Creativity and Its Link with Personality Type A/B in Students

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Abstract
This research has investigated the relationship of Personality Type A and B with Creativity among Post graduate Fine Arts Students. The variables determining the personality Type A and B were evaluated to see which one has strong relationship with Creativity. For Type A personality - Tenseness, Impatience, Restlessness, Achievement, Domineering, and Workaholic variables were taken for analysis where as for Type B - Easy going, Non-assertive, Relaxed, Patience and Complacent variables were analyzed. A sample comprising of 121 Fine Arts students from different universities of Pakistan were taken. The survey data was analyzed using descriptive statistics, Pearson's correlation coefficient, Independent t-test and regression analysis. The results revealed a positive relationship of Creativity with Personality Type A whereas a negative relationship with Personality Type B.

Keywords: Creativity, Personality, Type A, Type B.

1. Introduction

In order to survive in the world which is rapidly changing and becoming complex thereby increasing the competition (McCloskey, 1995) one has to innovate to survive. (Krause, 2004), (Daft, 2004); Innovation needs to be practiced both in academia and by professionals (Mumford, 2000); (Weifens, 2000); (DiPietro, 2006) where Creativity is the basis of innovation (Dewett, 2007). Human beings are creatures with high analytical and manipulative abilities where each and every human being tries to perceive things differently. They think in their own ways and they process the same information in different individual manners. In every family, parents observe that their children are as different in their temperament and behavior as they are in appearance. Artists and writers have been especially fascinated by the qualities that make persons unique. (Amabile, 2008). The present research attempts to understand relationship between Type A and B behavior pattern with Creativity in order to understand how these two Types can bring innovation into their work required for their survival and growth.
2. Literature Review

Creativity

According to the research (Bharadwaj & Menon, 2000) Creativity is a property of thought process that can be acquired and improved through instruction and practice. He determined two mechanisms for Creativity: Individual Creativity mechanisms- where individuals engage in activities within the organization to develop something meaningful and novel and Organizational Creativity mechanisms- the extent to which the organization have provided formal tools and resources to promote novel behaviors within the organization. (Paulus & Nijstad, 2003) defined Creativity as the “development of original ideas that are useful and influential”. He believes that innovation is only possible through change and basis for change is bringing new ideas which could come through Creativity. Creativity is a valuable response to evolutionary changes and enhances problem solving, adaptability, self-expression, and health (Runco, 2004). Creativity could be technical and aesthetic. Technical Creativity helps to generate ideas for all the technical things that can help human beings to survive in a better way e.g. machines and different scientific inventions. Aesthetic Creativity nurture the aesthetic sense of human beings now how a society perceives Creativity can affect the Types of products being produced there (Hussain, 2007).

Creativity at individual level is the ability of a person to solve problems in a daily routine whereas at societal level it is leading to discovering novel and meaningful scientific findings, activities in arts, social programs (Mellander, 2009). Creativity of students can be developed through appropriate guidance through learning experiences and opportunities to create thing in their own area of interest (Selby, Shaw, & Houtz, 2005). Universities can increase the innovation level of new students (which is the base for Creativity) by ensuring they admit creative students and existing students by enhancing their current Creativity level (Chen & Chen, 2012).

Personality Type A/B

Not every individual is the same, this holds same for students. Not every student is creative or has creative abilities to bring innovation and the major reason behind this is the existence of different personalities (Chen & Chen, 2008). Mental examination has endeavored to reveal the cognitive and motivational contrasts between Personality A and Personality B that lead them to translate and react to circumstances in an unexpected way. Presently, there are a few clarifications concerning the underlying mental elements that offer ascent to Personality A and Personality B (Saadat, 1998).

