





## ABSTRACT

*This study is intended to examine the relationship between creativity of employees and their interpersonal relations. A quantitative research design is employed for this study. The data has been collected using self-administered questionnaires, from National Capital Region, India. A sample of 400 employees is selected using stratified systematic sampling. The results show that employees having a high interpersonal relations score have scored high on norm reference (NR) creativity as well, but have scored less on total creativity. Employees having a high score on need for control, have scored high on NR Creativity as well, but have scored low on criterion referenced (CR) creativity. Those showing a high score on need for affection have shown a high score on NR and CR Creativity as well. Employees scoring high on need for inclusion have scored high on NR Fluency as well.*

*KeyWords – Creativity, Interpersonal relations, need for control, need for affection, need for inclusion*



## INTRODUCTION

"The things we fear most in organizations—fluctuations, disturbances, imbalances are the primary sources of creativity."  
—Margaret J. Wheatley

Creative imagination has been the main attribute separating man from other beings. It is a potentiality which influences human activity in almost all spheres of life and expresses one's inner state. Creativity is believed to be of great significance to society, perhaps most, of our changes and development in society are a function of creative thinking abilities. Highlighting the importance of creativity, Taylor once said, "creativity at its highest has played an important role as any other human quality in changing history and reshaping the world."

The importance of creativity has been well recognized in developing countries in the context of present day race for superiority among the nations of the world. Continuing in the same league India also needs to augment its creative capability for social and economic up-liftment.

The research in creativity took an impetus, after the famous speech on "creativity", by of the American psychologist Guilford in the early 1950s. The term "creativity" is used in a variety of contexts (e.g. technical, scientific, literary) which has given rise to the multifaceted aspects of human behaviour. Looking at this diversified scenario, it is not easy to provide a universally acceptable definition. Still, many theorists have tried to define creativity as, Tomas (1999) defines it in terms of the generation of original ideas, whereas, Shalley and Perry-Smith (2001) argued that it is not enough only to be original. Sternberg and Lubart (1999) maintains that "creativity is the ability to produce work that is both novel (i.e. original, unexpected) and appropriate (i.e. useful concerning tasks constrains). Rodhes (1961), Treffinger, Isaksen & Firestein (1982) have distinguished four general approaches to the issue of defining creativity which constituted of person, process, product and press.

Majority of people now spend a significant part of their life at work, where they engage in a variety of interpersonal relationships like peer friendships, superior- subordinate relationships and mentor-protégée interactions (Sias & Perry, 2004; Sias & Cahill, 1998), resulting in an interpersonal interactions which has become fundamental and inevitable in a managerial job. The Hawthorne studies of the 1920s and several others since then (e.g. Weick, 1969; Mintzberg, 1975; Zelenzik, 1977; Liden and Graen, 1980; Kotter, 1982 ; Stewart, 1982 ; Bohra and Pandey, 1984; Wayne and Ferris, 1990; Mintzberg and Quinn, 1991; Pestonjee, 1992) have investigated the connection between interpersonal relations and managerial effectiveness.

Good interpersonal relations at work are important and may lead to multiple desirable organizational and individual outcomes like greater supervisory support and guidance, higher subordinate satisfaction and performance, lower subordinate turnover, effective managerial decision making , take on more challenging and important tasks, higher level of

job satisfaction, employee commitment, job involvement , social support, creativity and career development (Liden and Graen, 1980; Rosse and Kraut, 1983; Scandura et al., 1986 ; Mintzberg and Quinn, 1991 ; Liden & Graen, 1980 ; Cogliser 2009; Rawlings, 1992; Riordan & Griffeth, 1995 ; Kram & Isabella, 1985 ; Kram & Isabella, 1985; Yager, 2007; Graen & Scandura, 1987; Kram & Isabella, 1985).

Interpersonal relationships are the corollary of interactions among individuals and are affected by the personality and predisposition of the persons involved (Sullivan, 1953).

The authors believe that creativity is multi-dimensional concept and is affected by a number of factors. Besides being influenced by personal factors, it is also affected by environmental factors. The type of interaction which a person maintains with his/her immediate superior and with his/her peer – group also influence the creative outcome of the individual.



## CREATIVITY AND INTERPERSONAL RELATIONS

At workplace, we tend to form a number of relationships, some knowingly some unknowingly. Some relationships are a cause of formal structure, some we develop because of our own social needs. Graen & Scandura way back in 1987 found in their work that the quality of the relationship between superior and subordinate is directly related to innovation. Carrying on this research on the same line, in this paper, we will take up a) superior – subordinate relationship and b) peer-group relationship.

### Superior – subordinate relationship

In this relationship there are lots of factors which promote creativity, few of these are: supervisory support and encouragement, conviction, open communication, freedom, autonomy etc.

Supervisory support and encouragement has been found to be an important facilitator in idea generation. A number of studies have been conducted in this regard and results have shown a positive inclination (Amabile et al., 2004; Madjar, Oldham, & Pratt, 2002; Tesluk et al., 1997; Amabile et al., 1996; Farr and Ford, 1990; Amabile and Gyskiewicz, 1989 ; West, 1989; West and Farr, 1989; Amabile, 1988; Burnside et al., 1988; Delbecq and Mills, 1985; Abbey and Dickson, 1983). The employees' capacity to generate quality ideas increase when they feel that creativity is a desired behavior. The support can be in any form – whether it's a non specific organizational support (Basadur & Gelade, 2006; Anderson et al., 2004) or support from executive management in particular or a general management support (Andrew et al., 2008; Amabile, 1998).

Conviction and open communication relate to different forms of creativity and this has been proven in a number of research works (Davis, 2009; Hunter et al., 2007; Batey and Furnham, 2006; Ekvall and Tångeberg-Andersson, 1986; Cotgrove and Box, 1970). Further, in this regard, Florida states that creative people are attracted to places that are characterized by open –

minded and diverse culture (2004).

Freedom and autonomy at workplace acts as a key ingredient for employee creativity. Scholars have found that if the individuals are given substantial freedom in determining their course of action, they can expand their horizons and look for a range of possibilities which will ultimately result in great creativity solutions (Amabile, 1983). Many more authors have reached the same conclusion that autonomy and freedom enhances creative ability (Anderson et al., 2004; De Jong & Kemp, 2003; Unsworth and Parker 2003; McCoy and Evans, 2002; Shalley et al., 2000; Collins, and Amabile 1999; Zhou, 1998; Scott and Bruce, 1994; Greenberg, 1992; Shalley, 1991; Amabile, and Gyskiewicz 1989; Deci et al., 1989; Hatcher, Ross, and Collins 1989; Witt, and Beorkrem 1989; Mumford and Gustafson, 1988; Amabile, 1988, 1996; Amabile and Gyskiewicz's ; 1987; Deci and Ryan, 1987; Amabile and Gitomer ,1984; Amabile, 1983; Abbey and Dickson, 1983; Hackman and Oldham 1980).

