participants were seeking to get scholarship for further studies abroad. The scholarship would become an instrumental factor to propel them to have successful navigation to their career decision (Butler, 2012). The participants had the belief that it would be very difficult to become what they wanted to be because of the system of higher education in Ghana where

funding of graduate education is an individual affair without any direct financial grant or loan from the government. According to Fernandez-Mozard et al., (2007, p. 457 in Narli et al., 2010) attitude is "a tendency or state internal to a person which biases or predisposes a person toward evaluative responses which are to some degree favorable or unfavorable." Considering their thoughts on how to pursue university postgraduate education, there were changes in their thinking and evolving frame of reference as postulated by the Cognitive Theorists (Chickering and Reisser, 1993).

15. Making moral decision and developing intimate relationship

It was established by a research carried out by Conger and Little (2010) that during the development of a student, from 18 to 25 years of age, the transition into adulthood of that individual is defined in the context of having romantic relationships. The definition takes place mostly during self-exploration in terms of taking responsibility, making independent decisions, and establishing financial independence. The relationship of the participants with the opposite sex had been an interesting one because they tried not to let the dominant campus features which were a reflection of the dominant group influence their sexual life (Torres et al., 2003). According to the ladies, they naturally had a flare that got men easily attracted to them but because of their experiences and how they carried themselves some men got wrong impression about them and thought they could easily accept their proposals for sexual relationship. Eighty percent of the female participants indicated that because of their financial difficulties they started having sexual intercourse from high school. All the men indicated that they had their first sexual intercourse from the university.

Most of the ladies demonstrated that they found it very difficult to reject all the proposals from the opposite sex for intimate relationship because of their inner desire for sex but persisted not to give up. They occasionally succumbed to some of the demands but soon after decided to abrogate the affair upon realization of their commitment (Chickering et al., 2006) to God. This aspect of their sexual behavior could be explained by their high authenticity and spirituality (Merriam et al., 2007) and the typology theory that describes how individuals approach their worlds differently depending on their stylistic differences (Evans et al., 1998). The focus in life of all the participants was how to complete their university education and become the person they wanted to be.

16. Conclusion

This exploratory study has demonstrated the practicality of student development theory using the case of students from a university in Ghana. The study has shed light on the ethnocentric epistemology surrounding the development of students using student development theory (Chaudhari and Pizzolate, 2008). The phenomenology demonstrated the application of the various theories and described the development of the participants. During the study, key issues surrounding the students, the appropriate interventions that made arguments about what might be going on with the students and the application of student development theory were described. It was discovered that most of the factors that affect the development of an individual

are the physical and social environment, economic, parental care received, cognitive variables, cultural factors and the type of education received.

References

Bausch, K.C. (2011), "Visions, hallucinations, and dreams in the context of body wisdomand chaos theory", *Neuro Quantology*, Vol. 9 No. 1, pp. 129-134.

Bock, T.M. (1999), "Baxter Magolda's epistemological reflection model", *New Directions for Student Services*, Vol. 88, pp. 29-36.

Bogden, R.C. and Biklen, S.K. (2007), "*Qualitative research for education: An introduction to theories and methods* (5th ed.), Pearson A & B, Boston, MA.

Butler, K.S. (2012), "Issues of social justice and career development", *Career Planning & Adult Development Journal"*, Vol. 28 No. 1, pp. 140-151.

Chaudhari, P. and Pizzolato, J.E. (2008), "Understanding the epistemology of ethnic identity development in multiethnic college students", *Journal of College Student Development,* Vol. 49 No. 5, pp. 443-458.

Chickering, A.W. and Reisser, L. (1993), "*Education and identity* (2nd ed.)", Jossey-Bass, San Francisco.

Chickering, A.W. and Stamm, L. (2002), "Making our purposes clear", *About campus*, Vol. 7 No. 2, pp. 30-38.

Chickering, A.W., Dalton, J.C. and Stamm, L. (2006), "*Encouraging authenticity & spirituality in higher education"*, Jossey-Bass, San Francisco.

Conger, K.J. and Little, W.M. (2010), "Sibling relationships during the transition to Adulthood", *Child Development Perspectives*, Vol. 4 No. 2, pp. 87-94.

