

IMPACT OF PROFESSIONAL DEVELOPMENT, WORKPLACE ENVIRONMENT ON EMPLOYEE CREATIVITY: THE MEDIATING ROLE OF TEACHER'S CREATIVE SELF-EFFICACY

Diljan Asad Khan¹, Jahanvash Karim¹, Zainab Bibi¹, Malali Ashraf², Manzoor Ahmed³

¹Institute of Management Sciences University of Baluchistan

²Sardar Bahadur Khan Women University Pishin Branch.

³Colleges Higher and Technical Education Government of Baluchistan.

Corresponding Author: diljanasad@gmail.com*

DOI: <https://doi.org/10.5281/zenodo.14942944>

Received	Revised	Accepted	Published
08 November, 2024	08 December, 2024	23 December, 2024	30 December, 2024

ABSTRACT

A teacher who enhances his creative self-efficacy foster's his creativity. The study examined two variables; Professional development a personal variable and workplace environment a situational variable. The study also revealed the effect of mediating function of teachers' creative self-efficacy. The goal of the research was to see the influence of the workplace environment and professional development on employee creativity in the Baluchistan education department. The study is based upon primary data comprising questionnaire developed from reliable measures. The sample size of the study is of 250 employees from teaching Staff i.e. Secondary School Teachers (SSTs; General & Science) from education department for general results. Data was analyzed using statistical package for social sciences (SPSS). Professional development had shown positive impact on employee creativity. Workplace environment had a positive impact too on employee creativity. Teacher's creative self-efficacy (TCSE) a mediating variable, affected the positive impact of both Professional development and workplace environment on employee creativity. A more professional teacher in a good workplace environment affects his creativity. The study discussed the implication of results for education department and other organization as well as for further research.

Keywords: Professional development, Workplace environment, Employee creativity, Teacher creative self-efficacy.

INTRODUCTION

Creativity means the capacity of an employee to develop new considerations and solutions for the problems. Creativity is influenced by a variety of individual and contextual characteristics such as personality, cognitions, and workplace environment. Academics have recently begun to search further into the systems by which the above mentioned factors foster creativity in the hopes of unlocking the "black box" of creativity (Choi, 2004; Zhou & George, 2001). Contemporary organization spend a tremendous measure of cash, endeavors, and time to support employee creativity by enhancing their professional development and creating good workplace environment. The capacity to deliver an

innovative result needs consistency to confront organizational and workplace challenges. The research analyzed the connection among employee creativity and professional development, workplace environment. The study searched the impact of Teacher's creative self-efficacy (TCSE) on employee creativity as mediator.

According to Jain, R., & Jain, C. (2016), Employee development is commonly regarded as a source of employee creativity, they did not notice the mediating role of TCSE. This study looked at the factors that influence employee creativity in the context of career growth in the education sector. According to a number of studies pleasant mood may enhance the development of many ideas and

may mitigate or regulate the relationship between the organizational workplace environment and creativity.

The amount of assistance received from the workplace environment determined how well a person develops fresh and useful ideas. Workplace designed for creativity could be a novel sect of research and practice. Woodman et al. (1993) also highlighted the workplace environment as a contextual emphasis, and Shalley advised that future study should look into the impact of workplace arrangements.

Professional development is defined as all of the education, training, and certification that a person needs to have advancement in their job (B. Avalos, 2011). The premise that professional development is about educators learning, learning how to learn, and trying to put their learning into practice for the sake of their students' development is at the heart of such efforts. In his professional development study, Avalos addressed the mediation of workplace environment, but he did not mention TCSE as a mediating component. Many with the strongest evidence of good impact, not all types of professional development are appropriate for all instructors (Avalos, B.2011). According to Watford (2011), teacher trainers cannot help instructors learn without reawakening their existing knowledge and experiences during the learning process.

TCSE is defined as "the inner belief of power to produce creative outcomes," is one key term that has garnered attention in this area. The Research found the relationship of Professional development and workplace environment with creativity of employee and checked the role of mediation of TCSE.

TCSE is a primary precursor of creative behavior and performance. Few researches have looked into the impact of training on teacher's creative self-efficacy (Locke, Frederick, Lee, & Bobko, 1984; Gist, 1989). Nobody has noticed TCSE as a mediator before. Therefore, I have studied it and brought very fruitful results, which would help organization and top-level management to plan well in their organizations.