In order to investigate about Type A versus Type B personalities a hypothesis was explained by the two cardiologists Friedman and Rosenman (1974). Individuals who want to achieve a lot and do more things in limited time, are hard driving, often in competition with other people or opposing forces in the environment (Rosenman, 1988); with periods of inactivity that include chronic impatience and exhibits the set of behaviors that constitute Type A behavior pattern. Type A involve behavioral patterns such as ambitiousness, aggressiveness, competitiveness, impatience and specific behaviors such as muscle tenseness, alertness, rapid and emphatic vocal stylistics; accelerated pace of activities and emotional responses such as irritation, hostility and increased potential for anger (Caracciolo & Molinari, 1986) (Rosenman R., 1990). They speak and act fast and see goals and challenges everywhere which they want to
achieve (Hugh Joffe, 1996). They are usually under moderate to high level of stress and find themselves in a continuous time pressure and generate a life of deadlines (P. Robbins, Judge, & Sanghi, 2009). They are considered restless as they set their own deadlines and are irritated in case they have to wait even in a small queue. They are workaholic people and as they are disturbed over small issues and don’t accept any incomplete job (Pandit & Madhura, 2012).

Some recent researches suggest an explanation for the high performance levels often achieved by Type A people. There are two major components bound together within the Type A behavior pattern. One is an achievement striving cum hard driving behavior; this component is associated with improved performance but is not related to health. The other component of Type A is impatience and irritability factor that is consistently related to health problems but has no relationship with performance. It appears that free floating anger is the source of health related problems that Type A’s experience and not achievement striving and competitiveness (Spence, Helmreich & S, 1989). In students Type A students perform well in academics but highly competitive nature becomes more of a problem for them that results in at times loosing friends. (Mahajan & Rastogi, 2011). Type A personality has been used as a shorthand for competitive or domineering person (Wilson, 2009).

In contrast to Type B individuals are easy going and relaxed and are never in a hurry to do lots of things at one time or involve themselves in a number of activities in lesser amount of time. They seek accomplishment of achievement oriented needs provided they don’t create mental pressures (Friedman & Rosenman, 1974) In students Type B were found to be easygoing, relaxed, less nervous and have lots of friends for their support (Mahajan & Rastogi, 2011)

**Link of Personality Type with Creativity**

Personality characteristics of creative individuals includes broad intelligence, openness to experience, aesthetic sensitivity, autonomy in thought and action and pursuit of new challenges and solutions (Vervalin, 1962). Another research on the comparison of more creative and less creative architects revealed self acceptance, dominance, self confidence, acceptance of unusual views as their personality characteristics (MacKinnon, 1970). According to (Stein, 1974) the creative person is curious, self-assertive, High achiever, self critical, self-sufficient, intuitive and empathic. (Feist, 1999) in his list of differentiating “creative’s” from “non-creative’s,” included, impulsive, anxiety, obsessive, emotional sensitivity, imagination, ambition, hostility, unsociable, unfriendliness, lack of warmth, autonomy, arrogance and dominance.

Various studies revealed a relatively consistent relationship of Creativity with other personality Types (Batey & Furnham, 2006). One study revealed personality difference on big five personality traits work as a function of the Creativity measure (Furnham & Bachtiar, 2008). However, there was a significant positive relationship with Openness to experience, and negative associations with Agreeableness and Conscientiousness and Extraversion with total Creativity (Batey, Furnham, & Safiullina, 2010) where total Creativity has four components i.e., Divergent Thinking Fluency, Rated Divergent Thinking, Inventory of Creative Achievement and self rated Creativity (Batey M., 2007). Personality Type on MBTI has showed that significant effect how individual implement innovations (Himmerich, 2007). On account of organizations who want to foster Creativity it was found that Creativity was positively associated proactive personality (Kim, Hon, & Crant, 2009). In another study investigating the relation between Creativity and Big five personality in students revealed positive association of Creativity with openness to experience, extraversion, agreeableness and conscientiousness while
a negative association of neurosis with Creativity (Jafar Hoseinifar, 2011). Research on exploring evidence of a relationship between Type A/B personality and Creativity is still lacking especially in the case of university students.

**Hypothesis**

The following hypotheses were formulated:

H₁: There will be a significant positive relationship between Personality Type A and Creativity in postgraduate students.

H₂: There will be a significant positive relationship between Personality Type B and Creativity in postgraduate students.

