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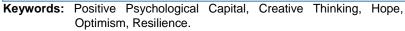
# The Relation between Positive Psychological Capital and Creative Thinking among Undergraduate Students

**Rita Rani Talukdar**
Associate Professor & Head,
Deptt.of Psychology,
Gauhati University,
Gauhati

## Abstract

The present study was conducted to explore the status of psychological capital and its relationship with creative thinking among undergraduate students. The positive psychological resources within a person can be related to creative thinking of a person. For the present study hope, optimism, self efficacy and resilience were taken as core positive psychological constructs. To examine these constructs a sample of 250 students pursuing nontechnical undergraduate courses were selected from various colleges within Guwahati city area. Data were collected by administering hope scale by Snyder (1991), self efficacy scale by Schwarzer and Mathias Jerusalem in 1979, life orientation test-revised by Scheier, Carver and Bridges in 1994, the Resiliency scale by Gail M. Wagnild and Heather M. Young in 1987 and creativity test by . N. K. Sharma in 2006.The results showed a significant positive correlation (r=0.298, p>.01) between positive psychological capital and creative thinking. Further regession analysis indicated that psychological capital was small but significant predictor ($R^2$ =.089, at .01 level) of creative thinking among undergraduate students. It indicated that by increasing these positive resources among the students their creativity may be enhanced.

**Keywords:** Positive Psychological Capital, Creative Thinking, Hope, Optimism, Resilience.

## Introduction

Positive Psychological capital is defined as an individual's positive psychological state of development and is characterized by: 1) having confidence (self-efficacy)to take on and put in necessary effort to succeed at challenging tasks; 2) making a positive attribution (optimism) about succeeding now in the future; 3) persevering toward goals and when necessary; 4) when beset by problems and adversity, sustaining and bouncing pack and even beyond (resiliency) to attain success. (Luthans, Youseef and Avolio, 2007,P.3.)

Psychological capital offers a dynamic resource potential that can grow and be sustainable over time. Psychological capital is proposed as higher order construct. Psychological capital uses the inclusion criteria of being 'state-like' which lead to differentiate it from other construct. Prior research also support that self efficacy, hope, optimism and resiliency are developable (Bandura, 1997, Synder, 2000,Carver and Scheier,2005 and Wagnild and Young , 1993).

**Kakoli Goswami**
Guest Faculty,
Deptt.of Psychology,
Gauhati University,
Gauhati

Positive psychological capital is comprised of positive psychological capacities are measurable, open to development and manageable (Luthans etal, 2004). Luthans and his colleagues specifically refers to the four positive psychological resources are self efficacy, hope optimism and resilience. Luthans and Youssef (2004) depict the dimension of positive psychological capital summarizing the manner in which each component is defined within the integrated construct.

Albert Bandura (1997) mentioned that the capacity of a person in which he or she can probably estimate that they can take on a particular task as an estimate of their self-efficacy. It is the person's ability to do something. Based on this original definition positive psychological capital explained self-efficacy as "one's own conviction about ability to mobilize motivation, cognitive resources and courses of his action needed to

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successfully execute a specific task within a given context to obtain his or her specific outcomes" (Stajkovic and Luthans, 1998).

Hope can be defined as having the willpower and path ways to attain one's goals. Hope is commonly used in everyday language.According to Snyder, one of the profound theory builder and researcher on area of hope, as 'a positive motivational state that is based on an interactively derived sense of successful a) agency (goal directed energy) and b) pathways (planning to meet those goals)'.(Snyder, Irving and Anderson, 1991).

Psychological capital optimism is not just predicting that good things will happen in the future. It considers optimism as an explanatory style that attributes positive events to internal, permanent and pervasive causes and negative events to external, temporary and situation specific ones. It depends on the reasons and attributions one uses to explain why certain events occur, whether positive or negative and past, present and future.

