

Difference of Creative Styles between Shy and Non-Shy Adolescents

***Zohra Batool, Khizra Jamil and Zainab Hussain Bhutto, PhD**
Institute of Professional Psychology, Bahria University-Karachi
Campus, Karachi

The present study aimed to explore the difference of creative styles between shy and non-shy adolescents. The hypothesis of the current research is that there will be a significant difference in the creative styles of shy and non-shy adolescents. The participants of current study included 200 participants, comprising of both males ($n=100$) and females ($n=100$), shy ($n=115$) and non-shy ($n=85$) adolescents between the age range of 13-19 years. Participants were approached from different private schools of Karachi, Pakistan. Data collection was done using a consent form, demographic form, Revised Cheek and Buss Shyness Scale (Cheek & Buss, 1981) and The Creativity Style Questionnaire (Kumar, Kemmler & Haulman, 1997). The independent sample t-test revealed a significant difference in creative style of shy ($M=43.80$) and non-shy ($M=32.20$) adolescents. From the components of creative styles, Belief in Unconscious Process, Use of People, Final Product Orientation and Use of Senses were found to be significant, where all these components were high in non-shy adolescents as compared to shy adolescents except for Final Product Orientation which was found to be higher in shy adolescents. The components of Global Creative Capacity, Use of Technique, Environmental Control and Superstition were found to be non-significant, indicating that these components are not potentially effected by shyness. For future researches it is recommended that diverse and larger sample size should be used to improve the generalizability of the results.

Keywords: Creative styles, creativity, shy, non-shy, adolescents

* Correspondence concerning this article should be addressed to Zohra Batool, Institute of Professional Psychology, Bahria University Karachi Campus, Pakistan. Email: zohra.batool@live.com

Shyness is a tendency where one feels worried, awkward and tensed while socially engaging, especially when interacting with new or unfamiliar people. Shyness may be exhibited as physical symptoms such as sweating, blushing, gastrointestinal issues and pounding heart. It also involves an affective component where one has negative feelings about self, has worries about how others' perception and a tendency to withdraw from social interactions (Encyclopedia of Psychology, 2000). Bressert (2006) findings suggested that every single person in the world is influenced by shyness and half of the world's population considers themselves as shy. A research reports the ratio of seventy five to ninety five percent of people who experience shyness at some point or other in their lives (Carducci, 2009).

Many people experience social anxiety or uneasiness in public encounters. Shyness is similar to social anxiety which occurs in presence of others (Buss, 1980). Henderson, Gilbert and Zimbardo (2014) explained that distress or reticence in interpersonal situations, hinders pursuit of one's interpersonal or professional goals and due to excessive focus on self and a fixation on one's thoughts, feelings and physical reactions. This phenomenon may vary from being mild social awkwardness to inhibiting social phobia.

With these symptoms, it has been explained that shyness starts in infancy and it has been reported that 10 to 15% of population are born as shy people while 40 to 60% of adults report being currently shy. The highest level of shyness occurs in adolescents, with higher level in girls than boys. The reason behind increased level of shyness in girls include body changes that are perceived as awkward or ugly and rise in sexual feelings and arousal that includes changes in female body shape which causes reactions from males in confusing ways and a new focus on self and privacy (Bressert, 2006).

Henderson, Gilbert and Zimbardo (2014) have classified shyness in three categories. It may be chronic, dispositional and situational shyness. Chronic and dispositional shyness serve as a personality trait while situational shyness involves the feeling of

awkwardness or incompetence in social situations. Furthermore, shyness is divided into four levels: cognitive level, affective level, physiological level and behavioral level.

The behavioral level of shyness deals with signs including gaze avoidance, nervous behavior, low tone, avoidance of fearful situation and little or closed body movements. The behavioral components of shyness also include a behavior pattern of withdrawal, avoidance and fear of unfamiliar situations during social interactions. Under these behavioral circumstances, shy individuals are generally identified as less talkative, unable to maintain proper eye contact and sitting farther away from people (Cheek & Buss, 1981).

Physiological level of shyness includes increased heartbeat, sweating, dry mouth, shaking or nausea. Blushing as a physical indicator symbolizes one of the most observable physiological indicator of shyness. While studying blushing as a physical sign of shyness, Hofman, Moscovitch and Kim (2006) concluded blushing as a strongest autonomic measure to differentiate between people who are shy and those who are not.