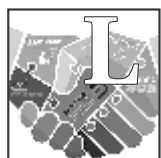
In Superior – subordinate relationship there are few other factors which are negatively related to creativity, such as controlling behaviour, close supervision etc.

Controlling behaviour in any form is detrimental for employee creativity, whether it's in a leader- member relationship (Shalley and Gilson 2004; Zhou and George 2003; Oldham, and Pratt 2002; Tierney and Farmer 2002; Amabile and Conti 1999; Tierney, Farmer and Graen 1999; Amabile et al. 1996; Oldham and Cummings 1996; Amabile and Gyskiewicz, 1989) or in the form of a controlling feedback (Shalley and Perry- Smith, 2001; Deci, Koestner & Ryan, 1999; Eisenberger, Pierce & Cameron, 1999).

Close supervision shifts individual attention towards peripheral concerns and in doing so the intrinsic motivation of an employee reduces which in turn reduces creativity. Researchers have reached the conclusion that creativity and control cannot go hand in hand (Gagné, and Deci, 2005; George and Zhou, 2001; Deci, Connell and Ryan, 1989; Deci and Ryan 1987).

### Peer – Group Relationship

In this relationship there are a lot of factors affecting creativity, one amongst them is inclusion. Inclusion engrosses respecting individual differences and incarcerating the advantages they provide. Nsombi B. Ricketts, director of the office of Diversity and Inclusion at Northwestern University in an interview said that “Companies really need to look at inclusion as a strategy,” in competitive corporate world employees inclusion in multiple groups at the workplace will go a long way in imbining creativity in an employee (e.g. Drazin et al., 1999).



### LITERATURE REVIEW

The relationship between creativity and formal control have been much less studied (as noted by Drazin, Glynn, & Kazanjian, 1999; Kurtzberg & Amabile, 2000; Oldham &

Cummings, 1996). Few studies which have been conducted by various researchers like Amabile et al. (2004), Madjar et al. (2002), Oldham & Cummings (1996), Tierney & Farmer (2002) etc. have found the creativity of employees to be negatively affected by controlled environment. Formal control requires attention to others, hierarchical supremacy, etc. , whereas creativity requires attention focused on the task rather than on others (Henle, 1962; Crutchfield, 1962; Csikszentmihalyi, 1990).Amabile (1983) stated that the boundaries and restrictions reduce a person's freedom for task approaches and divert attention from the experimental aspect of the task, which in turn reduces intrinsic motivation and have a negative impact on creativity. Amabile et al. (1996) and Zhou (2003) through social psychology and organizational behavior literature derived a conclusion that control, constraints and monitoring are barriers to creative thought and output whereas, free hand over one's work enables creativity.

Zabelina, Robinson and Anicha (2007) after their research concluded that under-controlled individuals would be spontaneous, but lack the discipline of sustained creative efforts. On the other hand, over-controlled individuals would be persistent but lack spontaneity. Also, during the years, management research has expanded the spectrum of analysis and has investigated creativity of individuals within multiple social domains (e.g. Ford, 1996) and has developed cross-level and multi-level models, to take into consideration that the creativity of individuals depends on their inclusion in multiple groups (e.g. Drazin et al., 1999).

Hazar and Robabeh (2015) conducted a research to study the relationship between positive and negative affection with creativity. 100 students were selected from the University of Tehran, using stratified random sampling to participate in the research. Research questionnaires included: Watson et al (1988), 20 item questionnaire for assessment of positive and negative affection, Amabile and Tierney's (1999), 5 item intrinsic motivation questionnaire, and Palmon et al (2004), 11 item creativity questionnaire. Data were analyzed using Pearson's correlation coefficient, step by step multiple regression analysis and t-test. The results showed that there is a positive significant relation between creativity and positive affection. There was also a negative, but no significant correlation between negative affection and creativity. So, positive affection can predict creativity scores, but negative affection is not a suitable predictor for creativity.

Spekle, van Elten, and Widener (2014) examined the relation between levels of control and creativity. They used survey data from 233 business unit managers and a structured equation model to explore the relation. When they modeled the four levers of control from the LoC framework (beliefs, boundaries, diagnostic and interactive controls) as a package, it was found to be positively associated with creativity. This study concluded that there does not exist a conflict between control and creativity per se. Rather, in contradiction, they found that creativity can flourish in the presence of control.

Kim, Vincent and Goncalo (2012) after their research theorized that the experience of social rejection may indeed stimulate

creativity, but only for individuals with an independent self-concept. In the three studies conducted by them, they tried to show that, individuals who hold an independent, self-concept performed more creatively following social rejection relative to inclusion. Also, that this boost in creativity is mediated by a differentiated mindset, or salient feelings of being different from others.

Ashton-James and Chartrand (2009) through their study concluded that for individuals with an interdependent self-concept, the effort to conform and regain approval from others may preserve self-esteem, but may also extinguish the sense of independence that is optimal for producing creative solutions.

Jorgensen and Messner (2009) stressed the relevance of enabling controls (as opposed to coercive controls) for product innovation.

Mouritsen et al. (2009) explained the reverse relationship of how management accounting controls mobilize innovation activities. They say “on the one hand, formal control systems are regarded as brakes on creativity and innovation, and on the other hand, they may enable innovation if used properly.”

As Davila et al. (2009b) noted that a literature is emerging on a new control paradigm where management control systems are conceptualized not as a hindrance but as a facilitator in entrepreneurship and innovation.

Akinola and Mendes (2008) quotes several articles when they argue that negative moods can enhance the results during tasks that “require concentration, precise execution, divergent thinking and analogical problem solving”. Whereas, in other cases positive moods can enhance creativity in tasks that require “rapid, less effortful judgment heuristic strategies that show little systematic and analytical processing”. They conducted their experiment which measured creativity after social rejection, social approval and controlled effect. They also divided the participants by a measure of biological products linked to depression (DHEAS). Their result was that individuals who were more depressed had a greater affect vulnerability when receiving rejecting social feedback. Social rejection resulted in greater artistic creativity than social approval or non-social situations. Social rejection and biological vulnerability resulted in better performance on the artistic creativity task.

