

January-2018

Volume-9- Number-1

ISSN 0976 9218

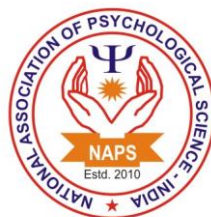
Indian Journal of Psychological Science

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The Official Publication of:

National Association of Psychological Science

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Email: mynaps@gmail.com Phone: 91-9417882789

Does Empathy Mediate the effect of Theory of Mind on Prosocial Behaviour? An exploratory study on male and female college students

Asmita Karmakar Atanu Kr Dogra***

Abstract

Prosocial behaviours are a broad category of actions covering behaviours meant to benefit others; for example, helping, volunteering and sharing. Pro-sociality is essential for the well-being of social groups. And hence, identifying factors that could foster pro-sociality is important. Empathy, the ability to feel and share another person's emotions has long been associated with pro-social behaviour. However, a related but distinct construct Theory of Mind, which is also at the core of social cognition, has not been assessed for its possible contributions to prosocial behaviour. Theory of Mind (ToM) refers to the ability to attribute mental states to the self and others. Present study aimed to find out whether the impact of ToM and sex, if any, on prosocial behaviour is mediated by empathy, among college students. Stratified purposive sampling was followed and total 297 undergraduate college students (150 males and 147 females) were selected for the study. Findings of mediated regression analysis reveal that different dimensions of empathy (Perspective taking, Empathic Concern and Personal Distress) mediate the association of Theory of Mind (ToM) with prosocial behaviour. This study provides some preliminary evidences in line of research concerning how social cognition might influence prosocial behaviour.

*About Authors : *Junior Research Fellow, Department of Psychology, University of Calcutta*

***PhD, Assistant Professor, Department of Psychology, University of Calcutta*

Introduction:

Prosocial behaviours are a broad category of actions covering behaviours meant to benefit others; for example, helping, volunteering and sharing (e.g., Batson, 1998; Schroeder, Penner, Dovidio & Pilliavin, 1995). Further, prosocial behaviours are interpersonal acts that involve a benefactor and a recipient, who may be a single person or a group, or even an organisation (Eisenberg & Mussen, 1989). The term prosocial behaviour is often used synonymously with other terms, for e.g., helping behaviours, which have been measured in experimental studies. Additionally, altruism and helping have been used as synonymous terms for prosocial behaviours; however, these terms can actually be classified as different types of prosocial behaviours (Batson, 1998). For the purpose of the current study, prosocial

behaviour, in the broadest sense, includes both the terms helping behaviours and altruistic behaviours, and also the corresponding actions that are included within these. More specifically, examples of prosocial behaviours that are addressed in the current study include such things as helping a person (e.g., with homework), volunteering, donating money or time, aiding a stranger in need- such as holding an elevator door for someone (Rushton, Chrisjohn & Fekken, 1981).

Prosociality is central to the well-being of social groups across a range of scales. The concept of prosocial behaviour and its psychological foundations are extremely important in furthering research and practice in a number of fields, including education, social work, criminal justice and law. The concept is also key to understanding philanthropy.

The role of cognition and emotion in altruistic behaviour has been a topic of debate for centuries. Throughout the years, various researchers have questioned why people do/ do not act prosocially (e.g., Batson, Harris, McCaul, Davis & Schmidt, 1979; Eisenberg et al, 1999; Latane & Darley, 1970, etc). Research concerning sex difference in prosocial behaviour has not been very conclusive. However, majority of studies have indicated that females are slightly higher in prosocial behaviour than males (Eisenberg, Fabes & Spinrad, 1998).

Prosocial behaviour has long been associated with empathy (for e.g., Batson & Coke, 1981; Batson & Shaw, 1991; Dovidio, Allen & Schroeder, 1990). Empathy has many different definitions that encompass a broad range of emotional states, including caring for other people and having a desire to help them; experiencing emotions that match another person's emotions; discerning what another person is thinking or feeling; and making less distinct the differences between the self and the other. It is also the ability to feel and share another person's emotions. Even though empathy has been continually linked with prosocial behaviours, the research on how it impacts prosocial behaviour has not been much informative.

Empathy and Theory of Mind (ToM) are distinct but related constructs. Premack and Woodruff (1978) introduced the term "theory of mind" to mean the ability to impute mental states to the self and others. From the beginning of the nearly twenty-five-year modern history of the notion of ToM, there has been the assumption that the ability to explain and predict behaviour by attributing mental states to agents is functional in the organization of social behaviour (Moore & Frye, 1991). On the other hand, empathy is defined as the "reactions of one individual to the observed experiences of

another". Belief understanding can be served by cognitive ToM and emotion understanding can be served by emotional ToM (Dvash & Shamay-Tsoory, 2014). ToM and Empathy are distinct in that ToM involves belief understanding, which is necessary, but not sufficient for successful social communication. Belief understanding does not guarantee emotion understanding; and emotion understanding does not guarantee empathy, and empathy might not guarantee kindness to people (Davis & Stone, 2003). Emotion sharing is served by empathy. Thus, empathy may actually serve as the link and bridge the gap between understanding someone else's situation (ToM) and responding kindly to them (Prosocial behaviour). This study aims to find out whether the impact of ToM and sex, if any, on prosocial behaviour is mediated by empathy, among college students.

Method:**Sample:**

Stratified purposive sampling was followed in this study. Total sample size was 297 (150 males and 147 females). For inclusion in the study, participants were required to be males or females of age between 19 to 22 years, residing in Kolkata for at least the last 5 years, to be unmarried, of Hindu community, and from nuclear family, having family income of 72K-100K per capita per year. Also, they were required to be the students of 1st to 3rd year of Graduate courses of Govt. or private coeducation colleges of Kolkata. Those with history of any chronic illness, psychiatric illness, physical handicaps or acute illness that may have residual effects were excluded from the study. Also, those not willing to participate in the study were excluded.

Procedure:

Stratified purposive sampling was followed in this study. However, for zonal representation of different undergraduate

colleges of Kolkata, the list of colleges spread over Kolkata were prepared and a zone wise mapping were done. Two colleges from North, South, East, West (Howrah) and Central Kolkata were selected. The college authorities and the student unions were approached and through them the students were contacted. They were asked to volunteer for the study and the nature of the study was explained to them. Those who agreed and met the criteria defined for the study were included as prospective subjects. 297 students (150 males and 147 females) were finally chosen for the study. They were administered Reading Mind in the Eyes Test (Baron-Cohen et al., 2002) Interpersonal Reactivity Index (Davis, 1983) and Self-Report Altruism Scale (Rushton et al, 1981).

Statistical analysis:

Descriptive statistics has been done to show the nature of the data. Mean and Standard Deviations of all the variables were calculated separately for men and women and the total sample.

Regression Analysis:

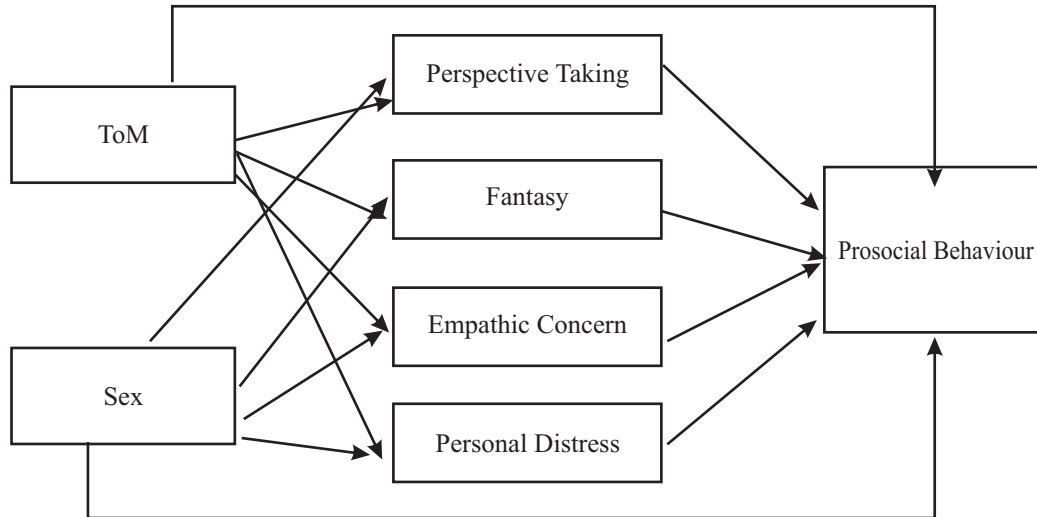
To test for direct effects of the predictors and mediation, sequential regression analysis was conducted following Baron and Kenny's (1986) approach. To examine the multivariate relations among the measures mentioned before, Sequential regression analysis was conducted. First, it was intended to examine whether different domains of empathy mediated the relationship between ToM and prosocial behaviour among college students. Second, it was intended to know whether domains of empathy mediated the relationship between sex and prosocial behaviour among college students.

According to Baron and Kenny (1986), to conclude that there is evidence of a mediated relationship, the following conditions must be met:

- a) There must be significant relations between the predictors and the outcome.
- b) There must be significant relations between the predictors and the mediators; and
- c) There must be significant relations between the mediators and the outcomes when all of the variables are entered into the same equation, and these relations must reduce the direct effects of the predictors on the outcomes.

First, simple linear regression was done considering ToM and Prosocial behaviour as predictor and outcome respectively (Condition I). Once this effect was established, domains of empathy (Perspective Taking - PT, Fantasy - F, Empathic Concern - EC and Personal Distress - PD) were regressed on ToM to test the first links in the hypothesized mediational sequence (Condition II). Second, simple linear regression was done considering Sex and Prosocial behaviour as predictor and outcome respectively (Condition I). Once this direct effect was established, domains of empathy were regressed on Sex to test the first links in the hypothesized mediational sequence (Condition II). Finally, the last analysis involved simultaneous regressions for prosocial behaviour that included both ToM (predictor) and domains of empathy (mediators). Evidence for mediated regression would include a direct effect of the mediators on the outcome and diminishment of the direct links between the predictors and outcome in these final equations (Condition III). Results are presented in Table III (a, b & c). However, Sex was not found to have any effect on any domain of empathy and thus, further analysis for mediation was not computed for sex.

Figure I: Model showing the hypothesized relations between all the variables to be tested in this study:



Results:

Table I: Mean and Standard Deviations of scores of Men and Women and total sample considering all the variables:

Variable	Men		Women		Total	
	Mean	S.D	Mean	S.D	Mean	S.D
ToM	20.87	5.79	21.56	3.34	21.21	4.56
Perspective Taking	18.52	5.17	20.13	4.38	19.35	4.77
Fantasy	16.58	4.38	17.00	5.45	16.79	4.91
Empathic Concern	17.99	6.61	19.69	2.23	18.84	4.42
Personal Distress	14.73	4.21	15.59	3.21	15.16	3.71
Prosocial Behaviour	45.61	5.37	49.91	4.43	47.76	4.9

Table II: Product-moment correlation value among all the variables for total sample:

Variable	ToM	Perspective Taking	Fantasy	Empathic Concern	Personal Distress	Prosocial Behaviour
ToM	1					
Perspective Taking	.367*	1				
Fantasy	.050	.190*	1			
Empathic Concern	.504*	.233*	.036	1		
Personal Distress	.195*	.150*	.225*	.295*	1	
Prosocial Behaviour	.412*	.331*	.074	.221*	.170*	1

Correlations among all the measures are shown in Table II. Significant bivariate relations between ToM, Perspective Taking (PT), Empathic Concern (EC), Personal Distress (PD) and Prosocial behaviour showed a predictable pattern.

Table III: Table showing results of sequential regression analysis:**Table IIIa:**

Step I	Adjusted R ²	Beta	Significance
ToM	0.167	0.412	Significant
Step II			
ToM		0.336	Significant
PT	0.201	0.207	Significant

Table IIIb:

Step I	Adjusted R ²	Beta	Significance
ToM	0.167	0.412	Significant
Step II			
ToM		0.330	Significant
EC	0.169	0.153	Significant

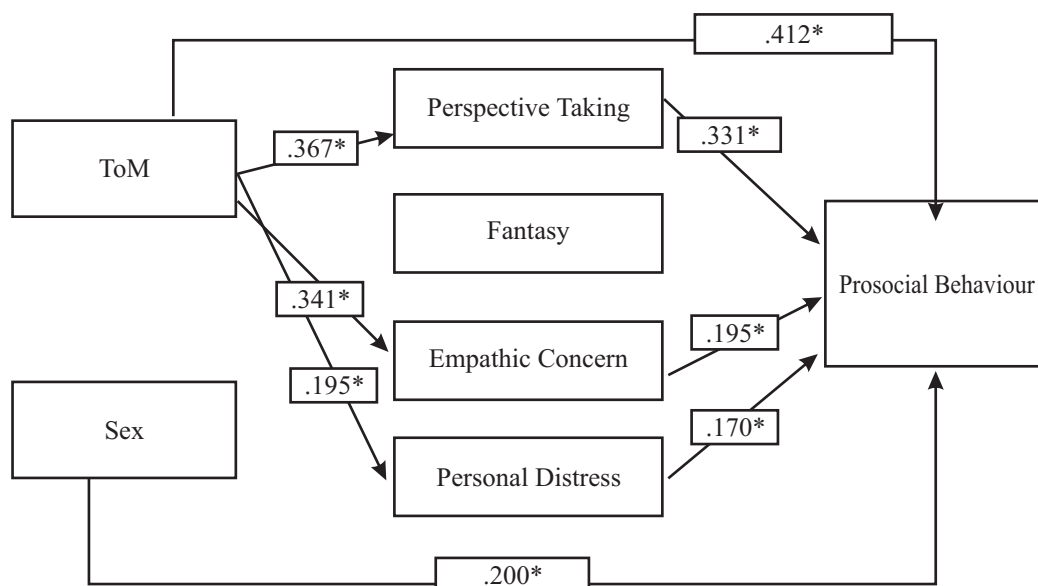
Table IIIc:

Step I	Adjusted R ²	Beta	Significance
ToM	0.167	0.412	Significant
Step II			
ToM		0.387	Significant
PD	0.173	0.143	Significant

Significant-p<.05

These tables present the results of sequential regression analyses. Effect of the predictor (ToM) on the outcome (prosocial behaviour) is found under the “Model I” column. “Model II” column presents the result of the full equation, i.e., when the mediators (PT, EC, PT) are also included in the regression equation. Results show that ToM significantly predicts prosocial behaviour. Perspective Taking had positive effect on prosocial behaviour and the direct

relation of ToM and prosocial behaviour reduced in this equation. Empathic Concern and Personal Distress, too had positive effect on prosocial behaviour and the direct relation of ToM and Prosocial behaviour reduced in these equations. Thus, Perspective Taking, Empathic concern and Personal Distress are found to partially mediate the effect of ToM on Prosocial Behaviour.

Figure II: Model showing the relation between all the variables of the study:

In the figure above, Standardized regression coefficients (beta) among all predictor variables and outcome variable are presented individually. ToM was found to be the strongest predictor of prosocial behaviour ($b=.412$, $p<.001$). ToM was also found to predict Perspective Taking ($b=.367$, $p<.001$), Empathic Concern ($b=.341$, $p<.001$) and Personal Distress ($b=.195$, $p<.05$). Sex did not predict any of the domains of empathy i.e., the mediators. Perspective Taking ($b=.331$, $p<.001$), Empathic Concern ($b=.195$, $p<.05$) and Personal Distress ($b=.170$, $p<.05$) were found to predict Prosocial behaviour.

Discussions

Findings of this study reveal that Theory of Mind (ToM) has significant effect on Prosocial Behaviour and different dimensions of empathy (Perspective taking, Empathic Concern and Personal Distress) partially mediate this association. Here, Prosocial behaviour has been conceptualised as “voluntary behaviour that benefits others/ promotes harmonious relations with others” (Eisenberg & Miller, 1987, Hay, 1994). It encompasses broad range of behaviours like sharing, helping, volunteering. Making inferences about others' affective states is crucial for prosocial behaviour and this is a prerequisite for basing one's responses on these inferences (Hoffman, 1984). According to the Decision Making Perspective (Latane and Darley, 1970) perceiving the need of the target person is the first crucial step in the process leading to help a person in distress. ToM, i.e., the ability to attribute mental states, such as desires, intentions and beliefs, to other people to explain and predict their behaviour, (Frith & Frith, 1999) serves these functions and hence might be important for prosocial behaviour.

From other perspective, ToM constitutes a central aspect of social cognition which is regarded to be a highly specialised,

human-specific skill that forms a crucial prerequisite to function in social groups (Adolphs, 2003). Prosocial behaviour requires organization of action with respect to others' goals (Moore & Macgillivray, 2004). The function of ToM is to organize complex social behaviours. Thus, ToM may be required for prosocial behaviour. In an interesting line of research, Sally and Hill (2005) found that the cognitive ability to infer the mental states of others such as ToM effects fairness-related behaviour in a positive manner. Engaging in social interactions with others requires constant observations and drawing inferences concerning other's mental states. Advanced capacity of mindreading is needed for that. However, ToM cannot, by and in itself, be enough for prosocial behaviour. While it can lead to helping behaviour, it can lead to manipulative behaviour as well. Research into Antisocial Personality Disorder (ASPD) has revealed that the lack of empathy is a central personality characteristic of individuals suffering from sociopathy; still, they are good at manipulating others, at least in short terms (Hare, 1993). Representing the diversity of mental states of self and other cannot be sufficient. While it can foster cooperation, it can promote manipulation as well in that it would enable individuals to gain advantageous positions or to manipulate others in order to attain own goal. In other words, given that in any social situation, both cooperation and manipulation of the target are possible, it must be that along with the representation of the mental states, or conditions of others, there is a desire to act in their favour. If this desire is not there, the actor would act in a way that would be of best interest to himself/ herself only. To put it in other words, the individual must be able not only to represent other's mental states/ beliefs/ desires, but also to care about them, to feel for them. There must be some mechanism by which the represented state of others triggers sufficient

motivational power in the observer that the observer relinquishes his/ her selfish motives. Thus, the findings of this study show that empathy may provide this motivational power and act as a mediator between ToM and prosocial behaviour.

