African Journal for Physical, Health Education, Recreation and Dance (AJPHERD) October 2015 (Supplement 1:2), pp. 473-484.

Self-leadership behaviour of clinical research nurses in the southern suburbs of Cape Town, South Africa

C.P. REDDY AND K. JOOSTE

School of Nursing, University of the Western Cape, P. Bag X17, Bellville, Cape Town, South Africa.

E-mail: kjooste@uwc.ac.za

Abstract

Clinical research nurses are at the frontline of clinical research and they act as nurse leaders in the area of patient-orientated research. The purpose of the study was to explore and describe the experiences of clinical research nurses' self-leadership role in nursing practice in nursing units in the southern suburbs of Cape Town, Western Cape Province. A phenomenological, exploratory, descriptive, and contextual design was followed. The population consisted of all the clinical research nurses (n = 22) at Western Cape hospitals and health care institutions in the southern suburbs. Purposive sampling was applied according to selection criteria and unstructured individual interviews were conducted until data saturation occurred. Data was analysed by using the methods of open coding and data triangulation. Self-leadership of the clinical research nurse indicated four themes; (i) an initial tedious and daunting experience, (ii) in which collaborative action was pursued, (iii) with certain personal traits, and (iv) self-leadership behaviour. The findings emphasised that the clinical research nurses' experienced their self-leadership role in nursing as an evolutionary process. This evolutionary role required that they needed to develop strategies with the purpose of surviving the initial tedious and daunting phase that facilitated the development of skills needed for collaborative partnerships with stakeholders. As general confidence increases, the clinical research nurse is able to recognise her professional attributes and use self-leadership behaviour to enhance her daily practice. Appropriate self-leadership behaviour would assist the clinical research nurse to successfully navigate the complex, yet dynamic clinical research environment.

Keywords: Clinical research nurse, self-leadership, nursing units, interviews.

How to cite this article:

Reddy, C.P. & Jooste, K. (2015). Self-leadership behaviour of clinical research nurses in the southern suburbs of Cape Town, South Africa. *African Journal for Physical, Health Education, Recreation and Dance,* Supplement 1:2 (October), 473-484.

Introduction

Patient-orientated research involves the inclusion of patients in a hospital environment and can be described as clinical research (National Institute of Health, 2009). The function of the clinical research nurse and the formalisation of the role for nurses in clinical research by nursing leaders are a fairly recent development (Gibbs & Lowton, 2012). The clinical research nurse is responsible for recruiting patients, implementing protocols, monitoring either positive or negative side effects, evaluating outcomes, advocating on behalf of patients, and

interpreting clinical data for patients (Castro, Bevans, Miller-Davis, Cusack, Loscalzo, Matlock & Hastings, 2011). Often, the principal investigator delegates many of these tasks to the clinical research nurse (Gibbs & Lowton, 2012). Practically, it means that the clinical research nurse becomes *solely* responsible for directing these tasks. These tasks require self-leadership of clinical research nurses.

Self-leadership is best described as the process of influencing oneself to achieve the self-direction and self-motivation that are necessary to achieve identified goals (Neck & Houghton, 2006). Self-leadership provides for self-regulation, self-control, and intrinsic motivation (Andressen, Konradt & Neck, 2012). Influencing oneself means that self-direction and self-motivation are necessary for allowing an individual to perform in a desirable way. Recently, the concept of self-leadership has been introduced – at least partly – to distinguish between different levels of self-influence and to provide a broader, more encompassing perspective that includes, but looks beyond, a primary discipline and a behaviourally grounded self-management process (Stewart, Courtright & Manz, 2011). In order to achieve this desirable performance; specific behavioural, natural, cognitive, and constructive thought pattern strategies are necessary (Neck & Houghton, 2006). These strategies imply that both extrinsic and intrinsic factors influence an individual, with an emphasis on intrinsic factors.