LITERATURE REVIEW AND HYPOTHESIS

Creativity is having a very complex nature so it has many definitions but highly frequency used definition is the creation, conceptualization, or development of new and beneficial practices by

an individual or a group of individuals. Wong and Pang, (2003); Robinson and Beasley (2010) said that Creative employees are acquired in an organization to cash constant competitive edge. Researchers have indicated that creativity is needed for the production of new and beneficial conceptions. Creativity is basic for organization's survival and competitive edge (Oldham & Cummings, 1996).

Employee creativity refers to the generation of possibly valuable and new concepts for the solution of problems as well as the development of novel products, services, systems, procedures, and work ideas. Employees with creativity can come up with fresh solutions and recommend modifications that will help the company flourish. However, creativity is influenced by a combination of personal characteristics, motivation, social workplace environment, consciousness, emotion, and affection, which are all potentially important aspects. Teachers in organizational psychology have traditionally been used in research on Teacher Creative Self Efficacy. This emphasizes the relevance of creativity for employers: it is now regarded as a critical aspect for organizations whose staff is expected to "adapt to ever-changing organizations".

Hypothesis 1 (H1): Professional Development has positive impact on Employee Creativity.

Professional development is a personal resource available to an employee (Gist & Mitchell, 1992) for creative performance. Teachers have to keep on working in increasing professional development bases.

Researches indicated that teachers need to improve their professional development to increase understanding of the material they teach. Formal Short training courses are stimuli for further professional development of employee at station. As Posthole (2012) indicated out, training courses "practice-oriented exploratory work" is beneficial for teacher's professional development.

A teacher's understanding of his subject and the necessary skills increases with his TCSE. A research of 1322 college and high school students found a correlation between a high degree of teachers' creative self-efficacy and both a good sense of academic accomplishment and a higher

motivation to learn. It has been demonstrated that there is a relationship between effective performance and teacher's creative self-efficacy: Teachers employ their creativity more frequently when they perceive themselves to be more creative. As a result, teachers will develop more creative and original solutions if they have higher sense of self-efficacy and teacher's creative self-efficacy.

H1: Professional development is positively linked to employee creativity.

Hypothesis 2 (H2): Workplace Environment has a positive impact on Employee Creativity

Empirical scholars have looked into the aspects of the workplace environment that can influence creativity at a station. The total of actions, forces, and other significant aspects that are currently and/or potentially having impact on performance at workplace environment (Kohun, 1992). The workplace environment is the sum of people's interactions with the environment in which they work. According to some theories, a positive work atmosphere can boost an employee's creativity.

The majority of empirical studies, as well as Amabile and Woodman theories, focus on the support of employee creativity in the social-organizational workplace environment. Amabile et al. (1996) write that "physical environments that are built to be cognitively and perceptually difficult might promote creativity."

If the school environment is upgraded, teacher will be more motivated and creative. The workplace environment in the 1990s was modernized by changes in various components, including the workplace environment, information and technology, and flexible ways of organizing work activities (Hasun & Makhbul, 2005). Teachers that are psychologically and mentally fit will be more motivated to work and perform better. A nice work environment can also help to reduce absenteeism and hence enhances teacher's creativity, resulting in higher workplace performance (Boles et al., 2004).

H2: Workplace environment is positively linked to employee creativity.

Hypothesis 3 (H1a): TCSE mediates the relationship between Professional development and Employee creativity

Teacher's creative self-efficacy has been defined as individual teachers' belief in their own

abilities to plan and arrange, then to conduct out activities needed to achieve certain academic goals, according to social cognitive theory (Hsiao, Chang, Tu & Chen. 2011). Improving elevated professional development is a vital instrument for raising your teacher's creative self-efficacy. A teacher with a greater self-efficacy view is more confident and more likely to stay in the classroom. Teacher will be able to transmit their expertise to their pupils and useful learning obstacles if they have more confidence and self (Mikel, 2008).

Teachers sometime receive verbal persuasion in the form of workshops of professional development that can be little to increase self-efficacy (Stein & Wang, 1988). Bray-Clark and Bates (2003) argue that employee self-efficacy should be a central focus in professional development opportunities of employees because it is a key driver in employee effectiveness. Teachers who have high self-efficacy views appear to be more willing to try out novel educational techniques and then adopt them stated by Chen et al.

