

Artículo de investigación

# Reward, a driver to creativity: mediating role of appraisals of reward between self efficacy and creative performance

Recompensa, un conductor a la creatividad;

mediar el papel de las evaluaciones de la recompensa entre la autoeficiencia y el desempeño

creativo

Recompensa, um motorista para a criatividade;

papel mediador das avaliações de recompensa entre auto eficácia e desempenho criativo

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#### Abstract

The purpose of this dyadic study was to explore the insight that trigger the creative performance. For such purpose self-efficacy and rewards in shape of challenge and threat appraisal were used. A Survey was conducted to collect the data from the public and private sector organizations related to technical education in Punjab. Sample was the faculty member working on positions of instructors, senior instructor and lectures. A total of 302 respondents were analyzed. The results of the analysis show that there is significant relationship among self-efficacy and creative performance. The mediation analysis also shows that challenge appraisal of rewards for creativity and threat appraisal of reward also worked as mediator. Consequently, we reached at the point that having high level of self-efficacy, individuals in technical education organizations appraises the reward as a challenge and perform creatively. And on the other side having low level of selfefficacy, but appraising the Reward as a threat, tends to impact negatively on creative performance.

#### Resumen

El propósito de este estudio diádico fue explorar la información que desencadena el rendimiento creativo. Para tal fin se utilizaron la autoeficacia y las recompensas en forma de desafío y evaluación de amenazas. Se realizó una encuesta para recopilar los datos de las organizaciones del sector público y privado relacionadas con la educación técnica en Punjab. La muestra fue el miembro de la facultad que trabaja en posiciones de instructores, instructor senior y conferencias. Se analizaron un total de 302 encuestados. Los resultados del análisis muestran que existe una relación significativa entre la autoeficacia y el rendimiento creativo. El análisis de la mediación también muestra que la evaluación desafiante de las recompensas por la creatividad y la evaluación de la amenaza de recompensa también funcionó como mediador. En consecuencia, llegamos al punto en que, al tener un alto nivel de autoeficacia, los individuos en las organizaciones de educación técnica valoran la recompensa como un desafío y se desempeñan de manera creativa. Por otro lado, tiene un bajo nivel de autoeficacia, pero evaluar la recompensa como

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**Keywords:** self-efficacy, technical education, dyadic study, threat appraisal.

una amenaza, tiende a tener un impacto negativo en el rendimiento creativo.

**Palabras claves:** autoeficacia, educación técnica, estudio diádico, evaluación de amenazas.

#### Resumo

O objetivo deste estudo diádico foi explorar a percepção que aciona o desempenho criativo. Para esse propósito, a auto-eficácia e as recompensas em forma de desafio e avaliação de ameaça foram usadas. Uma pesquisa foi realizada para coletar os dados das organizações do setor público e privado relacionadas à educação técnica em Punjab. Amostra foi o membro do corpo docente trabalhando em posições de instrutores, instrutor sênior e palestras. Um total de 302 respondentes foi analisado. Os resultados da análise mostram que existe uma relação significativa entre autoeficácia e desempenho criativo. A análise da mediação também mostra que a avaliação de recompensas de recompensas por criatividade e avaliação de ameaças de recompensa também funcionou como mediador. Consequentemente, chegamos ao ponto em que, tendo alto nível de autoeficácia, indivíduos em organizações de educação técnica avaliam a recompensa como um desafio e realizam de forma criativa. Por outro lado, ter baixo nível de autoeficácia, mas avaliar a recompensa como uma ameaça, tende a impactar negativamente no desempenho criativo.

Palavras-chave: autoeficácia, educação técnica, estudo diádico, avaliação de ameaça

#### Introduction

With the rapid changes in the global market of products, Industries often strive to go for creative work to meet the needs and competition within the industry to sustain. The twofold aim of the creative performance is (a) sustainability for the organizations to remain in the industry and (b) uniqueness to get the recognition among the individual firm, individual industry and individual person (George & Zhou, 2002; Oldham & Cummings, 1996; Zhou, 1998).

