Challenge Stressor and Organizational Commitment

The Mediation Role of Thriving

Kelebogile. Mkhabela, Huiyuan. Jia*

Capital University of Economics and Business, Beijing, China
kelebogilemkhabela@yahoo.com, jiahuiyuan@cueb.edu.cn
*Correspondin author, No.121 Zhangjialukou, Flower Town, Fengtai District, Beijing, China

Abstract

Despite many investigations concerning the predictors of organizational commitment in the workplace, very few studies so far have analyzed the relations between stress perception and organizational commitment. Although working under tremendous pressure, some employees still commit to the organization. We proposed that the perception of stress as a challenging goal could become the fuel to strengthen employee organization commitment. This could be because of the knowledge attained (learning) and energy (vitality) gained through resolution of challenging situation which makes them thrive in the workplace, and ultimately transfer the thriving resources to their commitment to the organization. To investigate and have proper understanding of the relationship between challenge stressors and organizational commitment when mediated by thriving at work a quantitative research was conducted amongst 144 employees. The results of the study indicated a positive relationship between challenge stressors and thriving at work which brings an understanding that self-determined individuals within an organization do not view challenge stressors as challenges but rather opportunities which can help them thrive in the workplace. In addition, the results indicated that organizational commitment is high when an employee gains knowledge and vitality which they deem important for self-development and career growth. Furthermore, the findings of the research offer an important perspective on the predictors of organization commitment bringing about an important outlook for future researchers. The results propose that organizations should actively seek employee's abilities and capitalize on strengthening them not only for the betterment of the organization but for the upliftment of the employee.

Keywords: Challenge stressors, organizational commitment, thriving at work, learning, vitality

Introduction

The ever-changing business environment has birthed turbulence in workplaces that can only be survived by those who are psychologically fit for the fight. Highly demanding, highly stressful, burnout, high productivity, too much learning are some of the responses employees use to explain their day at work. Everyone joins an organization with the aim of excelling in their job and tasks and are partially ready for the intensity and demands of the job as informed during the interview or induction process.

Once on board they get to discover the challenges, stressors and pressure that come with being part of the organization. Nonetheless, these individuals still remain committed to the organization. What makes them different?

Challenge stressors are deemed as good stressor that employees experience which allow them to introspect and ask why they are partaking in a particular task, who will benefit the most from this task, how this task will affect them and their future goal and what exactly do they get from this task. Indicating that individual's hard work and dedication is usually at the ether if the task at hand is beneficial for accomplishing both personal and organizational goals. If not, an individual usually does the bear minimum.

Those individuals who encounter, experience and face a challenge head on, view challenge stressors as stressful but not disempowering. Instead, it is an opportunity for them to learn, grow and develop both professionally and personally. These employees get a sense of euphoria from learning and achieving a task that started off as an obstacle but is bringing them a step closer to their ultimate goal allowing them to thrive and succeed. Thriving at work is a term used to explain this rare and essential quality that some employees have. Thriving at work describes that no matter what one faces they still remain committed in an organization regardless of the stress they face. This is witnessed in the compromises (time and energy) and personal resources that individuals gives to the organization and resources gained from the organization. These are a few factors that assist an individual's not only survive the stressors, they also remain committed to the organization. This notion leads to the following research questions:

1. Can challenging stressors influence employee's organizational commitment?
2. How will challenging stressors influence organizational commitment?

The effect of challenging Stressors on thriving at work

Individual nonsupport, job ambiguity, autonomy, job stress, personality and job overload are a few driving forces when an employee leaves an organization. Can these also be the reason why employees remain within an organization? Could these factors have the potential to assist in achieving personal goals and organizational goals, is employee stress bad or good for personal and organisational growth and development? Stress consist of two forms eustress known as good stress and distress known as bad stress (Selye, 1956). However, stress on job-related level can result in exhaustion, sickness, and high turnover (Hakanen, Bakker, & Schaufeli, 2006). In addition, (Kyriacou, 2001) found that continued stress had negative behavioral, physical and mental affects an employees and can have a negative effect on organization turnover and commitment. The above mentioned indicates that stress has a negative influence on an individual and the activities they must partake in thus challenging their personality, working style and level of organizational commitment.