According to the researchers, subjective elements (such as students' motivation) are more closely associated to teacher's creative self-efficacy than objective outcomes (Puentes-Diaz, 2016). The effect of teacher's creative self-efficacy on innovation is strongly reliant on the workplace environment (Innes-Ker, & Haase, Hoff, Hanel, 2018). Meta-analyses typically report a consistent and mildly strong relationship for both teacher's creative self-efficacy as well as creative objectives reported by (Farmer and Tierney, 2017).

H1a: TCSE mediates the relationship between professional development and employee creativity.

Hypothesis 4 (H2a): TCSE mediates the relationship between Workplace Environment and Employee creativity.

Schools would provide new important competencies by providing instructions that inspires the drive to be creative throughout one's life, Teacher's creative self-efficacy must be compromised in order to permit such long-term creativity development. Beghetto & Karwowski (2017) give two definitions of creative self-efficacy: "the perceived confidence to creatively do a given task" and "the idea that one has the potential to produce creative outputs" (Tierney

& Farmer, 2002). Teachers with a high feeling of self-efficacy appear to be more efficient in the classroom. Self-efficacy is a motivator that is linked to one's intention and tenacity to engage in certain actions under certain circumstances that may be influenced by environmental factors such as resources, peer influence, and administrative assistance (Bandura, 1986 & 1997; Chunk & Pujaris, 2002). The important quality of creativity in the workplace is TCSE.

High TCSE is needed for creative works and high performance. The person who has an inner belief to perform with the highest level of creativity brings a high rank of TCSE. "One's belief in his competencies to organize and execute a course of action to accomplish desired results," says Bandura. According to the findings, employee creative self-efficacy influences teacher's creativity as well as their willingness to engage in employee creativity or efforts.

H2a: TCSE mediates the relationship between workplace environment and employee creativity.

METHODS

Sample

The Present study was conducted in education department of province Baluchistan. Participants in the study are randomly selected from 30 schools. To have better results only teaching staff was included in the study. A sample of 250 teaching Staff i.e. SSTs (General & Science) from education department was selected. 217 responses were selected from those 250 Questionnaires. Out of 217, 76.95 % were male teachers and 23.05 % were female teachers. I collected the primary data from Teachers. The Population of the study were all (Secondary School Teachers; General & Science) from education department of Baluchistan.

Procedure

The primary data was collected using questionnaires. A reliable and valid Questionnaire was developed. Several items were included from related literatures. The Questionnaires comprises of five parts. The 1st part was about demographics and other parts were concerning the Employee Creativity 13 items, Professional development 20 items, Workplace environment 17 items and Teacher creative self-efficacy 12 items.

Measures

1. The thirteen items measure for employee creativity by Zhou and George (2001) was used. A likert scale of 5 points (1= "Strongly agree," to 5= "Strongly Disagree"). I rated target teacher's creativity using the 13 items scale. This scale is reliable and widely used in studies such as used by Liu et al (2017) and many more. I conducted a reliability test and Cronbach's α was 0.889.

2. The 17 items measure for Workplace environment by Teresa M. Amabile & Nur D. Gyskiewicz (1996) was adopted for this study. A likert scale of 7 points (1= "Strongly agree," to 7= "Strongly Disagree"). I conducted a reliability test and Cronbach's α was 0.889 for workplace environment.

3. A 20 items (3 parts) measure for the professional development was included from TALIS 2013 technical report for this study. A likert scale of 2 points for part 1 with 5 items (1= "Yes," and 2= "No"). A likert scale of 4 points for part 2 with 9 items (1= "No need at present," to 4= "High Level of need") and a likert scale of 4 points for part 3 with 6 items (1= "Strongly Disagree," to 4= "Strongly Agree"). The reliability test and Cronbach's α was 0.858 for professional development.

4. The last measure 12 items adopted for Teacher's creative Self Efficacy was from TALIS 2013 technical report for this study. All the 12 items are at a likert scale of 4 points (1= "Not at all," to 4= "A lot"). I conducted a reliability test and Cronbach's α was 0.846 for Teacher's creative self-efficacy.

RESULTS

The correlation between workplace environment and employee creativity is .433** a positive and significant relationship lies among them while the correlation between professional development and employee creativity is .395** that depicts positive and significant relationship among them. The correlation between the variables is 55.5 percent. The R Square score of .308 or 30.80% indicated the proportion of the dependent variable that the independent variables could explain.

As a result, the statistical analysis of this inquiry revealed that the significance level of F is 0.05, which was less than 44 implying that such analysis of variance (ANOVA) model was appropriate and the deviation represented by the model was not

merely coincidental. The value of the F- is 44, which was higher than 2.