Resiliency has been defined as a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk (Masten and Reed, 2002).As a component of Psychological capital, this definition is expanded and redefined resiliency is the ability to bounce back from adversity and also very positive, challenging events and the will to go beyond the normal, to go beyond the equilibrium point. (Avolio & Luthans 2006 ).

According to Ambile (1983), creativity can be defined as the production of novel and useful ideas. Creativity is important because it provides us with new knowledge and new interventions that can improve the quality of human life. Theories of creativity have focused on a variety of aspects. One important was four P's:- process, person, product and place. Cognitive approaches in psychology describe thought mechanisms and techniques for creative thinking. Various theories were developed describing creative processes such as Wallas theory of stages and Guilford divergent thinking ability. Product aspect of creativity focuses on how to measure creativity in people, whereas person aspect considers habits or behavior related to creative person. Place aspect of creativity emphasizes on the environmental conditions suitable for creative behavior thinking.

J.P.Guildford was another important psychologists who worked extensively in the field of creativity. He gave the idea of 'Structure of Intellect' in 1950, later on in 1956 he prepared a model on it and by 1959 he explained 120 human mental abilities by that model. In this model Guildford differentiated intelligence and creativity and explained both the concept by the term convergent and divergent thinking abilities. In divergent thinking, the problems are incomplete and un suggestive. Divergent thinking involves creative generation of multiple answers to a set of problems, it is similar to creativity but in case of divergent thinking the answers are not known , they are novel and original(Guilford, 1950).

Based on conceptual and theoretical background the following objectives are formulated.

## Aim of the Study

The objectives of the study
1. To develop an understanding about positive psychological capital.
2. To measure the creativity among undergraduate students.
3. To measure the relationship between positive psychological capital and creativity among undergraduate students.

## Hypothesis of the study
1. There will be no significant relation between positive psychological capital and creativity among undergraduate students.
2. There will be no significant influence of positive psychological capital on creativity among undergraduate students.

## Methods
## Participants

A sample of two fifty college students have been selected for the present research. The sample has been collected from various colleges located in Guwahati City area. Following criteria has been taken for inclusion of a student as a sample from population:
1. He/ she should be a regular student in college.
2. He /she should be pursuing the course from college located in Guwahati city area.
3. He/ she should be in the age group of 18-22 years.
4. He/ she can be a student of Arts/science / commerce stream.
5. He/she should be pursuing graduation in non-technical field.

## Materials

Positive psychological capital construct includes four basic constructs. These are self-efficacy, optimism, Hope and resiliency. To measure these four construct four separate tools were used.

## The General Self –Efficacy Scale

It was developed by Ralf Schwarzer and Mathias Jerusalem in 1979 in Germany. The scale was created to assess a general sense of perceived self-efficacy with the aim in mind to predict coping with daily hassles as well as adaptation after experiencing all kinds of stressful life events.

## The Life Orientation Test

Revised: It is a 10-item scale, with four filler items and six scale items. This scale was developed by Scheier, Carver and Bridges in 1994.Total scores are calculated by summing the three positively worded and three negatively worded items Respondents are asked to indicate their level of agreement with each of the items on a 4-point scale, using the response format, "strongly agree" to "strongly disagree".

## Hope Scale

This scale was developed by Snyder and his colleague in 1991.This scale has 12 items. Both subscales have adequate internal reliability, with Cronbach's alphas ranging from .70 to .84 for the Agency subscale, and from .63 to .86 for the Pathways subscale (Snyder et al., 1991).

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**The Resiliency Scale**

This scale was developed by Gail M. Wagnild and Heather M. Young in 1987. This scale has 14 items. The purpose of the scale is to identify the degree of individual resilience (personal competence and acceptance of self and life); a positive personality characteristic that enhances individual adaptation. This scale can apply to adult population ranges between 18-23 years.

