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Seeing Creativity: Attitudes towards Creativity from a Pakistani Sociocultural Background

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From the Pakistani sociocultural perspective, this study investigated the general attitudes of Pakistani teachers towards creativity, which were ranked as the medium by involving a total of 155 (65 Males and 90 Females) teachers from diverse areas. Demographic variables such as gender, highest professional qualification, teaching level, and key subjects taught brought significant statistical differences in their attitudes towards creativity. The findings were discussed in light of past literature. Suggestions and limitations for future research were discussed.

Key words: *Creativity, Attitudes, Pakistani Sociocultural Background*

INTRODUCTION

The past literature has addressed creativity differently; that's why it became a tricky concept for readers; for example, Bohm (1998) and Craft (2003) stated creativity as a concept that bears no fix definition. Also, Craft (2003) said that being an open-ended concept, creativity becomes naturally unfixed.

Regarding teachers Hashweh (1996) andPajares (1992) have stated they are the agents that shape students' learning experiences. So, it becomes an indispensable step for the researchers to understand what attitudes teachers hold towards creativity, if they want to cultivate creativity. Also, if research should be made available regarding teachers' attitudes towards creativity, it will help educators develop creativity. Keeping in view the importance of creativity, researchers (e.g., Craft, 2003; Gibson, 2005; Ng & Smith, 2004; Park, Lee, Oliver & Crammond, 2006) have stated that various policies and projects have demanded the addition of creativity into school curriculum which is a suggestion for creativity development in education. The researchers (e.g., Craft, 2006; Cachia & Ferrari, 2010; Glaveanu, 2011;

Humes, 2011; Rinkevich, 2011; Beghetto & Kaufman, 2013) have stated that creativity has an essential role in education which shows that it is a fundamental concept to be explored. It will be difficult for teachers to conceptualise creativity if we ignore their attitudes towards creativity.

In this study, the current researchers, in light of past creativity literature, exposed the attitudes of past teachers towards creativity regarding their sociocultural framework, which made a case for the present study. For example, the Kuwaiti primary EFL female teachers resulted in a higher level of attitudes towards creativity because they believed that creativity is an essential skill and much needed to teach (Al-Nouh, Abdul-Kareem & Taqi, 2014). However this study was undertaken purely on female teachers which is gender-biased; therefore, this study includes male teachers' which the current researchers examined in this study. Teachers in other sociocultural frameworks, for example, Turner (2013) at East Midlands, the UK and Roy & Carter, 2013 at Northwest Arkansas, USA also perceived that creativity in schools should be cultivated due to its importance (Roy & Carter, 2013; Turner, 2013). This meant that teachers from the west had a firm conviction about creativity. This study also explores other sociocultural frameworks (i.e., Pakistani perspective) and whether creativity is considered an essential skill by Pakistani teachers or what attitudes they hold for creativity?

Further, the UK teachers in Turner's (2013) study favoured creative tasks to be promoted in their lessons, and most of the teachers believed in the cultivation of creativity (Turner, 2013). This also needs to be explored from the Pakistani sociocultural framework, whether they believe in the cultivation of creativity and creative teaching environments. Knowledge regarding Pakistani teachers' attitudes towards creativity is still limited and unknown. Teachers in past studies further expressed that teacher training, independent learning, learning through play, and also for cultivation of creativity, students must be given assignments that are based on problem solving because it is crucial for creativity (e.g., Al-Nouh et al. 2014). This study recognizes that these attitudes should also be explored from a Pakistani perspective. Similarly, teachers perceived that creative pupils are successful (e.g., Al-Nouh et al. 2014); here, it can be said that this might be the result of socio-cultural differences as teachers assumed only creative pupils to be successful. A Al-Nouh et al. (2014) perceived the success of creative pupils in their study; the reason may be creativity with intelligence.