Gibbs and Lowton (2012) report that clinical research nurses assume the following responsibilities and skills: "screening, recruitment and obtaining informed consent from patients; administration of the intervention being studied; monitoring participants and performing some laboratory work, collecting data, and reporting any adverse events; and general management of the trial, including maintenance of study files and resolving data queries". In order to accomplish the aforementioned responsibilities, the clinical research nurse must use extrinsic and intrinsic factors to influence the outcomes of her endeavours. In this study, the researcher explored the experiences of clinical research nurses and their self-leadership as part of the dominion of clinical research. Self-leadership encompasses intrinsically behaviour-focused strategies; such as self-observation, self-goal setting, self-reward, self-punishment, and self-correction (Neck & Houghton, 2006).

Strategies of self-leadership involve building features into a task that make the task more pleasant to perform (Stewart, Courtright & Manz, 2011). For a clinical research nurse, it may involve ensuring that when she needs to resolve queries, it requires her interaction with other members of the multidisciplinary team with whom she has a good relationship, while at the same time she changes negative perceptions about clinical research (Neck & Manz, 2007). Self-leadership provides an individual with a sense of competence and self-motivation (Andressen *et al.*, 2012). These intrinsic factors may allow the clinical research

nurse to continue in her often demanding job that in turn energises performance-enhancing task-related behaviour.

The idea of influencing oneself means that the power, through self-responsibility and knowledge, rests in the hands of an individual. Considerable research has revealed positive effects of self-leadership on work-related outcomes and managerial analysts have linked the construct of empowerment to organisational effectiveness, team building, and group cohesion (Stewart, Courtright & Manz, 2011). According to Stewart et al. (2011), unlike traditional management where members have little autonomy and limited decision-making authority; individuals who are "self-managing" or "self-leading" have authority over work processes and are allowed to regulate their own behaviour. Exploring the clinical research nurses' self-leadership in nursing practice serves to increase the available body of knowledge about self-leadership of clinical research nurses. Literature confirms that clinical research nurses must direct themselves during clinical studies in practice (Burgess & Sulzer, 2010). During the self-leadership role of clinical research nurses, they enhance patient recruitment, informed consent, patient retention, appropriate data collection, and ensure the success of many clinical trials. It was unclear how clinical research nurses experience their self-leadership during clinical research in nursing practice. From the problem statement, the following questions were posed:

- What are the experiences of clinical research nurses in relation to their self-leadership role during clinical research in nursing practice?
- How could clinical research nurses lead themselves in nursing practice?

Methodology

A phenomenological, exploratory, descriptive, contextual research design was followed. The study was conducted with clinical research nurses who were working in nursing units in the southern suburbs of Cape Town in the Western Cape Province. Participants' names were obtained from a clinical research organisation in the Western Cape that kept a register of all clinical research nurses. The information provided was used to identify the accessible population (n = 22). Participants were chosen purposively based on inclusion criteria (Gill, 2014). Professional nurses were selected based on their knowledge about the existing nursing practice of clinical research nurses, working in general nursing units in the southern suburbs of Cape Town, working in the clinical research field for a period of more than one year, and who were either male or female. Seven (n = 7) individual unstructured interviews were conducted until themes that had evolved became repetitive and data saturation was reached.

The researcher conducted unstructured interviews in February 2013 and probing statements were used to elicit more detailed information (Polit & Beck, 2012). A

private venue at one of the research sites that was convenient for both researchers and participants was used. The researcher made private voice recordings of the face-to-face interviews. The interviews lasted approximately 45 minutes to an hour. During each interview, the researchers took field notes that allowed for a more trustworthy data collection process (Polit & Beck, 2012).

Data analysis was conducted concurrently with data collection. Transcription of the interviews took place in order to validly reflect on the interview experience from the voice recording. Open coding was used, defined as the first level of coding that required basic descriptive coding of the transcribed content (Polit & Beck, 2012). Data analysis involved data reduction and subsequent interpretation by using a scheme (Tesch, 1990). A list was then reduced to groups of similar topics. The codes were transposed into themes. Data triangulation of transcripts and field notes was conducted.