Empathy may also serve to “feel into” other's situation. One way could be simulation, which involves imagining oneself in another's situation (e.g., Decety & Sommerville, 2003). Another possibility is that the observer can feel her way into the experience of and feel for the other person because he/she identifies with that person's attitudes. Whether via simulation, identification or some other mechanisms, one takes the other's perspective and infers the other's affective state, which can trigger affective responses and thereby motivate prosocial behaviour (Batson, Fultz & Schoenrade, 1987; Feshbach, 1978). Smith and Mackie (2007) have argued in similar lines stating that, humans are often motivated by feelings of empathy to relieve distress of another person without regard to personal rewards and costs. Also, the Empathy-altruism hypothesis suggests that people experience two types of feelings when they see a person in distress, personal distress (anxiety and fear) or empathic concern (sympathy and compassion). Personal distress motivates them to help for egoistic reasons, aiming to reduce actor's negative feelings (negative state-relief) and empathic concern on the other hand creates altruistic motivation where the actor helps to reduce the distress of a person. Eisenberg et al (1989) using path analysis, obtained findings consistent with this. Also, investigators have suggested that empathy triggers the development of internalized moral reasoning reflecting concern for other's welfare (Hoffman, 1987) and primes the use of other-oriented moral cognitions (Eisenberg, 1986).

The study also found that female sex has a positive effect on Prosocial Behaviour. Among the characteristics that people attribute more frequently to females than to males is the tendency to care, to help. Sociologists like Parsons & Bales (1955) have attributed differences in males' and females' behaviours to variations in the traditional roles of the two sexes. According to them, women are socialised to assume an expressive role, i.e., to facilitate interpersonal harmony within the family. Thus, to fulfil their role functions effectively, females, but not males, must be socialised to be nurturant, sympathetic and empathic. Also, in a country like India, where collectivism prevails, social construction of self for women is relational. They are taught to be affiliating with close others, maintaining connectedness and blending the self-other boundary (Singelis, 1994). In line with this, Baumrind (1980) found that girls are more prosocial and empathic than boys. Hall (1978) found in an extensive review that females were better nonverbal decoders than males. Borke (1973), Hudson (1978) found that females score higher on affective role taking.

Conclusion

The study suggests that different dimensions of empathy (Perspective taking, Empathic Concern and Personal Distress) partially mediate the association of Theory of Mind (ToM) with prosocial behaviour among college students. Identification of the factors that can nurture prosocial behaviour is important because it can work as the starting point in research aiming at understanding what can enhance prosocial behaviour. This study provides some preliminary findings in this line. However, this study is not without limitations and it should be interpreted in light of these limitations. One such limitation is that the tools used were self-report measures. In future research, experimental social research

employing real-time measures of prosocial behaviour and empathy can be beneficial.

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Exploring the Relationship Between Stalking and Self Esteem of Adolescents

Payal Kanwar Chandel Palak Rathore***

Abstract

Stalking involves a persistent course of conduct or activities by an individual which are projected to maintain contact with or exercise power and control over another individual. Self-esteem refers to the self-confidence that an individual brings for himself, it is the judgment of how an individual feel about himself. The present investigation is carried out to examine the pattern of relationship between stalking and self-esteem of adolescents. The sample comprised of 200 university students, out of which 100 were males and 100 were females. It was found that there exists a negative correlation between stalking and self-esteem, which was tested using Pearson's correlation between the two variables. Other demographics were also tested and it was found that there exists a significant difference between self-esteem of hostellers and non-hostellers. Similarly significant difference was found between stalking of hostellers and non-hostellers and joint and nuclear families.

Keywords: *Adolescence, self-esteem, stalking, violent behavior and harassing behavior*

*About Authors : *Associate Professor, AIBAS, Amity University Rajasthan*

***Student, AIBAS, Amity University Rajasthan*

Introduction

Self-esteem is a self-confidence that an individual brings for himself, it is how an individual feel about himself. Self-esteem is made up of dissimilar opinions, thoughts, feelings and basically different view about our own self. People can think about themselves from both the side i.e. negative or positive. Self-esteem of an individual can fluctuate, it can rise or sometimes decrease. They can build a negative as well as positive image about themselves. But when an individual have a clear viewpoint of his own self-esteem, he can easily progress his self-esteem.

Morris Rosenberg (1965) defines self-esteem as "totality of the individual's thoughts and feelings with reference to himself as an object", while Coopersmith (1967) defined it as "positive and negative attitudes toward oneself."

Types of self esteem

Low self-esteem – people who have low self-esteem, does not value themselves, have trouble in trusting themselves, feel unfortunate, and feel uncertain, not so assertive, face problem in decision making, face problem in protecting themselves.

High self – esteem – people who have high self-esteem, accept and worth themselves. They feel better than someone, inspire themselves, and feel safe. They love themselves as they are, feel confident in social meetings, more ambitious, more energetic. They are dissimilar from people who have low self-esteem.

Theories based on self-esteem:

Theories may include **Abraham Maslow's** theory of motivation. This theory was postulated in 1970. According to this theory an individual will go to the higher level needs only

once his lower level needs are fulfilled thus it is also called need hierarchy theory.

- Physiological needs, such as the necessity for food, water, safety, and security.
- Safety needs, such as feeling safe and secure.
- Needs for social communication, such as the need to belong.
- Needs for esteem, elaborate which include the need for respect from oneself and the others.
- Self-actualization, or realizing one's full potential.

A strong level of self-esteem can make an individual feel better and can lift up the confidence of a person that can do many things as most people do. A high level of self-esteem can make an individual feel empowered and perhaps, even improve your social relationships. A highly motivated person can increase his self-esteem. If an individual do not have the right level of motivation, then he will not have any need of self-esteem to be able to reach his goals.

William James's (1890) stated a theory of self-consciousness in his book Principles of Psychology. This theory gives the details of self-esteem which is expressed as the ratio of an individual's actual behavior to their pretensions.

Stanley Coopersmith's(1967) self-esteem theory defined that recent belief is that self-esteem is directed in early childhood with a foundation of unconditional love, trust and safety impacted on a life growth by a combination of positive and negative evaluation.

studied the connection between middle school students' experience with cyberbullying and their level of self-esteem and the study initiated that students who experienced cyber bullying, both as an offender and a victim had

significantly lower self-esteem than who had slight or no experience with cyberbullying.

Hazelwood & Koon-Magnin (2013) stated that in spite of growing concern among legal scholars some criminologist, the understanding of cyber stalking and cyber harassment legislation in the United States remains limited. Using a qualitative approach, this research work explored cyber stalking and cyber harassment. Brewer & Kerslake(2015) found the impact of self-esteem, empathy and loneliness on the cyberbullying victimization and perpetration. Standard several regressions exposed that together, loneliness, empathy and self-esteem projected levels of cyberbullying victimisation and execution. Self-esteem was a significant person predictor of perpetration and cyberbullying victimisation, such that people with low self-esteem were most likely to report experience of cyberbullying. Empathy was a significant person interpreter of cyberbullying execution, such that as empathy reduces and due to the reduction of empathy likelihood of cyberbullying execution rises. These findings show that self-esteem and empathy oriented interventions may positively address cyberbullying behaviour.

Ireland (2002), studied about social self-esteem relates to self-reported bullying behavior among adult prisoners. It explores both level of self-esteem and participants certainty of their self-esteem. There were no significant differences among bully categories in total self-esteem scores. In four categories the prisoners were compared i.e. victims, bullies, those who reported both bullying others and being victimised, and those who were not involved in bullying behaviour. Men reported significantly higher levels of self-esteem than the women. There were no significant sex or bully category differences in certainty of self-esteem. Self-esteem was found to include a number of individual components that differed between the sexes.

Drennan, Brown, Mort, Gillian, & Mort(2011), studied about the neglected negative effect of mobile bullying on young consumers and to expand the understanding of the pervasive impact of enhanced mobile communication and further it was founded that both genders experience of mobile bullying and that level of self-esteem were founded to have a direct effect on overall wellbeing of an individual.

Criminal action consisting of the recurring following and harassing of other individual. Stalking is distinctive form of criminal action composed of a sequence of activities that taken individually might constitute legal behaviour. In many conditions, cases of stalking and harassment will come in the explanation of 'domestic violence'. Cases including stalking and harassment can be harder to prosecute. Their nature are likely to require sensitive handling, especially with regard to victim care.

Stalking involves a persistent course of conduct or activities by an individual which are projected to maintain contact with or exercise power and control over another individual. These actions can cause loss of control, distress, fear or harassment to another individual and occur more than once. Stalking can include threats or sexual innuendo and the stalker usually tries to intimidate or induce fear in the individual they are stalking. The individual being stalked may only realise they are being stalked once they identify a pattern of strange or suspicious incidents happening on regular basis. The incidents can be as follows: disturbing mobile calls, messages, disturbing messages on social media as in on Facebook, whatsapp, twitter, Instagram etc. unwanted gifts and letters from strangers. Followed by unwanted people on street, malls, offices etc. violated a restraining order. Harmed your new partner. Broke into home etc.

Anyone can be a victim of stalking. People who involve in stalking behaviour do not necessarily need to be linked to the victim. People need to know that a person is not responsible for the behaviour of the stalker and that should not be blamed in any way. If an individual a victim of stalking, then he should report it to the police so that there can be an investigation. A victim of staking faces incidents such as: followed by someone, blank or false calls, unwanted emails, letters, texts etc. left unwanted gifts for the victim and threatened by someone.

Ostermeyer, Friedman, Sorrentino, & Booth(2016) stated three widely known stalker classifications assist in categorizing stalkers, which allows for better management of violence risk. Although 80% of stalking is done by men, women also engage in stalking, and their violence risk should not be underestimated. Juvenile stalkers do exist and juvenile stalking is also associated with violence. Clinicians can become a victim of stalking and may become victims of stalking by proxy, a special type of stalking behavior where the stalker involves other people or agencies to communicate with or track their victim. A careful stalking violence risk assessment is essential in the intervention and risk management process.

Lyndon, Bonds-Raacke, & Cratty (2011) studies to examine that whether individuals obsessively harass or monitor their ex-partners on Facebook, Twitter etc and whether those individuals would also engage in Obsessive Relational Pursuit and Cyber Obsessional Pursuit, which categories of stalking and cyber stalking. The study was based the ways they communicated with their ex-romantic partners using Facebook. This result in three factors that are: Covert Provocation, Public Harassment, and Venting. Each grouping of Facebook harassment was linked to perpetration of COP and ORI. Participants who are involved

in COP were almost six times greater likely to also effect ORI. If participants admitted to engaging in some types of stalking behaviours. Then they will do so online, offline, and on Facebook.

Heckels & Roberts(2010) it gives a review about the characteristics of stalkers and victims of stalking, examine the behaviour carried out by stalkers and look at some of the responses to stalking. The chapter will begin with a historical review of the concept of stalking.

Amar(2007),this study sought to understand behaviors that college women identify as stalking and researcher founded that the stalking is a significant public health and criminal justice issue. Lack of clarity exists about which behaviors constitute stalking or harassment. This study sought to understand behaviors that college women identify as stalking.

Southworth, Finn, Dawson, Fraser, & Tucker(2007),this research note describes the use of a broad range of technologies in intimate partner stalking, including cordless and cellular telephones, fax machines, e-mail, Internet-based harassment, global positioning systems, spy ware, video cameras, and online databases. The concept of "stalking with technology" is studied, and the requirement for an expanded definition of cyber stalking is presented. Legal matters and advocacy-cantered responses, including training, legal remedies, public policy issues, and technology industry practices, are discussed.

Haron & Yusof(2010), this study employs the qualitative approach in exploring the phenomenon of cyber stalking in Malaysia. It was found that that the factors contributing to cyber stalking include love obsession, love affairs, flirting, and revenge. Four kinds of cyber stalking are discovered from the study are intimidating, harassing, bullying and

impersonating profiles. Cyber stalking victims experienced behavioural and psychological effects. These effects are depression, anxiety, isolation and extreme cautious of their surroundings. In facing the phenomenon, they developed strategies such as confiding with family members, close and trusted friends for support. An optimistic effect of being cyber stalked is the tendency to be more alert during online. A victim should be very careful in sharing their personal information through the social networking sites like Facebook, Twitter etc.

Methodology

Sample:

Non-probability sampling method is used in this research i.e. the samples are collected in a route that does not give chances of being nominated.This research is conducted on a sample of 200university students further divided into 100 males and 100 females further classification done on the basis of gender, residence and family type. The age group of the sample was 17 – 20.

Tools Used

Stalking Behavior Checklist:This checklist has 25 items further divided into two sub scale. The first subscale, referred to as the Violent Behavior subscale, includes items 1–12. The second subscale includes items 13–25, denoted to as the Harassing Behavior subscale. The range of scores for the checklist is 25 to 150. Higher scores are indicative of subject being victim of violent and harassing behaviors respectively.

Self Esteem Scale:The Rosenberg self-esteem scale (RSES), developed by sociologist Dr. Morris Rosenberg, and is a self-esteem measure widely used in social-science research. It was developed in year 1965. It has 10 items, the range of scores is 0-40 where, and a score less than 15 may indicate a problematic low self-esteem. The RSES is designed similar to social-survey questionnaire.The reliability and validity

of the scale is considerably high. It has a reverse scoring for item no. 2,5,6,8 and 9.

Hypothesis

H1 There would be no significant relationship of males and females on the measures of self-esteem.

H2 There would be no significant relationship of hostellers and non-hostellers on the measures of self-esteem

H3 There would be no significant relationship of joint and nuclear families on the measures of self-esteem

H4 There would be no significant relationship of males and females on the measures of stalking and its sub scales

H5 There would be no significant relationship of hosteller and non-hosteller on the measures of stalking

H6 There would be no significant relationship of joint and nuclear families on the measures of stalking

H7 There would be no significant correlation between self-esteem and stalking.

Result

TABLE 1: Showing mean, SD and t values among males and females on the measures of self esteem

GENDER	N	Mean	Std. Deviation	Df	T
MALE	100	29.55	4.41	198	1.19
FEMALE	100	28.85	3.89		

Table shows mean, SD and t values among males and females on the measures of self-esteem. Result shows that for self-esteem mean of males (mean= 29.55, SD=4.41) is found to be greater

than the mean of females (mean = 28.85, SD = 3.89) and the difference between the two (t value = 1.19) is not found to be significant. Hence H1 is accepted.

TABLE 2: Showing mean, SD and t values among hostellers and non-hostellers on the measures of self esteem

RESIDENSE	N	Mean	Std. Deviation	Df	T
HOSTELLER	124	29.77	4.49	198	2.49*
NON HOSTELLER	76	28.28	3.39		

Given table represents mean, SD and t values among hostellers and non-hostellers on the measures of self-esteem. On measuring the self-esteem mean of hostellers (mean= 29.77, SD=4.49) was observed to be greater than mean of non-hostellers (mean = 28.28, SD = 3.39) and t value = 2.49 which is found to be significant at

0.05 level. The reason behind this may be that hostellers are living independently which boosts their self-confidence hence enhance the self-esteem, therefore H2 stands rejected. Self-esteem of hostellers is more as they live independent. Hypothesis is rejected.

TABLE 3: showing mean, SD and t values among joint and nuclear families on the measures of self esteem

FAMILY TYPE	N	Mean	Std. Deviation	Df	T
JOINT	77	28.96	4.28	198	-0.64
NUCLEAR	123	29.35	4.10		

The above drawn table displays mean, SD and t values among the students becoming from joint and nuclear families on the measures of self-esteem. On the basis of the results calculated upon the measure of self-esteem, mean of joint

families (mean= 28.96, SD=4.28) is greater than mean of nuclear families (mean = 29.35, SD = 4.10) and t value = -0.64 which is not found to be significant. H3 is accepted.

TABLE 4: Showing mean, SD and t values among males and females on the measures of stalking and its sub dimensions

Group Statistics						
	GENDER	N	Mean	Std. Deviation	Df	T
STALKING	MALE	100	37.42	15.89	198	0.88
	FEMALE	100	35.26	18.70		
VIOLENT BEHAVIOR	MALE	100	16.78	7.06	198	0.09
	FEMALE	100	16.67	9.63		
HARASSING BEHAVIOR	MALE	100	20.54	9.68	198	1.27
	FEMALE	100	18.77	10.05		

This table displays the mean SD and t values among males and females on the measures of stalking and its sub scales. Surprisingly in our study we found that males are more victims of stalking as compared to the females. Although the mean are not significantly different. The overall result implies that on the measure of stalking mean of males (mean = 37.42, SD = 15.89) is greater than that of females (mean =

35.26, SD = 18.70) and t value = 0.88. Whereas on measuring, the violent behavior of males (mean = 16.78, SD = 7.06) is greater than mean of females (mean = 16.67, SD = 9.63) and t value = 0.09. Besides this, measure of harassing behavior of males (mean = 20.54, SD = 9.68) is greater than mean of females (mean = 18.77, SD = 10.05) and t value = 1.27. H4 is accepted.