According to occupational stress literature, stress has two factor models namely challenge stressors and hindrance stressors (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Our research focuses on the challenging stressor. According to McCualey et al., (1994) challenge stressors have positive work results that can be linked to organizational needs such as work overload, time pressure, job scope and increased responsibility. In support Cavanaugh et al, (2000) states, challenge stressors refer to workplace aspects that are demanding such as job complexity and ambiguity which have the potential to positively influence organization success (e.g., job satisfaction, job performance and creativity) (LePine, Podsakoff, & LePine, 2005). Similarily, challenge stressor has indicated that certain challenge stressors

are positively related to motivation, performance, commitment (Podsakoff et al, 2007) and engagement (Crawford et al, 2010).

Challenge stressors are related to Conservation of Resources theory which emerged from studies of stress and human motivation towards stress which looks at the complexity involved in evaluating stress because each individual has their own mechanism to assess and manage it (Lazarus & Folkman, 1984). Resources are considered to be objects, conditions, personal characteristics and energies that are valued for survival or serve as a means for achieving and enhancing personal resources. This indicates that there are differences among people when interpreting stress some view it as a stimulus or a response such as challenge stress (Lazarus, 1995). Those that view it as a stimulus will see it as strengthening their personal resources instead of depleting them. In addition (Lazarus, 1995) states that cognitive evaluation theory focuses on the individual, the environmental demands and stimulus response options. According to the theory there are a number of external and internal information that have a role in the evaluation process (Folkman et al., 1986). It includes categorizing existing options and resources, which will help the person to negotiate with actual demands (Lazarus, 1995). The individual also evaluates the extrinsic and intrinsic which directly related with their needs and personal resources. Once the individual has appraised the situation they then deem it positive or negative. The stress is evaluated as positive if the environment is suitable, and the individual has the potential to develop, learn and grow from the challenging situation. Ultimately giving the individual the ability to gain vitality, learning and self-development which enhance and make them better performers in their role and daily functioning. Factors that are related with the individual are self-motivation, characteristic, beliefs, cognitive resources and skills (Folkman & Lzarus, 1991).

Many authors emphasize the potential for growth, development, or improvement to be associated with challenge stressors (Boswell et al., 2004) meaning challenge stressors generate positive emotions (LePine et al., 2005) that can be positively related to work outcome (such as performance or remaining in an organization) (Podsakoff et al., 2007). For example: a very demanding job can be associated with anxiety, because of the pressure induced, and with less depression because the individual is able to achieve personal goals and organizational goals (Warr, 2005). Indicating that what the mind can conceive the mind can achieve.

Sonenshein and colleagues found that properties of work (challenge, novelty, variety, etc.), working closely with others (including supervisors, colleagues, and clients), and organizational properties (culture, structure, and physical space) were all described as enabling people to thrive and grow at work. (Amabile, 1998) listed a few reasons thriving at work can be related to challenging stressors:

First, when individuals are learning and growing at work (the first dimension of thriving), they are in a good position to identify problems and come up with new ideas. It is through the learning process that individuals are likely to see the possibilities for new ways of doing and creating at work.

Second, vitality in the work place has the ability to keep an employee fully engaged in their task. Moreover, it works as an energizer which pushes the individual to think and act beyond their normal role causing them to be creative and have new ideas. It's a psychological state which results in innovation. For example, Vinarski-Peretz and Carmeli (in press) found that psychological conditions manifested by safety, meaningfulness produce positive outcomes.

Therefore, we propose hypotheses:

H1: Challenge stressor is positively related to thriving at work.

H1a: Challenge stressor is positively related to vitality.

H1b: Challenge stressor is positively related to learning.

Organizational Commitment and Challenge stressor

Commitment is a word used to explain an individual's loyalty, trust and affection in a relationship, friendship, organization and close environment. Meyer and Allen (1997) defined organizational commitment as a psychological state that symbolizes the employee's relationship with an organization and its influence on their decision to extend and continue membership in the organization. It is also an individual's influence, involvement and full participation in an organization (Martin, 2007).Tendencies of employees with high levels of organizational commitment are increased involvement, increased performance and productivity and extremely lower levels of absenteeism and punctuality (Cohan, 2003). This indicates that employees with a high level of commitment tend to exhibit more energies and determination in their performance in an organization and are willing to devote more professional and personal resources in the organization. While those who have low commitment do not go the extra mile. In deduction, over committed employees are normally characterized by high achievement and are innovation orientated with the ultimate aim of engaging, improving performance and achieving organizational goals together with personal goals.