**Creativity Test**

To measure creativity a standardized psychological test named 'Divergent production abilities' developed by Dr. N. K. Sharma in 2006 was used. The battery of divergent production abilities contains six subtests measuring eight abilities which in total provides a creativity score. The test –retest reliability was measured for each subtest. The coefficient values are ranging from .67 to .85, which indicates a good reliability level. To ensure content validity, a deliberate and consistent effort has been made to use the test stimuli, test tasks, instructions and scoring procedures based on the Test theory and researches available on creativity or divergent production abilities. The correlation of the battery of the test with Baqer Mehdi's test of creative thinking, showed good level of coefficient values, ranging from 0.33 to 0.50 for creativity score.

**Procedure for Data Collection**

The study was conducted on college students pursuing graduation. The consent was taken from the students and authority for the data collection.

The questionnaires were distributed in classroom in a group of 8-10 students at a time. At first basic instructions were given about the data collection. Then interview schedule was filled up by them to get the socio -demographic information. Thirdly the main psychological tests were administered to the students. All the tests are self reported so students filled these by themselves. Lastly they were thanked for their participation in the research. Each set of tests were required almost one hour to complete. Data were collected by the investigator herself from the field.

**Results and Discussion**

The present research was carried out to examine positive psychological capital and its role as predictor of creativity among undergraduate students.. Every human being is having some positive mental resources within themselves and some of these positive resources together developed a core concept which is called as positive psychological capital. It is necessary to achieve higher goals in both personal and professional life and creativity can help us to sustain in this competitive world. To attain all round achievement we need to have healthy life both psychologically and physically. Therefore positive psychological resources will play important role as predictor of creativity. In this study positive psychological capital was selected as independent variable or predictor variable and creativity was considered as dependent or criterion variables.

In this present investigation Positive psychological capital was the first variable and it was

the independent variable for the study. It was measured by four core dimensions of it which were self-efficacy, optimism, hope and resilience. Each of the four core dimensions were measured by administering four subtests. After collecting the data, raw score were calculated and descriptive statistics were analyzed. After calculation of mean and standard deviation on the four subtests, the total score was calculated which represented the score on Positive psychological capital.

In the present research second variable under investigation was creativity and it was studied among undergraduate students Creativity was measured by administering a standardized psychological test named Divergent thinking abilities by K.N. Sarma. Creativity was also measured as dependent or criterion variable of Positive psychological capital. Because creativity is an important component for success in student life .A creative thinking is must for performing high in academic life as well as in daily activities. Creativity is important in today's world. In this conceptual age, we need to foster and encourage creativity. For students of graduate and postgraduate, to develop creative thinking is important. Creativity helps the student to deal with problems and adjust with environment in a better way. Students are the future of a country's development and growth. A report by Business council of Australia, emphasize on creativity among college students. This is the era of conceptual age where creativity is most important skills. Creativity is most important for future success among students and their success at future jobs and life as a whole.

After the analysis of the data at first the mean and standard deviation were found and presented in table 1. Then correlation was calculated and presented in table 2.

**Table 1**
**Showing Mean, SD Values on Positive Psychological Capital and Four Dimensions of it, Creativity Among UG Students**.

|  | MEAN | SD |
|---|---|---|
| 1.   **Psychologicalcapital** | 162.66 | 22.416 |
| a.   **Self efficacy** | 29.95 | 4.764 |
| b.   **Optimism** | 14.29 | 2.858 |
| c.   **Hope** | 48.17 | 8.363 |
| d.   **Resilience** | 70.25 | 12.524 |
| 2.   **creativity** | 76.94 | 24.015 |

**Table 2**
**Showing Pearson Product Moment Correlation Coefficient Values between Positive Psychological Capital and Creativity among UG Students**

|  | Creativity |
|---|---|
| **Positive Psychological Capital** | 0.298** |
| 1.   Self efficacy | 0.095 |
| 2.   Optimism | 0.222** |
| 3.   Hope | 0.269** |
| 4.   Resilience | 0.267** |

** .01 level     *.05 level

Results in Table 2 showed the correlation coefficient values between positive psychological

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capital and its four dimensions self-efficacy, optimism, hope and resilience and creativity among undergraduate students. The result in present study indicated that positive psychological capital and three core constructs or dimensions of it have positive significant correlation with creativity. It meant that positive psychological capital is positively related to creativity and also optimism, hope and resilience were positively significantly related to creativity among undergraduate students.