TABLE 5: Showing mean, SD and t values among hostellers and non-hostellers on the measures of stalking and its sub dimensions

Group Statistics						
	RESIDENSE	N	Mean	Std. Deviation	Df	t
STALKING	HOSTELLER	124	34.27	14.72	198	-2.18*
	NON HOSTELLER	76	39.72	20.59		
VIOLENT BEHAVIOR	HOSTELLER	124	15.31	5.99	198	-3.09**
	NON HOSTELLER	76	19.03	10.99		
HARASSING BEHAVIOR	HOSTELLER	124	18.79	9.43	198	-1.59
	NON HOSTELLER	76	21.07	10.49		

This table represents mean, SD and t values among hosteller and non-hosteller on the measures of stalking and its sub scales. Based upon the table, results signifies that on measuring thatstalking the mean of hostellers (mean = 34.27, SD = 14.72) is clearly less than mean of non-hostellers (mean = 39.72, SD = 20.59) and t value = -2.18 which is found to be significant at 0.05 level. Along with this; after measuring, the violent behavior of hostellers

(mean = 15.31, SD = 5.99) is greater than mean of non-hostellers (mean = 19.03, SD = 10.99) and t value = -3.09 which is found to be significant at 0.01 level. Also, the measure of harassing behavior of hostellers (mean = 18.79, SD = 9.43) is greater than mean of non-hostellers (mean = 21.07, SD = 10.49) and t value = -1.59 which is not found to be significant. H₅ is rejected.

TABLE 6: Showing mean, SD and t values among joint and nuclear families on the measures of stalking and its sub dimensions

Group Statistics						
	FAMILY TYPE	N	Mean	Std. Deviation	Df	T
STALKING	JOINT	77	37.39	15.88	198	0.68
	NUCLEAR	123	35.68	18.23		
VIOLENT BEHAVIOR	JOINT	77	17.13	7.25	198	0.54
	NUCLEAR	123	16.47	9.10		
HARASSING BEHAVIOR	JOINT	77	20.13	9.42	198	0.54
	NUCLEAR	123	19.36	10.19		

The above drawn table depicts mean, SD and t values among joint and nuclear families on the measures of stalking and its sub scales. Results prove that on the measure of stalking mean of joint families (mean = 37.39, SD = 15.88) is greater than mean of nuclear families (mean = 35.68, SD = 18.23) and t value = 0.68. The measure of violent behavior of joint families (mean = 17.13, SD = 7.25) is greater than mean of nuclear families (mean = 16.47, SD = 9.42)

and t value = 0.54. The measure of harassing behavior of joint families (mean = 20.13, SD = 9.42) is greater than mean of nuclear families (mean = 19.36, SD = 10.19) and t value = 0.54. None of the means were found to differ significantly. On the above based calculations, one can clearly predict how much variation can exist in the children living in a joint and nuclear family. H6 is accepted.

TABLE 7: Showing the correlation between self-esteem and staking behavior and its sub dimensions

	Stalking behaviour	Violent Behavior	Harassing Behavior
Self esteem	-.351**	-.380**	-.286**

** . Correlation is significant at the 0.01 level (2-tailed).

Given table is a representation of the correlation between self-esteem and stalking behavior and its sub dimensions i.e. violent behavior and harassing behavior. A significantly negative correlation was also identified between self-esteem and stalking (Pearson $r = -.351$), self-esteem and violent behavior (Pearson $r = -.380$), and self-esteem and harassing behavior (Pearson $r = -.286$).

Based upon the above revelations, self-esteem is found to be inversely proportional to stalking behavior i.e. if one has a high self-esteem he/she is less likely to fall victim to stalking or maybe we can say that stalking will not bother that person as much as it would bother a person with low self-esteem. H7 is accepted.

Discussion

This study was taken up to find the relationship between stalking and self-esteem along with the demographic variables, a sample of 200 college going students was taken up for the purpose. There were 100 males and 100 females further classification of sample was

done on the basis of gender, residence and family type. The results indicated that there is no significant difference between self-esteem of males and females. Similar result was found by Diseth, Meland, & Breidablik (2014) where they found that females have lower levels of self-esteem, self-efficacy, and incremental views of intelligence than boys. Also Moksnes & Espnes (2013) showed that boys scored higher than girls on both self-esteem and life satisfaction. Our result also implies that there is no significant difference between self-esteem of joint and nuclear families. Similar studies were supported by Cooper, Holman, & Braithwaite (1983) where their research indicate different family types experienced varying degrees of closeness and support. It reported little family support tended to score low on self-esteem. Robertson & Simons (1989) perceived parental rejection showed both direct and indirect effects on self-esteem. We did not find significant difference between of males and females being victims of stalking. Similar studies were found Langhinrichsen-Rohling

(2012) argued that future stalking researchers need to be sensitive to changing cultural norms about gender/relationships, technology, and privacy as these are likely to alter the prevalence, perceptions, and prosecution of stalking across the world. Lambert, Smith, Geistman, Cluse-Tolar, & Jiang (2013) found significant differences in stalking views between men and women on all the measures, except for perceptions of the line between courtship and stalking. Women tended to perceive stalking as more pervasive and harmful. Men were more likely to perceive stalking as involving strangers and to blame the victim for the stalking. Female and male respondents also differed in their perceptions of motivations for stalking.

Significant difference was found between self-esteem of hostellers and non-hostellers, stalking of hostellers and non-hostellers and there exists high significant difference between joint and nuclear families.

A significantly negative correlation was found between self-esteem and stalking, violent behavior, harassing behavior. It shows that a person with high self-esteem is not effected by stalking behavior. Patchin & Hinduja (2010) studied the connection between middle school students experience with cyberbullying and their level of self-esteem and the study initiated that students who experienced cyber bullying, both as an offender and a victim had significantly lower self-esteem than who had slight or no experience with cyberbullying. Hazelwood & Koon-Magnin (2013) stated that in spite of growing concern among legal scholars some criminologist, the understanding of cyber stalking and cyber harassment legislation in the united states remains limited. Using a qualitative approach, this study explored cyber stalking and cyber harassment. Brewer & Kerslake (2015) found the impact of self-esteem, empathy and loneliness on the cyberbullying victimization and perpetration.

Self-esteem was a significant person predictor of perpetration and cyberbullying victimisation, such that people with low self-esteem were most likely to report experience of cyberbullying. Empathy was a significant person interpreter of cyberbullying execution, such that as empathy reduces and due to the reduction of empathy likelihood of cyberbullying execution rises. These findings show that self-esteem and empathy oriented interventions may positively address cyberbullying behaviour.

Conclusion

To sum up things based upon the findings of the study done, following relationships can be established:

- There is no significant relationship between self-esteem of males and females.
- There is a significant difference between self-esteem of hostellers and non-hostellers.
- There is no significant difference between self-esteem of joint and nuclear families.
- Similarly there is no significant difference between stalking of males and females.
- There is a significant difference between stalking of hostellers and non-hostellers.
- There is a high significant difference between joint and nuclear families.
- A significantly negative correlation was found between self-esteem and victims of stalking, violent behavior, harassing behavior.

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Gender Difference in of Organisational Behaviour (OCB) and Motives Underlying OCB

AnuPriya Punia Radhey Shyam***

Abstract

Do men and women really differ in the kind of behaviour they display? Do their motives for indulging in certain behaviours differ from one another? This Gender debate has been a subject for speculation for the behaviourist. In today's competitive world one needs an edge over another to succeed; the organisations especially like to understand aspects that will enable them to retain this edge. Human resource is one such area that if utilized to its true potential can ascertain wonderful result, however in order to so the management needs to understand their workforce. Understanding workforce also entails understanding the basic gender differences underlying behaviour. The current study focuses on understanding whether the female and male employees in an organisation differ in displaying Organisational Citizenship Behaviour (OCB) and whether their motives for indulging in this non mandatory behaviour differ as well. The study was conducted on 140 employees (70 Females, 70 Males) from the Information Technology sector.

Keywords: Gender difference, OCB, Motives, Organisation

*About Authors : *Research Scholar, Department of Psychology, M.D. University, Rohtak.*

***Professor, Department of Psychology, M.D. University, Rohtak*

Introduction:

“People's behaviour makes sense if you think about it in terms of their goals, needs and motives” Thomas Mann

Psychology is the science of behaviour, understanding “why aspect of behaviour” is of utmost importance. It is a basic human need to understand what motivates an individual to act in a certain manner. Organisational Psychologists acknowledge this essential aspect and hence are focused on understanding what drives people and how can these motives be understood to facilitate efficiency of workforce. One such behaviour that is extensively studied within an organisation is Organisational Citizenship Behaviour (OCB). OCB may be understood as “Individual Behaviour that is discretionary, not directly or explicitly recognised by the formal reward system and that in the aggregate promotes the effective functioning of the organisation” (Organ, 1988).

This means that these behaviours are not mandated or a requisite for a job but are rather voluntarily indulged in by employees. Upon reflection the question that needed answering was why certain employees felt compelled to indulge in behaviours which were neither acknowledged nor rewarded directly by the organisation. Rioux & Penner (2001) were the first to study the possible motives which might explain why OCB occurred. This phenomenon was further studied by a number of researchers (Grant & Mayer,(2009); Finkelstein, (2006); Espejo, (2011).) Despite numerous studies it is essential to know what the motives are and do they vary from individual to individual. The current study aims at understanding whether Gender plays a role in the extent to which an employee exhibits such voluntary behaviours and whether males and females differ in motives underlying such behaviours.

Organisational Citizenship Behaviour (OCB)

In Organisational & Industrial Psychology, Organisational Citizenship Behaviour is understood as an individual's elective undertaking within an organisation that is in no way a part of their ordained tasks. This concept of OCB has been researched for over three decades now. The attempts to understand this concept and relate it to other variables date back to early 1980's. Various researchers over the years have tried to delineate the dimensions of OCB. Over time a number of taxonomies pertaining to this concept came into being in order to comprehend these voluntary behaviours. The term "*Organisational Citizenship Behaviour*" was first introduced by Organ & Bateman (1983) following which researchers have identified about thirty different forms of OCB.

1. **Organ, Near & Smith (1983):** These researchers with the help of factor analysis of 16 items measure of OCB and these were reduced to just two factors: *a. Generalised Compliance (Conscientiousness), b. Altruism.*
2. **Organ (1988):** Organ is the one who basically coined the term Organisational citizenship Behaviour. He then went on to give a five factor Model of OCB. *1) Altruism:* This kind of behaviour refers to an innate tendency to help other without any expectation of reward or acknowledgement of any kind. For e.g. helping a co-worker with their workload. *2) Conscientiousness:* can be defined as exceeding minimum role requirement of an organisation (Law, Wang & Chen, 2005). It consists of cluster of behaviours like: adherence to rules and regulations of the company even when no one is watching. *3) Sportsmanship:* refers to not displaying any sort of negative behaviour when things do not turned as planned. A sporty individual is ready to go with the flow and does not get perturbed easily if situations at the workplace seem less than desirable. *4) Courtesy:* Courteous behaviour is one where an individual is polite and considerate towards the feelings and needs of others. These people indulge in behaviours that minimise work related problems like informing peers regarding meeting schedules or any change in them. *5) Civic Virtue:* This refers to employee's internal concern and active attention to the existence of the organisation (Organ, Podsakoff & Mackenzie, 2005). For e.g. participating proactively in company meetings and being active in works related to the betterment of the organisation. Almost all of the further models of OCB are variants of Organ's dimensions.
3. **Lin (1991):** Illustrated six dimensional model of OCB, his dimensions were: *1) Self-Improvement, 2) Harmony, 3) Righteousness, 4) Discipline, 5) Identification with the organisation, 6) Assistance to Colleagues.*
4. **Anderson and Williams (1991):** Based their approach on the directed behaviour. OCB was divided into two constructs by them: *OCB-I:* People indulging in these behaviours directed their behaviour towards helping other co-workers. It is directed towards other individuals within the organisation e.g. helping newly appointed people. *OCB-O:* Exhibits behaviours oriented towards the company like participating in pro organisational activities.
5. **Van Dyne, Dieneschand Graham (1994):** They delineated three

dimensions of OCB: *Loyalty*: pertains to preservation of community and working towards its betterment for common good. *Participation*: This refers to involving oneself in community affairs. *Obedience*: This refers to respecting the order and structure of the organisation.

6. **Podsakoff et al. (2000)**: Keeping in mind all the above dimensions these researchers boiled down OCB to seven dimensions. *A)* Individual Initiative which means the readiness of an individual to go beyond expected level of duties to settle issues. *B)* Organisational Compliance refers to abiding by and obeying the policies and procedures of the Organisation. *C)* Organisational Loyalty refers to employees promoting the cause of their organisation and being committed to their company even in adverse conditions. *D)* Sportsmanship refers to the ability to stay positive and not complain even under unfavourable circumstances. *E)* Self Development refers to the personal initiative undertaken by an employee to enhance their knowledge and skill sets in order to perform better. *F)* Civic virtue consists of responsible behaviour of an individual in an organisational set up.

As is obvious from above, some of the dimensions overlap and are not really adequate to understand OCB. The researcher has used Organ's five dimensions to understand the gender difference among the OCB displayed by employees.

OCB Motives

The understanding of motives is essential in organisational sector as the reward system primarily depends upon what drives an

individual. These motives can be intrinsic or extrinsic, individual oriented to group oriented. Psychology as a whole is a rather complex science wherein each individual behaves in a particular manner and underlying intent cannot be generalised. Anyone can do the same work with different intent therefore the outcomes may serve different needs in different people. In this study we are trying to understand the motives that drive people to perform organisational behaviour and if at all there is any difference in these motives based upon the gender of the employee performing this behaviour. In order to do so we must first understand both Organisational citizenship behaviour (OCB) and motives and find the common motives that underlie these behaviours.

Though researchers such as Bolino (1999) did delve into the role of motives it was Penner and his co researchers who first addressed this concept from a functional aspect. The basis of this functional perspective is a simple trait "that people engage in certain behaviour (e.g., OCB) because such actions serve some primary need of that individual". In other words behaving in such a manner serves a purpose (Borman & Penner, 2001). For instance one person may help another for it makes them look good, another person however may help a co-worker simply out of goodness of heart or in an altruistic manner. Despite the fact, that these people performed similar behaviour their reasons to do so vary. A major part of the support for a practicable approach to OCB comes from the related phenomena of "volunteerism". Hanson in 1991 defined Volunteerism as "formal planned helping" which involves helping others through service organisations such as churches, schools, hospitals etc. This behaviour is very similar to citizenship behaviour: a) both are long term b) both are carefully thought and planned c) their context is an organisation d) these both refer to decision to help made by a person. The

researchers applying a functional approach have strongly supported that individuals vary about reasons for volunteering based on their needs. Hence such researches act as springboard for work on OCB and Motives. Rioux and Penner in 2001 delineated three primary OCB motives:

- 1) **Organisational Concern:** This focuses on display of OCB by an employee motivated by the need to display commitment to the organisation. This motive enables an employee to increase their knowledge base and also enhance work experience (Tillman, 1998).
- 2) **Prosocial Values:** This pertains to display of OCB with a desire to help others and be recognised by them. This motive is important for people with a strong need of approval and who believe in the importance of maintaining relationships.
- 3) **Impression Management:** This refers to engaging in OCB with a desire to either gain materialistic rewards or avoid negative evaluation by others within the organisation. This behaviour is usually displayed by people with a higher need for acceptance. These people are overly concerned about others opinion of them. Thus they wish to avoid being viewed as lazy or irresponsible by displaying OCB.

These motives have been found to correlate strongly with different dimensions of OCB. Overall researchers tend to suggest that these motives may in effect play a pivotal role in the prediction of OCB.

Gender Difference

Lately a lot of emphasis is being laid on how Gender impacts different constructs, in the same vein the researcher in this current study has tried to understand the role of gender in display of OCB and its underlying motives. Researches

have indicated at a possibility of subtle discriminations exists when men and women are rated for appraisal based on their display of OCB (Allen, 2004). It's a common assumption that both genders display different types of OCB. Gender influences how an individual's behaviour is interpreted. If thought of as a personal characteristic then gender influences how an employee might view their workplace and it also impacts their attitude towards their co-workers. Gender also tends to affect how an individual connects with co-workers who tend to render social support, opportunities & information (Scandura & Landau, 1997). Research suggests that helping behaviour is central to female gender stereotype perception that purports that women are inherently nurturing and more socially oriented therefore women are expected to be higher in altruism, whereas behaviours associated with male gender stereotype include participation in various organisational activity and being concerned about the parent organisation, these are typical traits of one high in civic virtue and sportsmanship. Not many studies focus on how gender impacts OCB and that leads to a research Gap. The current study intends to study if there actually exists any difference in OCB and its motives based on the gender of the employee displaying such behaviour.

Objectives

- a) To assess whether there is a difference in female and male employees in display of Organisational Citizenship Behaviour (OCB)
- b) To assess whether there is a difference in female and male employees in display of motives underlying OCB.

Hypotheses

- a) There will be a difference in OCB displayed by female and male employees.

- b) There will be a difference in underlying motives of OCB performed by female and male employees

Method

Sample

A sample of 140 employees (70 females & 70 males) was selected from information technology sector. These employees were mid-level managers falling in the age range of 28- 32 years, with a work experience of at least 3 years and not less than one year within the current organisation. The sample was selected following non – random purposive sampling basis.

Tools

Organisational Citizenship Behaviour (OCB):

A modified version of the scales developed by Podsakoff & Mackenzie (1989) was used to measure OCB. It consists of 24 items, and measures all five dimensions of OCB identified by Organ (1988); Altruism, Conscientiousness, Sportsmanship, Courtesy & Civic Virtue. Respondents were asked to indicate the degree to which they agreed with each item using a seven-point likert scale. This

scale ranged from (1) “strongly disagree” to (7) “strongly agree”. Numerous studies using the scale have shown that the measure possess good validity as well as acceptable internal consistency reliability (Mackenzie, Podsakoff & Fetter, 1991; Moorman, 1991; Moorman, Nienhoff & Organ, 1993).

Citizenship Motives Scale:

Employee motives for engaging in OCB were measured using Rioux & Penner's (2001) Citizenship Motives Scale (CMS). This scale consisted of 30 items, and measured all three of the motives for engaging in OCB: (1) Pro social values (2) Organisational Concern and (3) Impression Management. Respondents were asked to rate on a scale ranging from “not at all important” to “extremely important” how influential was each item in their decision to engage in OCB. Psychometric evidence provided by Rioux & Penner (2001) reports internal consistency reliability above .80 and test-retest reliabilities for each factor .70.