Creativity is not only to generate the new ideas and innovation, but also "the process of coming up with fresh ideas for changing products, services, and process so as to better achieve the organization's goals" (Ambile et. al 2005). It will provide the clear way for the emergence of creative performance needed to overcome challenges, adapt to new organizational realities, and drive innovations that create competitive advantage (Sweetman et. al 2011). Creative performance depends upon several factors to be performed in innovative way. There may be suitable environment, supporting supervision, inherent capacity to think and act innovatively, courage, person's expertise in specific areas and specific time to think about, that enable someone to make an effort to operationalise the new idea into invention of some new product, process, services or replacing the old ways of doing things and as well as modifying and injecting the new features in product and services.

Major players in current research were chosen are self efficacy, Rewards appraisal in shape of challenge and threat which result the creative performance. self efficacy, that is, believe of someone to do something that play a vital role to perform the creative work as well.

- "If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning" - Mahatma Gandhi. Where it comes from and what is the relationship with creative performance? Bandura (1977) contended that there are four major sources of self efficacy which are performance outcomes that is past experiences; vicarious experiences that someone acquire by making comparison with the other individual; verbal persuasion that can be influenced by encouraging and discouraging the performance and physiological feedback that depicts the emotional arousal and results agitation, sweaty palm and increasing the heart beat. Another researcher Williams and Williams (2010) argue that "individuals with high levels of self-efficacy approach difficult tasks as challenges to master rather than as threats to be avoided" According to Gist and Mitchell (1992) there are three assessment processes that will determine and interpret the level of self efficacy that directly affect creative outcomes. Firstly, to analyze the task requirement that determines what to perform. Secondly, attributional analysis of past experiences that is the judgment about why performance level occurred. And thirdly,



the assessment of personal and situational resources and constraints. In that part of assessment, individual judges his personal skills and level of available efforts to be invested. Our results support the self efficacy theory of Gist and Mitchell (1992) that has direct and positive relation with creative performance. Our hypothesis I supports the work of Gist and Mitchell on self efficacy.

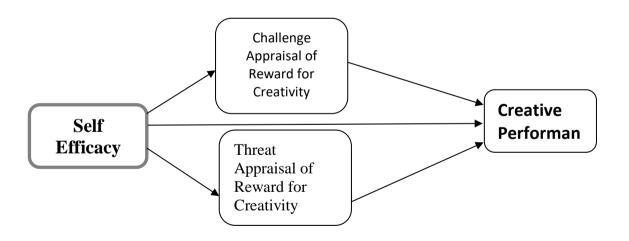
Analysis result accepted the relationship of self efficacy with challenge appraisal of reward for creativity (hypothesis 2) and relationship of self efficacy with threat appraisal of reward for creativity (hypothesis 3).

Lazarus, 1991; Lazrus, Folkman (1987) suggested that people appraise the reward on the basis of self confidence and such confidence comes from the level of self efficacy. Appraisal theory suggests that employees appraise the rewards on the basis of individual capability having different level of competencies, confidence and locus of control. Having internal locus of control, high level of self confidence appraise the reward as a challenge and on the other side with low level of self confidence and external locus of control appraise the reward as a threat.

Although Self determination theory suggest that self determination is concerned with intrinsic motivation and interest that leads creative performance but the research work of Kai wang (2017) resulted that individual driven with the extrinsic rewards to produce the creative outcomes, are still motivated in such type of activity that is self initiated and self regulated. This self determination rises within the individual when he/she will appraise the reward as a challenge backed by the requisite expertises and KSAs to achieve the personal goals and to show the competency, performs creatively when rewards were contingent with creative performance. The expectancy valance theory suggested that the activity performed more than the expectation will be fruitful considering the value of the reward which is predefined and contingent with the performance. Our hypothesis 4 accepted that creativity continent has a positive and direct relationship with creative performance and supported the work of Li et al., (2017).

And rewards being appraised as a threat to self esteem was hypothesized negative relationship with creative performance also accepted and result shows significant negative relationship. Our results from the path 2, support the work of Li et., al 2017 and Rich,2016 that the threat appraisal of reward for creativity tends for blaming and avoiding the task performance and in turn creativity.