Cognitive signs include negative thoughts and feelings about one self or others, excessive worry and self-blame while affective level of shyness includes signs of anxiety, depression, loneliness, low self-esteem, shame and guilt (Kahn & Fawcett, 2008). In the cognitive part of shyness, during social interactions, shy individuals confirm having a high rate of negative self-thoughts as opposed to positive thoughts (Garcia, Stinson, Ickes, Bissonette & Briggs, 1991). In this physical component of shyness, cognitions are specially associated with physiological process.

Eysenck's theory (1970) of personality considers shyness as a personality trait. His theoretical work comprised of a hierarchal model of personality in which personality of an individual has been described in several different dimensions as: neuroticism, extroversion, introversion and psychoticism. Eysenck suggests that shy people have higher levels of physiological

arousal which allows them to be conditioned by environmental stimuli more easily. Because of this, such people develop more inhibitions, which make them more reserved and uneasy in social situations. Hofmann, Moscovith and Kim (2006) states that when a person feels shy, a complex pattern of reactions results from stimulation of sympathetic and parasympathetic nerves of autonomic nervous system. Hence the physiological symptoms as heart racing, dry mouth, sweating, trembling, and muscle tension arise.

Furthermore, Russ (1999) indicated several features of shyness as a function of creativity in individuals and two of them support the features of shyness. First feature is *loneliness*. The creative individuals are usually reclusive and according to psychoanalysis and are also neurotic. The genius is permanently isolated from society and being very uncomfortable with social norms, they tend to avoid social interactions because creativity is related to less social interactions and greater participation in solitary activities. Lloyd and Howe (2003) found that high rate of divergent thinking was related to active solitary play in preschool children. Creative children may be less engaged with their peers because they think and act differently, and the findings reported negative association between sociability and creativity.

Imagination is the second feature of creative person who lives most often in their world of imagination. These people have highly functioning and enriched mental life. Even when grounded, these people thrive on fantasies as they have high cortical arousal. The creative process is concerned with making or observing new associations between objects and concepts; a creative person is distinct by qualities of originality, nonconformity and high levels of knowledge (Misc, 2009).

Wallas (1926) studied the stages of creativity and explained the process. According to him, a creative idea is first of all prepared. It is then internalized through incubation. After incubation, the creative individual uses the enlightenment or insight, lastly go through the verification process of applying the

idea. Creativity is therefore characterized by divergent thinking and cultivation of varied possibilities.

Russ (1998) explained creativity experience and psychological adjustment of shy individuals and explained that people who inhibit and are shy experience emotional, and physiological symptoms more frequently. He gave the explanation that in part of thalamus, amygdala circuit provides a pathway in which emotional responses and learning can occur without the involvement of the higher processing system of the brain such as cortical regions; systems believed to be involved in thinking, reasoning, and consciousness. Paguio and Hollett (1991) used creativity assessment (which involves factors of fluency, originality & imagination) and found higher shyness and lower creativity in females compared to males. Girls scored significantly high in originality but not on imagination. Shyness might act as a barrier to diverge thinking in females as compared to males. Cheek and Sherin (1986) conducted an experiment to measure the variables of shyness and verbal creativity. Forty two college women who had previously completed Shyness Scale and Private Self Consciousness Scale wrote poems which were rated for creativity. The results showed a negative relation between shyness and creativity of the individuals. Kemple, David and Wang (1996) measured the variables of shyness, self-esteem, and creativity on a sample of 64 preschool children. The correlation analyses of the study indicated a positive relation between self-esteem and creativity and negative relation between shyness and creativity.

In countries like Pakistan, different researches have been conducted to explore different dimensions of adolescent behavior in educational settings. But a very few of them are directly involved in studying the impact of shyness on creative styles of adolescents. In most developed countries like Japan, a number of researches have been conducted to study the different creative styles of adolescents as well as their relationship with different variable including academic achievement and intelligence. So, in order to expand the horizon in following area, this study will enable to understand the difference in the creative styles of

adolescents who are shy and those who are not shy. In educational settings, this study will be helpful in understanding the different creative styles of shy and non-shy adolescents which will help educators in developing more relevant educational based activities and curriculum. Also the research will highlight the different areas of creative styles which can be helpful in understanding the strength of shy adolescents and non-shy adolescents. Keeping in view all the mentioned literature, hypothesis of the present research is that *there will be a significant difference in the creative styles of shy and non-shy adolescents.*

Method

Research Design

The current research is based on a quantitative comparative survey research design, in which the creative styles of shy and non-shy adolescents were compared.