Above hypothesis were determined to see if there is difference between the Creativity of workaholic and easy going individuals as easy going people are considered to be more creative and tagged as productive people. This present study is meant to identify the difference in the Creativity of people determining by their personalities there is a general assumption that Type B personality is more creative. The conceptual framework is shown in Figure 1.

**Figure 1 : Conceptual Framework**
3. Methodology

Participants

There were 121 participants of which 155 were males and 66 were females. Age ranged from 22 to 40 years. All the students were enrolled in a postgraduate program of different Fine Arts Universities in Pakistan.

Measures

Creativity: There are two instruments used in our research which are Gough Personality Scale (Gough, 1979) which is self-assessment for Creativity on personality characteristic. The scale consists of 30 adjectives consisting of 18 positive and 12 negative items indicative of Creativity. Participants can answer the objectives described in yes/no and would receive +1 against an item against which they have responded as “yes” and -1 for “no”. Depending on the sample the scale is very reliable having alpha coefficients ranging from .73 to .81. The reliability for current sample was also good. (Cronbach’s \( \alpha = .78 \)).

Personality Type A/B: For Type A/ B Personality assessment a second Questionnaire Type A/B Behavioral Pattern Scales (ABBPS) by (Upindar Dhar and Manisha, 2001) was used. It consists of 33 total items, 17 items in form A and 16 items in form B. The questionnaire has two forms, A and B. Form A consists of 6 subscales, and Form B consists of 5 subscales. Factors of Type A Behavior Pattern includes Tenseness (the sense of time urgency), Impatience (inability to wait calmly), Restlessness (feeling of not being relaxed while working), Achievement orientation (Need to achieve something worthwhile), Domineering (sense of power over anything) and Workaholic (Tendency of doing something all the time). Factors of Type B behavior Pattern includes Complacent (habit of enjoying everything), Easy going (the ability to work with relaxed mood), Nonassertive (the person is not bold enough to have attention of other person), Relaxed and Patience (ability to wait and work with ease). The reliability coefficient for form A and B was good having alpha coefficient of 0.54.

Procedure

The paper and pencil self administered questionnaires were completed by participants that was lasted for approximately 15 min’s. Any further questions were attended to during the session.

4. Findings and Results

Table 1 shows inter correlations and indicate a positive correlation \( (r = .317) \) between personality Type A and Creativity. This suggests that as personality Type A behavior increases Creativity increases or vice versa. It also shows that there is significant negative correlation between personality Type B \( (r = -.065) \) and Creativity depicting as personality Type B increases Creativity decreases.
Table 1: Correlation coefficients between personality Type A and Type B and Creativity.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>-</td>
<td>.31*</td>
<td>-.065</td>
<td>13.14</td>
<td>4.40</td>
</tr>
<tr>
<td>Personality Type A</td>
<td>-</td>
<td>-</td>
<td>-.02</td>
<td>48.69</td>
<td>5.25</td>
</tr>
<tr>
<td>Personality Type B</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>37.41</td>
<td>3.12</td>
</tr>
</tbody>
</table>

* p < 0.01.

Table 2 indicate that Creativity has a negative significant relationship with Tenseness (r= -.278) and Workaholic (r= -.336) and a significant positive relation with Achievement orientation (r= .264) Impatience (r=0.25) , Restlessness (r=.046) and Domineering behavior (r=.115) which shows that Creativity is increased when the Participant of Type A personality has behavioral patterns of being Impatient, Restless, Achievement oriented and Domineering.

Table 2: Correlation coefficients between sub factors of Personality Type A and Creativity

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>-</td>
<td>-.278</td>
<td>.25**</td>
<td>.046**</td>
<td>.264**</td>
<td>.115**</td>
<td>-.336</td>
</tr>
<tr>
<td>Tenseness</td>
<td>-</td>
<td>-</td>
<td>-.031</td>
<td>.062</td>
<td>.006</td>
<td>.287</td>
<td>.280**</td>
</tr>
<tr>
<td>Impatience</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.085</td>
<td>.206*</td>
<td>.105</td>
<td>.293**</td>
</tr>
<tr>
<td>Restlessness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.090</td>
<td>.056</td>
<td>-.056</td>
</tr>
<tr>
<td>Achievement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.131</td>
<td>.265**</td>
</tr>
<tr>
<td>Orientation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.162</td>
</tr>
<tr>
<td>Domineering</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Workaholic</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**p< .001