Tschang's (2007) study of the forces that influence creativity in the video games industry illustrates that there is a strong tension between the game developers' inclination to be creative and the rationalization and control logic applied to the developing process to satisfy the customers' evolving tastes.

Henri (2006) examined a reduced form of level of control and argues that when diagnostic and interactive controls are coupled, dynamic tension results leading to enhancing creativity by organizational members. Also, when there is high environmental uncertainty, the interplay between diagnostic and interactive controls is positively related to innovative

capabilities.

Zhou and George (2003) summarize the control and creativity relation as a contradiction. They stated that “on the one hand, organizations are highly dependent upon control systems, standardized practices and routines to ensure smooth and efficient operations. And, on the other hand, these systems have the unintended consequence of shutting down the innate creative propensities of organizational members”.

George and Zhou (2001) demonstrated empirically that conscientious individuals exhibit low levels of creativity when they are closely monitored by supervisors and have unsupportive coworkers.

Kurzban and Leary (2001) have concluded in their study that, the very traits that distinguish highly creative people, such as unconventionality, make them easy targets for rejection.

Shalley, Gilson and Blum (2000) stated that a considerable body of theory argues that formal organizational controls (accepting collective goals, conforming to pre-given standards and plans, and sacrificing individual interests in order to achieve group goals) will undermine the intrinsic motivation needed for creativity.

Amabile and Sensabaugh (1992) conducted interviews to examine influences on the creative behaviors of R&D researchers. About half of the respondents interviewed stated that when there were controls such as rewards, evaluation against specified metrics or monitoring present in the environment, that restricted either their actions or their decisions, they believed that creative behaviors were reduced.

Employees possessing creative cognitive abilities work best in environments that allow risk taking, autonomy and freedom to deviate from the status quo (Kirton, 1989).

Deci and Ryan (1985) found a difference between the form of control used and creative output. When employees perceived that the control mechanism was informative, creativity and intrinsic motivation were higher than when employees perceived that the control mechanism was solely for monitoring.



## RESEARCH GAP

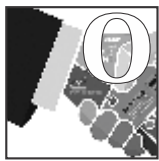
An extensive and thorough literature review shows that a lot of research has been done, which relates creativity to age, gender, marital status, birth order, education level, performance, etc. but there is a huge dearth of research when it comes to establishing a relation between creativity and interpersonal relations. The relation between creativity of managers and their interpersonal skills, needs to be explored even more in manufacturing and service sectors, located in the National Capital Region of India.

## Rational of study

This research is conducted to find the impact of creativity on interpersonal relationship of managers at entry, middle and



senior level. It is believed that creativity and innovative behaviour are important not only at the organizational level ,but also at the individual level. In the present context , it has become important to understand both these factors at managerial level because, if managers appreciate creativity, they will encourage open exchange of ideas among their employees and will be supportive of their innovative behaviour. Innovative and creative outlook contributes towards cost-effective business solutions resulting in increasing the productivity of the organization and creating a competitive edge. Managers good at interpersonal relations will make better team and will collaborate in a better manner. So, both of these factors need to be studied as high creativity and good interpersonal skills creates a win-win situation for individual and organization.



**OBJECTIVE OF THE STUDY**

The main objective of the study is to understand the impact of creativity ( norm referenced , criterion referenced and total creativity) on interpersonal relations (i.e total need, control, affection, inclusion , wanted and expressed) of employees working in different manufacturing and service sectors.



**RESEARCH METHODOLOGY**

**Sample**

The sample for the study includes 400 managers from selected manufacturing and service organizations located in National Capital Region, India. The statistical technique of stratified systematic sampling was used to select the sample.

The strata of managers was taken as 1:3:6 for top level managers, middle level managers and lower level managers respectively. This strata is followed because generally the ratio of managers or associates of these three levels remains roughly in this ratio of 1:3:6 only.

Accordingly, 40 top level managers, 120 middle level managers and 240 lower level managers were taken. To select the managers in each strata , systematic sampling was used wherein every 3rd manager was picked from each strata in the organization.

**Following hypothesis were framed in this study:**

- H01: There is no significant relationship between total creativity and total interpersonal behaviour
- H02: There is no significant relationship between total creativity and need for inclusion
- H03: There is no significant relationship between total creativity and need for control
- H04: There is no significant relationship between total creativity and need for affection
- H05: There is no significant relationship between total

creativity and expressed interpersonal behaviour.

H06: There is no significant relationship between total creativity and wanted interpersonal behaviour.

**Survey Instruments**

A two – part questionnaire was used for data collection.

**Abbreviated Torrance Test for Adults (ATTAs)**

Abbreviated Torrance Test for Adults (ATTA) was developed by Goff & Torrance in the year 2002 to measure creativity of adults, since the original Torrance Test of Creative Thinking (TTCT) required considerable testing time (45 minutes for the Verbal and 30 minutes for the Figural).

The ATTA is comprised of one Verbal and two Figural exercises and respondents are given 3 minutes to answer each question. The first question in the ATTA gauges Verbal responses and asks the participant to create a list of problems that might be created if one could walk on air or fly without being in an airplane or similar vehicle. Activity #2 is comprised of two incomplete figures, one which looks like a “curly q” and the other which is comprised of two intersecting lines at a 90 degree angle. The respondents are asked to make pictures with the incomplete figures. The instructions further advise the respondents to make the picture unusual and to communicate as interesting and as complete a story as possible (Goff & Torrance, 2002). Activity#3 is a 3\*3 matrix of small equilateral triangles. Respondents are asked to see how many objects or pictures they can make from the triangles. The instructions for both activities require that the participants create a title for all of the pictures they create.

These three questions are assessed on four norm-referenced abilities and fifteen criterion referenced creativity indicators (Goff & Torrance, 2002, p. 1). **Norm referenced (NR)** creativity - are those that are exhibited in every response to some varying degree. The four norm-referenced measures are identified as the following: **fluency** (is the ability to produce quantities of ideas both verbally and figurally), **originality** (ability to produce uncommon or totally new or unique ideas), **elaboration** (embellish ideas with details) and **flexibility** ( to process information in different ways given the same stimulus). **Criterion referenced (CR) creativity** – these creativity indicators, may or may not be evidenced on any given record. The fifteen criterion-referenced creativity indicators included (Goff & Torrance, p. 2): Verbal response and Figural responses. **The CR verbal responses** are 5 in number and they are - Richness and Colorfulness of Imagery, Emotion/Feelings, Future Orientation, Humor: Conceptual Incongruity, Scoring Provocative Questions. The CR figural responses are 10 in number and they are – Openness, Unusual Visualization, Movement and/or Sound, Richness, and/or Colorfulness of Imagery, Abstractness of Titles, Context, Combination/Synthesis of Two or More Figures, Internal Visual Perspective, Expressions of Feelings and Emotions, Fantasy.