Contrary to this, many of the teachers in past studies believed that creativity is an extra workload (e.g., Al-Nouh et al. 2014; Turner, 2013) due to long curriculum, lack of time (de Souza, 2000) and pressure of subject matter (Al-Nouh et al. 2014), therefore, only 38% of creative activities have been put into practice in classrooms (Roy & Carter, 2013). In a previous study, Turner (2013) showed that some creative tasks were employed in the classrooms while ignoring classroom observations. It might be due to the above reasons (e.g., Al-Nouh et al., 2014; Turner, 2013; de Souza, 2000; Al-Nouh et al., 2014). Further, past studies identified that most of the teachers were exam-oriented and believed that exam-

oriented teaching does not leave time for creativity (e.g., Al-Nouh et al. 2014; Cheung, 2012). This belief may lead teachers to teach factual knowledge and focus on rote learning because it is necessary to pass exams (e.g., Al-Nouh et al. 2014; Cheung, 2012). Also, most teachers teach for tests and to check grammar and vocabulary (Al-Nouh et al. 2014) instead of creativity. In a past study, teachers stated that children who have creativity show troubling manners (Al-Nouh et al. 2014) while students who practice creativity the length of curriculum give no time (Turner, 2009). Various researchers (e.g., Craft, 2003; Sawyer, 2006; Sternberg, 2007) state that this can be due to cultural differences, so the current researchers wanted to explore these notions from a Pakistani socio-cultural background deeply because it is possible that sometimes the socio-cultural framework shapes or influences the understanding of the person about creativity and their capacity to show creativity. Thus, we can say that a process or occurrence that is considered creative may not be regarded as creative by other people in society. This study was designed to pay attention to the Pakistani sociocultural framework's creativity to examine what Pakistani teachers think about creativity, how they perceive what creativity is, and the differences regarding the demographic variables for creativity.

SOCIOCULTURAL CONTEXT– RATIONALE OF THE STUDY

Researchers (e.g., Beghetto, 2007; Starko, 2005) stated that there are various scales through which we define creativity, but the most important are novelty and appropriateness. In English-speaking countries, divergent thinking is also used to describe creativity (Baer & Kaufman, 2006; Plucker et al., 2004). To define novelty, we support terms such as originality, newness, uniqueness and unusualness, while effectiveness, practicality, or usefulness are the terms that define appropriateness (Cropley, 2001; Jackson & Messick, 1967). But researchers (e.g., Gibson, 2005; Starko, 2005) stated that scale, novelty and appropriateness that has been set for the definition of creativity depends upon the context of creativity from where creativity arises. Thus, the sociocultural framework acts as a mediator of whether a specific phenomenon would be considered to be creativity or not. Therefore, the current study aimed to seek Pakistani teachers' attitudes from Pakistani sociocultural lens because it is crucial to know the attitudes of that specific people within a particular socio-cultural setting.

Of the amount of novelty, creativity has been grouped into Big-C, i.e., eminent creativity and little-c, i.e., everyday creativity. Also, creativity has been grouped into P-creativity, i.e., psychological creativity and H-creativity, i.e., historical creativity. Besides, Gow (2000) grouped creativity into two further types, i.e., born creativity and learned creativity. Born creativity is related to giftedness that can be rarely achieved through classroom learning alone, while contrary to this, learned creativity is cultivated through education. Thus, the sociocultural perspectives of creativity pertain to how diverse societies view it differently. Sternberg (1985) added that research should be done on the implicit theories of creativity because Vygotsky (1986) stated that based on implicit theories, people form their sociocultural thinking. Further making a case for this study, it can be said that within the same culture, the teachers and parents hold a similar definition of creativity , but in labelling creative children, they possess different

features of the creative children (Plucker & Renzulli, 1999). Differences and similarities arise in defining creativity's implicit theories due to the sociocultural background (Choe, 2006; Ruzgis & Grigorenko, 1994) of any country.

RESEARCH QUESTIONS

1. What are the attitudes that Pakistani teachers hold towards creativity?
2. What are the items in the questionnaire for having low, medium and high attitudes towards creativity?
3. What significant statistical differences do exist in teachers' attitudes regarding the demographic variables, i.e., gender, highest professional qualification, level of teaching, and subject that they teach?

HYPOTHESES

H_{01}: There are significant statistical differences in Pakistani teachers' attitudes towards creativity regarding gender.
H_{02}: There are significant statistical differences in Pakistani teachers' attitudes towards creativity regarding their highest professional qualification.
H_{03}: There are significant statistical differences in Pakistani teachers' attitudes towards creativity regarding their teaching level.
H_{04}: There are significant statistical differences in Pakistani teachers' attitudes towards creativity regarding the key subjects they teach.