Results and Discussion

Table 1: Mean, Std. Deviation and t-value of female and male employees on OCB scale.

S No.	Dimensions of OCB	Females		Males		t-value
		Mean	S.D.	Mean	S.D.	
1.	Conscientiousness	31.84	1.49	32.14	1.41	1.22 ^{ns}
2.	Altruism	31.37	1.45	31.63	1.46	1.05 ^{ns}
3.	Sportsmanship	31.34	1.74	32.10	1.36	2.86 ^{**}
4.	Civic Virtue	24.80	1.62	25.96	1.69	4.14 ^{**}
5.	Courtesy	31.36	1.43	32.27	1.68	3.47 ^{**}
6.	Total OCB	1.51	3.74	1.54	3.78	5.33 ^{**}

ns = Non- Significant ; ** = Significant at 0.05 level.

The comparison between female and male employee in Table 1 shows that the difference in certain dimensions of OCB performed by them. Results show that t- value on conscientiousness is 1.22 and it is non- significant, t-value of Altruism is 1.05 and this too is non- significant. However, when we compare both genders on dimensions such as Sportsmanship (t- value 2.86,p<.01), Civic Virtue (t- value, 4.14,p <.01), Courtesy (t- value, 3.47,p <.01), and Total Score

of OCB (t-value, 5.33,p <.01) the difference among female and male employees is significant and hence our Hypothesis (a) is accepted that there indeed is a difference in display of OCB by female and male employees.

Table 2: Mean, Std. Deviation and t- value of female and male employees on Citizenship Motives Scale (CMS).

S. No.	Motives	Females		Males		t-value
		Mean	S.D.	Mean	S.D.	
1.	Organisational Concern	44.77	3.88	45.43	3.88	.99 ^{ns}
2.	Prosocial Values	44.87	3.63	43.40	3.78	2.35**
3.	Impression Management	39.87	4.98	41.89	3.58	2.75**

ns = Non- Significant ; ** = Significant at 0.05 level.

The comparison between female and male employees in Table 2 shows that there is a significant difference in 2 out of 3 motives underlying OCB. Results show that while difference in Organisational concern (t- value, .99^{ns}) is non-significant the other two dimensions namely: Prosocial values (t- value, 2.35,p<.01) and Impression Management (t- value, 2.75,p <.01) differ significantly. Thus this table proves Hypothesis (b) to be correct that there is a difference in motives underlying OCB of female and male employees.

The purpose of this study was to investigate if females and males differ in their display of organisational citizenship behaviour (OCB) and do the motives for indulging in these non- mandatory behaviours differ as well. Table 1 indicates that men and women do not differ substantially in display of dimensions such as Conscientiousness and Altruism, the general

assumption of gender stereotype is that women are inherently nurturing and helping out in an organisational set up is considered a somewhat 'requisite' behaviour for women owing to their inherent nurturing nature. Women are not seen as doing something out of the ordinary if they indulge in altruistic behaviour but are penalised if they do not act so. But if we notice the dimensions such as civic virtue, courtesy and sportsmanship the difference between men and women is significant. Men tend to display this behaviour more than women. The prescriptive gender stereotype views behaviours such as civic virtue and sportsmanship as inherently male behaviours but the twist is that even if this behaviour is performed by men it is viewed as non- mandatory behaviour and hence men tend to benefit from display of such behaviour. This reward system seems to put women at a disadvantage as they do not benefit from display of such behaviours but are penalised for not

displaying them. Hence this leads us to accept Hypothesis (a) that there is a difference in OCB displayed by male and female employees.

The second hypothesis suggests that men and women differ in their motives underlying OCB. If we look at Table 2 it is evident that while both the genders do not differ significantly on the motive of organisational concern, they do however differ significantly on Prosocial Motives and Impression Management. As per the findings women are more motivated by Prosocial Values and men are higher on Impression Management. These results too are in line with the prescriptive gender stereotypes that women are innately helpful and nurturing in nature and hence are motivated by a need to help others and a need for acceptance. Men however are higher in need for approval and wish to avoid negative evaluation as well as gain materialistic rewards and hence are motivated by a need to impress.

The results obtained after analysis of the data are in line with the initial assumption that there indeed is a difference between males and females in the kind of OCB displayed and their underlying motives too differ.

Conclusion

The purpose of the study was to ascertain whether males and females differ in display of OCB and if their motives for doing so are different as well. From the current study it is evident that there is a difference between the kind of behaviour displayed and the motivation to do so. The reason of this difference may be attributed to prescriptive gender stereotype that leads to a certain biasing in the reward system that is followed by the organisations. This prescriptive behaviour leads to women being disadvantaged i.e. no special reward for displaying OCB but being penalised for not indulging in these dimensions. Women are seen to display less OCB as compared to men and are

higher in Prosocial motive which can be attributed to their inherent helpful nature where else men display higher OCB as they are rewarded for such behaviour and their motive for this seems to be garner materialistic rewards and avoid negative evaluation. More research needs to be carried out in this context so as to encourage a change in the organisational set up to enhance betterment of the organisation.

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Perceptions of Primary School Teachers towards Quality of In-Service Teacher Training Programmes in Punjab

Jatinder Grover Sandeep Kumar***

Abstract

The in-service training is the elixir of life for teachers as it protects their professional health and often lends a golden touch to their activities. The present study is a descriptive survey to evaluate the perceptions of primary school teachers towards effectiveness of in-service teacher training programmes in Punjab. The sample comprised of 237 randomly selected primary school teachers from the ten districts of Punjab. The results showed that the participants had positive perceptions towards in-service teacher training programmes held under the ambit of Sarva - Shiksha – Abhiyaan in Punjab. Majority of the primary school teachers responded positively on all the dimensions of in-service teacher training programme quality assessment scale. No significant difference was found in the perceptions of male and female teachers; and teachers belonging to high and low literacy rate districts of Punjab towards quality of in-service teacher training programmes.

Keywords: *In-service teacher training programmes; Primary school teachers; Dimensions of in-service teacher training programme; and Sarva- Shiksha- Abhiyan (SSA).*

About Authors : **Associate Professor, Department of Education, Panjab University, Chandigarh.*

***Assistant Professor (Contract), Regional Institute of Education, Ajmer.*

Introduction:

Education has always been the most powerful tool for sustainable development of any nation and it is the key to create, apply and spread knowledge. Over the past two decades, India has made significant advances in school education with respect to overall literacy, access and enrolment in schools and infrastructure. The two major accomplishments in the recent years is the political recognition of Universalization of Elementary Education (UEE) as a legitimate demand and the state commitment towards UEE under Right to Education (RTE) Act, 2009.

To achieve the goals of UEE and RTE Act (2009), India requires teachers of special vision and sensitivity. In this context, teachers' training, calibre of teacher and teachers' competencies are of prime importance. It has been observed that the quality of education in Government primary schools of India has got a

great deal of criticism as there is a shortage of qualified and engaged teachers, as well as many schools lack of relevant teaching materials and majority of children in primary schools barely read their own text books. There is a substantial difference in the access and quality of education in different states, as well as in different districts (ASER, 2016). The 11th EFA Global Monitoring Report (2014) also cautioned that poor quality education is holding back learning even for those who make it to school.

Today's teachers need to be competent to meet the requirements of changing classroom practices. As agents of change, teachers can promote quality education and improved students' performance in schools. Equipping teachers with necessary teaching competencies will contribute to effective implementation of education reforms. National Knowledge Commission (2007) stressed the need to

strengthen the capacity building of teaching community qualitatively with the support of in-service teacher training programmes.

India has made long strides in the last fifty years in the field of education, but quality improvement remains a major concern. Since 2001, **Sarva- Shiksha- Abhiyan (SSA)** is attempting to fill this vacuum by taking up all the issues related to elementary education cohesively by covering all the districts in the country, unlike the earlier programs in elementary education.

The objective of SSA is undoubtedly the universalization of elementary education i.e. enrolment, retention and most essentially, the quality in education. Teacher is responsible for providing quality in education and SSA provides teacher training to all trained, untrained and newly recruited teachers. **The major focus of the interventions under SSA** includes regular teachers' in-service training, academic resource support and support for improving learning achievement levels. With the passage of the RTE Act, 2009 from 1st April, 2010 onwards changes have been incorporated into the SSA approach, strategies and norms as per the norms of RTE Act, 2009 (MHRD, 2017).

As per SSA interventions, there is provision of twenty days in-service training for all teachers every year which include ten days training at Block Level and ten days training at Cluster level; sixty days refresher course for untrained teachers already employed as a teacher; and thirty day orientation course for freshly trained recruits. These teacher trainings are provided to the teachers of Government and Government aided schools, cantonment/municipal corporation schools and aided Madrasas (MHRD, 2014).

In- service teacher training is necessary to keep the attention focused on the need for improved quality of educational outcome through better performance. It helps to maintain

an environment that would facilitate the quality learning in schools through teachers' own commitment and enable teachers to develop their competency. It is important in developing the concept of teaching as a profession offering career long-challenges, satisfaction and rewards as it maintains the motivation and enthusiasm of teachers and other functionaries.

All training programmes cover various pedagogical issues, including content and methodology, aimed to improve teaching learning transactions in classrooms and learning process in schools. States have started exploring several innovative means of imparting these trainings, including the use of distance, self-learning mode and use of educational technology. Teacher training under SSA emphasizes child- centred pedagogy and activity based teaching learning (MHRD, 2015).

Central assistance for in- service training is also provided to District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs) and Institutes of Advanced Studies in Education (IASEs) under the Centrally Sponsored Scheme on Teacher Education. State Governments also financially support in-service programmes. Several NGOs, including multi-lateral organizations, support various interventions, including in-service training activities. The State Council for Educational Research and Training (SCERT) is declared as the academic authority to develop the age appropriate academic curriculum and carry on the capacity building programs in a state (MHRD, 2016).

Nagi (2004) in a study on in- service training programmes highlighted the need of change in methods of in- service training and organization of in- service training programmes throughout the year. **Rahman, Jumani, Akhter, Chisthi and Ajmal (2011)** stressed to introduce quality training programs for in-service teachers to improve the effectiveness of t

eaching as it has significant correlation with student performance. Saini and Devi (2014) indicated that in-service training programmes have improved the overall quality of teaching and learning and suggested that training programmes need improvement in terms of infrastructural facilities, qualified and competent master trainer, training programme schedules, use of modern methods in training, appropriateness of content matter and methodology of training.

Further, Uysal (2012) indicated that in-service teacher education programmes have a positive impact on teachers' attitude in general but the program had limitations in terms of its planning and evaluation phases and its impact on teachers' practices. In a study on elementary schools of Punjab, Yadav (2012) concluded that in-service teacher education programmes have a positive impact on the classroom transactions of the teachers, but still only a few teachers were capable to resolve classroom difficulties by consulting various sources such as print material, audio-visual material and the Internet. Surapuramath (2012) found that there was no significant difference between the attitude of rural and urban; male and female teachers towards in-service training programs of SSA. In-service education and training programs have important role in professional development and capacity building of teachers, but its effectiveness depends on the effectiveness of its composing elements such as teachers' interest, time and duration, trainers' ability, subject covered in each training and follow-on support (Safi, 2014). Asiyai (2016) found that upon completing in-service training, teachers perceived that the programme was useful and beneficial in many ways and it has positively affected their teaching effectiveness.

Objectives of the study

- To study the perceptions of primary school teachers towards the quality of in-

service teacher training programmes.

- To study the satisfaction of primary school teachers about the effectiveness of training curriculum, training environment and role of resource persons during in-service teacher training programmes.
- To study the perceptions of primary school teachers about the participation of trainees and role of trainees during the in-service teacher training programmes.
- To study the effectiveness of evaluation procedures of in-service training programmes on behavioural changes of participant teachers.
- To compare the perceptions of male and female primary school teachers towards the quality of in-service teacher training programmes.
- To compare the perceptions of primary school teachers belonging to high and low literacy districts towards the quality of in-service teacher training programmes.

Research questions

- What are the perceptions of primary school teachers towards the quality of in-service teacher training programmes?
- What are the satisfaction levels of primary school teachers with the effectiveness of training curriculum, training environment and role of resource persons during in-service teacher training programmes?
- What are the perceptions of primary school teachers regarding participation of trainees and role of trainees during in-service teacher training programmes?

- Do in- service teacher training programmes evaluation procedures have any effect on behavioural changes of participant primary school teachers?
- Is there any significant difference in perceptions of male and female primary school teachers towards quality of in-service teacher training programmes?
- Is there any significant difference in perceptions of teachers belonging to high and low literacy rate districts towards quality of in- service teacher training programmes?

Method and Procedure

Method of Study: A descriptive survey method was used to assess the quality of the in- service teacher training programmes by generating quantitative data through primary school teachers' perceptions and experiences on the various dimensions of in- service teacher training programme quality assessment scale.

Sample of Study: The study was conducted in the state of Punjab only. Ten districts (five districts having high literacy rate and five having low literacy rate) were selected. Multi- stage random sampling technique was used to select two blocks randomly from each selected district and four schools from these blocks were selected randomly. All the teachers of these schools were taken as a sample for the study. The participants of study were 237 randomly selected primary school teachers from 80 Government primary school teachers of Punjab.

Tools used for data collection: A closed- ended **in- service teacher training programme quality assessment scale** consisting of forty two items was developed and validated for collection of responses of primary school teachers. The scale was developed on six quality dimensions of in- service teacher training programme i.e. training curriculum; training environment; role

of resource persons; participation of trainees; role of trainees; and evaluation of training and behaviour change. All the items on the six dimensions were in the statement form. Positive and negative statements were included in the scale to add variety and reduce the teachers' tendency to respond perfunctorily. The items were rated on a five point Likert scale ranging from strongly agree to strongly disagree. The scale was validated with the inputs of fifty two primary school teachers. Data was collected in the months of January, 2013 to March, 2013. During the data-collection process, all respondents were informed about the purpose, time demands, confidentiality and voluntary nature of the study.

Results and Findings

Analysis of Teachers' Responses on various Dimensions of In-service Teacher Training Programme Quality Assessment Scale: The collected data were assessed descriptively using mean scores. For each statement, a respondent has to respond on a five point Likert scale ranging from strongly agree (5) to strongly disagree (1). The statements having mean values of 3.0 or above would indicate high levels of satisfaction and a mean value below 3.0 would indicate a low level of satisfaction with the procedures of **in- service teacher training programmes**. Items were grouped according to dimensions and an average of all the means of the items per dimension (global mean) was used to make inferences and discuss the research questions.

Research question -1: What are the perceptions of primary school teachers towards the quality of in- service teacher training programmes?

The total mean score on in-service teacher training programme quality assessment scale is 3.71 which indicated that primary school teachers had positive perceptions towards in-service teacher training programmes in Punjab.

It shows that training programmes are organised continuously and in a proper way to boost professional development of teachers. The teachers were participating in these programmes to refine their pedagogical skills and to gain new knowledge. The item wise results on each dimension are presented as follows:

Research question - 2: What are the satisfaction levels of primary school teachers with the effectiveness of training curriculum, training environment and role of resource persons during in-service teacher training programmes?

Table 1. Results by Mean scores of Teachers' Perceptions on the First, Second and Third Dimension of the Scale		
Sr. No.	Item	Mean score
Global Mean Score on Dimension-I (Training Curriculum)		3.61
1.	Training program was developed by looking after the teachers' needs.	3.72
2.	The training module and the material were thoroughly tested before implementation.	3.60
3.	In the training program, information about various technologies and other supporting material was given.	3.86
4.	There was no coordination of written work and experimentation in the training program.	3.43
5.	There was no participation of teachers in preparation of training modules and material.	3.44
Global Mean Score on Dimension-II (Training Environment)		3.82
6.	At the time of training, objectives of training were explained to resource persons and trainees.	3.86
7.	During training, material and social conditions were helpful for training.	3.84
8.	There was a good system of air and light in the training room.	4.07
9.	During training television, computers and other technologies were available.	3.59
10.	The teaching- learning material prepared by trainees was displayed in the training room.	3.87
11.	Teaching learning materials required for training were not available.	3.72
Global Mean Score on Dimension-III (Role of Resource Persons)		3.77
12.	Resource persons were not expert in their subject.	3.48
13.	Resource persons had attended courses for training of the elementary teachers.	3.86
14.	Resource persons had the ability to use different training methods.	3.91
15.	Resource persons were not aware about the education system of Punjab.	3.73
16.	Resource persons were aware of training modules and materials.	3.87
17.	Resource persons shared their experience and material with trainees.	4.01
18.	Resource persons were well prepared for the training.	3.85
19.	Resource persons used only lecture method for training.	3.60
20.	Resource persons examined the needs of trainees and provided the right information when needed.	3.70

Table 1 summarizes that the global mean score of the perceptions of primary school teachers' on various items of dimensions of training curriculum; training environment; and role of resource persons is 3.61; 3.82; and 3.77 respectively on in-service teacher training programme quality assessment scale. The majority of the sampled teachers have responded

positively on all the twenty items of the three dimensions as the mean scores for all the twenty items were greater than 3.0.

Research question - 3: What are the perceptions of primary school teachers regarding participation of trainees and role of trainees during in- service teacher training programmes?