Workplace environment had a t value of 6.663; While Professional development had a t value of 3.758, which was greater than 1.96. Their beta values were .249 and .326 respectively, by seeing these values than H1 and H2 were accepted that they both had positive impact on employee creativity.

MEDIATION ANALYSIS

TABLE1: MEDIATION ANALYSIS OF WORKPLACE ENVIRONMENT, EMPLOYEE CREATIVITY AND TEACHER CREATIVE SELF-EFFICACY.

	R	R ²	MSE	F	df1	P
	0.4379	0.1933	0.2585	15.1775	3.0000	0.0000
Model						
	Coeff	Se	t	P		
constant	-1.6666	1.3921	-1.1973	0.2327		
MeanPD	1.3126	0.4436	2.9591	0.0035		
MeanTCSE	1.3786	0.3284	4.1983	0.0000		
Int_1	-0.3116	0.1051	-2.9653	0.0034		
Product terms Key:						
Int-1 : MeanPD X MeanTCSE						
Test (s) of highest order unconditional interaction (s) :						
	R2-chng	F	df1	df2	P	
X*W	0.0373	8.7927	1.0000	190.0000	0.0034	

Notes: R (Correlation Coefficient) R² (R-squared) MSE (Mean Squared Error) F (F statistics) df1 (Degree of Freedom) P (Significance) Se (Standard error) t (t-value) P (P-value) Int-1 (Interaction term)

The Table 1 illustrates the amount of correlation between the teacher creative self-efficacy mediation and the relationship of professional development and employee creativity is 43.97 percent. The R Square value 19.33% indicates the level of teacher creative self-efficacy mediated the relationship of professional development and employee creativity. The change in R-value was .0373, which showed TCSE meditates the relationship of professional development and employee creativity. The t value of TCSE showed that its positively impacting in the relationship of dependent and independent variables.

So teacher's creative self-efficacy showed mediation relationship between professional development and employee creativity predicted by hypothesis 1 hence H1a was accepted

TABLE2: MEDIATION ANALYSIS OF WORKPLACE ENVIRONMENT, EMPLOYEE CREATIVITY AND TEACHER CREATIVE SELF-EFFICACY.

	R	R ²	MSE	F	df1	df2	P
	0..5236	0..2741	0..2326	23.9192	3.0000	190.0000	0.0000
Model							
	coeff	se	t	P			
constant	3.5577	1.3575	2.6207	0.0095			
MeanWE	-.1810	.2866	-.6317	.5284			
MeanTCSE	-.1098	.3266	-.3362	.7371			
Int_1	.0912	.0680	1.3412	.1814			
Product terms Key:							
Int-1 : MeanWE X MeanTCSE							
Test (s) of highest order unconditional interaction (s) :							
	R2-chng	F	df1	df2	P		
X*W	.0069	1.7989	1.0000	190.0000	.1814		

Notes: R (Correlation Coefficient) R² (R-squared) MSE (Mean Squared Error) F (F statistics) df1 (Degree of Freedom) P (Significance) Se (Standard error) t (t-value) P (P-value) Int-1 (Interaction term)

The Table 2 illustrates the level of correlation among the TCSE mediation between workplace environment and employee creativity was 52.36 %. The R Square value was 27.41% indicated the level of TCSE which has mediation relationship between workplace environment and employee creativity. The change in R value was .0069 which showed TCSE mediated the relationship of workplace environment and employee creativity. The t value of TCSE showed that it is positively affecting in the relation of dependent and independent variables.

So teacher's creative self-efficacy mediated the positive relationship between professional development and employee creativity predicted by hypothesis 2 hence H2a was accepted.

DISCUSSION

The prime purpose of the study was to dig into the real impact of professional development and workplace environment on Employee's creativity. Creativity is not related to a specific group of people (Mumford, Whetzel, & Reiter-Palmon, 1997). On the other hand, I assessed the mediating role of teacher's creative self-efficacy as an influencer between them. It is impossible for researchers to cover all respective variables, which could affect employee creativity. Therefore, I have included a blend of two new variables and checking the impact of mediator teacher creative self-efficacy on employee creativity.