A purposed conceptual framework is given below:



### Literature Review

- Self Efficacy and Creative Performance. Self efficacy is a perceived competence that can satisfy the demand on the specific condition. (Bandura, 1997) suggested the "context free and context specific self efficacy". Literature highlights two types of self efficacy, i.e. general self efficacy which refers to some flexibility in someone competence and capabilities to meet the demands of environments and situations. (Bandura, 1989). Another researcher (Jerusalem and Schwarzer, 1992) also proposes that with high general self efficacy person believes in their capabilities and mastery to fulfill the environmental demands. Self efficacy has a positive relationship with the creative performance (Tierney & Farmer, 2002). This concept has a large scale of empirical support. Creative performance is all about to come up with new ideas, process, procedure, generation of fresh ideas and/or replacing the old way of doing things with new ones. Organizations strive to be creative and struggle to make their employees perform creatively. So, creative performance, being the focus of industries, can be influenced by several factors. Current research will focus on specific and key factors of creative performance. Creative performance has two approaches to reach the destination level, one is by using existing resources to discover, improve the process, procedure and product, and another way is to innovate completely a new product, process and procedure by using the available resources. Both ways are the part of creative performance. Here it is necessary to differentiate the of concept creative performance and innovation. Innovation is an application and implementation of ideas into better solutions. According to Frankelius, P (2009), the innovation can be defined as the creation of something entirely new, more effective and efficient and emerging into markets, industries and society as well. Although innovation seems related to invention but not like as such. Because innovation provides practical implementation of invented ideas in the shape of new product, services, processes and technologies. Sternberg and Lubart (2010) contended that "Creativity requires passion and commitment". Where the creativity comes from? If it is inherent in some people to generate the ideas which are more applicable or on the other hand may be learned. In answer to this question, a research conducted by George Land (2012) which resulted that human being are naturally creative, but with the passage of time as they grow up they learn to be uncreative. The researcher further argued that "Creativity is a skill that can be learned". If the creativity can be learned, what factors can enhance the creativity? To investigate the reasons and factors that can influence directly and indirectly to the creative performance, organizations considering interest in learning and understanding that what management practices may facilitate the creativity and creative performance (Zhou et.al 2003). While displaying the creativity at the work, individuals tend to generate the novel and potentially useful ideas at their workplace in result of products, processes and procedures (Shalley & Gilson, 2004).

Creativity is a building having the base and foundation of knowledge, skills and ability to perform the tasks that provides the individual some certain level of self-efficacy.

People at work with learning orientations can make the bases and build the formation of creativity. Which is the basic requirement of self efficacy with some factors that can't be ignored. Bandura (1997) contended that having strong self-efficacy and to discover the "new knowledge" is the unavoidable condition for creativity production. In line with this concept, self efficacy influences the motivation and provides a tool to engage in certain behavior or task (Bandura, 1986). This view of self-efficacy has a promising foundation towards creativity in the organization's structure. Ford (1996) also in support of this concept and is of the view that self efficacy, a belief that play the role of key motivational factors in his model in creative action. According to Tierney, (2002) for a person, there are two sources of creative efficacy, job knowledge and job self-efficacy and by this the knowledge can be obtained through job experience and education in formal (Gist & Mitchell, 1992).And (Gist, 1989) was also of the view that idea generation self efficacy is the result of training method of learning. In the view of above current research hypothesized in such a way.

HI: Self efficacy has positive relationship with creative performance.

- Self Efficacy and Challenge appraisal of reward for creativity. According to literature there are two types of self efficacy. General self efficacy, which is referred to the belief and capability that someone can meet the demand of the situation. And creative self efficacy is specific to creativity and believe of one's ability to produce the creative results within his/her own role.( Li et al. 2016) also suggested the self efficacy as an antecedent of creative performance. Self efficacy either creative or general if higher, is a prediction of reward as a challenge whenever someone is fully confident about his her capabilities to meet the demand of creative contingent reward.