Humans are naturally curious, vital, and self-motivated. Small changes in their lives compel them to re-examine and evaluate their situation. The evaluation will cause them to achieve their best, to be inspired, continue striving to learn, to challenge themselves, to master new skills and apply their talents responsibly. This is true because most people show effort and commitment in their lives when they are challenged. Challenges and challenge stressors cause most people to be positive, energetic and full of life. However, there are individuals during trials and tribulation who lack motivation and reject growth and responsibility. The social environment one is exposed to can have great influence on their motivation and growth, it can increase an individual's self-motivation, energy and learning. According to (Ryan & Deci, 2000) positive human potentials has both theoretical significance and practical import because it contributes to formal knowledge of human conduct and shared environments that improve people's development, performance, and well-being.

COR theory provides framework for understanding, predicting and examining transactional relationships that can be used to better shape a balance between resource cost and benefits. Instead of focusing on gaining the right amount of motivation, COR Theory believes that resource loss is disproportionately more salient than resource gain. COR Theory focus on personal resources and the ability to preserve and nurture them through exposure opportunities and work environment that is beneficial for the development and growth of their personal resources.

The variable of agentic work behavior can have great influence on organizational commitment and productivity (Ryna & Deci, 2000), task focus, exploration and heedful relating. Task focus individuals are more likely to thrive when they focus on the tasks at hand. Task focus promotes focus on tasks, meaning employees become absorbed in their work, and thus feel energetic and creative (Brown and Ryan 2003, Csikszentmihalyi 1990, Ryan and Deci 2000). Secondly, when employees explore and are exposed to new working tasks this increases vitality and learning and most importantly self-development and commitment. Lastly, heedful relating indicates that an individual knows their job, is fit for the job and

works well with others to achieve the organizations goal. Relating it well to learning, vitality, increased productivity and commitment because of development and growth both personally and professionally.

These two theories relate well to employee commitment because employees stretch themselves and ensure that what every challenge they face, it has a positive outcome and completion. They then become committed to the organization because the environment they are exposed to grants them a platform that helps master their skills, personality and traits which helps them excel in their personal and professional life. The tasks and environment they are in speaks the same language with their soul and the reciprocity leads to increased commitment.

Vitality and learning are deeply rooted in social systems. For example, (Miller and Stiver, 1997) suggest that the development of the self occurs through interaction with others in a community and organization. The relational view of self-development describes how vitality comes from relational connections with others. Second, with respect to learning, many scholars claim that learning does not take place solely in the individual mind or in isolation from others. Instead, learning occurs in social interactions with others for instance, work collaborations, talking about work, and observing others doing their work (Brown and Duguid 1991). This indicates that learning is a component which links individuals in a social and professional context in order to achieve their self-development and professional goals. This is linked to self-determination theory and seen in agentic work behavior which links well to organizational commitment.

Therefore, we propose the following hypothese:

H2: Thriving at work is positively related to organizational commitment.

H2a: Vitality is positively related to organizational commitment.

H2b: Learning is positively related to organizational commitment.

The mediation effect of thriving at work

Usually when one is exposed to challenge stressors for a long time in an organization they opt to resign because of their inability to handle the pressure, anxiety and stressors. This decreases their commitment to the organization, increases organizational turnover and results in negative relationship between challenge stressors and organizational commitment. The presence of self-determination and personal goal attainment results in an individual overlooking the negativity attached to challenge stressors and instead regards them as opportunities to develop both personally and professionally.

The energy and vitality (thriving at work) gained from challenge stressors in the organization enhances an individual's mental capacity, psychological well-being, creativity, skills, ability, personal and professional growth through exposure of different tasks and creative ways to solve them. These are positive elements that can be gained from challenges at an organization level that can positively affect an organization by increasing organizational commitment. Challenge stressors that are combated and measured through elements such as vitality, learning and growth can result in organizational commitment.

Therefore, we propose the hypothese:

H3: Thriving at work has a mediating role between challenge stressor and organizational commitment.