1. Effects of professional development on employee creativity

Previously, there has not been much evidence of a link between professional development and employee creativity in academic settings. I demonstrated this relationship within education department. Prior work had shown positive relationship between Professional development and employee creativity but in a different context; production companies. Researchers did not keep in view the workplace environment as another important variable, which could be linked to Professional development. I linked and extended their work and got better and positive results. The above statements back my results about professional development and its impact on creativity. It means that if we apply professional development in a good environmental context it can positively affect the creativity of teachers largely.

2. Effects of workplace environment on employee creativity

An important component in creativity is the organizational environment. The second conclusions include the results of empirical scholars who have looked into the aspects of the workplace environment that can influence creativity at a station. Researchers have previously examined the effects of social-organizational, personal, and physical factors on employee creativity (Dul, J., & Ceylan, 2011). A creative work environment promotes creative performance was proven to be valid when this instrument was utilized on a group of 409 employees. I tried on a lower level the same thing to know the impact of the workplace environment on teacher's creativity. Recent research has discovered that how people perceive their workplaces has an impact on their creative output. According to researchers. Employees' perceptions of how much creativity is valued at work, as well as creative performance, are influenced by organizational resources allocated to foster creativity. Leaders can create a pleasant work environment that encourages creativity. Teachers with a good workplace environment showed a positive impact of their work environment on employee creativity. While those with poor workplace environments showed less creativity backing my hypothesis H2.

3. Teacher's Creative Self-Efficacy as Mediator

The mediating function of a teacher's creative self-efficacy, giving insight on how professional development and the working environment have influenced employee creativity. My findings showed that a teacher's creative self-efficacy acts as a mediator. One reason for this mediating effect was that teachers' creative self-efficacy reflected their creativity knowledge and skills. Teachers who have high self-efficacy views appeared to be more willing to try out novel educational techniques and then adopted them stated by Hsiao, Chang, Tu, & Chen (2020). Those who were high in TCSE may set higher creativity goals for themselves.

Implications for Education department

The Implications have demonstrated that employee creativity is likely to help the education department, highlighting the practical significance of study into the factors that influence employee creativity. This means that by hiring or cultivating a creative teaching team, the education department can reap the benefits of employee creativity. The findings also advised that the education department could design and implement a professional development plan, particularly for teaching positions that place a high value on creativity in the school or institution. The Department of Education must keep in mind that hiring teachers solely because of their professional development will not guarantee originality.

First, department leaders should act as creative role models, convincing teachers that they, too, can be creative.

Second, heads may directly demonstrate and teach creativity-related abilities to their teaching team. The teaching personnel to improve their skills should use these activities. Prior research has not clearly presented these recommendations since it did not look at professional development and the workplace environment as influencing variables, and it only used the teacher's creative self-efficacy as a mediator (Shin & Zhou, 2003). Employees' professional growth and basic teaching skills should be enhanced to enactive mastery through these tactics, which would increase their teacher's creative self-efficacy and creativity.

Third, by providing support and encouragement, heads can help teachers overcome their fears and

anxieties about creative undertakings. Teacher's creative self-efficacy is also boosted because of this encouragement.

Limitations and Future Research Suggestions

First, I simultaneously measured professional development, workplace environment, and TCSE. It was done so because the school administration would not let teacher's set-aside time for professional development, workplace environment, and teachers creative self-efficacy solutions. This constraint prevents me from interpreting the relationship between professional development, workplace environment, and TCSE in a causal manner. In the end, a field experiment is required to prove causation.

Second, the research design is temporally lagged for professional development and employee creativity. Because there is a different form of training involved for Science and general teachers. I used the same lagged design for workplace environment and employee creativity. This might have affected our responses taken from them doing questionnaire filling. Future studies may be able to shed more light on such occurrences and their impact on employee creativity.

Third, in this study, I did not add employee performance training. Performance orientation has no evident consequences for creative self-efficacy from a conceptual standpoint. Depending on whether creative quality was being assessed and if the assessment was favorables, negative or neutral, it may or may not alter TCSE.

Forth, the research was carried out in Baluchistan. The findings should be replicated in other cultures in the future.

Fifth, job satisfaction was relatively low among the respondents in our study. As a result, a more highly satisfied sample should presumably be used in a replication of the study.

Sixth, researches should be conducted on other sectors such as construction sector, manufacturing sector and cement sector etc.

Finally, studies need to add teacher's creative self-efficacy as moderator to examine its role in the research model.