Participants

The participants of the present research were approached from private schools of Karachi, Pakistan through purposive convenient sampling technique. The participants consisted of 200 school going adolescents (Male $n=100$ & Females $n=100$). The students' age ranges from 13 to 19 years, belonging to different English medium schools of Karachi city. From the total respondents, 115 were shy and 85 were non-shy adolescents.

Measures

Following measures were used in the current study:

The Revised Cheek and Buss Shyness Scale (RCBS). It was used in the present study to measure the level of shyness among adolescents. The scale is consisted of 13 items to measure the shyness among individuals. It was psychometrically sound as compared to the previous version. The revised version was found to have high internal consistency and test retest reliability. The alpha coefficient for the scale is .90 and test retest reliability is .88. Scores on RCBS range from 13 to 65. The Likert type scale

provides score on 5-point rating scale for each item, which are summed up to obtain the overall score. On this scale, 1 is for strongly Disagree, 2 for Disagree, 3 for Neutral, 4 for Agree and 5 is for Strongly Agree. The scale has 4 reversely scored items i.e. 3, 6, 9 and 12. RCBS suggests that those who score over 49 should be considered as shy while those who score between 34 and 39 should be considered as somewhat shy. If the score is below 34, the individual is not particularly a shy person. The cutoff score for the scale is 39 which is the indicator of discrimination among shy and non-shy individuals (Cheek, 1983).

The Creativity Style Questionnaire-Revised (CSQ-R). It was used to assess the creativity styles of shy and non-shy adolescents. The questionnaire is comprised of 8 subscales including creativity capacity (measures the extent to which a person perceives themselves to be creative), belief in unconsciousness (person believe in a creative process as insightful and inspirational over which they have little control), use of technique (the extent to which a person uses some specific strategies or techniques to facilitate their creative work), use of other people (the extent to which a person consults other people, work with other, or share ideas or creative products with other people), final product orientation (the extent to which individuals are motivated to engage in creative work by the development of a final product), environmental control (a person set up discriminative stimuli to self-regulate or facilitates their creative work), superstitious (superstitious behavior to facilitate creative work of an individual) and use of senses (the extent to which a person uses the five senses for their creative work). The questionnaire uses 5-point rating scale with strongly agree 1, agree 2, unsure 3, disagree 4 and strongly disagree 5. The sum of the items of the scale is to be reversed for scoring i.e. strongly agree 5, agree 4, unsure 3, disagree 2 and strongly disagree. The reliability of Kumar, Kemmler and Holmen's global measure of Creative capacity is .76 (Kumar, Kemmler & Holmen, 1989).

Procedure

The data was collected in group setting in different English medium schools of Karachi, Pakistan. The formal permission from the school authorities was obtained before collecting data. The participants of the research were provided with the informed consent form to obtain their formal permission for participating in research and to assure the confidentiality of their provided information. After informed consent, participants were provided with Revised Cheek and Buss shyness scale (RCBS; Cheek & Buss, 1983). The formal instructions to fill out the questionnaire were also provided to participants group wise. Total time required to give the response on all the items was 10 minutes approximately. After completion of shyness questionnaire, Creativity Style questionnaire-Revised was provided to the participants. The instructions to record the responses on questionnaire were also briefed to participants. The total time to give responses on all the items of the questionnaire was 25-30 minutes approximately. After completion of both the questionnaires, participants were thanked for their time and cooperation.

Results

The data was analyzed on SPSS-21 and independent sample t-test was performed to test the hypothesis of the study. The results of the study are presented below in the tables:

Table 1

Impendent Sample t-test Showing Difference in the Creative Styles of Shy and Non-Shy Adolescents (N=200)

	Non-Shy Adolescents <i>n</i> =85		Shy Adolescents <i>n</i> =115		<i>t</i>	<i>SEM</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Creative Styles	32.2	4.21	43.80	3.99	19.57	.39	198	.01

The result indicates a significant difference among the creative styles of shy and non-shy adolescents where shy students were found to be more creative than non-shy adolescents.