Table 2. Results by Mean scores of Teachers' Perceptions on the Fourth and Fifth Dimension of the Scale		
Sr. No.	Item	Mean score
Global Mean Score on Dimension-IV (Participation of Trainees)		3.72
21.	During training all trainees had an equal opportunity for participation.	3.84
22.	There was active participation of trainees in training process.	3.96
23.	At the time of training, trainees experience was not used.	3.73
24.	During training, there was less time for trainees' participation in activities.	3.57
25.	Trainees did not help each other during training.	3.65
26.	Trainees were paid equal attention without discrimination of gender and caste.	3.79
27.	Communication between resource persons and trainees was not effective.	3.58
28.	Resource persons were ready to help trainees during training.	3.95
29.	Opportunities for the discussion related to the solution of the problems in different subjects were provided.	3.85
30.	Full attention was paid to the suggestions given by trainees.	3.35
Global Mean Score on Dimension-V (Role of Trainees)		3.62
31.	Trainees were aware of the purpose of training.	3.48
32.	Before training expectations of trainees were not tested.	2.95
33.	Trainees did not get the opportunities to connect their education with real life.	3.48
34.	Trainees were interested and excited to learn.	3.99
35.	The trainees were involved in the progress of the learning process.	4.01
36.	Trainees did not consider training work as a burden.	4.00
37.	Trainees were not interested in using the given knowledge in the class.	3.41

Table 2 shows that the global mean score of the perceptions of primary school teachers' on various items of dimensions of participation of trainees and role of trainees is 3.72 and 3.62 respectively on in-service teacher training programme quality assessment scale. The majority of the sampled teachers have responded positively on the sixteen items of the two dimensions as the mean scores were greater than 3.0. But on item no. 32, of the

dimension of role of trainees, teachers reported negatively as mean score was less than 3.0 which indicates that training expectations of trainees need to be tested before training.

Research question - 4: Do in- service teacher training programmes evaluation procedures have any effect on behavioural changes of participant primary school teachers?

Sr. No.	Item	Mean score
Global Mean Score on Dimmension-VI (Evaluation of Training and Behaviour Change)		3.66
38.	Assessment of trainees was not done at the end of the programme.	3.28
39.	There were no arrangements for the follow- up of trainees after training.	3.68
40.	The training program has increased the teaching skills of trainees.	3.73
41.	The training program has helped in enhancing knowledge and competence of trainees.	3.83
42.	Resource persons provided feedback upon assessing the trainees' performance.	3.78

Table 3 shows that the global mean score of the perceptions of primary school teachers' on various items of dimmension of evaluation of training and behaviour change is 3.66 on in-service teacher training programme quality assessment scale. The majority of the sampled teachers have responded positively on the all the five items as the mean scores were greater than 3.0.

Analysis of Teachers' Perceptions towards Quality of In- Service Teacher Training Programme in relation to Gender and Literacy Rate of Districts: To compare perceptions of male and female teachers; and teachers belonging to high and low literacy rate districts, the independent sample t- test was used for testing the differences between the means of independent groups and results are presented in the table 4.

Table 4: Results of Independent Sample t- test

	Gender	N	Mean	SD	t- value	Sig.	Significance
Gender	Female	155	157.43	19.31	1.399	.163	Not significant
	Male	82	153.72	19.54			
Literacy Rate of Districts	High Literacy Rate	110	155.67	19.93	0.346	.729	Not significant
	Low Literacy Rate	127	156.55	19.06			

From table 4, it is clear that t- ratio value for the perceptions of female and male teachers'; and teachers belonging to high and low literacy rate districts is 1.399 and 0.346 respectively which was not significant even at 0.05 level of significance $p > 0.05$ (.163) and (.729) at 235 degrees of freedom. So, it may be inferred that there was no significant difference in the perceptions of male and female teachers'; and of teachers' belonging to high and low literacy rate districts towards quality of in- service teacher training programme.

Discussion of Results

The analyses and interpretation of data clearly indicated that primary school teachers' had positive perceptions towards quality of in-service teacher training programmes organised under the ambit of quality related interventions of Sarva- Shiksha- Abhiyan in Punjab. The results of the present study corroborate the findings of Johnson and Sloat (2006); Eswaran and Singh (2008); and Chandrababu and Murali (2010) who found that teachers were satisfied with the in- service teacher training

programmes; as training programmes helped the teachers to gain clarity and confidence in planning and preparing for the class room interaction.

The present findings are contradictory to Kidwai et al. (2013) who concluded that the quality of in-service teacher training in India has repeatedly failed to match the expectations as the training s/he received was not reflective of what is expected of him/her. Khattak and Abbasi (2010) concluded that teacher training course was ineffective in Pakistan as the trainees were not being able to utilize it mainly due to lack of resources at the workplaces; efforts need to be made to provide facilities at the training places to enhance training output.

The high mean scores on all the dimensions of in-service teacher training programme quality assessment scale signify that primary school teachers had positive perceptions towards all the aspects of in-service teacher training programmes. The global mean score of 3.61 on the dimension of training curriculum indicated that training curriculum caters to the needs of teachers as they were participating in preparation of training modules and material and teachers had positive perceptions for the training curriculum. The global mean score of 3.82 on the dimension of training environment pointed out that the teachers' were satisfied with the training environment of the in- service teacher training programme. The responses of teachers specified that availability of teaching learning material and equipment's was helpful in making the training programme a success.

On the dimension of role of resource persons, a high global mean score of 3.77, highlighted the positive perceptions of teachers with the role of resource persons during in-service teacher training. The high mean scores on various items indicated that resource persons were expert in their subjects and well versed in

practising different training methods. A global mean score of 3.72 on the dimension of participation of trainees in the training programme indicated active participation of trainees during in-service training without any discrimination.

On the dimension of role of trainees during the in-service training programme, a high global mean score of 3.65 highlighted that trainees were aware about the purpose of training and their role and responsibilities. The global mean score of 3.66 on the dimension of evaluation of training and behaviour change confirmed that training program has increased their teaching skills and helped them in enhancing knowledge and competence as performance of trainees was assessed and feedback was provided to them by resource persons.

The results of the present study corroborate the findings of Angrist and Lavy (2001) who revealed that in-service teacher training programmes have a significant positive effect on the students' test scores. Ha, Lee, Chan and Sum (2010) also concluded that in-service training program was deemed to be practical and effective to bring about good communication among school teachers, educational experts, and government curriculum officers. Jahangir, Saheen and Kazmi (2012) confirmed that in-service training had a significant positive change in the perceptions of the trainees regarding qualities of a good teacher.

Statistically, no significant difference was found in the perceptions of male and female primary school teacher's towards quality of in-service teacher training programmes in Punjab. Although, female teachers (157.43) gained higher mean scores on the perceptions of teachers towards quality of in- service training programme than the male teachers (153.72). The results are in agreement with the findings of Surapuramath (2012) who concluded that there

was no significant difference between the attitude of male and female teachers towards in-service training programs of SSA. But, Kumar (2013) and Thecla (2016) revealed a significant difference in the attitude of male and female teachers towards in-service training programmes.

No significant difference was found in the perceptions of teachers belonging to high and low literacy rate districts towards quality of in-service teacher training programmes in Punjab. Although, teachers belonging to low literacy rate districts (156.55) gained higher mean scores **on the** perceptions of teachers towards quality of in-service training programme **than the** teachers belonging to high literacy rate districts (155.67). The results are in consensus with the study of Kusum (2016) who found no significant difference between the attitudes of teachers towards in-service teacher training programme from different areas.

The results confirmed that similar type of in-service teacher training programmes are organised in all the districts of state of Punjab and teachers had positive perceptions towards in-service teacher training programmes.

The results of this study imply that an in-service teacher training programmes are useful in developing professional knowledge and skills to teach amongst the participant teachers. The in-service training programme must be approached from a system prospective. So, that teachers may acquire adequate competencies for improving the classroom transactions and in turn learning outcomes of students.

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The Relationship Between Organization Citizenship Behavior (OCB), Job Satisfaction and Organizational Productivity: A Study on Manufacturing Organizational Employees

Pankaj Tripathi Manoj Kumar Pandey***

Abstract

Background & aim: One of the most significant areas of concern among organizational theorists and practitioners is organizational productivity. Organizational citizenship behavior (OCB) is a voluntary, organizationally desirable action that is not part of the employee's formal job requirements. Organizational citizenship behavior (OCB) and job satisfaction has contributed tremendously to the productivity through improving service quality, customer satisfaction and organizational effectiveness. This study investigates the relationship between job satisfaction, Organizational Citizenship behavior and organizational productivity. This research, therefore, was conducted to identify the relationship between organizational citizenship behavior, job satisfaction and organizational productivity in manufacturing organization.

Method: This descriptive-correlational study was performed on 128 employees working at manufacturing organization of Gurgaon, India, in 2015. The participants were chosen using a census approach. The tools for data collection included a demographic questionnaire, Kumar organizational citizenship behavior Questionnaire, Camman, Fichman, Jenkins, and Flesh job satisfaction scale and Spreitzer and Mishra organizational productivity scale.

Result: A significant direct correlation was found between organizational citizenship behavior (OCB), organizational productivity ($P=0.87$), and job satisfaction, organizational productivity ($P=0.71$). Result shows that Organizational citizenship behavior (OCB) and job satisfaction as a predictor of organizational productivity.

Keywords—Organizational Citizenship Behavior (OCB), Job Satisfaction, Organizational Productivity.

About Authors : *Guest Faculty, Department of Psychology, University of Allahabad- A Central University

** Guest Faculty, Department of Psychology, University of Allahabad- A Central University

Introduction

Organizational citizenship behavior

The term of Organizational citizenship behavior refers to Additional activities and behaviors of staff which improves "efficiency of organization". Trends to OCBs starts In the early 1980s, when this term was first used by Batman and organs, which is commonly defined as "voluntary individual behavior that is not a part of the official duties of employees and does not appreciated by formal reward system directly or explicitly but improves the overall efficiency of

the organization (Torkamani & Keirandish, 2013). There are specific elements within this concept as follow (C. Stamper & L. V. Dyne, 2004):

- The Organizational citizenship behavior is the employee behavior that exceeding the organization standard.
- The Organizational citizenship behavior is the implicit behavior.
- This employee Organizational citizenship behavior is getting the acknowledgment indirectly or is easy to

be recognized within the formal organizational structure.

- The Organizational citizenship behavior is categorized as the important behavior to increase the company effectiveness.

Job Satisfaction

It is commonly accepted that job satisfaction is a contributing factor to the physical and mental well-being of the employees; therefore, it has significant influence on job-related behaviors such as productivity, absenteeism, turnover rates and employee relations (Becker, 2004). It also plays an important role in improving the financial standing of organizations (Aronson, Laurenceau,

Sieveking, & Bellet, 2005). Thus, understanding job satisfaction of employees is an important organizational goal (Aronson et al., 2005).

Job satisfaction has been considered as a function of the perceived relationship between that one expects and obtains from one's Job and how much importance he or she attributes to it (Kemelgor, 1982; Mobley & Locke, 1970). Job Satisfaction has been defined as "positive emotional state resulting from the appraisal of one's job or job experiences (Locke, 1976). In earlier studies, job satisfaction has been viewed as a uni-dimensional concept, However, it is now widely accepted that job satisfaction is multi-dimensional and its multiple dimensions should be related to specified independent variables (Weitzel, Pinnto, Davis & Jury, 1973) Khaleque and Rahman (1987) noted that a job can have many facets and the degree of satisfaction seems to be dependent on the satisfaction with the numbers of job facets as well as their perceived importance.

Organizational Productivity

Productivity is a measure of effectiveness of the transformation process

indicating how the resources are being utilized. It can be interpreted as relationship between the physical resources used in production and the units of output produced in a specified period of time. From one perspective on organizational productivity, productivity may be defined as follows: $Productivity = Output / Input$

Conceptually, productivity is a 'supply-side' measure, capturing technical production relationships between inputs and outputs. But, implicitly, it is also about the production of goods and services that are desired, valued and in demand.

Literature Review

Employee satisfaction, organizational commitment, organizational justice, career development, age, tenure, personality, motivation, leadership and leadership behavior all impact and affect citizenship behavior within an organization (Bateman & Organ, 1983; Organ, 1983; 1990; 1997; Organ & Lingl, 1995; Organ & Moorman, 1993; Penner, Midili, & Kegelmeyer, 1997; Tang & Ibrahim, 1998). Tested the relationship between OCB and job satisfaction and failed to find a significant correlation between the two variables Chen et al. (1998). Ahmad (2006) has stated that four job attitudes, namely, organizational commitment, job satisfaction, procedural justice and distributive justice have a positive and direct impact on academicians' citizenship behaviors.

Werner (2007) asserts that only satisfied employees seem more likely to display positive behaviors that can effectively contribute to the overall functioning of the organization. Job satisfaction has the most robust attitudinal relationship with OCB (Organ and Ryan, 1995). Analyzed the effect of perceived equity, leadership and job satisfaction on OCB and found that leadership and perceived equity is strongly related to OCB and hence predictor of OCB while job satisfaction is only found related with two dimensions of OCB (Schnake et al. 1995).

Organizational citizenship behavior may also contribute to organizational success by enhancing coworker and managerial productivity, promoting better use of scarce resources, improving coordination, strengthening the organization's ability to attract and retain better employees, reducing variability of performance, and enabling better adaptation to environmental changes (Podsakoff, Blume, Whiting & Podsakoff, 2009).

Vaidya (2002) conducted study on 'employees' satisfaction', with a objectives to access employees views on work environment and examine their motivational value to employee satisfaction, productivity and effectiveness.

Parmar (2002) studied Job Satisfaction and Job Anxiety She found that organization should be proactive to take positive and corrective measures for the overall development of its employees. There is positive correlation between working condition, changes for promotion and Job Satisfaction

Methodology

Research Model and Hypotheses

The model (Figure 1) which is formed depending on the aims of the study proposes the effects of organizational citizenship behavior (OCB) and job satisfaction on organizational productivity.

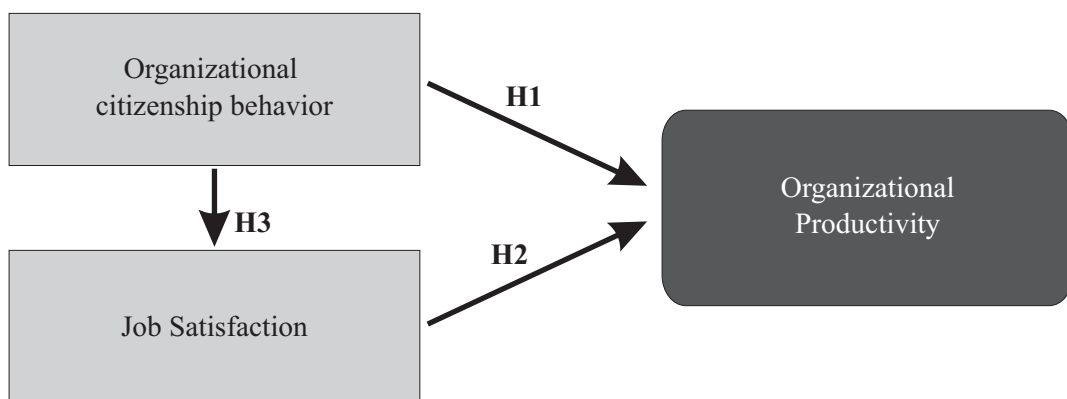


Figure 1: Research Model

H1 There is a positive correlation between organizational citizenship behavior (OCB) and organizational productivity.

H2 There is a positive correlation between job satisfaction and organizational productivity.

H3 There is a positive correlation between organizational citizenship behavior (OCB) and job satisfaction.

Sample

In this research, a questionnaire was used to survey and collect the data sample. The sample consisted of 128 male employees

working in the manufacturing organization in Gurgaon, India. The mean age of the employees was 36.44 years. 31.88% of employees were B.E. /B. Tech, 5.79% were B.C.A., 44.79% were M. Tech and 17.39% of employees were M.C.A.

Measures

Kumar (2002) "organizational citizenship behavior (OCB) scale" consisting of 22 items was conducted on the sample of the research. Answers are collected with a 5 Likert scale as "1= strongly disagree, 5= strongly agree". To examine the participants' job

satisfaction status (Camman, Fichman, Jenkins, and Flesh (1984), “job satisfaction scale” consisting of three items with 5 Likert scale as “1= strongly disagree, 5= strongly agree” is applied. To examine organizational

productivity, Spreitzer and Mishra (1999) “organizational productivity scale” consisting of five items with 5 Likert scale as “1= strongly disagree, 5= strongly agree” is applied.

Table 1: Reliability Coefficients for Major Variables

Variable	Number of items	Cronbach's Alpha
Organizational Citizenship Behavior (OCB)	22	.84
Job Satisfaction	3	.91
Organizational Productivity	5	.81

Data analyses

SPSS 21 is used for statistical analysis. To test this research study many techniques have been used. In the first step, according to the results of the data tables, analyses are done to determine the descriptive statistics. First Mean and standard deviation has been used in order to measure the mean values of overall Organizational Citizenship Behavior (OCB), Job Satisfaction and organizational productivity, and the standard deviation, to productivity, Spreitzer and Mishra (1999) “organizational productivity scale” consisting of

five items with 5 Likert scale as “1= strongly disagree, 5= strongly agree” is applied. know how much of the variance with in data from its mean. Second a bi-variate correlation analysis (Coefficient of Correlation) has also been done to find out the relationship and magnitude between Organizational Citizenship Behavior (OCB), Job Satisfaction and Organizational Productivity. Fourth Multi regression analysis has been conducted in order to measure the predicting power of research variables.

Descriptive Statistics

Table 2 Descriptive Statistics for Major Variables

Variables	N	Range		Mean	SD
		Min.	Maxi.		
Organizational Citizenship Behavior (OCB)	128	53.00	127.00	71.43	20.48
Job Satisfaction	128	3.00	15.00	11.88	2.11
Organizational Productivity	128	6.00	23.00	13.20	4.37

Correlation analysis

In order to find out the dependency and correlation between the DV and IDVs, the scholar conducted correlation test. Correlation technique is one of those techniques that have been used widely for examining two quantitative variables in order to measure the level of

dependency and co-linearity among them. In this research, Pearson's Correlation Matrix was used in order to test the strength of relationship between DV (i.e. Organizational Productivity) and IDVs (i.e. Organizational Citizenship Behavior (OCB) and Job Satisfaction).

