

“The Impact of Need for Cognition on Life Satisfaction of P.G. Students”.

Prerana Huli*, Dr. Vijaylaxmi .A. Aminbhavi**

*P.G. Student, Department of Psychology, Karnatak University, Dharwad, Karnataka State, India.

**Head of Department, Department of Psychology, Karnatak University, Dharwad, Karnataka State, India.

Abstract: This study was conducted to find out the significant difference between high and low need for cognition on life satisfaction of P.G. Students. The sample for the study consisted of 80,40 male and 40 female students studying in the departments of Social Science. The tools that were used are need for cognition developed scale by Cacioppo and Petty (1982) was used to measure the individual tendencies to pursue and enjoy the process of thinking. Satisfaction with life scale developed by Dinner, Emmons, R Larsen and Griffin S. (1985) to assess the Life Satisfaction.

Results revealed that the students with high need for cognition have significantly high life satisfaction ($t = -2.07$; <0.05). Further analysis revealed contribution by demographic variables like parental education and number of siblings have contributed significantly to high need for cognition, and stay in the hostel have a negative impact on student's need for cognition. Two siblings have positive impact on the students need for cognition.

Keywords: Need for Cognition, Life Satisfaction.

I. Introduction

Need For Cognition:

The need for cognition in psychology is a personality variable reflecting the extent to which people engage in and enjoy effortful cognitive tasks.

Individuals who have high need for cognition are the ones who engage in discussions, assessing the ideas and comprehending of problems and solutions. These individuals by their very nature are more likely to involve themselves in the intellectually demanding tasks. Individuals with low need for cognition by their very nature are not really motivated to engage themselves in the intellectually demanding tasks. These individuals rather prefer to process the information heuristically, that is low elaboration (Dole and Sinatara 1998 p. 117).

Need for Cognition is closely related to openness to ideas, typical intellectual engagement and epistemic curiosity. It has also been positively related to Self-esteem and negatively related to social anxiety. Apparently psychological research on need for cognition has been conducted using self-report tests where research participants answered series of statements such as “I prefer my life to be filled with puzzles that I must solve and were scored on how much they felt the statements represented them. The results from the above suggest that people who are high on need for cognition score slightly higher in verbal intelligence tests but not higher in abstract reasoning tests.

Need for Cognition has been incorporated in Epstein dual system theory of judgment called Cognitive-Experimental Self- theory. The theory proposes that people have two information processing system a rational system and a experiential system. The rational system is thought to be logical verbal, and relatively unemotional. The experimental system is thought to be inductive based on image and highly reliant on emotion. A modified version of the need for cognition scale has been used to assess individual differences in the rational system, where as the experiential system has been assessed using a scale called faith in intuition. The results revealed that the two systems are correlated and hence independent of each other.

Need for cognition is in line with the amount of thinking that is involved in making a decision. Irrespective of the level of need for cognition, individuals are vulnerable to the bias in judgment. People low in need for cognition tend to show more bias while the basis is due to relying on heuristic. People high in need for cognition tend to be more affected by biases that are generated by effortful thought.

The research also indicates that individuals high in need for cognition are more susceptible to the creation of false memories associated with certain learning tasks.

A bias associated with low need for cognition is the halo effect, phenomena in which attractive or likeable people tend to be related as superior on a variety of other characteristics example intelligence.

Research has concluded that individuals high in need for cognition are less likely to attribute higher social desirability to more attractive individuals and are high life satisfaction.