Table 3 indicates that Creativity has a negative relationship among students having Complacent (r=-.239) , Non Assertive (r=-.170) and Patient (r= -.150) behavioral pattern where as a positive relationship among students with Easy Going (r=.321 , and Relaxed (r=.234) behavioral pattern. This tells easy going and relaxed people are significantly more creative. Moreover, easy going people are significantly relaxed where as relaxed people are significantly patient.
Table 3: Correlation coefficients between sub factors of Personality Type B and Creativity.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>-</td>
<td>- .239</td>
<td>.321**</td>
<td>-.170</td>
<td>.234**</td>
<td>-.150</td>
</tr>
<tr>
<td>Complacent</td>
<td>-</td>
<td>-</td>
<td>.339**</td>
<td>.093</td>
<td>-.249**</td>
<td>.065</td>
</tr>
<tr>
<td>Easy going</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.431**</td>
<td>.236**</td>
<td>.052</td>
</tr>
<tr>
<td>Non Assertive</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.070</td>
<td>.082</td>
</tr>
<tr>
<td>Relaxed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.406**</td>
</tr>
<tr>
<td>Patience</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**p < .001.

Independent T-tests was further used in order to assess the relation of Creativity with Type A or B personalities. According to the results shown in Table 4 it was found that there is a significant difference between personality Type A and B concerning Creativity. Tests for the sample showed personality Type A (T = -3.66, P < 0.05) has a significant positive relationship with Creativity.

Table 4: Regression for predictability of Creativity regarding personality Type A and B

<table>
<thead>
<tr>
<th>R</th>
<th>R^2</th>
<th>B</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>.33</td>
<td>.11</td>
<td>.32</td>
<td>.001*</td>
</tr>
<tr>
<td>Personality Type A</td>
<td>Personality Type B</td>
<td>.07</td>
<td>.405</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Creativity, * p < .01

In Table 4 when the Type A and B Personality was analyzed using Regression test the result depicted that together the Type A and B Personality account for around a 0.11 of the variance in predicting Creativity and Personality Type A (β = .32) was meaningful high and positive predictor while Personality Type B (β = -.07) was negative predictor of Creativity.

This study sought to systematically examine the relationships between personality Type A and B with Creativity. Personality Type A was the predictor of Creativity. There was positive correlation between Type A personality and Creativity. There was no significant relationship between Type B personality and Creativity. It was found that Personality Type A factors were only variables which are significantly predicting creative personality features. The results showed that personality Type A has the great influence on Creativity β = 0.32. Due to lack of research in examining the link of Creativity with personality Type A and B, a close examination by various researchers in determining the personality characteristics of creative individual
revealed that creative individuals possess major characteristics of Type A personality. (Feist, 1999) list of creative individual listed anxious, hostile and dominance a close match with our result of positive relation of Creativity with domineering and impatient characteristics. (MacKinnon, 1970) in his research associated dominance as a characteristic of creative individuals while (Stein, 1974) listed high achiever in match with achievement orientation having a positive relation with Creativity.

5. Conclusion

The results indicate that Personality Type A is significantly more creative than personality Type B. Personality Type A students who are high on Tenseness and Workaholic behavioral pattern reduces their potential of bringing creativity into their work whereas students high on Achievement orientation, Domineering, Impatience and Restlessness behavioral pattern enhances their creative abilities which might result in bringing innovation into their work.

6. Limitation

This research was limited to post graduate students and could be conducted on students and professionals of other disciplines with a larger sample size. Data collection through questionnaires was another limitation which could be avoided by the use of latest instruments such as interviews as this would further improve the quality of information collected. Further this study can examine other variables apart from Type A / B personality to determine the relation with Creativity that could be intelligence and socio-cultural factors.

References