RESEARCH METHOD

SAMPLE AND SAMPLING PROCEDURE

The study recruited 155 (65 males & 90 females) teachers from primary, secondary, and higher secondary schools from diverse areas in Pakistan by performing a random sampling technique. 24, 81, 41, and 09 teachers were from primary, secondary, higher secondary and other schools. 85 teachers were from rural areas, and 68 were from urban localities. The majority of teachers were between 20 to 30 years. Regarding teaching experience, most of the teachers fell in 1 to 5 years (90 teachers) and 6 to 10 years (53 teachers) category while regarding academic qualification category, most of the teachers (96 teachers) had MA/MSc degrees; and few had a PhD degree (03 teachers). Similarly, most of the teachers fall into the B.Ed. and M.Ed. category regarding professional qualification. Teachers taught key subjects such as Physics, Chemistry, Biology, Maths and English. Out of 200, 155 teachers returned the questionnaires. The demographic information of the teachers is shown below in table 1.

Table 1. Demographic Information of the Teachers

Demographic Information	Subcategory	N
Gender	M	65
	F	90
Age	20-25 years	44
	26-30 years	65
	31-35 years	28
	36-40 years	09
	41-45 years	09
Highest academic qualification	B.Sc	32
	M.Sc	96
	M.Phil	24
	Ph.D	03
Highest professional qualification	PTC	10
	CT	19
	B.Ed	82
	M.Ed	44
Level of teaching	Primary	24
	Secondary	81
	Higher Secondary	41
	Others	09
Key subjects teachers teach	Physics	28
	Chemistry	26
	Biology	38
	Math	37
	English	08
	Arts/Drawing	18

INSTRUMENT AND PROCEDURE OF THE STUDY

A questionnaire was used to collect the descriptive data, which was adopted from Al-Nouh et al. 2014. This questionnaire was developed by Al-Nouh et al. 2014 by doing an extensive review of the literature (e.g., Turner, 2009; Soh, 2011; Zeteroglu et al., 2012; Roy, 2013; Roy & Carter, 2013; Turner, 2013). The original questionnaire had three main parts and 41 close-ended questions. It also had a section that was composed of interview and examination papers analysis. The first part had information about demographic variables.

In contrast, the second part had 19 items that represented the teachers' attitudes towards creative thinking. In comparison, the third part had 20 items aimed at seeking information about the teachers' practices when they teach in their classes. The items regarding teachers'

practices in their classes and two open-ended items included in the original questionnaire were beyond the scope of this study and therefore was not used in this current study. In the original questionnaire, item 40 had five choices from which participants had to choose only one, while item 41 asked the teachers if they had implemented any creative activity in their classroom; in case of 'yes', they had to mention an example.

From the original questionnaire of Al-Nouh et al. 2014, the researcher adopted 11 items according to this study's objectives. The scale was in the order of five points arranged on Likert-type ranging from Strongly Disagree =1 to Strongly Agree =5. To ensure the understanding of the instrument's items, it was re-examined for conducting the pilot study. Afterwards, permission was taken from the questionnaire developers (e.g., Al-Nouh et al. 2014) through an email. This questionnaire was delivered by the researcher to 20 teachers in secondary schools in Dera Ismail Khan city, Pakistan, with permission of the respective schools' heads. This enabled the researcher to collect data easily for the piloting of the study. In this way, the questionnaire was piloted. To prevent biased results, the 20 piloted teachers were not included in the original study. After the piloted questionnaires were taken back, the Cronbach alpha coefficient was calculated statistically to ensure the instrument's reliability. The calculated Cronbach alpha coefficient was 0.72 (shown in table 2), which was reliable enough to move the study forward.

Table 2. Reliability of the Instrument

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.721	.728	11

The instruments were accepted as reliable since a correlation coefficient was greater or equal to 0.5 and is considered reliable (George & Mallery, 2003).