Self-efficacy related to a specific domain more effectively predicts the behavior related to this domain (Choi, 2004). In current research, creative self-efficacy will be employed, which refers to "the belief (that) one has the ability to meet the creative demands and requirements of



the situation" (Tierney & Farmer, 2002, p. 1138). In addition and contribution to prior studies that have shown the mediated effects of self-efficacy on creative performance (Choi, 2004; Gong, Huang, & Farh, 2009). As above illustrated with respect to the expectancy theory of (Vroom, 1964) proposes that people get motivated to engage in a task whenever they feel confident and trust upon them that their efforts will be fruitful and can improve performance. People with high level of creative self-efficacy have confidence in their ability to meet the creative demands and tackle the situation. This high self efficacy depicts that people take the assignments and tasks as a challenge to achieve the rewards. In such way, when the rewards are contingent with the performance, with high level of self efficacy people take the tasks and assignments as a challenge and at that position intrinsic motivation increases to display creative behavior (Eden, 1984; Peterson & Seligman, 2004).So, with the high level of self efficacy that provide the increased level of self confidence and internal locus of control appraises the reward as a challenge and intrinsic motivation triggers all that process to move forward to fulfill the demand of creative performance. So, that path of research model hypothesis in such a way,

H2: Self efficacy has positive relationship with challenge appraisal of reward for creativity.

- Self Efficacy and Threat appraisal of reward for creativity. People working in organizations tend to resist in engaging creative activity when they perceive that they would not be successful, this undermines the motivation related to self efficacy to creative action. Employees having the low level of requisite skills. expertise, knowledge of work and experience tend to show reluctant behavior towards performance of tasks. In other words, individuals with low level of self-efficacy have a low expectation and belief that they would not perform successfully the demands of creative tasks even if they put in their maximum efforts (Dewett, 2007). With the low level of expectation even investment of their substantial efforts towards creative performance, these employees value rewards for their creative performance as a threat to esteem that imposes demands of creativity they wouldn't meet (Putwain, Kearsley, & Symes, 2011). Thus, in spite of progressing and achieving the reward that is promise for creative performance, the people with low level of self-efficacy are supposed to be escaped the situation by ignoring

the assignment for creativity and are likely not to achieve the creative performance. This condition similarly match the situation of evaluation apprehension in which (Cottrell, 1972) describe that people with low level of self efficacy have no intention to perform creatively even if they have some sort of skills. They have some doubts within their capability to perform. So when those people recognize that there will be negative result of specific situation they tend to avoid the activity. Due to lower level of expectancy to perform and having low levels of self efficacy divert the rout of their effort towards some other aspects of job performance and resultantly display low, & Harkins, 2009). Having grounds of displaying less creatively, current research hypothesizes that with low level of self efficacy leads to appraise the reward as a threat, employee will not perform creatively.

H3: Self efficacy has negative relationship with threat appraisal of reward for creativity.