Rigour and ethics

The researchers bracketed their own experiences that ensured credibility of the findings. Field notes supported the data of the interview recordings and their subsequent transcripts. An independent coder validated the data analysis process during a consensus meeting (Brink, Van der Walt & Van Rensburg, 2012). The dense description of the research topic and the decision to use a phenomenological approach enhanced the transferability of the research findings. Voice recordings of the interviews and the researcher's field notes of the interviews ensured confirmability.

The Research Senate Committee at a university in the Western Cape approved the research proposal (Ethical clearance number 12/10/24). The researchers obtained permission from an institute to use one of its private rooms for conducting the interviews. Only after approval had been granted, did any study-related activities begin. Written informed consent was obtained from participants, an information sheet was provided, and the researchers answered questions from participants in relation to the research process. The participants were all informed that their participation in this study was completely voluntary and that at any stage in the research process they had the right to withdraw.

Results

Self-leadership of the clinical research nurse indicated four themes of (i) an initial tedious and daunting experience, in which (ii) collaborative action was pursued, with (iii) certain personal traits, and (iv) self-leadership behaviour. The fourth theme of self-leadership behaviour is the focus of this article.

The categories that emerged under the theme self-leadership behaviour are set out in Table 1.

Table 1: Self-leadership behaviour

Self-leadership behaviour	Future-focused orientation
-	Goal setting
	Passion
	Prioritise
	Self-motivation
	Planning and organising
	Leading through teaching
	Patient advocate
	Learning through experience

Future focused orientation

Individuals who take cognisance of a future time perspective are inclined to persistently engage in future thinking and planning with the intent of ensuring that their present behaviour aligns with future aspirations (Visser & Hirsch, 2014). A participant mentioned the importance of confronting unfounded prejudices to facilitate better long-term working relationships: "I'm also loved in different areas and you I hope will start to respect me but I cannot be held responsible for your not greeting me but I understand it. I understand it hugely but you must look at me with a new eye and you must decide whether I, if you like me, you don't like me. I'm doing my job, you must come with an open heart . . . it took about a week, I think, and then suddenly I got, oh good morning, oh good morning and then I got yes please, if you wouldn't mind doing that, OK, I don't mind." (P02)

A participant commented on the interplay between family relations and future work decisions: "... for me it's my family... at the end of the day. I want to ensure that they have a future and the thing is but for me it's like I can't work towards a future for my children if I am never there for them..." (P01)

Another participant described using the support she received from her family as a mechanism to help her cope with work stressors: "Well, I think if one has a stable private life, that helps you cope with all stresses at work and so on. So, I do try and switch off when I go home even though it is quite difficult." (P07)

A participant's future orientation was focused on their career. A participant gave an account of her experience of taking self-ownership of her career in the clinical trial environment: "Especially the clinical trials, it feels like my baby so you know, I've cultured it, we've grown, we've figured things out, how things should work and I feel ninety per cent of it is mine ..." (P07)

A participant described how the diversity of her job responsibilities served to influence her intent to stay in her career: ". . . I find I have enough administrative

duties, I have enough clinical duties, I have enough client interaction, not to make me feel like I am missing out. There is enough there for me to balance it out and still see like I am getting something . . . I am at a point where it is still interesting for me." (P01)

Goal setting

Mastery goals are purposes that an employee aims at to either develop their competence, or to master a task (Dysvik & Kuvaas, 2013). A participant described her tendency towards maximising her personal growth through setting goals as an opportunity to propel her towards a career that would best suit her needs: "I have set a goal for myself, not fixed in terms of time but a very loose goal where I want to see myself in ten years . . . I know doing research and doing this, getting this kind of experience is a stepping stone towards what I want to do at the end of the day . . ." (P01)