Life Satisfaction (LS): is a feel good factor about our personal and professional life. LS is perceived relying on how he/she has measured in relation to economic standing, education level and life experiences. It's important to be satisfied with life because it drives us to have goals, dreams and purpose to surge ahead. Martin Seligman uses a formula for happiness that encompasses the factors that are inclusive of general happiness. The formula is $H=S+C+V$ in this formula H stands for, person's enduring level of happiness, S is the set range or (biological boundaries) and V is the factor under a person's voluntary control. It is possible that is LS could reflect experiences that have affected a person in a positive way. The positive experiences have the ability to motivate people to pursue their goal (Frisch, 1999, Frisch et al 2005). There are two emotions that may affect how people perceive their lives. Hope and Optimism both consist of cognitive processes that are usually oriented towards the reaching of goals and the pursuing of those goals. The satisfaction with life scale is a single scale that is used to measure how one views his/her self-esteem, well-being and overall happiness (Dinner, Sapyta and Suh, 1998).

In the past, Research on personality has been narrowed down into five categories; openness to experience, extroversion, agreeableness and neuroticism Gold-berg. In a study carried out by Deneve and Cooper in (1998), multiple studies were analyzed and certain personality questionnaires that linked subjective well-being and personality also measured. They found that neuroticism was the strongest predictor of life satisfaction and negative effect. While the personality measures openness to experience correlated equally to life satisfaction. According to Seligman, more the people are happy, less they focus on the negative. They also tend to like others more that create an overall happiness, which then correlates to a higher level of satisfaction with their life. However, others have found that life satisfaction is compatible with profoundly negative emotional states like depression (Larson 1981).

It is proposed that overall LS comes within an individual based on the individual's values and what he/she holds important. For some its family, for others it's love, and for some it's money or other material things. Either way it varies from one person to another. The people who personally valued material items were found to be less satisfied overall in life as opposed to people who attached a higher amount of value with interpersonal relationships.

Yuval palgi and Dov Shmotkin (2009) studied old people who were in their early nineties. The experiment talk of how life satisfaction accentuates as people as they become older, they are wiser, and knowledgeable, perceive that life will be better, and also appreciate important things in life. In one of the studies it was also quoted as they grow older they become more religious and LS is also high.

LS is high when we are more social and have more friends as found in one of the studies “Religiosity and Charity” aids in connecting with people and help to build relationships. Compared to people with no friends are tend to have less satisfaction. Culture and Social values also play a very important role in having better life satisfaction and well-being.

Gary L Bowen in his article high lights on “Family life satisfaction, A value based approach”. He examines how family life satisfaction is enhanced by the ability of family members to jointly realize their family values in behavior. In this article it is found that communication and understanding each other are key issues.

Well-being: is one of the important factors in leading happy life. Well-being is the term that should be understood in a broader sense. Single factor like being financially secured or to have lot of friends doesn't make one happy or a have a good well-being. To have a well-being we need to be stress free, we ought to have good physical and mental health; we have to be financially secured and also socially comfortable.

An individual strives for good well-being because it is linked with life satisfaction. Life satisfaction itself is comprehended in a wider sense. Like well-being many factors amount to life satisfaction. We draw satisfaction from what we have with us and also things we like to do.

It is perceived that well-being and satisfaction are crucial for an individual. Perhaps because it determines the quality of life we lead. If the quality of life is not good, then we are lesser satisfied than when we lead a quality life.

Quality of life is inclusive of high Self-Esteem, Self- worth, Life Satisfaction and Well-being. High Self-Esteem or worth makes a person competent, happy both professionally and personally. They perceive life in much positive way than with low self-esteem or worth. Likewise high self-esteem accentuates the life satisfaction when we are free of incompetency, inefficiency and negative attitude. Provided we need to work towards achieving self-worth and life satisfaction.

Hence life satisfaction and high self worth reflects in person's well-being of ourselves, family peers and society . It reflects in physical and mental health, also in our performance both professionally and personally.

II. Review of Literature

A relationship between the need for cognition(nfc) and LS was explored among college students. Both the scales were administered to the undergraduate university students. Results of a correlation and stepwise

multiple regression indicated that currently enrolled students are high in nfc expressed greater life satisfaction than students low in the nfc. This study supports the hypothesis that the nfc is a predictor of LS among college students-Cutinho, Savia, Woolery, Lisa M.