### Calculation of Creativity Index

Raw scores from the four norm-referenced measures (Table 1) were converted to normalize scaled score (Table 2), and were added to fifteen criterion-referenced indicators (Table 3), which received a score ranging from 0 to 2 (a rating of zero is given if the indicator does not occur, a rating of a single "+", is given for an indicator appearing once, and a rating of double plus "++" is given for any indicator appearing more than once, Goff & Torrance, 2002), to create the **creativity index (CI)**, which is the measure of the creativity level of an individual (Table 4).

According to the Scholastic Testing Manual (2002), reliability for the ATTA was derived by using the Kuder-Richardson 21 (KR21) reliability coefficient. The KR21 reliability coefficients for the ATTA were: "fluency = .45; originality = .38; elaboration = .84; flexibility = .38 and total creativity indicators = .69" (Goff & Torrance, p. 35). The ATTA was developed from the TTCT and both content and face validity have been established by the Scholastic Testing Service (Goff & Torrance).

### The Fundamental Interpersonal Relations Orientation-Behaviour (FIRO-B)

FIRO- B is a 54-item instrument designed to measure three interpersonal needs, i.e. inclusion, control and affection on two dimensions i.e. wanted and expressed.

**Need for inclusion** - The need for inclusion refers to the extent to which individuals need to have social interactions and associations with others.

**Need for control** - The need for control refers to the extent to which individuals want to lead and influence others as well as the extent to which they prefer to be led and influenced (Hammer & Schnell, 2000).

**Need for affection** - The need for affection refers to the emotional connections between people and the extent to which individuals seek to establish relationships with others, particularly one-on-one relationships (Waterman & Rogers, 1996).

And, the sum of all these three needs results in total need score, which represents the level of interpersonal relations of an individual.

**Expressed interpersonal behaviour** - The wanted dimension explains how much a person wants others to initiate action, and how much that person wants to be the recipient of that action.

**Wanted interpersonal behaviour** -The expressed dimension explains what a person prefers to do, and how much he wants to initiate a particular action.

Reliability and validity for FIRO-B have been established, and is satisfactory, with a coefficient of 0.70. The internal consistency reliability coefficient is 0.94. Content validity is satisfactory as are predictive and construct validity (Schutz, 1966, p. 66-80).



### RESULTS AND DISCUSSION

Pearson Correlation was employed to see the interrelationship between interpersonal relations and employee creativity (Table 5) and Regression was applied to find the effect of employee creativity on interpersonal relations of employees (Table 6).

The results (Table 5) reveal significant correlations between interpersonal relations and employee creativity of employees. It is found that total interpersonal need is significantly correlated to NR fluency, NR originality, NR flexibility, CR verbal response, CR figural response, NR creativity and Total creativity. Need for inclusion is found to correlate significantly with the CR verbal response, CR figural response and CR creativity. Need for control is found to correlate significantly with NR fluency, NR originality, NR flexibility, NR creativity, CR creativity and total creativity. Need for affection is also significantly correlated to NR fluency, NR originality, NR flexibility, CR figural response, NR creativity and total creativity. Wanted interpersonal behaviour is found to be significantly correlated with NR fluency, NR originality, NR flexibility, CR verbal response, CR figural response, NR creativity and total creativity, whereas expressed interpersonal behaviour is found to be correlated with CR creativity only.

#### Creativity and total interpersonal behaviour

Step wise regression analysis was applied to understand which all components of creativity has an impact on which all variables of interpersonal behaviour. The results (Table 6) show that, employees scoring high on total interpersonal behaviour has shown a strength of association with NR creativity ( $R^2 = 0.055$ ), total creativity ( $R^2 = 0.011$ ), NR fluency ( $R^2 = 0.014$ ) and CR verbal response ( $R^2 = 0.006$ ), the B score for NR Creativity is 1.107 at a Sig. level of .000, this means that for every unit increase in the NR creativity score, there will be a 1.107 unit increase in the score of total interpersonal behaviour holding all other variables constant. Similarly for every unit increase in NR fluency, there will be .460 unit increase in total interpersonal behaviour score with sig. level of 0.000. But as far as total creativity and CR verbal response is concerned, it has a negative coefficient score, which mean that for every unit increase in total creativity, total need score will decrease by 0.992 (Sig. = 0.000) unit, also for every unit increase in CR verbal response, there will be.384 decrease in total interpersonal behaviour score (Sig. = 0.042). This result shows that employees who believe that other people and human interactions can be a source of personal satisfaction, or can help attain important goals are poor on creativity. It is in agreement with a lot of research which states that employees high on social intelligence, convergent, inductive or reasoning are low on divergent thinking. The results show that employees who engage in interpersonal interaction with many people and on a frequent basis and who enjoy getting involved with other (i.e. high on interpersonal behaviour score) have shown a high score on fluency, originality, elaboration and flexibility (i.e on NR creativity). These people

like to produce quantities of ideas which are relevant to task instructions. They have the ability to generate multiple or alternative ideas and solutions, both verbally and figurally. They produce uncommon ideas or ideas that are totally new or unique rather than follow the more common path. They have the ability to embellish ideas with details rather than being restricted to the core idea. They have the capability of processing information or objects in different ways given the same stimulus. Flexible thinking is especially important when logical approach fail to produce satisfactory results. The results also show that for creative people, involvement with others is not a primary source of satisfaction, other needs such as intellectual stimulation or solitary pursuits, predominate. Creative employees need privacy to do their best work and they prefer to keep to themselves and tend to have a small circle of friends. Creative employees are highly selective about how often and with whom they interact.

Thus the hypothesis (H01): There is no significant relationship between total creativity and total interpersonal behaviour, is rejected.

Apart from total creativity, interpersonal behaviour is also related to NR creativity, NR fluency, CR verbal response.