Table 2

Independent Sample t-test Showing Difference of Shy and Non-Shy Adolescents on the Sub-scales of Creative Style (N=200)

Sub-scales of Creative Styles	Non-Shy Adolescents n=85		Shy Adolescents n=115		t	SEM	df	p
	M	SD	M	SD				
GCC	4.42	1.88	4.21	1.78	0.78	0.17	198	.43
BUP	3.23	1.07	2.91	0.84	2.34	0.10	198	.02
UT	3.62	0.70	3.59	0.99	0.24	0.06	198	.80
UOP	3.07	1.44	2.69	0.91	2.09	0.13	198	.03
FPO	2.32	0.74	2.59	0.99	-2.1	0.06	198	.03
EC	3.44	1.11	3.19	0.77	1.81	0.10	198	.07
SP	2.99	1.20	3.25	1.01	-1.5	0.10	198	.11
US	3.60	1.09	3.29	0.94	2.06	0.10	198	.04

Note. GCC= Global Creative Capacity, BUP=Belief in Un-conscious process, UT=Use of Technology, UPO= Use of Other People, FPO= Final Product Orientation, EC= Environmental Control, SP= Superstition, US= Use of Senses.

As indicated by Table 2, there is a significant difference in the creative styles of shy and non-shy adolescents. From the components of creative styles, Belief in Unconscious Process, Use of People, Final Product Orientation and Use of Senses were found to be significant, where as all these components were high in non-shy adolescents as compare to shy adolescents except for Final Product Orientation which was found to be higher in shy adolescents. The components of Global Creative Capacity, Use of Technique, Environmental Control and Superstition were found to be non-significant, indicating that these components are not potentially effected by shyness.

Discussion

The present research was aimed to explore the difference of creative styles between shy and non-shy adolescents. Although there has been an array of diverse researches and literature on the creative styles of adolescents but few researches have been done to explore the difference of creative styles of shy and non-shy adolescents.

The results supported the hypothesis. The difference between the creative style was found to be significant between shy ($M=43.80$) and non-shy ($M=32.2$) adolescents. In a study Amabile and Teresa (1985) found out that intrinsic motivation leads to more creativity in adolescents. As shy adolescents are more intrinsically motivated hence they are more engaged in creative work as compared to non-shy adolescents. Barron (1988), after conducting interviews with most creative people of his generation concludes that the creative genius may be at once naïve and knowledgeable, being at home equally to primitive symbolism and to rigorous logic. He is primitive and more cultured, more destructive and more constructive, occasionally crazier and yet adamantly saner, than the average person. It shows that creative people tend to be more shy, are more quiet and internalize personal logic more compared to non-shy people.

Moreover, on different components of creativity, significant difference was found between shy and non-shy adolescents. One of the components of creativity, Belief in Unconscious Process was found to be significant, where non-shy students had higher tendencies of believing in unconscious process than shy students. In a research at University of Oregon, Taylor (2013) suggests that 37% of children by the age of seven years involve in creative and imaginative activities like making imaginative friends thus their belief in unconscious mind process is more prominent and active. These childhood imaginative friends don't disappear as the childhood ends; they contribute in developing more creativity in adolescents. This shows that those children who are more active believers of unconscious process tend to be more creative as adolescents. Hence, it can be summed up that those adolescents who believe in unconscious processes are more creative or vice versa.

Furthermore, the component of Use of Other People was found to be higher in non-shy students as compare to shy adolescents. According to research, shy individuals report a greater frequency of negative self-referent thoughts as compared to positive thoughts during social interactions (Garsia, Stinson, Ickes,

Bissonette & Briggs, 1991). These negative thoughts are related directly to less social interaction which results in isolation or more dependence on self for performing tasks. Use of negative cognitions is related to worries about receiving disapproval from others (Leary, Kowalski & Campbell, 1988). In shy adolescents, these worries tend to be more prominent which reinforces them to interact with limited number of people. Miller (1995) investigated a sample of undergraduate students and found positive relationship between shyness and fear of evaluation which further supports the notion that shy adolescents are less likely to use people in their activities or tasks as compared to non-shy individuals. As compared to shy adolescents, non-shy adolescents are more likely to interact with people for achieving their goals. Parkash and Coplan (2003) and Ikhioya (1996) suggest that athletes who are shy would not be assertive enough within their team and thus would not make a sufficient contribution to the team.