Passion

Perrewé, Hochwarter, Ferris, McAllister and Harris (2014) describe work passion as an individual's emotional and persistent state of desire on the basis of cognitive and affective work appraisals that result in consistent work intentions. A participant described how diversity and patient interaction intrinsically motivated her passionate experience of her task: "It's my passion for my work. You have to love what you're doing because you work on your own and your patients motivate you and your love of what you're doing. I mean your . . . the wanting to help, to actually what is so nice about it, is that you still have the contact with patients. you're not just a pen pusher; you can use your nursing training and yet there is diversity in your work. Every trial is different, every patient is different and most of all, I love the contact with the patients." (P04)

Prioritising

Phillips and Bana e Costa (2007) state that appraisal is the process of arriving at a general hierarchy of several options in an area with a given level of resources. A participant verbalised her ability to process information in an orderly way in order to avoid repeating tasks: "...so, I think once you then prioritise and rather do what is important first and try do it right the first time around and not do it in a cycle of repeating things..." (P07)

Self-motivation

Motivation is broadly defined as something that moves people to take action (Ryan, Lynch, Vansttenkiste & Deci, 2011). A participant explained how easy she found it to motivate herself and to transform her negative experiences into more positive ones: "Well, I knew I had to learn because there was no-one else. So, I mean that was . . . it was pretty easy to motivate myself because I mean I knew I had to

know the stuff. So, I didn't really require motivation, you know. So, I did find it difficult but the PI didn't assist me, but I mean I had to accept that. It's probably the best way to learn anyway, you know." (P05)

Independence is part of self-motivation and is the practical ability to provide care, exercise independent judgement, and demonstrate self-governance in the scope of practice of registered nurse (Weiland, 2008). Participants described how the clinical research environment was well suited to their independent personalities: ". . . but the one thing that I've always used to motivate myself from the word 'go' is that I have an inherent personality flaw; I would say not to be dependent on other people . . ." (P01)

Planning and organisation

Participants described the planning and organising of management functions needed in order to successfully do a project during their jobs: "I start thinking when I wake up in the morning. I love to plan my day, so I know I have to do X, Y, and Z and I won't go home until I've done what I've set out to do . . ." (P07). Another stated: "I think because there are certain things that need to be done on each visit and those are predetermined in the protocol and one carefully follows what has to be done, the system of how it all operates or how and what has to be done." (P04)

Leading through teaching

Leading through teaching requires transformation. A transformational leader inspires by sharing the organisational vision of clear roles, effective teamwork/organisational structures, and providing feedback on individual/team performance (Halm, 2010). A participant reflected on the shortcomings in practice: "... I think where we fail in nursing, is that we don't get our colleague and so I have resolved that I will never be territorial. If a junior member of the staff says can you come help me check this at lunch, I'll come because I think they have a terrible attitude with junior staff; terrible and so I do lead by teaching." (P02)

Patient advocate

Patient advocacy is the process of informing patients adequately for them to make knowledgeable decisions and to support them after they have made their decisions (Graham, 1992). A participant had a particular view about the importance of patient advocacy in clinical research nursing: "... I think, I see my role as a study nurse and I also see myself as the advocate of the patient in a trial... so, I think one of my... another of my important roles is actually to be the advocate of the patient and say, listen. Do you actually understand what's going on here..." (P02)

The findings indicated how the strategy of self-monitoring enabled being an advocate for the patient. This role was assumed by own volition as a clinical research nurse.