### **Creativity and need for inclusion**

Step wise regression analysis was applied to understand which all components of creativity has an impact on which all variables of need for inclusion. The results (Table 6) show that, employees scoring high on need for inclusion have shown a strength of association with CR creativity ( $R^2 = 0.061$ ), NR fluency ( $R^2 = 0.084$ ) and CR verbal response ( $R^2 = 0.015$ ). The B score for NR fluency is 0.347 at a Sig. level of .000, this means that for every unit increase in NR fluency, there will be a 0.347 unit increase in score of need for inclusion. But as far as CR creativity and CR verbal response is concerned, there is a negative coefficient score, which mean that for every unit increase in CR creativity, need for inclusion score will decrease by 0.500 (Sig. = 0.000) unit, also for every unit increase in the CR verbal response, there will be 0.249 decrease in need for inclusion score (Sig. = 0.002). This means that employees having a high score on need for inclusion feel like including others in their activities, and love to join them and become a part of their group in the workplace. This high score also indicates that the employees perceive themselves to be social and they like being noticed by others. They love to seek out inputs and being offered a chance of a higher profile. These employees have scored high on NR fluency which means that they have the capability of producing multiple ideas or alternate solutions to a problem. Fluency involves not just remembering information that is learned, but also understanding and interpreting the same in the correct context. High norm referenced criterion group score high on total number of interpretable, meaningful, and relevant ideas generated in response to the given stimulus. The result shows that these employees have scored low on CR creativity and CR verbal response, which indicate that the employees lack in richness and colorfulness of imagination. These people are not very good at expressing their emotions and feelings,

neither they can project the future consequences. Low CR employees do not show a lot of inquiries, neither they are very provocative in nature. They lack a sense of humor, leap to conclusions prematurely and tend to close issues rather than have an open mind for discussion. They have the normal visual perspective of looking at things, i.e. static, upright, straight – one which is common among the majority of people. Given a stimulus, they tend to give simple names to an object, or at the most add a simple description without adding any interpretation to it. The employees are not able to communicate very clearly and powerfully their thoughts, also they are not able to give sufficient details. They don't see possibilities beyond the commonplace and lack the ability to synthesize multiple stimuli into a single one. They tend to look at things from a very superficial level rather than going into details. They lack a sense of imagination, fantasy and also score low on the emotional front, and feelings such as happiness, excitement, anger, sacredness, joy, jealousy, etc., which means that they are not very expressive of their emotions and feelings in front of everyone. They lack an orientation for future consequences and humor aspect is also lacking.

Therefore, the hypothesis (H02): There is no significant relationship between total creativity and need for inclusion, is accepted.

This result is supported by Kim, Vincent and Goncalo (2012) who concluded from their research that need for inclusion may not be necessary for creativity to flourish, in contrast social rejection may stimulate creativity.

Though, total creativity is not significantly related to need for inclusion, but it is significantly related to CR creativity, NR fluency and verbal response.

### **Creativity and Need for control**

Step wise regression analysis was applied to understand which all components of creativity had an impact on which all variables of need for control. The results (Table 6) show that employees scoring high on need for control have shown a strength of association with NR creativity ( $R^2 = 0.072$ ) and CR Creativity ( $R^2 = 0.17$ ). The B score for NR Creativity is .049 at a Sig. level of .000, this means that for every unit increase in the NR creativity score, there will be an increase of .049 units in need for control, whereas, B score for CR Creativity is -.149 with a significance level of .002, which means that for every one unit increase in its score will lead to a decrease in 0.149 units of need for control. Employees having a high score on need for control dimension are the ones who have a strong drive and desire to exert impact on the world. They want to assume responsibility and exert influence, and need frequent breaks from such responsibility. These employees prefer a structured situation where there are clear lines of authority and responsibility in order to get things done. Constant change and situations that are novel may be very difficult for these employees to handle. They like to maintain a balance between power and influence in relationships. They have a zeal to take up new challenges and explore new opportunities. As per the



results, it is found that such people score high on fluency, originality, elaboration and flexibility (i.e. NR creativity). These people like to produce quantities of ideas which are relevant to task instructions. They have the ability to generate multiple or alternative ideas and solutions, both vocally and figural. They produce uncommon ideas or ideas that are totally new or unique. The person with such an ability tend to produce new ideas rather than follow the more common path. They have the ability to embellish ideas with details rather than being restricted to the core idea. They have the capability of processing information or objects in different ways given the same stimulus. Flexible thinking is especially important when logical approach fail to produce satisfactory results. It was also found that such employees have low scores on CR creativity which means they lack variety, vividness, richness and colorfulness of imagination. They hide their emotions and feelings, and do not project future consequences as well. Presence of conceptual incongruity is felt in their response. The respondent with low CR creativity looks at an object from usual perspectives only, they tend to leap to conclusions prematurely. They tend to give simple names or perhaps give a simple description of objects around them.

Thus, the hypothesis (H03) : There is no significant relationship between total creativity and need for control , stands accepted.

This result is supported by a number of other researchers such as Amabile et al. (2004), Madjar et al. (2002), Oldham & Cummings (1996), Tierney & Farmer (2002), Zhou and George (2003), Zabelina, Robinson and Anicha (2007), etc. who have also found that the creativity of employees is negatively affected by need for control.

Though, total creativity is not significantly related to need for control, but it is significantly related to NR creativity and CR creativity.

### **Creativity and need for affection**

Step wise regression analysis was applied to understand which all components of creativity had an impact on which all variables of need for affection. The results (Table 6) show that employees scoring high on need for affection have shown a strength of association with NR creativity ( $R^2 = 0.105$ ), total creativity ( $R^2 = 0.073$ ), CR creativity ( $R^2 = 0.009$ ) and NR flexibility ( $R^2 = 0.008$ ). The B score for NR Creativity is 0.865 at a Sig. level of .000, this means that for every unit increase in the NR creativity score, there will be a 0.865 unit increase in score of need for affection holding all other variables constant. Similarly for every unit increase in CR creativity, there will be .452 unit increase in need for affection with sig. level of 0.000. But as far as total creativity and NR flexibility are concerned, there is a negative coefficient score, which mean that for every unit increase in total creativity, need for affection score will decrease by 0.760 (Sig. = 0.000) unit, also for every unit increase in NR flexibility , there will be a .118 unit decrease in need for affection (Sig. = 0.032). Employees displaying a high score on need for affection are open and like to demonstrate their warmth and attraction. They have a lot of tenderness,