In summary, our research is designed as the research model (Figure 1).

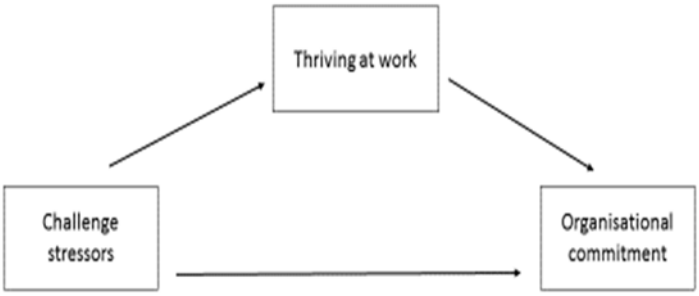


Figure 1. Research Model

Method

Sample and procedure

The data for the research was collected using a web-based questionnaire designed using Google Forms. 148 questions were sent to respondents in different age groups, profession and industries (Marketing, entrepreneurship, teaching, junior and senior managers, etc.) in South Africa. Four questionnaires were exclueded because of missing data. The total number of respondents that were used to conduct analysis for the study were 144.

Measure

Organizational Commitment Scale (OCS) was expounded on with Meyer and Allen's three component method affective, continuance and normative commitment (Meyer and Allen, 1991). The scale consists of 15 items on a five-point scale (1- strongly disagree, 5- strongly agree), including 'I am willing to put in a great deal of effort beyond what is normally expected in order to help this organization be successful.', 'I am extremely glad that I chose this organization to work for over others I was considering at the time I joined', 'I would accept almost any type of job assignment in order to keep working for this organization', etc. Cronbach's alpha was 0.72, a level deemed acceptable by DVellies (1991)

Thriving at work was measured with 10 items on a 1-5 scale (1-Strongly disagree, 5- Strongly agree). Statements such: at work, I find myself learning often, at work, I continue to learn more as time goes by, at work, I see myself continually improving, at work, I am not learning, at work, I am developing a lot as a person, at work, I feel alive and vital, etc., Cronbach's alpha was 0.87, a level deemed acceptable by DVellies (1991)

In order to measure employees challenge stressors four measures were used which consisted of questions such as (I often look for opportunities to develop new skills and knowledge.). Each participant rated their responses on a 1-5 scale (1-Strongly disagree, 5- Strongly agree). Cronbach's alpha was 0.81, a level deemed 'minimally acceptable' by DeVellie (1991).

Control variables: We controlled for newcomers' demographic variables including age, gender, education, job position and tenure. Besides, we also controlled the personality trait. Personality trait consist of five personality traits (extraversion, openness, consciousness, agreeableness and neuroticism) which were measured using 30 items on a five-scale pointer: 1- Strongly disagree, 5- strongly disagree.

Results

Descriptive statistics

The means, standard deviations, and zero-order correlations of key variables are shown in Table 1. As shown in Table 1. Education and job position are not significant to organizational commitment, which were excluded from further analysis.

Table 2. Mean, standard deviations, and correlations.

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	2.4	1.1	_											
2. Gender	1.6	0.5	-.11											
3. Education	2.6	0.8	.06	.01										
4. Job position	2.7	1.4	.19*	-.07	.17*									
5. Extraversion	7.3	4.5	.04	.16	.23	-0.1								
6.Conscientiousness	2.2	0.4	.21*	.02	-0.01	-.17*	.25**							
7. Openness	3.4	0.4	0	-.02	0.1	-.13	.17*	.25**						
8. Neuroticism	3.3	0.5	-.20*	.08	-.19*	.04	-.01	-.28**	-.11					
9. Agreeableness	3.2	0.7	0.1	.01	-.02	-.16	.39**	.39**	.09	-.27**				
10. Organizational Commitment	5.2	0.7	.19*	-.09	-.06	.09	-.05	.16	-.04	-.27**	.14			
11. Thriving	3.7	0.8	0	.13	-.04	-.11	.33**	.35**	.20*	-.41**	.41**	.43**		
12. Challenge Stressors	4	0.7	0.1	.21*	-.02	.02	.17*	.08	.14	-.09	.14	.15	.26**	_