- Challenge appraisal of Rewards and Creative Performance. When talk about rewards, it will be the extrinsic that may be in monetary form as well as recognition. Rewards that create extrinsic motivation within the employees are defined as extrinsic rewards. Rewards play pivotal role in creative performance. When reward becomes а challenge and what impact on the creative performance? According to (Deci et al., 1999), reward provides a signal that individual efforts towards creativity will be appreciated and recognized and also controls the behavior of individual. Another scientist (Ryan, 1999) contended that the reward provides an opportunity to express individual capability and skills towards creativity and get the chance of recognition. Behavioral scientists support these concepts and argue that rewards trigger the selfdetermination, and play the role as a supporter (Eisenberger & Cameron, 1996; Eisenberger, Pierce & Cameron, 1999) and creativity (Eisenberger & Aselage, 2009).On the basis relevant skills and expertise and blooming opportunities for recognition, individual appraise the reward as a challenge and strive to achieve it (Li et al 2016). "The person's decision about whether he or she has any stakes [personal gains or losses] in the encounter [stressor], and if so, what kinds" (Lazarus and Folkman, 1987). Keeping in view the rewards that emphasize the person towards making decision creatively, generate two types of feelings. On One side, basis on skills, ability, aptitude level, confidence level and expertise's, individual take it as a challenge and reward will result recognition, self esteem and some personal goals. The reflection theory (Thierry's, 2001) contends that the individual consider the reward as an instrument to attain personal goal. So it is up to individual to appraise the reward as an opportunity to acquire goals in the shape of achievements, financial rewards like bonuses and incentive pay and nonfinancial rewards like promotion and recognitions as well as career development that drives the person to some creative work. Expectancy theory maintains three aspects that provide high level of motivation to perform a task or assignments, which are (i) expectancy or belief of someone that more investment of efforts will enhance the performance, (ii) instrumentality or the belief of individual on the organizational systems that measure performance of work and tasks and offer rewards and incentives on the basis of performance and (iii) valence or the value is the judgment and importance of individuals to certain rewards (Vroom, 1964). The basic and foundation concept of expectancy theory was based on the reinforcement, which further elaborates the utilitarian view of human nature and suggests that "external reinforcements can strengthen any behavioral dimension, such as force, duration, novelty, and variability" (Skinner, 1938). This lens contends that employee efforts will be lead as per extrinsic rewards as set by the management towards desired direction and will display the behavior that will lead the individual toward creativity if the rewards are contingent with creative performance (Eisenberger & Cameron, 1998). Reinforcement theory interact with the instrument part of expectancy theory (Vroom, 1964), which maintains that whenever rewards are contingent with the the performance, it will boost up the motivation to attain the objectives of the creative performance. On the basis of expectancy theory and the instrumentality of rewards that are the prerequisites to promote the intrinsic motivation towards creative performance. Hence current research proposes the hypothesis that,

H4: Challenge appraisal of reward for creativity has positive relationship with creative performance.

H6: Challenge appraisal of reward for creativity positively mediates the relationship between self efficacy and creative performance.

- Threat Appraisal of Reward and Creative Performance. Previous researches maintain that extrinsic rewards may have positive and negative effects on creative performance (Deci, Koestner, & Ryan, 1999; Eisenberger, Pierce, & Cameron, 1999), Rewards, on the basis of perceptions and interpretations of oneself, may play the role of threat if someone is not capable to attain. As one of the researchers, Janis (1982) defines," Threat is a fear of failure and potential negative influence on self esteem". In continuation of this view, some researchers find the perception that "Threats to self esteem" that may cause "loosing self respect" (Folkman, et. al and Gruen, 1986). Leary (1999) is of the view that "self esteem is lowered by failure, criticism, rejection and other events that have negative implications for relational evaluation" (p.34). However, having the positive impression of workers regarding the utilization of extrinsic rewards to drive creativity, there is no significant impact of extrinsic rewards proved of on creativity. Several field researches have been concluded a non significant relationship between perceived reward for Creative performance (e.g., Baer, Oldham, & Cummings, 2003; Dewett, 2002; Eder, 2007; George & Zhou, 2002; Yoon, Choi, Lee, & Kim, 2009).

Cognitive evaluation theory contends that the impact of reward on creative performance depends upon individual differences with which people appraise the rewards (Deci et al., 1999). People having internal locus of control are less concerned with external factor such as rewards and their appraisals of rewards are less likely as "controller of their behavior". But on the other hand people with external locus of control backed by low level of expertise, skills, experiences and as a whole a low level of self efficacy, that could not fuel the intrinsic motivation towards creative performance. And individual displays the negative behavior towards creative performance.

The self-determination theory (Deci & Ryan, 2000) proposes that the motivation coming from extrinsic factor like rewards are two aspects of the same continuum. On the one hand, individual appraises the reward with the feelings of autonomy and become motivated to be engaged in certain tasks and assignment set to achieve rewards and similar effect on creative performance. But on the opposite continuum, the appraisal of rewards which are contingent with the performance are felt imposed without a feeling of autonomy but a threat. People having such type of appraisal; consider the reward as a threat to self esteem as well as self respect.



presence of extrinsic reward contingent with performance does not guarantee the creativity but failure expected. So it is up to individual that how he/she appraises the reward which is performance-contingent.