Table 3 Correlation Matrix

Variables	Organizational Productivity	Organizational Citizenship Behavior (OCB)	Job satisfaction
Organizational Productivity	1	.87**	.71**
Organizational Citizenship Behavior (OCB)	.87**	1	.82**
Job Satisfaction	.71**	.82**	1

Note: *p<0.05 level (2-tailed), **p<0.01 level (2-tailed).

The above table shows the correlation matrix test conducted for all the variables of the research. This revealed the summarized relationship of DV and each IDV. From this, the first relationship i.e. organizational Productivity and Organizational Citizenship Behavior (OCB) revealed the sig value is 0.000, which is < 0.05. Based on the given sig value, it can be concluded from the results that there is direct impact of Organizational Citizenship Behavior (OCB) on organizational productivity. Also, the second relationship tested and identified from the above table was between job satisfaction and organizational productivity. From the sig value

i.e. 0.71 is > 0.05, which shows that there is positive correlation between job satisfaction and organizational productivity. Also, the third relationship tested and identified from the above table was between Organizational Citizenship Behavior (OCB) and Job Satisfaction.

Regression Analysis

Regression analysis, scholars are able to examine the relationship between different DV and IDVs. To identify the existence of relationship level among the variables of this study, regression analysis was conducted. Following is the regression analysis to justify the acceptance and rejection of hypotheses of the research.

Table 4 Summary of Regression Analysis model

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.876	.767	.763	.643

The above table illustrates the summary of the regression analysis model conducted for the research. In the table, R value is mentioned, which helps in knowing the relationship level among the DV and IDVs. As the value is 0.876, which is 87.6% means to facilitate the correlation between DV (organizational

productivity) and IDV (Organizational Citizenship Behavior (OCB) and Job Satisfaction) shows strong bond. However, the R square value that is coefficient of determination is 0.767, which is 76.7% shows the variable between DV and IDV.

Table 5 ANOVA Table of Regression Analysis

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	1867.63	2	933.83	205.76	.000**
Residual	567.289	125	4.538		
Total	2434.93	127			

Note: *p<0.05 level (2-tailed), **p<0.01 level (2-tailed).

The above table reveals the F-test i.e. 205.76, which shows significant relationship and this is further justified from the sig value i.e. 0.00, which is < 0.05. This shows the correlation table values and justifies that there is a correlation between the DV (organizational

productivity) and IDVs (Organizational Citizenship Behavior (OCB) and Job Satisfaction), and shows that the results are statistically significant and the regression model prepared is valid.

Table 6 Coefficients of Regression Analysis

Model	Unstandardized Coefficients		Std. Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	17.341	.213		11.73	.000**
Organizational Citizenship Behavior (OCB)	.683	.067	.681	16.34	.000**
Job Satisfaction	.268	.034	.265	5.346	.000**

Note: *p<0.05 level (2-tailed), **p<0.01 level (2-tailed).

The above table illustrates the justification of regression test conducted between DV and IDVs based on Beta value. The value of Beta for organizational citizenship behavior is .0681 and the value for job satisfaction are 0.265, which justifies that

alternative hypotheses are accepted and relationship is significant. Results show that organizational productivity directly or indirectly related on organizational citizenship behavior and job satisfaction.

Conclusion

Organizational citizenship behavior is the intangible employee behavior, indirectly, and implicitly recognized by the reward system that in aggregate will influence the affectivity of some managerial functions within the organization. Organizational citizenship behaviors are usually performed by employees to support the interests of the organization even though they may not directly lead to employee benefits. The results of the study indicated that Job satisfaction has strong connections in terms of predicting organizational productivity. Several scientists believe that organizational citizenship behaviors are important to explain organizational form, but organization should not use them as a criterion for organizational purpose or organization success. Citizenship behaviors can enhance organizational productivity by encouraging efficient and effective organizational practices. Organizational citizenship behavior create efficiencies by reducing the need for monitoring and freeing time for more valuable management activities such as scheduling and problem solving.

If employees are satisfied with job so motivated for incurring organizational productivity. Job satisfaction is an extremely complex concept that is influenced by different factors, or more accurately by a group of factors that often have interwoven impact. As a result, studies that have dealt with the relationship between job satisfaction and other concepts have often given inconsistent results, especially in the case of the analysis of the relations between

job satisfaction and organizational performance (Chan et al., 2000; Chandrasekar, 2011; Daily & Near, 2000; Ellinger et al., 2002; Evans & Jack, 2003; Gould-Williams, 2003; Harter et al., 2002; Huselid, 1995; Koys, 2001; Mohr & Puck, 2007; Ostroff, 1992; Ryan et al., 1996; Schneider et al., 2003; Zohir, 2007). The results of this study confirmed the conclusions of other papers dealing with this topic about the existence of clear link between employees' job satisfaction and organizational performance in both direction, but with pretty weak intensity.

Practical Recommendations

In this study the significant positive relationship between organizational citizenship behavior, job satisfaction and organizational productivity was confirmed. Hence, any strategy that can boost employees' citizenship behavior will provide improvement in organizational productivity in the study population. There are two recommendations; the first limitation was based on deliberating only two factors in order to conduct the study. However, in the future, the research could be extended to more dimensions of the same area. Also, currently, the study was done on manufacturing organization, but in future, scholars can change the organization to make better comparison.

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Anxiety Level of ADHD(Attention Deficit Hyper disorder) Children

Khan Zeenat

Abstract

Attention Deficit Hyper Disorder is most common problem in the school children. These children suffer from Hyperactivity, Impulsivity and Inattention. If problem remain unattended or undiagnosed it would leads to wastage and stagnation. In this study the anxiety level of the ADHD Children was studied .The survey method was used and sample was selected by using purposive Random sampling technique .The ADHD test by James Gilliam was used for diagnosing the ADHD children and Anxiety test by A.K Singh and N.A Sen Gupta was used for studying the Anxiety level of ADHD Children. The 5.6% of the students were identified as ADHD children in every classroom.The 37.03% of the children with ADHD are Highly anxious, 16.66% of the children are Average Anxious and 46.28% of the children with ADHD are less Anxious. .There is a very low positive correlation between ADHD problem and anxiety level in school children.

Key words: Anxiety, ADHD (Attention deficit hyper disorder)

About Authors : Assistant Professor,Marathwada College of Education Aurangabad

Introduction:

The attention deficit hyper disorder problem is one of most grave problem of classroom which needs to be addressed immediately by the teacher in the classroom. The central problems here involve Inattention, i.e. persistent difficulties with sustained attention and concentration, and/or Hyperactivity-Impulsivity. Hyperactive-Impulsive children show excessive motor activity and restlessness, an inability to regulate behavior according to the situation, and difficulty delaying gratification. Attention problems are not always so obvious unless they occur together with hyperactivity, but these alone can create equally serious problems of under-achievement. These children also suffer from anxiety especially academic anxiety which affects not only the academic achievement but also leads to several psychological and behavioral problems in the children.

What is ADHD (Attention Deficit Hyper Disorder)?

ADHD children may be hyperactive and unable control their impulses. Or they may have trouble paying attention. These behaviors interfere with school and home life.

What is Anxiety?

Anxiety is a general term for several disorders that cause nervousness, fear, apprehension, and worrying. These disorders affect how we feel and behave, and they can manifest real physical symptoms. Mild anxiety is vague and unsettling, while severe anxiety can be extremely debilitating, having a serious impact on daily life.

People often experience a general state of worry or fear before confronting something challenging such as a test, examination, recital, or interview. These feelings are easily justified and considered normal. Anxiety is considered a problem when symptoms interfere with a person's ability to sleep or otherwise function. Generally speaking, anxiety occurs when a reaction is out of proportion with what might be normally expected in a situation.

RATIONALE OF THE STUDY: This study was undertaken in order to study the correlation between ADHD and Anxiety. It was observed that ADHD children are underachievers or Low achievers in academics. The problem of this children are usually ignored by the school teachers in the classroom and parents at home .Due to the ignorance by the teachers and parents it becomes more aggravate with increasing age in school and at home which hampers or obstruct the studies of the children and they lag behind in the studies and the academics, though they are very intelligent and creative but their energy is not directed in a positive direction. As the academics are affected, in the later part of their life they become more concerned and anxious with regard to their exams and carrier.

Objectives:

- 1) To identify the ADHD students in the classroom.
- 2) To study the percentage of ADHD students in the classroom.
- 3) To study the Anxiety level of ADHD students in the classroom.
- 4) To study the correlation between ADHD and Anxiety level of students.

Hypotheses:

- 1) The percentage of ADHD students in the classroom is Low.
- 2) The Anxiety level of ADHD student is High.
- 3) There is positive correlation between ADHD and Anxiety.

Scope:

- 1) **Area:** The study is useful for studying the ADHD students universally.
- 2) **Content:** The study is useful for studying the anxiety level of ADHD students
- 3) **Unit:** The study is useful for all the children of age group 9 go 12 years.

Limitations:

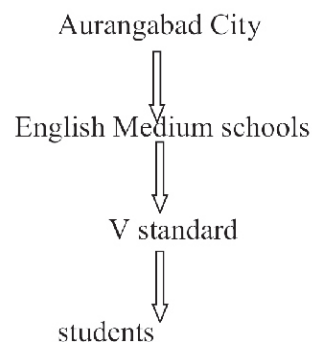
- 1) **Area:** The study is limited to only Aurangabad city
- 2) **Content:** The study is limited to anxiety and ADHD.
- 3) **Unit:** The study is limited only to V standard students of English medium

Operational Definition:

- 1) **ADHD** : The children who are impulsive,inattentive and hyperactive.
- 2) **Anxiety level:** The feeling of worry, nervousness, or unease about something with an uncertain outcome.

Research Methodology:

- 1) **Research Method-** Survey method was used for the collection of data .The Students from 8 English medium schools of Aurangabad was selected as a sample. Total 54 Students were diagnosed for ADHD and after diagnosing the ADHD students from the selected sample and on this identified students of ADHD ,the anxiety test was administered and anxiety level of the student was studied.
- 2) **Sampling Technique:** Purposive Random sampling technique was used.
- 3) **Sample Size:** 54 students from 8 English medium schools of Aurangabad city.
- 4) **Sample Design:**



Tools:

- 1) **ADHD Test-James E.Gilliam**
- 2) **Anxiety Level Test-A.K Singh and N.A Sen Gupta**

Variables:

- 1) **Independent Variable-Anxiety Level.**
- 2) **Dependent Variable- ADHD .**

Statistical Technique:

Mean and pearson coefficient correlation

Discussion Of The Result

- 1) To study the percentage of ADHD students in the classroom.

Variables	No. of students	No.of Students identified with ADHD	Percentage
ADHD	963	54	5.60%

The total 5.60% of the students were identified as ADHD students in the classroom

- 2) To study the Anxiety level of ADHD students in the classroom.

Total No. of ADHD students with Anxiety (N)	Percentage %	Interpretation
07	12.96	V.High anxious
13	24.07	High Anxious
09	16.66	Average
10	18.51	Less Anxious
15	27.77	Very less anxious

Total 37.03% of the children with ADHD are Highly anxious ,16.66% of the children are Average Anxious and 46.28% of the children with ADHD are less Anxious.

3) There is positive correlation between ADHD and Anxiety.

Variables	Correlation Value	Interpretation
ADHD	0.2180	Very Low Positive Correlation
Anxiety		

The Hypothesis number 03 is accepted ,as Correlation value is 0.2180 ,which states that there is a Low Positive correlation between ADHD and Anxiety

Conclusions:

Hypothesis No.01

1) The percentage of ADHD students in the classroom is Low .

The Hypothesis No.01 is accepted as the percentage of ADHD students in the class is Low.

Hypothesis No.02

2) The Anxiety level of ADHD students in the classroom is high .

The hypothesis no.02 is rejected as the percentage of ADHD students with low anxiety level is less as compare to high anxiety level.

Hypothesis No.03

1) There is a Positive correlation between ADHD and Anxiety level of students.

The Hypothesis No.03 is accepted as the correlaton value is 0.210 which shows a positive correlation between ADHD and Anxiety.

Findings:

- 1) The 37.03% of the children with ADHD are Highly anxious ,
- 2) The 16.66% of the children are Average Anxious
- 3) The 46.28% of the children with ADHD are less Anxious.

Suggestions:

- 1) The children who are having high anxiety level should be counseled by the counselor

2) The anxiety level of the students should be identified at the earliest in order to provide remediation.

3) The Adhd children should be dealt by the special teacher and anxiety related to exams should be removed

4) The ignorance by the parents and teachers to the ADHD children leads to high anxiety related with education and future ,this anxiety should be addressed immediately by the teacher and parents .

5) Special facilities in classroom and exams should be provided to this children in the classroom.

6) Individual attention should be provided to the ADHD children in the classroom.

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Across Generation Study of Prosocial Behaviour and Empathy

Pooja Deepti Hooda** NovRattan Sharma****

Abstract

The present study was designed to compare prosocial behaviour across three generation. The sample consists of 300 respondents, 100 in each group i.e. children, parents and grandparents, from various districts of Haryana especially Rohtak and nearby areas. Respondents for the three generation groups were taken from the same family i.e. (three subsequent generations) in order to reduce within group variance. To measure prosocial behaviour Helping attitude scale and Emotional Empathy Scale were used. The obtained data were subjected to statistical analysis using SPSS software. One way ANOVA (Repeated Measure) was applied to the data. Generation differences were obtained on prosocial behaviour and empathy. The results of Post hoc analysis further revealed that children possess more helping attitude than their parents and grandparents. Children also express more empathic behaviour than grandparents but no significant differences were observed between children and parents; and parents and grandparents. The results and implications of the study are discussed in detail in the paper.

Keywords: *helping attitude, empathy, generational differences*

About Authors : **Research Scholar, Department of Psychology, Maharshi Dayanand University, Rohtak*

*** Assistant Professor, Department of Psychology, Maharshi Dayanand University, Rohtak.*

****Professor, Department of Psychology, Maharshi Dayanand University, Rohtak*

Introduction:

Human societies represent a unique example of prosociality, as prosocial behaviour is important for the functioning of any society. Humans need other people to sustain life through socialization. Living together and in harmony in a certain society is dependent on to what extent the prosocial behaviors are at the forefront in that society (Bee and Boyd, 2004). Prosocial behavior has been defined as voluntary, intentional behavior that results in benefits for another individual or group (Eisenberg, 1982; Staub, 1979). Prosocial behaviours include helping, sharing, co-operating, donating and volunteering (Brief & Motowidlo, 1986). **Helping behaviour, a type of prosocial behaviour**, refers to voluntary actions intended to help the others, with reward regarded or disregarded.

Motivation to help is usually preceded by a feeling of empathy towards the potential

beneficiary (Batson & Shaw, 1991). Batson and Coke (1981) have reported that human motivation for helping is elicited by empathy for the person in need. According to Baston's *empathy-altruism hypothesis*, those feeling high levels of empathy for a person in need will be more likely to help than will those feeling less empathy. Thus, Empathy is a strong motive behind such prosocial behaviours and also has deep evolutionary roots (Silk & House, 2011). Empathy has been defined in many ways. According to some theorists, empathy involves only recognizing emotion, others state that it involves experiencing it, while others state that empathy involves both labelling and vicariously experiencing emotion (Reniers, Corcoran, Drake, Shryane, & Vollm, 2011). Two major types of empathy have been postulated: *affective empathy* and *cognitive empathy* (Reniers et al., 2011). Affective empathy, also known as emotional empathy, is “the ability to be sensitive

to and vicariously experience the feelings of others” (Reniers et al., 2011). Reniers et al (2011) defined cognitive empathy as the ability to identify and correctly label the emotional states of others.

Prosocial behaviours, like other social behaviours, are shaped by parents, friends, teachers, society and the culture (Hastings, Utendale and Sullivan 2006). The factors that influence prosocial behaviour can be categorized into demographical, situational, psychological and social factors that include bystander effect, mood (Underwood, Framing, & Moore, 1977; Carlson, Charlin, & Miller, 1988), personality traits (Graziano, Eisenberg, 1997; Penner, Fritzsche, Craiger, and Freifeld, 1995), learning and socialization during childhood, parenting styles, gender (Hoffman, 1977; Feshbach, 1982; Eisenberg, & Lennon, 1983; Frieze, & Li, 2010), age (Sze, Gyurak, Goodkind & Levenson, 2012), heredity (Israel, Hasenfratz & Knafo-Noam, 2015; Knafo & Plomin 2006; Knafo, & Israel, 2009) and cultural expectations (Diener and Kim 2004; Fabes, Martin, and Hanish 2003; Feldman 2005). Indian culture, as a result of the technological advancements, globalization and modernization has undergone many visible and significant changes. Due to which there has been a rapid economic growth that resulted in cultural holocaust bringing a dynamic change in lifestyle and belief system over the generations. Generational differences are the subject of much popular speculation but relatively little substantive research. There are differences of opinions, beliefs, and other social and cultural norms that exist between generations. These differences have been widened by technological advance. There is a dearth of research that takes in account the effect of generation on prosocial behavior and empathy. Thus, to fill in the gap in knowledge, the present study is designed to compare prosocial behaviour and empathy across three generation.

Objectives:

1. To compare prosocial behaviour across three generations.
2. To compare empathy across three generations.

Hypotheses:

1. There would be significant differences in prosocial behaviour across three generations.
2. There would be significant difference in empathy across three generations.

Method

Sample: The sample consists of 300 respondents from 100 families. Members of these families i.e Children, Parents and Grandparents were taken as three generation groups, 100 respondents in each generation group i.e. Children, Parents and Grandparents. Respondents for the three generation groups were taken from the same family (three subsequent generations) in order to reduce within group variance. Initially, children (11-17 years, mean age 15 years) who were residing with their parents (father/mother, age range 30 to 50 years, mean age 39 years) and grandparents (grandfather/grandmother, age range 60 to 90 years, mean age 65 years) were contacted at the respective schools from various districts of Haryana and requested to participate in the study.