ANALYSIS OF RESULTS

To analyse the data statistically, descriptive statistics such as percentages, means and, standard deviations were applied to examine the level (i.e., high, medium and low) of Pakistani teachers' attitudes towards creativity. Similarly, inferential statistics such as t-tests and one-way ANOVA were also applied to seek significant statistical differences to test the hypotheses. T-tests were applied on gender, while one-way ANOVA was applied to the highest professional qualification, teaching level, and the key subjects taught, respectively. According to Al-Nouh et al. (2014), high, medium and low attitudes were used to make the analysis easier for the level of teachers' attitudes which were calculated as:

i. Low attitudes show the values from 1 to 2.33
ii. Medium attitudes show the values from 2.34 to 3.66

iii. High attitudes show the values from 3.67 to 5.00

RESULTS AND DISCUSSION

The first research question was summarised by table 3, which showed that Pakistani teachers had at least medium (Mean = 3.555) attitudes towards creativity which seems that they were not ready and not overly prepared to cultivate creativity in their classes. This shocking result of the current study showed incongruences to the past studies (e.g., Al-Nouh et al. 2014; Roy & Carter, 2013; Turner, 2013). In past studies, teachers showed a high level of attitude towards creativity (Al-Nouh et al. 2014), provision of the creative teaching environment (Turner, 2013), and cultivation of creativity in classrooms (Roy & Carter, 2013).

Table3. Overall Mean of Pakistani teachers' attitudes towards creativity

	Mean	Standard Deviation	Rank
Pakistani teacher's attitudes towards creativity	3.555	.638	Medium

The overall mean and standard deviation in Table 3 showed that Pakistani teachers possessed medium attitudes towards creativity.

The second research question was answered by finding the items having low, medium and high means, which, in turn, stands for low, medium and high attitudes towards creativity. In table 4, Pakistani teachers showed high attitudes (high means) to the items like "creativity is an essential skill, teacher training, independent learning, learning through play, creative pupils are successful, and individual assignments based on problem solving" while showing medium attitudes (medium means) to the items like "creativity can be assessed, teaching creativity is an additional workload, exam-oriented teaching, the creative child is a burden, and current curriculum is able to cultivate pupils' creativity". No items got a low attitude (low means) score.

To discuss the above results, it was shown that Pakistani teachers perceived creativity as an essential skill to be nurtured in schools (shown in table 4) which is consistent with results of past studies (e.g., Al-Nouh et al., 2014; Roy & Carter, 2013; Turner, 2013). This meant that Pakistani teachers had firm conviction that creativity is an essential skill and must be nurtured in schools. Besides, the Pakistani teachers further expressed that teacher training, independent learning, learning through play, and individual assignments based on problem solving is highly essential to foster creativity in education which was consistent with past studies (e.g., Al-Nouh et al.,2014). Similarly, Pakistani teachers also perceived that creative pupils are successful. This was congruent with the past study (e.g., Al-Nouh et al., 2014); this congruence can be the result of socio-cultural origin as the Pakistani teachers perceived independent learning, learning through play, and individual assignments based on problem solving as one of the cultivating factors for creativity, therefore, they assumed creative pupils to be successful and were seemed

to be in favour of their presence in classrooms. Also, Al-Nouh et al. (2014) perceived the success of creative pupils in their study; the reason may be the association of creativity with intelligence because intelligent people are more successful as most of the teachers choose intelligent and clever people to demonstrate their creative endeavours; therefore, the intelligent and clever students get more opportunities to display their creativity than the ordinary and dull students.