Recent motivation theories and their empirical conclusions argue that "human resource practices may be perceived differently by different employees, resulting in different attitudinal and behavioral outcomes" (Nishii & Wright, 2008).

Scientists concerning with social cognitive orientation contended that "extrinsic rewards reduce intrinsic motivation and creativity due to lowered self-determination and the over justification effect" (Amabile, 1996; Hennessey & Amabile, 1988). On the basis of theories and concept of negative results of threat appraisal of reward that reduce the intrinsic motivation and creative performance, current research hypothesis that,

H5: Threat appraisal of reward for creativity has negative relationship with creative performance. H7: Threat appraisal of reward for creativity negatively mediates the relationship between self efficacy and creative performance.

### **Research Design and Methodology**

- Sample and data collection procedure. Population for the current research were the faculty members in technical education in Punjab and targeted the south Punjab region. The total population was 1123 and sample size was of N=340.

To reduce and minimize the common method bias, we used the separate questionnaire for employees and their supervisor for independent and dependent variables. For this reason, the sample size was consisting of 340 dyads were approached.

And questionnaire contains two pages (i.e.) one for the individual employee working on guzetted positions and other for the supervisor. Employees and supervisors were related to same institute. Employees were the faculty members of respective trade and supervisors were the head of institutes or head of departments. Questionnaires were distributed first among the employees to fill and rate them accurately by their self by writing their name on the employee page. Then supervisor forms were furnished to the respective supervisor to rate their employees' responses. The questionnaire was also separated for the employees and for supervisors by writing on top right corner "For Employee (PTEVTA)" and "For Supervisor (PTEVTA)". The questionnaire for employee contains twenty items of four variable which were abbreviated. Self efficacy has eight items and were coded SE1 to SE8, Challenge appraisal of reward for creativity has four items and were coded CARC1 to CARC4. Threat appraisal of reward for creativity, having three items, was coded and abbreviated with TARC I to TARC3..And at the last stage their demographics were asked which contain age in eight slabs from 21-60. Tenure of service were slabed in seven sets from 1-28 years. Educational qualification was used in three slabs i.e Bachelor, Masters and MPHIL/PHD. Cities which were selected from the south Puniab were Multan. Dera Ghazi Khan. Bahawal Pur. Rahim Yar Khan and Layyah/Muzaffer Garh. The second page of questionnaire was for the supervisor with same demographics were asked and requested to rate their employees on the scale of creative performance. It was promised to keep the information confidential. Creative performance contained the four items and asked to what extent you are satisfied with their employees' performance from strongly disagree to strongly agree. A total number of questionnaire received were 317 of which 15 incomplete were rejected. Sample of 302 complete questionnaires was identified and then converted into soft form in Excel spreadsheet. The response rate was 88%.

Investigation was done on the different parameters and factors influencing the creative performance. Rewards performed as a Mediator, in shape of Threat appraisal of reward for creativity and Challenge appraisal of reward for creativity, Self Efficacy as an independent variable, and Creative Performance will act as a dependent variable.

### - Measures.

A questionnaire was designed consisting of above-mentioned variable to check the impact of these on creative performance.

All the variables were measured by using 5-point Likert-type scale from I = Strongly Disagree to 5=Strongly Agree

(i) Self Efficacy was measured by using eight items scale from Chen, Gully, and Eden (2001).

(ii) Rewards appraisals as Challenge was measured by four items from Hayes (2005), which was based on Thierry's "reflection theory of compensation" (2001).

(iii) Threat appraisal of reward for creativity was measured by three items scale modified by Drach-Zahavy and Erez (2002) based on scale initially developed by Folkman et al. (1986).

(iv) Creative performance as a dependent variable was measured by the scale consisting of four items developed by Scott and Bruce (1998).

# Table I.

## Data Analysis

All the data collected from the respondents was converted in statistical form and then statistical data was analysed by IBM SPSS statistics, SPSS AMOS and other analysis techniques.