Tools used: The following tools were used in the present investigation.

1. **Helping attitude scale (HAS):** Helping attitude scale developed by Nickell (1998) was used to assess prosocial behaviour in the present study. This 20 items scale measure beliefs, feelings and behaviours related to helping. Each item on the questionnaire has to be rated on a 5-point scale from strongly disagree to strongly agree. Higher scores indicated high altruism/

prosocial. The scale possesses sound psychometric properties. Helping attitude scale was translated into Hindi using standard methodology of translation. After completing the translation process, the final Hindi version and the original version of the scale were administered on 50 children. A Pearson correlation coefficient of 0.74 was found between the original and Hindi version of the Scale. The Hindi version was administered twice on students after an interval of 15 days and Pearson correlation between test and retest scores was computed. Test-retest reliability was found to be 0.76.

2. ***Multi-Dimensional Emotional Empathy Scale:*** This scale is developed by Caruso and Mayer (1998). This scale of emotional empathy consists of 30 items. And each item is to be rated on a 5 point rating scale. Alpha reliabilities for all scale scores were moderate to high. The scales have significant relationship to a number of behavioural criteria. This scale was also translated in Hindi using same translation procedure as mentioned in the helping attitude scale. The test retest reliability was found to be 0.75 and correlation coefficient between the original and Hindi version of the Scale was 0.79.

Procedure

The present investigation was conducted to study Prosocial behaviour across three generations. To fulfil this purpose, firstly the principal of the schools were contacted with the request for the permission to contact the students of 9th to 10th standards. A list of students who were residing with their parents and grandparents was prepared and their addresses were obtained. Then, the families of these

students were contacted and parents and grandparents, who agreed to participate in the study, were finally included in the sample. Helping Attitude scale and Multi-Dimensional Emotional Empathy Scale were administered on 300 respondents (100 from each generation i.e. Children, Parents and Grandparents) individually or in small groups. After data collection, all the questionnaires/ tests/ scales were scored as per scoring patterns prescribed by their authors and or manuals.

Results

As the objective of the present study was to compare prosocial behaviour and empathy across the three generations, one way ANOVA (Repeated Measure) followed by Post hoc analysis was applied to the data.

Prosocial Behaviour: One way ANOVA (Repeated Measure) was applied to compare prosocial behaviour across three generations. The obtained value of F for families was found to be significant ($F=8.37, p<.01$). These results indicate that helping attitude differs across families. The F values for generation was also significant ($F=10.52, p<.01$), which means that helping attitude differ significantly across generation. Thus, the results show that prosocial behaviour or helping attitude tends to vary across generations as well as families. As F values for between generation was found to be significant, a post hoc analysis (LSD) was applied to compare multiple mean groups.

Table 1: *Summary of One Way ANOVA (repeated measure) of helping attitude.*

Source of Variation	SS	Df	MS	F
Between Families	20721.253	99	209.306	8.37**
Between Generation	1434.32	2	717.16	10.52**
Error	13490.34	198	68.13	

Table 2: *Mean differences on helping attitude between the three generation groups using LSD post- hoc analysis.*

Generation Group	Mean	Mean difference
Children (Generation 1)	79.38	3.580*
Parents (Generation 2)	75.80	
Children (Generation 1)	79.38	5.240*
Grand Parents (Generation 3)	74.14	
Parents (Generation 2)	75.80	1.660
Grand Parents (Generation 3)	74.14	

*p<0.05

Table 3: *Trend analysis of helping attitude scores for the three generation groups.*

Source of Variation	Ss	Df	MS	F
Liner	1372.88	1	1372.88	15.88**

**p<0.01

From the results of the post-hoc analysis, as shown in table 2, it is clear that children (generation 1) differed significantly from parents (generation 2) and grandparents (generation 3). To see the direction of changes in prosocial behaviour across three generation a trend analysis was applied. The results in table 3 reported significant linear trend in prosocial behaviour/ helping attitude across three generation. Linear trend indicates that children (generation 1) score highest on prosocial behaviour followed by parents (generation 2) and grandparents (generation 3).

Empathy: To compare three generations on Empathy, one way ANOVA (Repeated Measure) was applied. The F value for families was found to be significant (F= 1.26, p<.05). The F value for generation was also significant (F= 3.22, P<.01). Thus, the results imply Empathy vary across families as well as generations. As, F values for between generation was found to be significant, a post hoc analysis (LSD) was applied to compare multiple mean groups.

Table 4: *Summary of One Way ANOVA repeated measure of empathy.*

Source of Variation	SS	Df	MS	F
Between Families	22.177	99	0.224	1.26*
Between Generation	0.47	2	0.24	3.22**
Error	14.45	198	0.07	

*p<0.05, **p<0.01

Table 5: Mean differences on empathy between the three generation groups using LSD post- hoc analysis.

Generation Groups	Mean	Mean difference
Children (Generation 1)	3.11	0.036
Parents (Generation 2)	3.07	
Children (Generation 1)	3.11	0.96*
Grand Parents (Generation 3)	3.01	
Parents (Generation 2)	3.07	0.060
Grand Parents (Generation 3)	3.01	

*p<0.05

Table 6: Trend analysis of Empathy scores for the three generation groups.

Source of Variation	SS	Df	MS	F
Liner	.461	1	.461	5.64**

**p<0.01

The LSD post hoc analysis (table 5) revealed that children (generation 1) differed significantly from grandparents (generation 3) on empathy. Whereas no difference was observed between children and parents, and between parents and grandparents group on empathy. Trend analysis conducted to study the direction of changes in empathy across generation, results depicted in table 6, indicated significant linear trend in empathy between generations, which means that empathy increase from grandparents (generation 3) to children (generation 1).

Discussion

The current study examined the generational differences in prosocial behaviour and empathy, in a sample of three generations (children, parents and grandparents) of 100 families. Respondents for the three generation groups were taken from the same family (three subsequent generations), in order to reduce within group variance. Prosocial behaviour and empathy was measured using Helping attitude scale and Multi-Dimensional Emotional Empathy Scale. The obtained data was analysed

by applying one-way ANOVA followed by trend analysis, using SPSS software.

The results of One-way ANOVA applied to compare prosocial behaviour across three generation revealed significant generation differences. The post-hoc analysis further revealed that prosocial behaviour in children (youngest generation) is greater than their parents and grandparents generation. Children are more intended to help others than their parents and grand-parents. Whereas, no significant difference was found between parents and grandparents groups. It was also reported that prosocial behaviour differs significantly across families as well. Eisenberg, Cumberland, Guthrie, Murphy and Shepard (2005) reported that simple prosocial proclivities (i.e. helping, sympathy) did not increase with age. Consistent with these, the present evidence suggest that older generation i.e. grandparents and parents act less prosocially as compared to younger generation (children/adolescent). When considering differences in prosocial behaviour, it is important to consider the individual's motivation. There are strong theoretical basis

that suggest that empathy is an important factor in motivating prosocial behaviour (Batson, 1991; Hoffman, 2000; Staub, 1979)

One-way ANOVA applied to compare empathy across three generation revealed significant generation differences. Post-hoc analysis clearly depicted children differed significantly from grandparents on empathy. No significant differences were observed between children and parents, and between parents and grandparents group. This means that children experience more empathy than their grandparents. The youngest generation, children, feel deeply for others. They are more able to empathize with other people's pain as compare to their grandparents. The results of ANOVA also pointed out significant difference in empathy across families.

The empirical studies conducted on generation differences in empathy within the family have not been conducted. Therefore, empirical studies related to age differences in empathy were considered. But taken together the findings of the studies related to age differences in empathy are mixed, some suggest a negative pattern (Helson, Jones and Kwan, 2002; Phillips, MacLean and Allen, 2002; Schieman and VanGundy, 2000), whereas others report no age related differences (Eysenck, Pearson, Easting and Allsopp, 1985). A prominent life-span theory of emotion –cognition, Dynamic Integrating Theory (DIT), spanning the life span from birth to late life, suggests that relationship between cognition and emotion is inherently dynamic and age related changes in cognitive –affective complexity appears to follow a curve-linear trend suggesting declines in later life (Labouvie-Vief, 2003; Labouvie-Vief & Medler, 2002). The findings of the present study to an extent can be explained by the evidences suggested by DIT that in older adults (in the present study-grandparents) the ability to process complex affective information and empathetic understanding is diminished.

Taking into account the contextual factors that may influence cognitive – emotional representations and functioning, it has been observed from the empirical studies that age deficits in cognitive functioning are reduced, if tasks and instructions are age appropriate and meaningful. Charles & Piazza (2007) reported that older adult's emotional reaction depend on contextual factors like age-relevance, meaningfulness and personal relevance. Similarly, Richter and Kunzmann (2011) reported that age differences in empathic accuracy are only evident if the empathic episode is of relevance to older people. However, no age related deficits were observed in empathy, if target person talks about a topic of high relevance to older adults. Thus, the findings of the current study, that younger generations (children) express more empathy than older generation (grandparents), may be due to the decline in cognitive- affective information processing and empathetic understanding in old age. Moreover, at times due to cultural variation and lack of external validity, meaningfulness and personal relevance older generation shows deficit in empathy compared to younger generation. Younger generation's (children/adolescents) greater empathetic feeling may be the motivation for their more helping attitude and prosocial behaviour. The present study also suggests that there are differences in empathy across families. These findings are consistent with the studies that focus on contribution of familial factors in development of empathy and have reported significant impact of parents on their children's empathy (Eisenberg et al, 1991; Spinrad et al, 1999). Empirical evidences of shared genetics and shared environment effects on empathetic concern towards others further provide support to the findings of the present study that empathy differs across families.

Conclusion

Understanding the course of changes in prosocial behavior and empathy across generations has greatly enriched the knowledge of these important aspects of human emotions and behavior that contributes to greater social good, helps maintain lasting interpersonal bonds and promotes positive feelings. Generational differences exist, especially in representative samples, but whether these differences are due to generation that may be caused by shifting frame of reference or due to misinterpreting developmental changes for generational changes, is yet to be explored. How prosocial behaviours and empathy, vital aspects of good social functioning, will shape in the young generation as they enter adult life remains to be seen. Decrease in prosocial behavior and empathy in grandparents generation (older generation) as compared to younger generation, emphasize the need to design effective interventions for generation related deficits in prosocial behavior and empathy. Familial differences were also inferred for the results of the present study that highlight the scope of family intervention in fostering empathy and prosocial responding.

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Evaluation of Psychology Programme offered through Open and Distance Learning: A Case of IGNOU

Anil K Dimri Savita Panwar***

Abstract

Open and Distance Learning has captured the attention of a large number college entrants to pursue programmes through this mode mainly due to its flexibility in terms of pace, place and duration of learning. Its continuous evaluation system also provides scope for improvement by taking corrective measures. A large number of programmes are being offered through this mode in almost across all disciplines. In India, Indira Gandhi National Open University is playing catalytic role not only to promote ODL but also to strengthen this system. It gives greater emphasis on maintenance of quality and standard of education offered through ODL mode. Considering the success of programme development and delivery over period of time IGNOU also launched psychology programmes at Bachelor and Master Level in 2009. In the present paper an attempt is being made to evaluate the various issues pertaining to psychology programme offered by IGNOU under Chandigarh region. Therefore, the profile of the learners studying the programme will also be evaluated. The paper will examine the different components of the programmes delivery, including, aspects of pertaining to students support services such as availability of print material in time, conduct of counselling session, evaluation of assignment, and continuous evaluation system, such as conduct of practical, project work and internship. For the purpose of present study data were collected both from primary and secondary sources. Feedback of learners was also collected by developing a questionnaire which was supplied to the learners through on line mode by using Google platform. The analysis of the paper is presented in the coherent frame of the study. The study also analyse the feedback of the learners on various aspects of the programme so that the programme can further be strengthened in the larger interest of the learners.

Key words: *Open and Distance Learning, Counselling, Continuous evaluation system, assignment, project*

*About Author: *Regional Director & **Assistant Regional Director
IGNOU Regional Centre, Chandigarh*

Introduction:

Open and distance learning system has captured the attention of a large number of college entrants to join its programme because of the flexibility of the system in terms of pace and place of learning. Indira Gandhi National Open University has made phenomenon growth in terms of student's enrolment since its inception. University, was established by an act of Parliament in 1985, has continuously striven to build a knowledge society through inclusive

education. It has tried to make a mark in the higher education of the country by offering high quality teaching through Open and Distance Learning (ODL) mode. As enshrined, in its mandate IGNOU reaches out to the unreached, disadvantaged and marginalized sections of our society and has continuously tried to increase the Gross Enrolment Ratio (GER). IGNOU has currently 232 academic programmes (Ph.D/M.Phil, Master/Bachelor, PG Diploma/Diploma & Certificate) on offer

through 67 Regional Centres spread across the country ably supported by more than 3000 Learner Support Centres (LSCs) and 29 overseas partner institutions. It serves to the educational aspiration of over 3 million learners in India and other countries through its 21 School of Studies with the strength of 810 faculty members and 574 academic staff at hqrts and Regional Centres and about 43,785 Academic Counsellors at its LSCs from conventional institution of higher learning, professional organisation and industry among others. Through its substantial LSC network, the University seeks to redeem its promise of providing higher education to all the segments. School of Social Sciences, offered Master in Psychology programme in 2008-9. In the present paper an attempt has been made to evaluate this programme from learner's perspective.

Master of Psychology Programme:

Discipline of Psychology, School of Social Sciences, and IGNOU offered Master in Psychology programme in 2009 considering its demand with many schools, hospitals, voluntary welfare agencies and correctional institutions as well as industrial and corporate sectors. The main objective of the programme was:

- To give learners a sound base in psychology and human behavior through an in-depth investigation into broad range of psychology techniques and skills as applied in diverse settings.
- Offered to varied clientele - fresh graduate learners, those who want to enter in employment arena and those already employed but do not possess degree in psychology.

Learners of this programme has to successfully complete course work of 64 credits over a period of two years (32 credit each year) which include theory and practical component for each course. Therefore, eight practical are to be conducted by the learner in the psychology

laboratory. Out of the above eight practical, five practical are to be written in proper format in the practical record/notebook. This note book is to be assessed by the concerned academic counsellor. Actual conduction of practical and reporting it in practical note book (internal assessment) carries 50%weightage and the term end practical examination including viva- voce (external assessment) carries 50% weightage. Internship provides learner with an opportunity to integrate theoretical knowledge, research, and clinical skills. The internship experience includes a minimum of 240 training hours in one year. Internship can be conducted in schools, hospitals, private clinics and NGO providing services for women, and child and other deprived population, correctional institutions and child guidance clinics which will be supervised by the academic counsellors. Learners are also expected to complete the project work is a mediatory requirement of the programme (Programme Guide MA Psychology, IGNOU NEW Delhi).

Review of literature

In distance education, programme evaluation encompasses the evaluation of programme objectives, course content, instructional design, support services, assessment practices, student achievements, and use/impact of technology (IGNOU, 2006) so as to improve the quality of teaching-learning, to enhance the relevance of the programme, to assess how the programme is perceived by the stakeholders and meets their expectations and to provide regular feedback on the factors that affect outcome (Sangai and Garg,2009). There exists substantial literature on the theory and methods of programme evaluation (Kellaghan & Stufflebeam, 2003, p. 1-79), which delineates the objectives, approaches and methods for evaluating a programme (Mishra, 2008, p. 34-46).

Sangai and Garg, while analysing the performance of BED programme offered by IGNOU used CIPP model for programme evaluation and pointed out that the programme was well designed and high quality SLM was provided and use of technology was scanty and student-teachers lacked aptitude for problem solving and independent thinking. In spite of this, the success rate was above 90%. To improve the programme, it would be desirable to include IT related courses and improve considerably learner support services. The study also signifies the possible use of evaluation for improvement in learning through distance mode.

Studies on evaluation of programmes offered in the distance mode are available in the public domain. The Ph.D. programme in Education at the University of the Philippines (UP) Open University has been evaluated using the CIPP model (Quimbo, 2002, p. 196). The study revealed that improvement in significant input and process variables made a positive impact on learner performance. The CIPP model was also used to monitor and develop an evaluation framework for technology-based community learning centres in India (Calder & Patel, 2002, p. 214). Mishra et al (2009) used this model to evaluate the B. Sc programme of IGNOU. The study revealed that the content density of self-learning materials (SLMs) was high but laboratory experiences were interesting and useful. However, access to electronic media facilities at the study centres was poor. Although the University enhanced access to higher science education, the attrition rate was found to be high (73%), and the success rate was low. Similar findings have been reported by Kapoor (2004), who evaluated the Mental Health Nursing Care course—a competency-based course—offered in the B.Sc. Nursing programme at IGNOU and used a model akin to the CIPP evaluation model.

The influence of system theory on the Logic Model approach to evaluation can be seen in its careful attention to the relationships between programme components and the components' relationships to the program's context (Frechtling 2007). Though often used during program planning instead of solely as an evaluation approach, the Logic Model structure strongly supports a rational evaluation plan. The Logic Model, similar to the evaluation models already discussed, can be strongly linear in its approach to educational planning and evaluation. In its least complicated form, it may oversimplify the programme evaluation process and thus not yield what educators need. With careful attention to building in feedback loops and to the possibility of circular interactions between programme elements, however, the Logic Model can offer educators an evaluation structure that incorporates system theory applications into thinking about educational programmes. The Logic Model's structure shares characteristics with Stufflebeam's CIPP evaluation model but focuses on the change process and the system within which the educational innovation is embedded. Though its structural simplicity makes it attractive to both novice and experienced educators, this approach is grounded in the assumption that the relationships between the programme educational methods and the desired outcomes are clearly understood. The simplest form of the Logic Model approach may therefore oversimplify the nonlinear complexity of most educational contexts. The Logic Model works best when educators clearly understand their programme as a dynamic system and plan to document both intended and unintended outcomes.