Pakistani teachers believed that it is an extra load on teachers toteach creativity in classes. This was consistent with past studies (e.g., Al-Nouh et al., 2014; Turner, 2013) where it is possible that due to large curriculum, lack of time (de Souza, 2000) and pressure of subject matter (Al-Nouh et al., 2014) led teachers to possess this attitude that creativity is an extra workload on the teachers due to which Roy and Carter (2013) stated that only 38% of creative activities had been put into practice into their classrooms. Thisalso supported the notion that teachers are still in favour of creativity in the minimum in their classrooms, e.g., Turner (2013). A previous study showed that some creative tasks were employed in classrooms while ignoring others. It meant that generally still teachers are in favour of creativity in their classrooms, but why the Pakistani teachers had opposite attitudes towards creativity is the question, the cause might be the socio-cultural framework as the present study results showed that most of the teachers were exam-oriented and believed that exam-oriented teaching does not leave time for creativity. This is congruent with the past studies (e.g., Al-Nouh, et al., 2014; Cheung, 2012) and might lead Pakistani teachers to teach factual knowledge and focus on rote learning because rote learning is necessary to pass exams (e.g., Al-Nouh, et al., 2014; Cheung, 2012). This may produce a learning culture where the teachers have to teach the students through rote learning to memorise and rewrite factual knowledge in the final exams (Rinkevich, 2011) because the assessment affects how the teacher teaches (Beghetto, 2005) in the classrooms. Also, most of the teachers stated that they teachwith tests to check grammar and vocabulary (Al-Nouh et al., 2014) instead of creativity. Further, the exams were traditional and rote-learning oriented (Cachia & Ferrari, 2010; Roy & Carter, 2013), which lacked creative questions (Al-Nouh et al., 2014). The current study results showed that Pakistani teachers stated that the creative child is a burden because of his/her disturbing behaviour, which was consistent with past studies (Al-Nouh et al., 2014) This may be due to the current curriculum because Pakistani teachers showed the only middle value of attitudes in favour of the current curriculum to be able to cultivate pupils' creativity Because a lengthy curriculum has no place for creativity (Turner, 2009).

Table 4. Means and Standard Deviations for Teachers' Attitudes towards Creativity

No	Statement	M	SD	Rank
1	Creativity is an essential skill to be nurtured in schools.	3.76	1.305	High
2	Teacher training is important to foster creativity in education.	3.92	1.184	High
3	Independent learning enhances creative thinking	3.82	1.142	High
4	Learning through play increases creativity	3.79	1.043	High
5	Creative pupils are successful.	3.95	1.240	High
6	Individual assignments based on problem solving would stimulate creativity	3.70	1.260	High
7	Creativity can be assessed	3.58	1.104	Medium
8	Teaching creativity is an additional workload	3.16	1.266	Medium
9	Exam-oriented teaching doesn't leave time for creativity	3.26	1.290	Medium
10	The creative child is a burden because of his/her disturbing behaviour	2.95	1.378	Medium
11	A current curriculum is able to cultivate pupils' creativity	3.19	1.278	Medium

To answer the third research question, four null hypotheses were tested one by one as shown below;

H_{01}:

To test significant statistical differences among male and female teachers' attitudes towards creativity, a t-test was applied. From table 5, it was concluded that male and female teachers had significant differences in their attitudes towards creativity. So, hypothesis 1 was accepted.

Table 5. T-test for gender differences

	N	Mean	*SD*	*Df*	*T*	*Sig*
Male	65	3.3524	.60506	153	-3.482	.001
Female	80	3.7019	.62476			

Table 5 shows that male teachers had lower attitudes towards creativity than females, with a mean score of 3.35 and a standard deviation of 0.605. In contrast, female teachers had high attitudes towards creativity, with a mean score of 3.70 and a standard deviation of 0.624. The

difference was statistically significant *(t=3.48; p=0.001)* at alpha level 0.05. This result of the current study has shown consistencies and inconsistencies in many ways to the past studies. For example, evidence of gender differences is present in the creative tasks at the highest level because, according to the researchers (e.g., Eccles, 1985; Eysenck, 1995; Maccoby & Jacklin, 1974; Reiss, 1999), there are more distinguished and genius men than women in terms of creative tasks in the field of science, arts, literature, music, and technical development. It should be remembered that women have also contributed to the creative achievements since gender differences vary remarkable according to the fields of study. For example, in writing, dance or theatre, women's contribution can be found in higher ranks (Baer, 1999, 2005; Eysenck, 1995).

H_{02}:

To test the significant statistical differences regarding the highest professional qualification, a one-way ANOVA was applied. From table 6, it was concluded that teachers had significant differences in their attitudes towards creativity regarding the highest professional qualification. So, hypothesis 2 was accepted.

Table6. ANOVA test for highest professional qualification comparison

No	Study Variables	Professional Qualification	N	M	SD	F	Sig.
1	Teachers' Attitudes	PTC	10	3.57	.892	2.982	.033
		CT	19	3.91	.398		
		B.Ed.	82	3.54	.648		
		M.Ed.	44	3.40	.593		
Total			155	3.55	.638		

Table 6 shows that teachers who had done CT as a professional course had higher attitudes towards creativity than others, with the highest mean score of 3.91 and a standard deviation of 0.398. The difference was statistically significant *(f=2.98; p=0.03)* at alpha level 0.05.