Learning through experience

Learning is a process initiated by an intent to learn, followed by experience and action, feedback seeking and reflection (Noe, Tews & Marand, 2013). A participant explained how stressful her hands-on learning experience was: "...I never ever had any formal training. I had an understanding of it through the GCP course but certainly not any experience and it was a hands-on learning process. Because it is stressful, because it is a very ... it's very meticulous work and you can make real mistakes which is what you want to avoid, obviously." (P04)

Discussion

Clinical research nurses experience a future-focused orientation as an aspect of goal orientation that is a behaviourally focused self-leadership strategy. This leads to enhanced levels of general self-efficacy perceptions and subsequently serves to affect performance outcomes (Prussia, Anderson & Manz, 1998). Family was pointed out by participants as essential in their future. Literature defines family-relatedness of work decisions as the extent to which an individual's decision-making process and the course of action in the work domain are influenced by a family situation, in order to maintain positive outcomes for the family (Greenhaus & Powell, 2012). The clinical research nurse takes on the responsibility of self-influence to develop coping resources. These resources could have a relationship (family) coping dimension and a skillscoping dimension (Appel & Kim-Appel, 2008). Participants in this study indicated that their career and jobs were part of their future orientation. Individuals' personal careers, as well as the future of organisations, are shaped by effective leadership skills; taking self-ownership of projects in one's career is a leadership behaviour that could facilitate career growth and work satisfaction. Job satisfaction and the intention to remain in a particular career could affect nurse retention in various areas of clinical practice that are influenced by organisational, managerial, work-related, and individual determinants (Gilles, Burnard & Peytremann-Bridevaux, 2014).

Participants seemed to be goal-orientated learning individuals. Such individuals perceive their abilities as malleable and their know-how as contingent on expended effort. Hence, they are more likely to perceive life circumstances, (e.g. work transitions) as career enablers rather than barriers (Tolentino, Garcia, Lu, Restubog, Bordia & Plewa, 2014).

Work passion was mentioned by participants working in the field of clinical research. For the clinical research nurse, her work passion is usually based on affect, cognition, intention, and efforts to improve. Her performance should, therefore, be designed around these (Zigarmi, Nimon, Houson, Witt & Diehl, 2009).

Prioritising tasks is essential in clinical research, since it is a science. Zhang and Feyen (2005) explain that the self-regulation processes of prioritising tasks are essential for successful work performances and for avoiding repetition. When people choose and master difficult tasks, their self-motivation is strengthened by mobilising their internal resources, showing their independence (Bledow, 2013). The role of the clinical research nurse potentially allows for high levels of independence. Literature purports the validity of an independent personality as an influencing factor that is likely to require higher autonomy, as opposed to job activities that require little autonomy (Penney, David & Witt, 2011).

The findings indicate that junior staff members could learn from the clinical research nurse through mentorship and teaching. In her self-leadership role, the clinical research nurse epitomises a transformational leader in her willingness to allow for a culture of learning. Transformational leaders enable members of staff to explore their professional practice; this promotes a culture of learning and engenders commitment to give organisations a competitive advantage, since the most recent knowledge is transferred to practice (Halm, 2010).

Clinical nurse researchers advocate for their patients. Ellis (1992) cites Murphy and Hunter (1984) who outline the advocacy role of the nurse: "The goal of the nurse is not to receive gratification from other healthcare professionals but rather to help the patient obtain the best care even if it means going against hospital admin and other health care professionals".

The success and effectiveness of a clinical research nurse's learning is possibly associated with the adoption of behaviour-focused strategies that establish a paradigm where work and learning are inseparable; therefore, learning becomes embedded in her daily processes (Cook & Smith, 2004).

Recommendations

This phenomenological study describes the essence of self-leadership and reveals the need to enhance self-leadership in nursing practice. Self-leadership concepts could be included in a blended learning course for clinical research nurses in the southern suburbs of Cape Town. This process could be facilitated by either the Global Health Network or included as a component of a local one-year postgraduate course.

Conclusion

This study emphasises the need for self-leadership guidance in the often independent role of a clinical research nurse. The clinical research nurse is an example of a professional nurse who is called upon to assert independence as a nurse practitioner in her discipline. Clinical research nurses in the southern suburbs of Cape Town act independently, albeit in a partially blended working environment whilst ensuring collaborative partnerships either on site or as a member of a virtual team. Such a dynamic, complex role requires self-leadership. In accordance with the social cognitive theory, their human behaviour can be comprehended, analysed, and changed. Self-leadership creates room for autonomous decision making in the context of national regulations and allows for disciplined appropriate skills development.