encouragement and support for others. This high score implies that they want others to get closer to them. They also have a lot of desire for others to act warmly, share their feelings, and encourage them, which makes them happy. The respondents want to interact and associate with people very much, both at their own initiatives and at that of others. The employees love to maintain personal and close contacts in their relations. As per the results, employees having high need for affection have also shown a high score on NR creativity (4.354), which means they have the ability to produce quantities of relevant ideas both verbally and figural. Their ideas are uncommon, new and unique in their own aspect. These employees can embellish ideas with details, rather than being restricted to the core idea. They can process information or objects in different ways given the same stimulus. Along with high NR creativity, the employees have high CR creativity as well, which means that their response may evidence a strength, variety and vividness of the imaginary. They are very expressive of their emotions, whether it is happiness, jealousy, anger or excitement. They are futuristic, which is clearly expressed in their responses. They are humorous and have a conceptual incongruity. They are provocative by nature. People having a high CR creative score have a resistance to premature closure. They have the ability for unusual visualization and looking at things from different perspectives in comparison to usual common perspective given by the majority of people. They have the ability of going beyond exteriors and pay attention to internal, dynamic working of things. Employees high on CR creativity are also able to communicate clearly and powerfully through responses which provide sufficient details. These people can fantasize and are very expressive. These people having a high need for affection have shown a negative score on total creativity which means that these employees are not very sensitive towards problems, and hence lack redefining abilities, which include transformations of thought, reinterpretations, and freedom from functional fixedness in driving unique solutions. They lack the ability to generate a variety of ideas and flexibility in their outlook. They are not able to look at challenges or generate options by examining a situation from multiple perspective, which help in building connections. They lack originality (i.e. unusual, unexpected and unfamiliar response to challenges) in their response. These employees have also shown a negative score on NR Flexibility which means that they are not in a very comfortable position to make connections across domains and between ideas. They lack multiplicity in idea generation which can provide surprising insight and new connections.

Thus, the hypothesis (H04) : There is no significant relationship between total creativity and

need for affection, stands rejected.

This result is not supported by the research of Hazar and Robabeh (2015) , who concluded that positive affection can predict creativity of an individual.

Apart from total creativity, need for affection is also related to NR creativity, CR creativity and NR flexibility.

### Creativity and expressed interpersonal behaviour

Step wise regression analysis was applied to understand which all components of creativity had an impact on which all variables of expressed behaviour. The results (Table 6) show that employees scoring high on expressed behaviour have shown a strength of association with CR creativity ( $R^2 = 0.014$ ) and NR fluency ( $R^2 = 0.049$ ). The B score for NR fluency is .238 at a Sig. level of .000, which means for every unit increase in NR fluency, there will be a 0.238 unit increase in score of expressed behaviour. Whereas CR creativity has shown a negative coefficient score, which mean that for every unit increase in CR creativity, expressed behaviour score will decrease by 0.324 (Sig. = 0.000) unit. This means that respondents having a higher score on expressed behaviour take the initiative in approaching others to fulfill the three basic interpersonal needs. In general, it shows how comfortable you are in being proactive. These employees have shown a higher score on NR fluency which means that they have the ability to produce the quantity and quality of ideas with the same stimulus. On the contrary the same employees have shown a low score on verbal and figural CR creativity. This means that employees lack on richness, vividness and colorfulness of imagination. They also lack the ability to express their emotions and feelings in the best possible way. Future orientation and conceptual incongruity are lacking in their responses. The provocative angle also seems to be missing in their responses. They tend to leap to conclusions very fast in comparison to people having high CR creativity. They have a low scoring on visual perspective and do not tend to see objects in unusual and different perspective. They lack the capability to capture the essence and deeper meaning of visual presented to them. They find it difficult to communicate clearly and powerfully.

Therefore, the hypothesis (H05): There is no significant relationship between total creativity and expressed interpersonal behaviour, stands accepted.

Though, total creativity is not significantly related to expressed interpersonal behaviour, but it is significantly related to CR creativity and NR fluency.

### Creativity and Wanted interpersonal behaviour

Step wise regression analysis was applied to understand which all components of creativity had an impact on which all variables of wanted interpersonal behaviour. The results (Table 6) show that employees high on wanted interpersonal behaviour have shown a strength of association with NR creativity ( $R^2 = 0.058$ ) and total creativity ( $R^2 = 0.129$ ). The B score for NR Creativity is .850 at a Sig. level of .000, this means that for every unit increase in NR Creativity, there will be .850 unit increase in the score of wanted behaviour holding all other variables constant. Whereas total creativity has shown a negative coefficient score, which mean that for every unit increase in total creativity, wanted behaviour score will decrease by 0.720 (Sig. = 0.000) units. This means that employees who have scored high on wanted behaviour dimension usually like others to initiate activities with them. It shows how much one relay's on others to get what they want.

In general, it shows how comfortable one is being reactive and responsive to others approaching them. These employees have shown a higher score on NR creativity, which means that respondents have a high score on fluency, originality, elaboration and flexibility. These respondents are able to produce ideas that generally are not produced, or ideas that are totally new and unique. They have the capability of producing a variety of ideas which are relevant to the task in hand. They are able to embellish ideas with great details. They score high on flexibility, i.e. they can process information or objects in different ways with the same given stimulus. But the same employees have shown a negative score on the total creative dimension which indicates that employees are not very sensitive towards problems, also they lack redefining