The component of Final Product was found to be higher in shy adolescents. Shy adolescents are more likely to engage in final product orientation as compared to non-shy adolescents. According to Mahler (1997), people who announce solution to a problem and are acknowledged by others didn't achieve their goals. This supports the notion that shy individuals who incubate their creative ideas are more likely to reach till the completion of product as compared to non-shy people who like to announce their plans to world. Gollwitzer (1999) suggests that those who keep their intentions private are more likely to achieve them as compared to those who announce them publically. It shows that shy people who are more internally oriented, tend to incubate their work and generate ideas inside and work privately to reach till final product as compared to people who share their plans with number of people.

The difference in component of Use of Senses in shy and non-shy adolescents is also found to be significant, where it is higher in shy students. According to Cain (2012), introverts and shy people prefer quiet and peaceful environment with minimal

stimulation while people who are extroverts or non-shy use maximum stimulation. These stimulations can be in various forms including noise, lights, people and so on. These stimulations require senses to operate and in non-shy people the use of senses is more evident as compared to shy individuals because in order to stimulate themselves for performing tasks, they tend to utilize their senses to accomplish their goals. On the other hand, as shy people need little or no inner stimulation, their use of senses is less as compared to non-shy adolescents. It can be assumed that shy people are more self-absorbed and self-disciplined in their creative process that they don't need additional use of senses to carry out their work.

The results indicates a non-significant difference on the creative component of Environmental Control in shy and non-shy adolescents. Shy people have as much environmental control as non-shy people have. But, the idea is that environmental control and social dealing of non-shy adolescent is better than shy individuals (Buss, 1980). Pozzulo, Coplan, and Wilson (2005) suggest that the attention to environmental detailing is more critical in non-shy as compared to shy people. They were found to recall more details related to environment as compared to non-shy individuals.

Global Creative Capacity of shy and non-shy adolescent was also not found to be significant. It indicates that there is no evident difference in the global creativity of shy and non-shy adolescents. Bruce (2011) suggested that creative people can be both, shy and non-shy. They possess an equal capacity to be creative and the only thing which makes them different from their surroundings is their complexity.

The component of Use of Technique in shy and non-shy adolescents was also not found to be significant. It shows that both shy and non-shy adolescents use similar creative techniques to achieve their goals. The reason behind this includes the fact that shy and non-shy adolescents utilize same creative approach towards achieving their goals and also their overall creative

capacity is similar to one another. Thus, it can be safely assumed that although shy and non-shy adolescents respond differently to different components of creativity but their core techniques remains same.

The component of Superstition in shy and non-shy adolescents is not found to be significant. Table 2 shows that shy individuals are more superstitious compared to non-shy individuals but that is not statistically significant. Research suggests that females are often described as more gullible than men (Preece & Baxter, 2000; Sjodin, 1995). Johnson and Pigliucci (2004) findings shows that there is no significant difference in the superstition nature on the basis of personality but it depends on the content of superstition and culture. Thus, it can be said that in adolescents, either the superstition beliefs come from culture, are learned myths or develop with age but being shy or not is not found to be playing a vital role in it.

Conclusion

The present research aimed to study the difference of creative styles between shy and non-shy adolescents. The results revealed significant difference in the creative styles of shy and non-shy adolescents. From the components of creative styles, Belief in Unconscious Process, Use of People, Final Product Orientation and Use of Senses were found to be significant, where all these components were high in non-shy adolescents as compare to shy adolescents except for Final Product Orientation which was found to be higher in shy adolescents. The components of Global Creative Capacity, Use of Technique, Environmental Control and Superstition were found to be non-significant, indicating that these components are not potentially effected by shyness. On the outlook of present research, it can be concluded that difference exists in creative styles of shy and non-shy adolescents.

Limitations and Recommendations

Since the data of the research was only collected from few private schools of Karachi city, therefore for future researches it is recommended that the sample should be collected from diverse population and from different schools including government and private sector schools. The present research was limited only to the difference of creative styles between shy and non-shy adolescents. For future researches comparison of gender differences, difference of creative styles among different age groups with self-esteem and loneliness are also recommended areas to explore.

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