References

Andressen, P., Konradt, U. & Neck, C.P. (2012). The relationship between self-leadership and transformational leadership: Competing models and the moderating role of virtuality. *Journal of Leadership and Organizational Studies*, 19, 66-80.

Appel, J. & Kim-Appel, D. (2008). Family systems at work: The relationship between family coping and employee burnout. *The Family Journal (Alexandria, Va)*, 16(3), 231-239. http://dx.doi.org/10.1177/1066480708317509.

Bledow, R. (2013). Demand-perception and self-motivation as opponent processes: A response to Bandura and Vancouver. *Journal of Management*, 39(1), 14-26. http://dx.doi.org/10.1177/01492 206312466149.

Brink, H., Van der Walt, C. & van Rensburg, G. (2012). Fundamentals of Research Methodology for Healthcare Professionals: Juta & Company Ltd.

Burgess, L.J. & Sulzer, N.U. (2010). Clinical trials in South Africa: Need for capacity building and training. *South African Medical Journal*, 100(7), 402. PMID: 20822581

Castro, K., Bevans, M., Miller-Davis, C., Cusack, G., Loscalzo, F., Matlock, A.M. & Hastings, C. (2011). Validating the clinical research nursing domain of practice. *Oncology Nurse Forum*, 38(2), E72 - 80. http://dx.doi.org/10.1188/11.ONF.E72-E80

Cook, J. & Smith, M. (2004). Beyond formal learning: Informal community eLearning. *Computers & Education*, 43(1-2), 35-47. http://dx.doi.org/10.1016/j.compedu.2003.12.003.

Dysvik, A. & Kuvaas, B. (2013). Intrinsic and extrinsic motivation as predictors of work effort: The moderating role of achievement goals. *The British Journal of Social Psychology*, 52(3), 412-430. http://dx.doi.org/10.1111/j.2044-8309.2011.02090.x PMID: 22273179.

Ellis, P. (1992). Role of the nurse advocate. *British Journal of Nursing (Mark Allen Publishing)*, 1(1), 40-1,43. PMID: 1596625.