Note: N= 144; *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

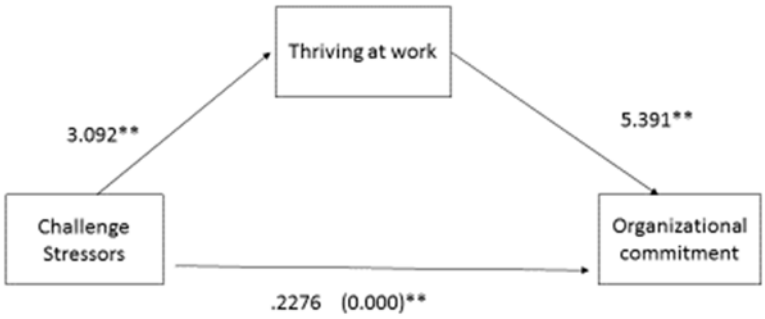
Regression Analysis

To further test the hypothese, we ran the regression analysis. The results showed that challenging stressor is positively related with thriving at work ($\beta = .26$, $p < .001$), proved Hypothesis 1. Challenging stressor is positively related with learning ($\beta = .25$, $p < .001$), proved Hypothesis 1a. Challenging stressor is positively related with vality ($\beta = .23$, $p < .001$), proved Hypothesis 1b.

Also, there is a significant relationship between thriving at work and organizational commitment ($\beta = .31$, $p < .01$). This proves H2. In addition, there's a significant relationship between vitality and organizational commitment($\beta = .32$, $p < .01$). Which proves H2a. Lastly, there's a significant relationship between learning and organizational commitment($\beta = .34$, $p < .01$). This proves H2b.

Mediation test

The bootstrap analysis generated a 95% bias –corrected confidence interval (0.05) for the indirect effect. This effect did not include zero, CI [.08, .29], suggesting a mediator of thriving at work. In other words organizational commitment and challenge stressors will have a relationship with the existence of thriving at work.



N= 144; Note: p= p<0.05** and p<0.01*

Figure 2 Mediation results

Conclusion

The general belief is that challenge stressors such as job autonomy, workload etc., have the potential to burnout employees and leave them detached. This study has proven that even with the above occurring, there are certain employees who thrive and seek challenge stressors in the workplace in order to succeed and develop both personally and professionally. Challenges or stress can keep employees committed to an organization with the mediation role of thriving at work. According to (Pandrock et al, 2009) challenge stressors can arouse positive emotional responses that would offset the negative effects that come with job demands, prompt enjoyment and even euphoria. (Spreitzer et al., 2005; Patterson et al., 2013) defines thriving as the higher psychological state in which an individual feels involvement and energy, marked by both a sense of learning (gaining informational understanding) and a sense of vitality (liveliness, zest and vigor). Thriving at work indicates that employees are eager to achieve the goals of the organization but are not willing to do so at the expense of their happiness and dreams. So, they actively seek and partake in challenging activities within the organization that help them achieve organizational goals while achieving their personal goals and aspiration, similar to Maslow's self-actualization needs. It's all in the attitude and cognitive psychology one has towards challenges. If you have a positive outlook and ambition you will see challenge stressor as an opportunity instead of a problem.

Together (challenge stressors, thriving at work and organizational commitment) can be used by organization to help identify proactive employees and create opportunities for these employees and reward these employees to keep them engaged and active. Once recognized they have the potential to commit to the organization (creativity, problem solving etc.) and also help keep other members of the organization committed and engaged which increases the organizations success. Organizations have to create learning opportunities and provide support for these opportunities or they risk losing skill and workmanship that is vital for their competitive advantage.

Organizations need to actively seek out and identify employees who have positive stimuli towards challenge stressors and thrive at work because they have the potential to inject positive spirits within a team, boost team moral and achieve organizational goals thus increasing commitment and engagement in the organization. The key is in positive cognitive psychology, attitude and mindset which creates

commitment in organizations that presents opportunity to thrive and succeed both personally and professionally.

References

Allen, N.J. and Meyer J.P. (1990) The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organisation. Journal of Occupational Psychology, 63, 1-18. https://doi.org/10.1111/j.2044-8325.1990.tb00506.x

Allen, T.D., et al., (2000) Consequences associated with work to-Family Conflict: A Review and Agenda for Future Research. Journal of Occupational Health Psychology, 2000. 5(2): p. 278-308.