An article by Ed Diener et al, reports the development and validation of a scale to measure global life satisfaction, the satisfaction with life scale, (SWLS). The SWLS is shown to have favorable psychometric properties, including high internal consistency and high temporal reliability. It is noted that the SWLS is suited to use with different age groups and other potential uses of the scale are discussed.

It is assumed that people seek positive self-regard, that is they are motivated to possess, enhance, and maintain positive self-views. The cross-cultural general ability of such motivations were addressed by examining Japanese culture. Anthropological, sociological, and psychological analyses revealed that many elements of Japanese culture are congruent with such motivation. Moreover, empirical literature provides scant evidence for a need for positive self-regard among Japanese. It is argued that the need for self-regard must be culturally variant because the constructions of self regard themselves differ across cultures.

In the similar study on ‘Facebook’ was conducted by Nicole .B. Ellison, Charles Steinfield, Cliff Lampe. They examined the relationship between use of Facebook, the formation and maintenance of social capital . They explored a dimension of social capital that assess one’s ability to stay connected with members of a previously inhabited community, which they call maintained social capital. Regression analyses suggest a strong association between use of Facebook and the three types of social capital with the strongest relationship being to bridging social capital. In addition to usage was found to interact with measures of psychological well-being suggesting that it might provide greater benefits for users experiencing low self-esteem and low satisfaction.

A illustration by R.A Cummins. H.Nistico research into population standards of life satisfaction has revealed a remarkable level of uniformity, with mean values for western population clustering at around three quarters of the measurement scale maximum. This paper proposes that well-being homeostasis is controlled by positive cognitive biases pertaining to the self. Most particular in this regard the positive biases in relation to self-esteem, control and optimism.

In one of the studies conducted by Sebastian Valenzuela et al examines if facebook, one of the most popular social network sites among college students in the U.S is related to attitudes and behaviors that enhance individual’s social capital. Data was collected from a random web survey of college students across Texas (n=2,608). They found positive relationship between intensity of facebook use and students life satisfaction , social trust, civic engagement and political participation.

A Research conducted by suh. Et al reveals the relative importance of emotions versus normative beliefs for life satisfaction judgments was compared among individuals and collectivist nations in 2 large sets of international data (in total, 61 nations, N=62, 446). Among nations, emotions and life satisfaction correlated significantly more strongly in more individualistic nations. At the individual level, emotions were far superior predictors of life satisfaction to norms in individual in individualist cultures, whereas norms and emotions were equally strong predictors of life satisfaction in collectivist cultures.

Authors Shigehiro Oishi et al tested cross-cultural difference in predictors of life satisfaction in study 1 they found that financial satisfaction was more strongly associated with life satisfaction in poor countries. In study 2 they found that self-esteem needs predicted global life satisfaction more strong among people in individualistic nations than people in collectivist nation. The present investigation provides support for the needs and values as moderator mode of subjective well being at the cultural level.

Since its introduction in 1985, the satisfaction with life scale has been heavily used as a measure of the life satisfaction component of subjective well-being. Scores on the SWLS correlate with measures of mental health and to be predictive of future behaviors. It is also been used to examine the subjective quality of life of people experiencing serious health concerns by William pivot and Ed Diener.

III. Methodology

Need For The Study:

Thinking is an act of intellectual activity involving an individual’s subjective consciousness. This study tries to find out how people enjoy thinking or otherwise. The Need for Cognition scale tries to measure the enjoyment in thinking and relate it to Life Satisfaction.

Objectives

- 1) To find out significant difference between students with low need for cognition and high need for cognition on their life satisfaction.
- 2) To identify the demographic factors which significantly contribute to need for cognition and life satisfaction.