REFERENCES

- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of management journal*, 39(5), 1154-1184.
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and teacher education*, 27(1), 10-20.
- Bandura, A. (1986). Fearful expectations and avoidant actions as coeffects of perceived self-inefficacy.
- Beghetto, R. A., & Karwowski, M. (2017). Toward untangling creative self-beliefs. In *The creative self* (pp. 3-22). Academic Press.
- Boles, M., Pelletier, B., & Lynch, W. (2004). The relationship between health risks and work productivity. *Journal of Occupational and Environmental Medicine*, 737-745.
- Bray-Clark, N., & Bates, R. (2003). Self-efficacy beliefs and teacher effectiveness: Implications for professional development. *Professional Educator*, 26(1), 13-22.
- Chen, T.; Hao, S.; Ding, K.; Feng, X.; Li, G.; Liang, X. The impact of organizational support on employee performance. *Empl.Relat. Int. J.* 2020, 42, 166–179.
- Choi, J. N. (2004). Individual and contextual predictors of creative performance: The mediating role of psychological processes. *Creativity research journal*, 16(2-3), 187-199.
- Dul, J., & Ceylan, C. (2011). Work environments for employee creativity. *Ergonomics*, 54(1), 12-20.
- Farmer, S. M., & Tierney, P. (2017). Considering creative self-efficacy: Its current state and ideas for future inquiry. In *The creative self* (pp. 23-47). Academic Press.
- Gist, M. E. (1989). The influence of training method on self-efficacy and idea generation among managers. *Personnel psychology*, 42(4), 787-805.
- Haase, J., Hoff, E. V., Hanel, P. H., & Innes-Ker, Å. (2018). A meta-analysis of the relation between creative self-efficacy and different creativity measurements. *Creativity Research Journal*, 30(1), 1-16.
- Hsiao, H. C., Chang, J. C., Tu, Y. L., & Chen, S. C. (2011). The impact of self-efficacy on innovative work behavior for teachers. *International Journal of Social Science and Humanity*, 1(1), 31.
- Jain, R., & Jain, C. (2016). Employee Creativity: A conceptual framework. *Management and Labour Studies*, 41(4), 294-313.

- Kohun, S. (1992). Business environment.
- Locke, E. A., Frederick, E., Lee, C., & Bobko, P. (1984). Effect of self-efficacy, goals, and task strategies on task performance. *Journal of applied psychology*, 69(2), 241.
- Makhbul, Z. M., Osman, L. H., & Hasun, F. M. (2005). Ergonomics workstation and work stress in multinational organizations in Malaysia.
- Mumford, M. D., Whetzel, D. L., & Reiter-Palmon, R. O. N. I. (1997). Thinking creatively at work: Organization influences on creative problem solving. *The Journal of Creative Behavior*, 31(1), 7-17.
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of management journal*, 39(3), 607-634.
- Postholm, M. B. (2012). Teachers' professional development: a theoretical review. *Educational research*, 54(4), 405-429.
- Puente-Díaz, R. (2016). Creative self-efficacy: An exploration of its antecedents, consequences, and applied implications. *The Journal of psychology*, 150(2), 175-195.
- Robinson, R. N., & Beesley, L. G. (2010). Linkages between creativity and intention to quit: An occupational study of chefs. *Tourism Management*, 31(6), 765-776.
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of management Journal*, 46(6), 703-714.
- Stein, M. K., & Wang, M. C. (1988). Teacher development and school improvement: The process of teacher change. *Teaching and teacher education*, 4(2), 171-187.
- Teresa M Amabile, Regina Conti, Heather Coon, Jeffrey Lazenby, Michael Herron *Academy of management journal* 39 (5), 1154-1184, 1996
- Warford, M. K. (2011). The zone of proximal teacher development. *Teaching and teacher education*, 27(2), 252-258.
- WONG, S., & PANG, L. (2003). MOTIVATORS TO CREATIVITY IN THE HOTEL INDUSTRY—PERSPECTIVES OF MANAGERS AND SUPERVISORS. *TOURISM MANAGEMENT*, 24(5), 551-559.
- WOODMAN, R. W., SAWYER, J. E., & GRIFFIN, R. W. (1993). TOWARD A THEORY OF ORGANIZATIONAL CREATIVITY. *ACADEMY OF MANAGEMENT REVIEW*, 18(2), 293-321.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management journal*, 44(4), 682-696.
- Zhou, J., & Shalley, C. E. (2003). Research on employee creativity: A critical review and directions for future research. *Research in personnel and human resources management*, 22, 165-217.