Aselage,J., & Eisenberger,R. (2003). Perceived Organisational Support and Psychological Contracts: A Theoretical Integration. Journal of Organisational Behavior, 24, 491-509 (October 29, 2007). Available at SSRN: https://ssrn.com/abstract=2744707

Bakker, A.B., Demerouti, E., & Verbeke, W. (2004) Using the job demands-resources model to predict burnout and performance. Human Resource Management, 2004. 43(1): p. 83-104.

Blau, G., & Boal, K. (1987). Conceptualizing how job involvement and organisational commitment affect turnover and absenteeism. Academy of Management Review, 12(2), 288-300.

Blascovich, J., Mendes, W. B., Tomaka, J., Salomon, K., & Seery, M. (2003). The robust nature of the biopsychosocial model challenge and threat: a reply to Wright and Kirby. Personality & Social Psychology Review, 7, 234–243. doi:10.1207/S15327957 PSPR0703_03.

Bollen, K. A., Long, J. S. (1993) Testing Structural Equation Model; Sage: Thousand Oaks, CA, USA.

Boswell, W. R., Olson-Buchanan, J. B., & LePine, M. A. (2004). Relations between stress and work outcomes: The role of felt challenge, job control, and psychological strain. Journal of Vocational Behavior, 64, 165–181.

Brown, K. W. and Ryan, R. M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. Journal of Personality and Social Psychology 2003, Vol. 84, No. 4, 822–848

Brown, J. S. and Duguid, P. D. (1991). Organisational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation. Organisation Science, 1991, vol. 2, issue 1, 40-57

Buchanan, B. (1974). Building organisational commitment: The socialization of managers in work organisations, Administrative science Quarterly, 19 (4), 533- 546.

Camilleri, E. (2002). Some Antecedents of Organisational commitment: Results from an Information Systems Public Sector Organisation. Bank of Valletta Review, 25, 1-29.

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. Journal of Applied Psychology, 85, 65–74. doi:10.1037/0021-9010.85.1.65

Cohen, A. & Hudecek, N. (1993). Organisational commitment and turnover relationship across occupational groups. Group & Organisation Management, 18(2), 188-212.

Cohen, A. (2003). Multiple commitments in the workplace: An integrative approach. Mahwah, NJ: Lawrence Erlbaum Associates.

Collins, F. & Seller, R.E. (1988). Management of an accounting practice: creating organisational loyalty. CPA Journal, 58 (4),98-101.

Coyle-Shapiro, A.M.J, Shore, L.M (2007). The employee–organisation relationship: Where do we go from here? Human resource management review

Crawford, E. R., LePine, J. A., & Rich, B. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. Journal of Applied Psychology, 95, 834–848. doi: 10.1037/a0019364.

Creswell, JW. (2009). Quantitative & Qualitative Research. Sage Publication. Thousand Oaks, CA

Cropanzano, R., & Mitchell, M. (2005). Social exchange theory: An interdisciplinary review. Journal of Management, 31(6), 874.

Csikszentmihalyi, M. (1990). Flow. New York: Harper and Row.

Dalton, D.R. & Tudor, W.P. (1993). Turnover, absenteeism: An interdependent perspective. Journal of Management, 19,193-219.

Johnston, G.P. & Snizek, W.E. (1991). Combining head and heart in complex organisations: A test of Etzioni's dual compliance structure hypothesis. Human Relations, 44, 1255-1272.

Khan, M.R., Ziauddin, Jam, F.A. & Ramay, M.I. (2010). The impacts of organisational commitment on employee job performance. European Journal of Social Sciences, 15(3): 292 – 298.

Kirmizi, A., & Deniz, O. (2009). The organisational commitment of IT professionals in private banks. European and Mediterranean Conference on Information Systems, July 13 – 14, 2009.

Kushman, J. W. (1992). The organisational dynamics of teacher workplace commitment: A study of urban elementary and middle schools. Educational Administration Quarterly, 28, 5-42.

Lazarus R. S., Launier, R. (1978). Stress related transaction between person and environment. Edit: McGraw - Hill Book, N.Y., 1978

Mathieu, J. E., & Zajac, D. M., (1990). A review and meta-analysis of the antecedents, correlates and consequences of organisational commitment. Psychological Bulletin, 108(2), 171-194.