Research Problem

- a) Do Students with low need for cognition and high need for cognition differ significantly from each other on their life satisfaction.
- b) Do Demographic factors such as Age, Gender, Birth-Order, Number of Siblings, Students Education, Parents Education, Occupation, Income, Early Background, Religion, Caste, Health Status, Type of Stay P.G Students Contribute Significantly to Need for Cognition and life satisfaction.

Hypotheses:

Based on the above objectives and raised questions following hypotheses are formulated and tested further:

Ha₁: There is significant difference between students with low Need for Cognition and high Need for Cognition on their life satisfaction.

Ha₂: Demographic factors such as Age, Gender, Birth-Order, Number of Siblings, Students Education, Parents Education, Occupation, Income, Early Background, Religion, Caste, Health Status, Type of Stay P.G Students Contribute Significantly to Need for Cognition and life satisfaction.

Data Collection:

In the present study the primary data was collected from social science and science departments. The Quota sample of present study consists of N=80 PG Students, out of whom 40 from social science section and 40 from science .Both the groups consists of equal number of male and female students (20 each). The samples were administered with the Need for Cognition and Life Satisfaction scales.

Tools:

Need for Cognition Scale developed by Cacioppo and Petty in (1982) was used to measure individual’s tendencies to pursue and enjoy the process of thinking that is for their Need for Cognition.

Life Satisfaction scale developed by Diner, Emmons, R Larsen, and Griffin S (1985) used to measure Life Satisfaction of P.G students.

Statistical Techniques Applied ‘t’ test is applied to determine the significant difference between students with low need for cognition and high need for cognition.

Step-Wise Multiple Regression Analysis, This analysis is performed to determine the contribution of demographic factors to the need for cognition and life satisfaction. This is done with the help of computer package.

IV. Results and Discussion

Table 4.1 N, Mean and Standard deviation for Life Satisfaction score, students with high and low need for cognition.

SL.NO	Variable	Group	N	Mean	Standard Deviation
1	Life Satisfaction	Students with high need for cognition	33	52.71	8.70
		Students with low need for cognition	47	48.10	10.51

The above table lucidly illustrates that the groups vary from each other. The students with high need for cognition, ie mean score is 52.71 and the standard deviation is 8.70.

Students with high need for cognition have above average scores which indicates that there information processing is really efficient. Individuals, who have high need for cognition, are likely to be more open mind to new experiences and ideas. Apparently students are students are expected to have high scores on need for cognition because the scores can be associated with their academic achievement. (Sadowiski and Gvlgoz, 1996).

Students with high need for cognition have high life satisfaction. To support the above results a study conducted by cutinno, savia et al reveals that the enrolled students who were high in nfc expressed greater life satisfaction. Than students low in nfc. It also support the hypothesis that nfc is predictor of LS among college students.

Therefore the students high on nfc have there life is close to ideal and excellent, and they are satisfied with their life. Conversely students with low nfc expressed low life satisfaction. The mean score is 48.10and 10.51 standard deviation. Students with low nfc who have below average scores would not do academically well. They don’t enjoy the thinking process and their information processing is poor . To support the above result : Two studies conducted by Megan .E. Dwyer (2008), revealed that there was a statistically significant relationship between nfc and G.P.A.

Hence students with low nfc showed less life satisfaction. They were generally not happy and less satisfied.

Table 4.2 Mean Deviation, Standard Error of Mean and t-values for life satisfaction.

SL.N O	Variable	Group	Mean Deviation	Standard Error of Mean	t-value
1	Life Satisfaction	Students with high need for cognition	-4.61	2.22	-2.07*
		Students with low need for cognition.			

A perusal of Table reveals that students with high need for cognition and low need for cognition differ significantly from each other in their life satisfaction.

The students with high need for cognition have significantly higher life satisfaction. They have better academic achievement, their attitude towards life is positive. Their well-being is good. Their self worth is really high. They take up intellectually demanding tasks. The students with high nfc value family and friends more than material things. They are generally intrinsically motivated to face the challenges. It was predicted that individual with a high nfc would be less likely to loaf on a cognitively engaging task.