## REFERENCES

- Akinola, M., & Mendes, W. B. (2008). *The dark side of creativity: Biological vulnerability and negative mood leads to greater artistic creativity*. *Personality and Social Psychology Bulletin*, 34, 1677–1686.
- Amabile, T. (1983). *The social psychology of creativity*. New York: Springer-Verlag.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). *Assessing the work environment for creativity*. *Academy of Management Journal*, 39, 1154-1184.
- Amabile, T. M., & Gryskiewicz, N. (1989). *The Creative Environment Scales: The Work Environment Inventory*. *Creativity Research Journal*, 2, 231-254.
- Amabile, T.M., Schatzel, E.A., Moneta, G.B., & Kramer, S.J. (2004). *Leader behaviours and the work environment for creativity: Perceived leader support*. *The Leadership Quarterly*, 15, 5-32.
- Amabile, T. M., & Sensabaugh, S. J. (1992). *High creativity versus low creativity: What makes the difference? Essay in S. S. Gryskiewicz & D. A. Hills (Eds.), Readings in innovation*. Greensboro, NC: Center for Creative Leadership.
- Ashton-James, C. E., & Chartrand, T. L. (2009). *Social cues for creativity: The impact of behavioral mimicry on convergent and divergent thinking*. *Journal of Experimental Social Psychology*, 45, 1036-1040.
- Basu, R., & Green, S. G. (1997). *Leader-member exchange and transformational leadership: An empirical examination of innovative behaviours in leader-member dyads*. *Journal of Applied Social Psychology*, 27, 477–499.
- Crutchfield, R. (1962). *Conformity and creative thinking*. In H. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking* (120–140). New York, NY: Atherton.
- Csikszentmihalyi, M. (1990). *The domain of creativity*. In M. A. Runco & R. S. Albert (Eds.), *Theories of creativity* (190–214). Newbury Park, CA: Sage.
- Davila, A., Foster, G., & Oyon, D. (2009b). *Accounting and control, entrepreneurship and innovation: Venturing into new research opportunities*, *European Accounting Review*, 18(2), 281-311.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- Drazin, R., Glynn, M., & Kazanjian, R. (1999). *Multilevel theorizing about creativity in organizations: A sense making perspective*. *The Academy of Management Review*, 24 (2), 286-307.
- Florida, R. (2004). *The Rise of the Creative Class: And How it's transforming work, leisure, community and everyday life*. New York: Perseus Book Group.
- Ford, & Cameron, M. A. (1996). *Theory of Individual Creative Action in Multiple Social Domains*. *The Academy of Management Review*, 21 (4), 1112.
- Garwood, D. S. (1964). *Personality factors related to creativity in young scientists*. *Journal of Abnormal and Social Psychology*, 68, 4, 413-419.
- George, J. M., & Zhou, J. (2001). *When openness to experience and conscientiousness are related to creative behavior: An interactional approach*. *Journal of Applied Psychology*, 86(3), 513-524.
- Goff, K., & Torrance, E.P. (2002). *Abbreviated Torrance Test for Adults manual*. Bensenville, IL: Scholastic Testing Service, Inc.
- Hajar, K., & Robabeh, N.G.A. (2015). *The relationship between positive affection, negative affection and intrinsic motivation with creativity*. *Innovation & Creativity in Human Science*, 5(1), 49-63.
- Henle, M. (1962). *The birth and death of ideas*. In H. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking* (31–62). New York, NY: Atherton.
- Henri, J. F. (2006). *Management control systems and strategy: A resource-based perspective*. *Accounting, Organizations and Society*, 31, 529-558.
- Jørgensen, B., & Messner, M. (2009). *Management Control in New Product Development : Managing the Dynamics of Efficiency and Flexibility*. *Journal of Management Accounting Research*, 21, 99-124.
- Kim, S. H., Vincent, L. C., & Goncalo, J. A. (2012). *Outside advantage: Can social rejection fuel creative thought? Retrieved from Cornell University, ILR School site: <http://digitalcommons.ilr.cornell.edu/articles/613>*.
- Kirton, M. J. (Ed.). (1989). *Adaptors and innovators: Styles of creativity and problem-solving*. New York: Routledge.
- Kurtzberg, T. R., & Amabile, T.M. (2000). *From Guilford to creative synergy: Opening the black box of team-level creativity*. *Creativity Research Journal*, 13(3), 285-294.
- Kurzban, R., & Leary, M. R. (2001). *Evolutionary origins of stigmatization: The functions of social exclusion*. *Psychological Bulletin*, 127, 187-208.
- Madjar, N. A., Oldham, G. R., & Pratt, M. G. (2002). *There's no place like home? The contributions of work and non-work creativity support to employees' creative performance*. *Academy of Management Journal*, 45, 757-767.



REFERENCES	
•	Mouritsen, Jan, Hansen, A., & Hansen, C. Ø. (2009) . <i>Short and Long Translations: Management Accounting Calculations and Innovation Management. Accounting, Organizations and Society</i> , 34(6), 738–754.
•	Oldham, G. R., & Cummings, A. (1996). <i>Employee creativity: Personal and contextual factors at work. Academy of Management Journal</i> , 39, 607–634.
•	Pandey, J., & Bohra, K.A. (1984). <i>Ingratiation as a function of organizational characteristics and supervisory styles. International Review of Applied Psychology</i> , 33, 381-394.
•	Perry-Smith, J.E., & Shalley, C.E. (2003). <i>The social side of creativity: A static and dynamic social network perspective. Academy of Management Review</i> , 28, 89-106.
•	Rao, T.V., & Selvan, T. (1992). <i>Strengths and weaknesses of senior executives. Productivity</i> , 33(3), 443-451.
•	Scott, S.G., & Bruce, R.A. (1994). <i>Determinants of innovative behaviour: A path model of individual innovation in the workplace. Academy of Management Journal</i> , 38, 1442-1465.
•	Shalley, C. E., Gilson, L. L., & Blum, T. C. (2000). <i>Matching creativity requirements and the work environment: Effects on satisfaction and intention to leave. Academy of Management Journal</i> , 43, 215–223.
•	Simonton, D. K. (1984a). <i>Artistic creativity and interpersonal relationships across and within generations. Journal of Personality and Social Psychology</i> , 46, 1273–1286.
•	Simonton, D. K. (1992b). <i>The social context of career success and course for 2,026 scientists and inventors .Personality and Social Psychology Bulletin</i> , 18, 452–463.
•	Simonton, D. K. (1994). <i>Greatness: Who makes history and why. New York: Guilford.</i>
•	Schutz, W. (1966). <i>The Interpersonal Underworld. Palo Alto, CA: Science &amp; Behaviour Books.</i>
•	Spekle, R. F, van Elten, H. J., & Widener, S. K. ( 2014 ). <i>Creativity and Control: A Paradox. Evidence from the Levers of Control Framework. AAA 2015 Management Accounting Section (MAS) Meeting. Available at SSRN: <a href="http://ssrn.com/abstract=2480471">http://ssrn.com/abstract=2480471</a>.</i>
•	Tierney, P, & Farmer, S. M. (2002). <i>Creative self-efficacy: Its potential antecedents and relationship to creative performance. Academy of Management Journal</i> , 45,1137–1148.
•	Tschang, T. (2007). <i>Balancing the tensions between rationalization and creativity in the video games industry. Organization Science</i> , 18 (6), 989–1,005.
•	Zabelina, D. L., Robinson, M. D., & Anicha, C. L. (2007). <i>The psychological tradeoffs of self-control: A multi-method investigation. Personality and Individual Differences</i> , 43, 463-473.
•	Zhou, J., & George, J.M. (2001). <i>When job dissatisfaction leads to creativity: Encouraging the expression of voice. Academy of Management Journal</i> , 44(4), 682-696.
•	Zhou, J., & George, J. M. (2003). <i>Awakening employee creativity: The role of leader emotional intelligence. The Leadership Quarterly</i> , 14(4-5), 545-568.