H_{03}:

To test the significant statistical differences regarding teachers' level of teaching, a one-way ANOVA was applied. From table 7, it was concluded that teachers showed significant differences. So, hypothesis 3 was accepted. This result was consistent with Al-Nouh et al., 2014 in which the primary school EFL teachers had more positive attitudes towards creative thinking than teachers of higher levels. This study proved that primary-level Pakistani teachers "creativity attitudes" were at a higher level than teachers who taught at the secondary/higher secondary level. This might be causing teachers who teach at the primary level to teach to younger children while the latter has to teach to adults or older students. The second reason the teachers who teach at the primary level are younger.

Table 7. ANOVA test for the level of teaching

No	Study Variables	Professional Qualification	N	M	SD	F	Sig.
1	Teachers' Attitudes	Primary	24	3.95	.492	5.293	**.002**
		Secondary	81	3.54	.652		
		Higher Secondary	41	3.33	.593		
		Others	09	3.63	.626		
Total			**155**	**3.55**	**.638**		

Table 7 shows that teachers who taught at the primary level had higher attitudes towards creativity than others, with the highest mean score of 3.95 and a standard deviation of 0.492. The difference was statistically significant *(f=5.293; p=0.002)* at alpha level 0.05.

H_{04}:

To test the significant statistical differences regarding key subjects that teachers teach, a one-way ANOVA was applied. From table 8, it was concluded that teachers had significant differences in their attitudes towards creativity regarding the key subjects that they teach. So, hypothesis 4 was accepted.

Table 8. ANOVA test for teaching key subjects comparison

No	Study Variables	Teaching key subjects	N	M	SD	F	Sig.
1	Teachers' Attitudes	Physics	28	3.39	.723	2.863	**.017**
		Math	37	3.62	.480		
		Chemistry	26	3.57	.674		
		Biology	38	3.38	.624		
		Arts / Drawing	18	3.99	.703		
		English	08	3.55	.301		
Total			**155**	**3.55**	**.638**		

Table 8 shows that teachers who taught the subject of Arts/Drawing had higher attitudes towards creativity than others, with the highest mean score of 3.99 and a standard deviation of 0.703. The difference was statistically significant *(f=2.86; p=0.01)* at alpha level 0.05.

CONCLUSION

The study revealed that Pakistani teachers had a medium level (Mean = 3.555) of attitudes towards creativity, which seems they had a less significant interest in creativity. These shocking results of the current study showed incongruence to past studies (e.g., Al-Nouh, et al., 2014; Roy & Carter, 2013; Turner, 2013). Further, the male and female teachers had significant differences in their attitudes towards creativity. Female teachers showed greater interest in creativity as their mean score (M=3.70) was higher than male teachers (M=3.35). Significant statistical differences occurred regarding teachers' highest professional qualification, level of teaching, and key subjects.

SUGGESTIONS AND LIMITATIONS

This study was from the Pakistani sociocultural perspective, which involved 155 (65 males and 90 females) teachers. The under-researched problem should seek out perspectives from other sociocultural groupsby recruiting many teachers, which may lead to different results. Generally, in this study, the attitudes of Pakistani teachers towards creativity were ranked medium, but this result is not all in all; therefore, these results are limited and can't be generalised broadly. In past studies, teachers showed a high level of attitudes towards creativity (Al-Nouh et al. 2014), creative teaching environment (Turner, 2013), and cultivation of creativity in classrooms (Roy & Carter, 2013)**,** contrary to the Pakistani teachers' medium attitudes, so a larger, and more extensive study is needed to find the discrepancies as mentioned above. Also, factors behind the medium attitudes of Pakistani teachers towards creativity should be explored in more detail, which will enrich the field of creativity research. Items like "creativity can be assessed, teaching creativity is an additional workload, exam-oriented teaching, the creative child is a burden, and current curriculum is able to cultivate pupils' creativity" got the medium attitudes which are a questionable mark on Pakistani teachers; therefore, this should be further explored by mixed methods research because the current researchers used a quantitative method.

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