Cresswell, J.W. (2007), "*Qualitative inquiry and research design: Choosing among five Approaches"*, Sage Publication, Thousand Oaks.

Evans, N.J., Formey, D.S. and Guido-DiBrito, F. (1998), "*Student development in college: Theory, research, and practice"*, Jossey-Bass, San Francisco.

Hifazatullah, H., Farooq, H., Badshah, S.N. and Ur Rahman, S. (2011), "Status of child in Islamic society" *Asian Social Science*, Vol. 7 No. 7, pp. 199-203.

Jenny, T.J. (2012), "The holistic development of college students: spirituality as a predictor of college students' pro-social character development", *Culture & Religion*, Vol. 2012 No. 4, pp. 56-145

Jones, F., Rodger, S., Boyd, R., and Ziviani, J. (2012), "Application of hermeneutic phenomenologically oriented approach to a qualitative study", *International Journal of Therapy & Rehabilitation*, Vol. 19 No. 7, pp. 370-378.

Krathwohl, D.R. and Smith, N.L. (2005), "*How to prepare a dissertation proposal"*, Syracuse University Press, New York.

Kuran, M. (2011), "Applying cognitive learning theories to understanding of learning in vulnerable group adults", *Andragosa spoznanja: The Andragogic Perspectives*, Vol. 2, pp. 44-58.

Lange, T. (2010), "Culture and life satisfaction in developed and less developed nations", *Applied Economic Letters*, Vol. 17 Nos. 7-9, pp. 901-906.

Liao, P., Fu, Y. and Yi, C. (2005), "Perceived quality of life in Taiwan and Hong Kong: An international comparison", *Journal of Happiness Studies*, Vol. 6, pp. 43-67. DOI 10.1007/s10902-004-1753-6.

Links, S. (2008), "Theory of mind, research starters' education: Theory of mind", *Educational Psychology*, Vol. 1 No. 2.

Marczyk, G., DeMatteo, D. and Festinger, D. (2005), "*Essentials of research design and Methodology"*, John Wiley & Sons, Hoboken, NJ.

Masunaga, H. and Horn, J. (2000), "Characterizing mature human intelligence", *Learning & Individual Differences*, Vol. 12 No. 1, pp. 1-29.

McDonough, G.P. (2005), "Moral maturity and autonomy: Appreciating the significance of Lawrence Kohlberg's just community", *Journal of Moral Education*, Vol. 34 No. 2, pp. 199-213.

Merriam, S.B., Caffarella, R.S. and Baumgartner, L.M. (2007), "*Learning in adulthood: A comprehensive guide* (3rd ed.)", Jossey-Bass, San Francisco.

Miller, M.D. (2011), "What college teachers should know about memory", *A perspective from cognitive psychology*, Vol. 59 No. 3, pp. 117-122.

Narli, S., Yorek, N., Sahin, M. and Usak, M. (2010), "Can we make definitive categorization of student attitudes?", *Journal of Science Education & Technology*, Vol. 19 No. 5, pp. 456-469.

Pereira, H. (2012), "Rigor in phenomenological research: Reflection of a novice nurse researcher", *Nurse Researcher,* Vol. 19 No. 3, pp. 16-19.

Schram, T.H. (2006), "*Conceptualizing and proposing qualitative research* (2nd ed.)", Pearson/Merrill Prentice Hall, Upper Saddle River, NJ.

Simon, A.M. (2012), "Extending the coordination of cognitive and social perspectives", *PNA,* Vol. 6 No. 2, pp. 43-49.

Smythe, L. (2012), "Discerning which qualitative approach fits best", *New Zealand College of Midwives Journal*, Vol. 46, pp. 5-12.

Thomsen, S. (2011), "*How to develop research questions in qualitative research"*, Available athttp://www.whow. com/how7935386develop-questions-qualitative-research.html (accessed 21 June, 2012).

Torres, V., Howard-Hamilton, M.F. and Cooper, D.L. (2003), "*Identity development of diverse populations: Implications for teaching and administration in higher education"*, Jossey-Bass, San Francisco.

Walton, A. and Gasman, M. (Eds.) (2008), "*Philanthropy, volunteerism and fundraising in higher education"*, Pearson Custom Publishing, Boston.