- Gibbs, C.L. & Lowton, K. (2012). The role of the clinical research nurse. *Nursing Standard*, 26(27), 37-40. http://dx.doi.org/107748/ns2012.03.26.27.37.c8986 PMID: 22482174.
- Gill, M.J. (2014). The Possibilities of Phenomenology for Organizational research. *Organizational Research Methods*, 17(2), 118-137. http://dx.doi.org/ 10.1177/1094428113518348.
- Gilles, I., Burnand, B. & Peytremann-Bridevaux, I. (2014). Factors associated with healthcare professionals' intent to stay in hospital: A comparison across five occupational categories. *International Journal of Quality in Healthcare*, 26(2), 158-166. http://dx.doi. org/10.1093/intqch/mzu006.
- Graham, A. (1992). Advocacy: What the future holds. *British Journal of Nursing (Mark Allen Publishing)*, 1(3), 148-150. PMID: 1617281.
- Greenhaus, J.H. & Powell, G.N. (2012). The family-relatedness of work decisions: A framework and agenda for theory and research. *Journal of Vocational Behavior*, 80(2), 246-255.http://dx.doi.org/10.1016/j.jvb.2011.12.007.
- Halm, M.A. (2010). Inside looking in or inside looking out? How leaders shape cultures equipped for evidence-based practice. *American Journal of Critical Care*, 19(4), 375-378. http://dx.doi.org/10.4037/ajcc2010627 *PMID*: 20595218.
- National Institute of Health (2009). *Application for Public Service Grant PHS (06/2009)*. United States Department of; Health and Human Services. Retrieved August, 20, 2012, from http://grants.nih.gov/grants/funding/phs398/phs398.pdf.
- Neck, C.P. & Houghton, J.D. (2006). Two decades of self-leadership theory and research: Past developments, present trends and future possibilities. *Journal of Managerial Psychology*, 21(4), 270 -295. http://dx.doi.org/10.1108/02683920610663097.
- Neck, C.P. & Manz, C.C. (2007). *Mastering Self-Leadership: Empowering Yourself For Personal Excellence*. Upper Saddle River, N.J.: Pearson/Prentice Hall.
- Noe, R.A., Tews, M.J. & Marand, A.D. (2013). Individual differences and informal learning in the workplace. *Journal of Vocational Behavior*, 83(3), 327-335.: http://dx.doi.org/10.1016/j.jvb.2013.06.009.
- Penney, L.M., David, E. & Witt, L.A. (2011). A review of personality and performance: Identifying boundaries, contingencies, and future research directions. *Human Resource Management Review*, 21(4), 297-310. http://dx.doi.org/10.1016/j.hrmr.2010.10.005.
- Perrewé, P.L., Hochwarter, W.A., Ferris, G.R., McAllister, C.P. & Harris, J.N. (2014). Developing a passion for work passion: Future directions on an emerging construct. *Journal of Organizational Behavior*, 35(1), 145-150.: http://dx.doi.org/10.1002/job.1902.
- Phillips, L.D. & Bana e Costa, C. (2007). Transparent prioritisation, budgeting and resource allocation with multi-criteria decision analysis and decision conferencing. *Annals of Operations Research*, 154(1), 51-68. http://dx.doi.org/10/1007/s10479-007-0183-3.
- Polit, D.F. & Beck, C.T. (2012). *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins.

- Prussia, G.E., Anderson, J. S. & Manz, C.C. (1998). Self-leadership and performance outcomes: The mediating influence of self-efficacy. *Journal of Organizational Behavior*, 19(5), 523 538.
- Ryan, R.M., Lynch, M.F., Vansteenkiste, M. & Deci, E.L. (2011). Motivation and autonomy in counselling, psychotherapy, and behavior change: A look at theory and practice. *The Counselling Psychologist*, 39(2), 193-260. http://dx.doi.org/10.1177/0011000009359313.
- Stewart, G.L., Courtright, S.H. & Manz, C.C. (2011). Self-leadership: A multilevel review. *Journal of Management*, 37(1), 185 222.
- Tesch, R. (1990). *Qualitative Research: Analysis Types and Software Tools*. New York: Falmer Terre.
- Tolentino, L.R., Garcia, P.R.J.M., Lu, V.N., Restubog, S.L.D., Bordia, P. & Plewa, C. (2014). Career adaptation: The relation of adaptability to goal orientation, proactive personality, and career optimism. *Journal of Vocational Behavior*, 84(1), 39-48.
- Visser, P.L. & Hirsch, J.K. (2014). Health behaviors among college students: The influence of future time perspective and basic psychological need satisfaction. *Health Psychology and Behavioral Medicine: An Open Access Journal*, 2(1), 88 99.
- Weiland, S.A. (2008). Reflections on independence in nurse practitioner practice. *Journal of the American Academy of Nurse Practitioners*, 20(7), 345-352. http://dx.doi.org/10.1111/j.1745-7599.2008.00330.x PMID:18638173.
- Zhang, G. & Feyen, R.G. (2005). *A Conceptual Framework for Dynamic Priorization in Multiple-Task Scenarios*. Paper presented at the Proceedings of the Human Factors and Ergonomics Society 49th Annual Meeting. http://dx.doi.org/10.1177/15419312054901216
- Zigarmi, D., Nimon, K., Houson, D., Witt, D. & Diehl, J. (2009). Beyond engagement: Toward a framework and operational definition for employee work passion. *Human Resource Development Review*, 8(3), 300-326. http://dx.doi.org/10.1177/1534484309338171.