The first hypothesis stated that there will be no significant relation between positive psychological capital and creativity among undergraduate students.

The result showed that there was positive significant correlation between positive psychological capital and creativity among undergraduate students. Therefore the null hypothesis was rejected and confirmed the research hypothesis that there is significant relation between these two variables.

The present result indicated that if students have these positive psychological resources at higher level, then there would be more creativity among them. This result was supported by similar research findings found by earlier researchers. One study conducted by Sweetman, Luthans and Luthans(2011) found that self-efficacy, hope, optimism and resilience and psychological capital as core construct were significantly correlated with creative performance of the participants. Another study conducted by Abbas Mohammad and Usman Raja(2011) showed that positive psychological capital was positively related to innovative performance. That means high psychological capital individuals were related to exhibit more creative behaviors.

Further regression analysis was carried out to test role of positive psychological capital as predictor of creativity. The data result was presented in following table.

**Table 3**
**Showing Regression Analysis between Positive Psychological Capital and Four Dimensions of it and Creativity Among UG Students**

| Predictor variable | R Square | St. Error of Estimate | F Values | Significance |
|---|---|---|---|---|
| **Criterion Variable: Creativity** | | | | |
| **Positive Psychological Capital** | .089 | 22.970 | 24.179 | .01 |
| 1.    Self efficacy | .009 | 23.956 | 2.235 | -- |
| 2.    Optimism | .049 | 23.462 | 12.889 | .01 |
| 3.    Hope | .072 | 23.175 | 19.389 | .01 |
| 4.    Resilience | .071 | 23.190 | 19.038 | .01 |

Results in Table 3 showed that a simple linear regression analysis predictor variable which was positive psychological capital and criterion variable which was creativity among undergraduate students. Results showed that positive psychological capital was a significant predictor of creativity and R square showed there was 8.9% of total creativity could be predicted by psychological capital.

Regression analysis was also carried between four dimensions of positive psychological capital and creativity. Self efficacy dimension was found to share only 1 % influence on total creativity and was found not significant. Similarly optimism was found to predict 4.9% of total creativity and it was significant also. Third dimension hope was found to predict significantly 7.2% of total creativity whereas fourth dimension resilience was found to predict 7.1% significantly of total creativity variable.

The second hypothesis stated there will be no significant influence of positive psychological capital on creativity among undergraduate students. The present result showed that positive psychological capital and three sub constructs were important predictors of creativity among undergraduate students. Therefore this hypothesis was rejected. The present result indicated that higher level positive resources could lead to more creativity among the students. A recent research conducted by Sweetman, Luthans ,Avey and Luthans(2011) found that positive psychological resources of efficacy, hope, optimism, resilience and core construct psychological capital significantly predicted creative performance among employees. Amabile(1983) suggested that creativity

to occur multiple components must converge. Barbara Fredickson in her Broaden-and-built model suggested that positive emotions such as joy, happiness, self efficacy, hope, love broaden a person's availability repertoire of cognition and actions thus enhancing creativity. Positive emotion increases the number of cognitive elements available for association and elements need for problem solving. Positive psychological capital as psychological resources induces positive emotions in a person thus can significantly predict creativity of a person.

**Conclusion**

The study was carried out to explore the relation between positive psychological capital and creativity among undergraduate students. The study results indicated that there was a strong positive relation between these two factors. Further regression analysis showed that psychological capital can predict small but significant part of creativity among the students. It provided a ground for future research work related to these two concepts.

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