McCauley, C.D., Ruderman, M.N., Ohlott, P.J. & Morrow, J.E. (1994). Assessing the developmental components of managerial jobs. Journal of Applied Psychology, 79(4), pp. 544-560.

McDonald, D.J. & Makin, P.J. (2000). The psychological contract, organisational commitment and job satisfaction of temporary staff. Leadership & Organisational Development Journal, 21, 84-91.

Meyer, J.P., & Allen, N.J. (1991). A three-component conceptualization of organisational commitment. Human Resource Management Review, 1: 64 – 89.

Meyer, J.P., & Allen, N.J. (1997). Commitment in the workplace: Theory, research and application. Thousand Oaks, CA: Sage Publications.

Mowday, R.T., Steers, R.M., & Porter, L.W. (1979). The measurement of organisational commitment. Journal of Vocational Behavior, 14: 224 – 247.

Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extra role efforts to initiate workplace change. Academy of Management Journal, 42(4), 403-419.

Nahrgang, J.D., Morgeson, E. P., & Hofmann, D.A. (2011) Safety at Work: A Meta-Analytic Investigation of the Link Between Job Demands, Job Resources, Burnout, Engagement, and Safety Outcomes. Journal of Applied Psychology, 2011. 96(1): p. 71-94.

Nesbary, D.K. (2000). Survey Research and the World Wide Web. Massachusetts: Allyn & Bacon Press.

Nieuwenhuijsen, K., Bruinvels, D., & FringsDresen, M. (2010) Psychosocial work environment and stress-related disorders, a systematic review. Occupational Medicine, 2010. 60(4): p. 277-286.

Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity and proactive behavior: a multi-level study. Journal of Organisational Behavior, 31, 543

O'Reilly, C., & Chatman, J. (1986). Organisational commitment and psychological attachment: The effects of compliance, identification and internalization on prosocial behavior. Journal of Applied Psychology, 71(3): 492 – 499.

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a meta-analysis. Journal of Applied Psychology, 92, 438–454. doi:10.1037 /0021-9010.92.2.438.

Porter, L. W., Steers, R.M, Mowday, R. T. and P.V. Boulian, 1974. Organisational Commitment, Job Satisfaction and Turnover among Psychiatric Technician. Journal of Applied Psychology, 95 (5), 603-609.

Rodríguez-Muñoz, A., et al. (2014). Engaged at Work and Happy at Home: A Spillover–Crossover Model. Journal of Happiness Studies, 2014. 15(2): p. 271-283

Wang, Y., Li, Z., Wang, Y., Gao, F. (2017). Psychological Contract and Turnover Intention: The Mediating

Searle, B. J., & Auton, J. C. (2015). The merits of measuring challenge and hindrance appraisals. Anxiety Stress Coping, 28(2), 121-143. doi:10.1080/10615806.2014.931378

Siemer, M., Mauss, I., & Gross, J. J. (2007). Same situation—different emotions: how appraisals shape our emotions. Emotion, 7,592–600. doi:10.1037/1528-3542.7.3. 592. e3.

Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. Journal of Personality and Social Psychology, 48, 813 – 838. doi:10.1037/0022-3514.48.4.813.

Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. Cognition&Emotion,7, 233–269. doi:10.1080/02699939308409189.

Steers, R. M. (1977). Antecedents and outcomes of organisational commitment. Administrative Science Quarterly, 22, 46-56

Stevens, R.S. (1978). Music in State-Supported Schools in New South Wales and Victoria. Unpublished PhD thesis. University of Melbourne.

Tsui, K., Leung, T., Cheung, Y., Mok, H., & Ho, W., (1994). The relationship of teacher's organisational commitment to their perceived organisational health and personal characteristics in primary schools. CUHK Journal of Primary Education, 4(2), 27-41.

Warr, P. (2005). Work, well-being, and mental health. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.), Handbook of work stress (pp. 547–574). Thousand Oaks: Sage

Webster, J. R., Beehr, T. A., &Love, K. (2011). Extending the challenge hindrance model of occupational stress: the role of appraisal. Journal of Vocational Behavior, 79, 505