- Reliability Tests of scales. Reliability tests are done to increase and enhance the quality of research. During the analysis of data on SPSS, cronbach's Alpha was calculated for each of the scale. Results depict that all five scales are reliable and can be used.

Name of Variable	Items of variable	Cronbach's Alpha
Self efficacy	08	0.696
Challenge appraisal of reward for Creativity	04	0.689
Threat Appraisal of reward for Creativity	03	0.735
Creative performance	04	0.83

- Self efficacy. For self efficacy, to get the appropriate result, cumulative value was checked, the starting results were not supportive. Then four items which were being loaded on the two columns were deleted then checked, pattern supported and having good cumulative value. Then we applied the same items on confirmatory factor analysis (CFA). The result was not supported. Then we deleted the two items of S7 and S8 and then we checked. Result improved but not satisfactory. Then we checked by removing the more two items of S4 and S6, then run the CFA. The results were satisfactory with better values.

In Challege Appraisal of Reward for Creativity, four items of that variable applied on the CFA. When the results were not satisfactory, we removed CARC4. Then loaded three items and got satisfactory results for threat appraisal of reward for creativity:

Threat appraisal of reward for creativity has three items loaded on CFA. All the items loaded successfully loaded and provide satisfactory results. The Creative Performance has its four items. All the items were loaded on CFA which resulted satisfactory values of indices. Then proceeded to run the CFA full model.

Table 2. Full I	Measurement Model
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Sr.No	Variables	CMIN/DF	CFI	RMSEA	PCLOSE	GFI

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I	Full Measurement Model	1.80	0.947	0.52	0.397	0.951	

- **Mediation Analysis.** After getting model fitness indices and describing its entire factor loading and getting the satisfactory results, we proceeded to mediation analysis by using the SPSS v 23.0and AMOS v 23.0 to run the analysis.

By combining all of the variables on AMOS, regression weight analysis was executed and mediation was checked. The direct relationship of self efficacy with creative performance found significant. And link of self efficacy through mediator of challenge appraisal of reward for creativity found significant. Then we checked the relationship of challenge appraisal of reward for creativity with creative performance it found positive and significant. Then analysis on path two was conducted and found that there is a significant negative relationship of self efficacy and threat appraisal of reward for creativity. Then we checked the relationship between threat appraisals of reward for creativity with creative performance, it found significant and positive.

Resultantly the analysis found that there is partial mediation between self efficacy and creative performance through challenge appraisal of reward for creativity on path one. And on path two, there was also significant partially mediated relationship between self efficacy and creative performance through threat appraisal of reward for creativity.

Table 3.

Path (I)	DE(Direct Effect)	P value of DE	IE (Indirect Effect)	P value of IE	Mediation
SE → CARC→ CP	.322	0.03	0.136	0.02	Partially

The value of P shows that there is a partial mediation exists. This also shows that challenge appraisal of reward for creativity mediates

partially the path between the self efficacy and creative performance.

- Mediation analysis of Path 2.

Table 4

Path(2)	DE(Direct Effect)	P value of DE	IE (Indirect Effect)	P value of IE	Mediation
SE→ TARC→ CP	0.322	0.03	0.121	0.03	Partially

The value of  ${\sf P}$  shows that there is a partial mediation exists. This also shows that Threat

appraisal of reward for creativity mediates partially the path between the self efficacy and creative performance.

- Hypothesis Testing Results.

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Hypothesis	Path	Estimates	Value of P	Accepted/Rejected
ні	CP SE	0.032	Significant	Accepted
H2	CARC 🦯 SE	0.121	significant	Accepted
H3	TARC SE	0.000	significant	Accepted
H4	CP CARC	0.184	Significant	Accepted
H5		0.003	Significant	Accepted
H6	CP 🛱 RC SE	0.136	Significant	Accepted
H7	CP ( TARC SE (	0.121	Significant	Accepted

# **Discussion and Conclusion**

Self efficacy, especially related to creative outcomes that are believed to produce the self determination and to exhibit the creative behavior resulted in high level of self confidence and internal locus of control and also believe that that someone is capable of producing creative outputs. Bandura, 1977 described the four sources of information which depict the individual self efficacy which are performance results, vicarious experiences, encouragement and emotional arousal in shape of psychological feedback.