On the other hand the students with low nfc have significantly low life satisfaction. They do not perform academically well. Their attitude towards their life is negative most of the times. Low life satisfaction affects their health negatively. They are not motivated intrinsically; they need to be motivated by others. They avoid engaging in intellectually demanding tasks. They would enjoy materials things more.

Table Showing results of Step Wise Multiple Regression Analysis of the factors significantly contributing to Need for Cognition

SL. NO	Factors	Beta co efficient	Standard Error	r ²	t- Value
1	Parents Education	7.83	2.40	.130	3.25**
2	Students Staying at Hostel	-6.14	1.99	.079	-3.09**
3	Number Of Siblings	4.73	2.05	0.52	2.30**

Overall Adjusted r² = .23

F ratio = 8.92; P <0.01

*P<0.05; Significant.

**P<0.01; highly Significant.

An observation of the above table reveals that out of several factors Parents Education, Stay in Hostel and Number of Siblings significantly contributed to 0.23% of variance on NFC of P.G. students, which is found to be highly significant(F= 8.92;P<0.01.)

Further those students who are staying at hostel are found to have significantly low NFC (-3.09;P<0.01) compared to their counterparts.

The students who have two Siblings are found to have significantly high NFC (t=2.30; P<0.05). Parents Education and Number of Siblings have highly significantly contributed to the variance on NFC. The students with graduated parents are perhaps showing high NFC due to encouragement and facilities provided by the parents to explore and experience the knowledge world.

A research conducted by suh, et al reveals the relative importance of emotions versus normative beliefs for normative life satisfaction judgments was compared among individualistic and collectivist nations. Among nations, emotion and life satisfaction correlated significantly more strongly in Individualistic nations. At the individual level, emotions were far superior predictors of life satisfaction to norms in individualistic culture. Norms and emotions were equally strong predictors, of life satisfaction in collectivist culture.

From the above study we can draw inference that across cultures emotions played important role in life satisfaction. Similarly parents education, their affections and positive emotions have led to high NFC.

Students Staying at Hostel have low NFC because of the various reasons like they miss the family, their source of happiness only will be friends and teachers. They might have not been able to adjust with friends and also food plays a important role. When they indulge too much with friends it might have affected their studies.

A study conducted by Sebastian Velenzuela et al, examines if Facebook , one of the most popular social networking sites among college students. In US it is related to attitudes and behaviors that enhance individual social capital. They found positive relationship between intense use of Facebook and students' life satisfaction, social trust, civic engagement and political participation.

Students with two siblings have higher NFC because they got facilities that they required and parents could take greater care of them. They equally encouraged their children to pursue higher education.

In a study conducted by Diner, Marisa, The research data from 31 nations were collected on Self-esteem, life satisfaction, satisfaction with specific domains like Family, Friends and Finances. The association among these dimensions varied across nations. Financial satisfaction was a stronger correlate of life satisfaction in poorer

countries. It was found that Life satisfaction ratings except for financial satisfaction varied between slightly positive and fairly positive. Hence family plays important role in life satisfaction.

V. Conclusions:

Students with high need for cognition have significantly higher Life Satisfaction compared to students with students low need for cognition. Students with high life satisfaction have their life close to ideal and excellent. They enjoy thinking process. Students with low satisfaction don't enjoy thinking process, they are less satisfied with their life.

Students whose parents have completed degree level education and those students who have two siblings have high need for cognition. Perhaps students with graduated parents and two siblings are contributing to high need for cognition because they have received the required facilities from their parents and their parents took greater care of them. Compared to the students staying at hostel. It could be because students may not be have had access to all the things they required and may have over indulged with friends.

Social Implications:

The results imply that there is need to improve the need for cognition in order to enhance the life satisfaction of students.

Further interventions through counseling can be provided to students to enhance the need for cognition.

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