Annexure

Table 1: Norm – Referenced Measures

Creative Ability	Raw Scores			Total Score
	Activity			
	1	2	3	
Fluency	√	√	√	√
Originality	√	√	√	√
Elaboration	×	√	√	√
Flexibility	×	×	√	√

Table 2 : Converting Ability Raw Scores to Normalized Standard Scores (Scaled Scores)

Scaled Scores									Scaled Scores
11	12	13	14	15	16	17	18	19	
Corresponding Raw Scores									
1-6	7	8-9	10	11-12	13-14	15-16	17	18+	√
1	2	3	4	5	6	7-8	9-10	11	
1-3	4-5	6-8	9-11	12-14	15-18	19-23	24-27	28+	
-	1	-	2	3	-	4	5	6+	
<b>Total Scaled Score</b>									√

Table 3 : Criterion- Referenced Creativity Indicators

Verbal Responses (Activity # 1)	Figural Responses (Activity #2 and #3)
Raw Score	Raw Score
..... 1. Richness and Colorfulness of Imagery	.....6.Openness: Resistance to Premature Closure
.....2. Emotions/Feelings	.....7.Unusual Visualization, Different perspective
.....3.Future Orientations	.....8. Movement and/or Sound

**Table 3 : Criterion- Referenced Creativity Indicators**

Verbal Responses (Activity # 1)	Figural Responses (Activity #2 and #3)
Raw Score	Raw Score
.....4.Humor: Conceptual Incongruity	.....9. Richness and /or colorfulness of Imagery
.....5.Provocative Question	.....10. Abstractness of Titles
	.....11. Articulateness in telling story
	.....12. Combination/Synthesis of two or more figures
	.....13. Internal Visual Perspective
	.....14.Expressions of feelings and emotions
	.....15. Fantasy
_____ Total Score	_____ Total
<b>Composite Measures .....</b>	<b>+ ..... Total Indicator Score (Count 1-point for each</b>
<b>Total Scaled Score</b>	<b>“+” and 2 for each “++”)</b>
	<b>= -----Creativity Index</b>

**Table 4: Conversion of Creativity Index to Scaled Score and Related Interpretive Information**

Creativity Index	1-50	51-59	60-70	71-73	74-77	78-84	85+
Creativity Level	1	2	3	4	5	6	7
Verbal Assessment	Minimal	Low	Below Average	Average	Above Average	High	Substantial
% Adults in Level	4%	12%	20%	26%	20%	12%	4%

**Table 5: Correlations of Interpersonal Relation Skills with Employee Creativity**

Interpersonal Relations	Creativity	Pearson Correlation	Sig. (2-tailed)
	NR_fluency	.213**	.000
	NR_Originality	.227**	.000
	NR_Flexibility	.174**	.000
	CR_Verbal Resp	-.142**	.001
	CR_Figural Resp	-.137**	.002
	NR_Creativity	.235**	.000
	Total Creativity	.202**	.000
Inclusion need	CR_Verbal Resp	-.148**	.001
	CR_Figural Resp	-.174**	.000
	CR_Creativity	-.247**	.000
Control need	NR_fluency	.231**	.000
	NR_Originality	.252**	.000
	NR_Flexibility	.247**	.000
	NR_Creativity	.268**	.000
	CR_Creativity	.099*	.027
	Total Creativity	.256**	.000
	Affection need	NR_fluency	.231**
NR_Originality		.313**	.000
NR_Flexibility		.221**	.000
CR_Figural Resp		-.144**	.001
NR_Creativity		.324**	.000
Total Creativity		.297**	.000
Wanted Need		NR_fluency	.186**
	NR_Originality	.233**	.000
	NR_Flexibility	.156**	.000
	CR_Verbal Resp	-.148**	.001
	CR_Figural Resp	-.195**	.000
	NR_Creativity	.241**	.000
	Total Creativity	.206**	.000
Expressed need	CR_Creativity	-.119**	.008

**Table 6: Stepwise regression of employee creativity on Interpersonal Relations**

	F(sig)	R <sup>2</sup>	Adjusted R <sup>2</sup>	Un standard Coefficient		Standardized Coefficients	t	Sig.
				B	Std. Error	Beta		
<b>Total interpersonal behavior</b>								
NR_Creativity	29.205	0.055	0.053	1.107	.154	3.484	7.184	.000
Total Creativity	(0.000)	0.011	0.114	-.992	.137	-3.482	-7.237	.000
NR_Fluency		0.014	0.012	.460	.130	.283	3.530	.000
CR_Verbal Response		0.006	0.005	-.384	.188	-.107	-2.039	.042
<b>Need for inclusion</b>								
CR_Creativity	31.708	0.061	0.059	-.500	.058	-.480	-8.604	.000
NR_Fluency	(0.000)	0.084	0.082	.347	.046	.425	7.530	.000
CR_Verbal Response		0.015	0.014	-.249	.081	-.138	-3.060	.002
<b>Need for control</b>								
NR_Creativity	24.478	0.072	0.070	.049	.007	.402	6.606	.000
CR_Creativity	(0.000)	0.017	0.016	-.149	.048	-.187	-3.080	.002
<b>Need for affection</b>								
NR_Creativity	30.064	0.105	0.103	.865	.199	6.358	4.354	.000
Total Creativity	(0.000)	0.073	0.072	-.760	.198	-6.226	-3.841	.000
CR_Creativity		0.009	0.007	.452	.191	.510	2.364	.018
NR_Flexibility		0.008	0.006	-.118	.055	-.219	-2.145	.032
<b>Expressed interpersonal behavior</b>								
CR_Creativity	16.765	0.014	0.012	-.324	.059	-.317	-5.444	.000
NR_fluency	(0.000)	0.049	0.047	.238	.047	.297	5.102	.000
<b>Wanted interpersonal behavior</b>								
NR_Creativity	57.510	0.058	0.056	.850	.090	4.048	9.429	.000
Total Creativity	(0.000)	0.129	0.128	-.720	.081	-3.824	-8.907	.000