Gist and Mitchell (1992) contended the three assessment processes for judgment of self efficacy within someone. First one is analysis of task requirement in which individual tends to determine what to perform and second one is

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attribution of analysis that is described to judge why performance level occurred and last one is assessment of personal and situational resources which are knowledge skills and ability (KSA) and investment of personal efforts from personal sources and competition demand are the situational constraints. In the light of self efficacy theory, that someone who has high level of self efficacy has a motivation to be recognized to meet the personal goal and mastery over task performance to become unique within the firm tends to go for creative performance. Our research work support the finding of Gist and Mitchell (1992) that there is direct and significant relationship of self efficacy and creative performance.

Self-efficacy being the antecedents of challenge and threat appraisals, people appraise the reward as a challenge who have their high level of self efficacy. As results reveal that there is a signicant relationship of self efficacy and challenge appraisal of reward for creativity. And challenge appraisal of reward for creativity has also the positive relationship with the creative performance. In consistence with the result of path I, extends the work of Jerusalem and Schwarzer (1992). He contended that people with high level of self efficacy have trust and believe that they have the capability in mastering the various types of environmental demands and thus appraise the reward as a challenge.

Although there is a significant relationship of rewards which was being appraised as a challenge, with the creative performance but if they are contingent with the performance.

Some researches based on self determination theory, argue that there is a negative impact of rewards on creativity. Because the rewards which are used to control the behavior and provide the only direction towards completion of tasks and creative outcomes. And that minimizes the intrinsic motivation as well as self determination. The research work of Kai Wang, (2017) concluded that even someone is extrinsically motivated, he will also be interested and enjoying the activity of self initiated and self regulated.

Another school of thought that support our results that appraising the rewards as a challenge considering that he/she can achieve the reward because of his capability and competence has positive relationship with creative performance. Expectancy-valance theory and learned industriousness theory contended that the performance of individuals depends upon the prior learned habits. If the person, in past endeavors, experiences that the creative performance was recognized and valued then it will reinforce the creativity in future also. To exert and boost the intrinsic motivation towards creativity, rewards give the direction to achieve the personal goals. Rewards that are contingent with creativity were found positive relationship with creative performance. The study of Eisenberger and Shanock (2003) concluded that the rewards have no positive relationship with the creativity if they are not contingent and informed rather than a negative relationship. Monitory rewards enhance the self determination and also disseminate the information about inherent capacity to perform and in turn creativity. Kay Wang (2017) is also of the view that rewards that enhances the intrinsic motivation towards creativity because the individuals pay their full attention to complete the task and have much better capability to translate interest of the task performance into new process or changing the old one into new one. Thus challenge appraisal of reward for creativity mediates the relationship of self efficacy and creative performance positively.

Current research proposed that self efficacy has negative relationship with the mediator (threat appraisal of rewards for creativity) and through this mediator self efficacy has negative relationship with the creative performance and results also supported our hypothesis. Results show that there is a significant relationship between threat appraisals of rewards for creativity with creative performance. Having significant relationship between self efficacy and creative performance through TARC mediation, current research support the work of Byron & Khazanchi, 2012; Li et al., 2016) that appraising the reward for creativity which disseminate the information of incompetency that suffer the creativity at work.

# Limitations and Direction for Future Research

We conducted the research emphasizing on the technical education in Punjab which is providing the technical education in various fields. The samples were the faculty members working in BS 16-19. The study can be replicated in different organization in manufacturing and services sector in either public and private sector. Well established rewards system has not been incorporated in TEVTA, on exhibiting creativity,

the rewards partially mediated the self efficacy and creative performance. Future research may be conducted where there is a proper reward system incorporated. Further we controlled the variables of age, tenure of services, academic qualification. As the researcher from different field contended that age of employee, tenure of services and academic qualification play a significant role in defining and executing better performance as well as creativity. To further boost the level of self efficacy and rewards a way to recognition and personal achievement, intrinsic motivation may have significant role.

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