Objective of the Study

In the present study an attempt has been made to evaluate the psychology programme, therefore the main objectives of the programme are:

- to assess the profile of the learners pursuing the programme;
- To assess whether the learners are satisfied with the course content and its level;
- To analyse whether the learners are satisfied with the academic support provided at the Learner Support Centres; and.
- To assess the feedback of the learners on the Student Support Services its output and outcome.

Methodology

In order to accomplish the research study, data were collected both from primary and the secondary sources. A questionnaire was developed and canvassed among 856 learners of MAPC programme enrolled with IGNOU Regional Centre Chandigarh since the activation of programme in the region till 2015 for both the admission cycle. The questionnaire was placed on the Google platform and e- mail and SMSs were also sent to the learners to respond the questionnaire. There were also provided a link through e -mail. Out of 856 learners 236

responded and their response are included in the coherent frame of the study. Basic information on the enrolment and other issues were collected from the IGNOU Regional Centre Chandigarh and University profile 2017.

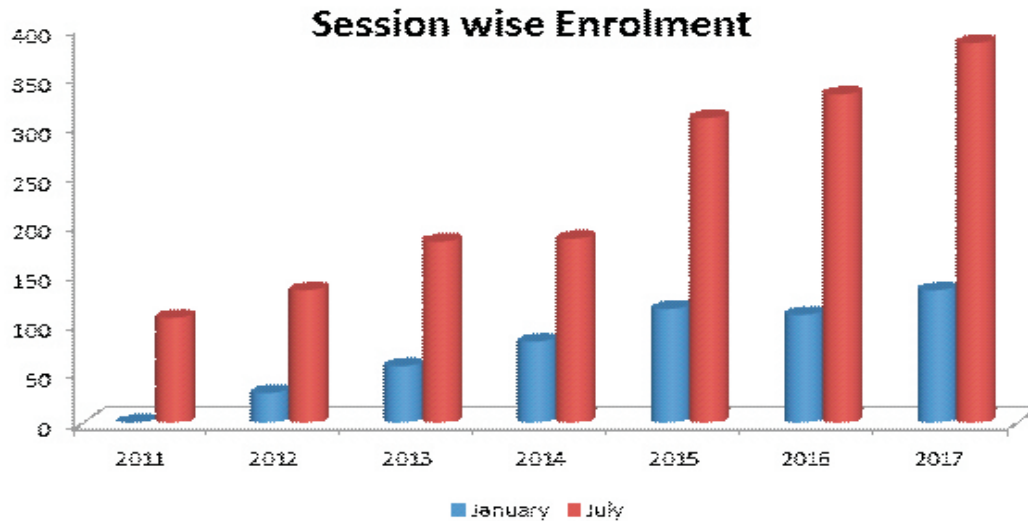
While analysing the questionnaire statistical tools such a measures of central tendencies were also used. In the present study Likert scale was also used to measure the attitude and the response. Attempt was also used to apply logical model of programme evaluation to assess the input, activities, output and outcome.

Enrolment Trend

Attempt has also been made to analyse the enrolment trend of MA Psychology programme in Regional Centre Chandigarh. From the table-1 it is evident to note the enrolment was only 52 at the inception o the programme. There was continuous increase in the enrolment in both the session. In January 2017 session, 102 learners were enrolled in this programme and same was 269 in July 2017 session. The enrolment trend was fluctuating both in July and January sessions. The increase in the enrolment was significantly higher in 2017. It has been observed that the programme is very popular in the region.

Table-1: Enrolment Trend

	JAN		JULY	
	FRESH	RR	FRESH	RR
2011	0	0	52	54
2012	19	11	98	36
2013	43	14	138	45
2014	56	26	131	55
2015	85	30	233	75
2016	60	49	205	127
2017	102	32	269	115



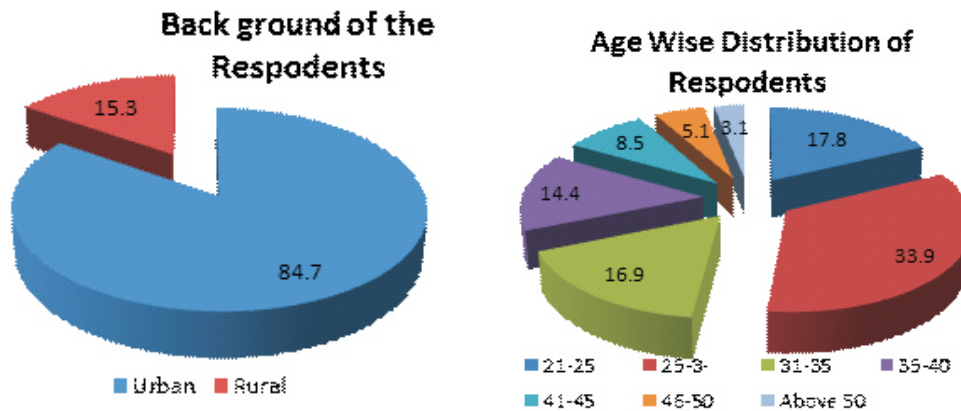
Profile of the Learners

Efforts were also made to understand the profile of the sample learners and it has been revealed that out of the total responded 35.6 percent were male and 63.6 percent were female. It may also be noted that 2 learners did not reveal their gender. Among these learners, 89 percent were from general category, 8.5 percent from OBC and 2.5 percent from Scheduled Caste. Similarly majority of the learners (84.7 percent) were from urban areas and 15.3 from rural areas including 66.9 percent employed and 31.1

percent employed. While analyse the age group of the learners it is noticed that 33.9 percent learners were from age group 25-30 years followed by 17.8 percent from 21-25 years and 16.9 percent learners from 31-35 years. It may also be noted that 20 learners were from age group from 45 and above which include 5.1 percent (12) percent from 46-50 and 3.1 percent (8) percent from 50 and above). This clearly indicates that the respondents are spread across the different age groups.

Table-2: Profile of the Learners

Indicators	Number	Percent	Indicators	Number	Percent
Sex			AGE		
Male	84	35.6	21-25	22	17.8
female	150	63.6	25-3-	80	33.9
other	2	0.8	31-35	40	16.9
Category			35-40	34	14.4
Gen	210	89	41-45	20	8.5
OBC	20	8.5	46-50	12	5.1
SC	3	2.5	Above 50	8	3.1
Background			Employment Status		
Urban	200	84.7	Employed	158	66.9
Rural	36	15.3	Unemployed	78	33.1



Discussion and Analysis

In this paper an attempt was made to evaluate the programme based on the feedback collected from the learners on various issues pertaining to input, activities, output and outcome of the programme using logical model of programme evaluation. The feedback thus collected is analysed in the following section. It may be noted that input provided for implementation of the programme including self instructional material, assignments and its evaluation and feedback, programme guide, practicum log book and internship support besides conducting counselling sessions, guidance for internship and supervision of project. Under the programme counselling sessions were conducted at the learners support centres and learners who attended the counselling sessions were asked to give feedback and the feedback was highly positive. Similarly learners are required to perform the required activities to complete the programme such as attending the counselling session, submitting the assignment in time, undertaking project work and also doing internship and practicum. Efforts were made to evaluate these issues with the feedback of learners.

There are certain activities which are to be performed by the RC for the effective implementation of the programme so that

expected outcome could be achieved which include constant monitoring of the academic aspects of the programme and timely corrective interventions. Feedback, thus collected on these parameters suggests that some of the activities were able to meet the learners' expectation however, corrective measures are required particularly dealing with the practicum, internship and project work as it has significantly influenced the pass percentage. Therefore, the output of the programme was not satisfactory as only 11 percent learners were able to complete the programme. This clearly indicates scope for correction in delivery of the programme which includes the lack of seriousness at both level needs to be addressed on priority. The analysis also reveals that 47 percent learners were able to get the job. However, we admit that further investigation on nature and type of the job was not undertaken. The details analysis of the programme evaluation is presented in the following section.

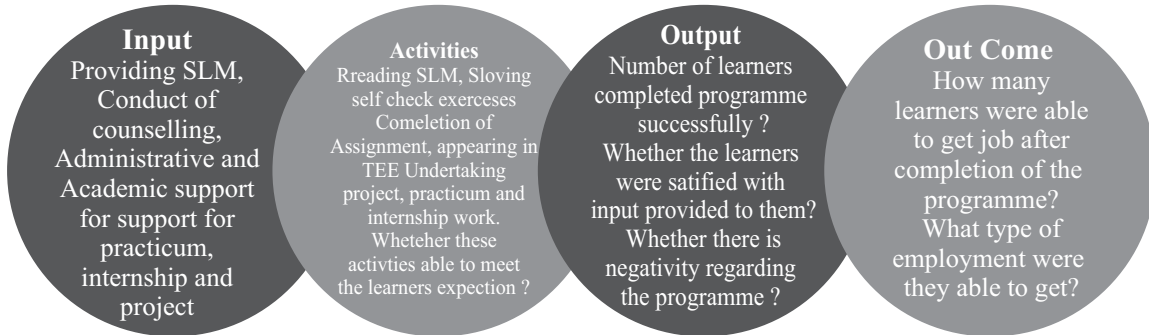


Fig. Logical model for Programme Evaluation

While analysing the feedback of the learners on the course content of the programme, it is revealed that 20.3 percent learners strongly agreed with the course content. On the other hand 36.4 percent learners agreed with the course content of the programme. The data clearly indicates that a significant proportion of

learners (31.4 percent) were undecided. The proportion of learners disagreed (9.3%) and strongly disagree (2.5 %) was 11.8 (28) percent. Although this is relatively less but it also provide feedback to the learners. The average mean score obtained for this indicator was 3.983 which are considered to be high.

Table-3: Perception of learners on Content and Language

Indicators	Number	Percent	Score	Average Mean Score
Course Content				
strongly Agree	48	20.3	240	
Agree	86	36.4	344	
Undecided	74	31.4	222	
Disagree	22	9.3	44	
strongly disagree	6	2.5	6	
Score	236		940	3.983051
Language				
strongly Agree	64	27.1	320	
Agree	148	62.7	592	
Undecided	22	9.3	66	
Disagree	0	0	0	
Strongly disagree	2	0.8	2	
	236		1008	4.271186

On the other hand feedback of the learners on the language of the course material was highly positive. 27.1 percent learners strongly agree with the language and 62.7 percent learners agree. Although 9.3 (22) percent learners were undecided with the language of the course material, however only 0.8 Percent

learners were strongly disagree with language of course material. The mean score for the same was 4.2711 which are significantly higher. This also substantiate the fact that the course material developed and supplied to the distance learners by IGNOU is one of the best material available for the distance learners in the world.

Table-4: Satisfaction Level with Conduct of Counselling and Evaluation of Assignment

Whether Satisfied with Counselling				
Indicators	Number	Percent	Score	Mean Score
strongly Agree	22	9.3	110	
Agree	102	44.1	408	
undecided	74	31.4	222	
Disagree	26	11	52	
strongly disagree	10	4.2	10	
	234		942	4.025641
Evaluation of Assignment				
strongly Agree	12	5.1	60	
Agree	112	47.5	448	
undecided	78	33.1	234	
Disagree	24	10.2	48	
strongly disagree	10	4.2	10	
	236		940	3.983051

While analysing the satisfaction level for the counselling support, 9.3 percent learners strongly agree and 44.1 percent learners agreed to the counselling support provided to them. A significant proportion of learners (31.4 percent) were undecided and this may be attributed to the fact that since counselling is not compulsory they may not have attended the sessions. However, 15.2 percent learners were disagreeing with the counselling support provided to them. This feedback would help the RC to provide suggestion to the ACs to improve the quality of counselling in order to increase the satisfaction level of the learners. Nevertheless the mean score obtained for the counselling was 4.024541 which are significantly higher.

On the other hand the mean score obtained for evaluation of assignment was marginally lower (3.983051) than the score obtained for the counselling. Nevertheless, more than 50 percent learners were satisfied with the evaluation of assignment as 5.1 percent were strongly agreed and 47.5 percent agreed. The proportion of learners not satisfied with evaluation of assignment was 14.4 percent and one-third of them were undecided. This clearly warrants for improvement in the evaluation of assignment as it is very important component of ODL particularly to encourage continuous evaluation process.

Table- 5: Feedback on Internship and Practicum

Internship			Practicum		Visited RC	
Yes	84	36.2	142	60.2	204	86.4
No	94	40.5	94	39.8	32	13.6
Yet to pursue	58	23.3	-	-	-	-

The learners were also asked whether they received support for internship and practicum work at the LSC and 36.2 percent learners reported that desired support from the LSCs, was received, however, relatively higher proportion of learners (40.5 percent) reported that they have not received support from the

LSC. On the other hand remaining 23.3 percent learners have reported that they are yet to pursue internship. Similarly 60.2 percent learners reported that they were properly guided for completion of practicum. It may also be noted that 86.4 percent learners regularly visited RC for academic and administrative support.

Table-6: Time taken for Completion of the Programme and Reason for Non Completion

Programme Completion	No.	Percent	Score	Mean Score
With in Minimum Period	24	10.2	168	
after one year	20	8.5	120	
After two year	2	0.8	10	
Took maximum period	4	3.4	16	
Re-admission	2	0.8	6	
New Admission	8	6.8	16	
Not completed	144	69.6	144	
	204		480	2.352941
Reason for Non completion				
Personal	40	17.1	280	
Poor academic support	34	14.5	204	
Lack of administrative support	22	9.4	110	
Tough course content	8	3.4	32	
Other commitment	32	13.7	96	
Yet to complete minimum period	42	35	84	
No Completed	36	6.8	36	
	214		842	3.934579

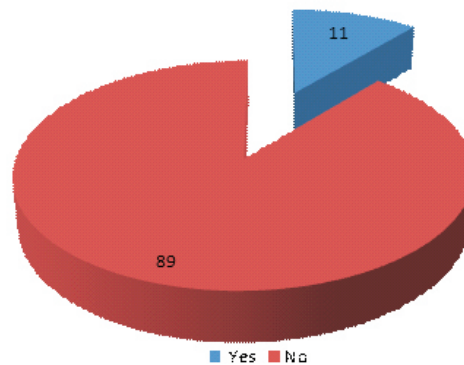
IGNOU provides flexibility for completion of programme beyond the minimum duration of the programme to the learners who are pre- occupied and do not find time to complete the programme in time. Hence,

feedback was also collected from the learners regarding completion of the programme. It has been noticed that on 10.28 percent learners have completed the programme with in minimum duration and 19.58 percent learners took

advantage of the flexibility, out of which 8.5 percent learners took one year to complete the programme 6.8 percent learners took re-admission to complete the programme beyond the maximum period of four years. This clearly

indicates that the success rate for completion of the programme was very low which has been computed to 11 percent only. Nevertheless, 47 percent learners were able to get job after completion of the programme.

Completion Rate of the Programme



Further investigation was also done to know the reasons for non-completion of the programme and 17.1 percent learners have reported that due to personal reason they could not complete the programme in time. 14.5 percent learners have reported that due to poor academic support they could not complete the

programme and 9.4 percent learners cited lack of administrative support for taking more time to complete the programme. On the other hand, 3.4 percent learners have reported that the course content is very tough as a result they could not complete the programme. These indicators are sufficient to initiate corrective measures in order to meet the learner's expectation.

Table-7: Overall Rating for Programme Evaluation

Indicators	Mean Score
Content	3.983051
Language	4.271186
Receipt of Course Material	4.584746
Satisfied with Counselling	4.025641
Evaluation of Assignment	3.983051
Support for Internship	2.110169
Support for Practicum	1.601695
Support While visiting RC	1.864407
Support Services	4.459459
Completion of Programme	1.111111
Time for completion	2.352941
Reason for Non Completion	3.934579
Programme was able to provide job	1.533898
Over all mean score	3.062764

As explained earlier 13 indicators were used to evaluate the programme by using Likert scale. We have grouped these scores into four categories for the purpose of our study as Very high >4.5, High 3.5 to 4.5, average 2.5 to 3.5, below average 1.5 to 2.5 and poor <1.5. Therefore, we may conclude that language of the study material, its receipts, and satisfaction level at the counselling and overall support services were rated high by the learners. The course content, evaluation of assignment and reason for non completion were rated average and support for internship and time for completion average. Completion of programme and job issues was rated below average.

Findings

- The MAPC programme has achieved its laid down objectives very effectively. The overall mean opinion score of learners measured in quantitative terms worked out to be 3.063 on Likert five point scales. Thus the success score of the MAPC programme is high and most of the learners have been benefitted by pursuing this programme.
- The learner's response on various aspects of Self Learning Material i.e. Content, Density, Style, Language, Practical Aspects, Adequacy and Structure is very good which reflects that they were satisfied with the overall quality of the SLM.
- Most of the learners agreed that counselling sessions organised both theory and practical were very useful for them. Their most of the problems could be sorted out during these sessions.
- The learners are of the opinion that preparation of assignments has helped them for appearing in the term end examination because pattern of questions was same.
- Most of the learners feel that job prospects are more after completion of this programmes

- The learners response were same irrespective of whether they are male or female, rural or urban, unemployed or employed on most of the issues.
- The pass percentage in MAPC programme is very low which (11%) only and this also draw the attention for corrective measures and further investigation.
- Learners are not satisfied with the support provided in Practicum and Project completion.
- Services provided by Regional Centre were also rated average and the learners have several administrative problems such as delay in approval of synopsis and reflection of practicum, project and internship marks.

Concluding Remarks

In this paper we have made sincere attempt to evaluate the MA Psychology Programme offered by Indira Gandhi National Open University on several indicators. The result of our study clearly indicates that the programme was able to meet its laid down objectives and has performed significantly better on number of parameters. However, the successful rate of the programme was very low which suggests that more efforts are required at the implementation and delivery level. Support services needs to be strengthened particularly for time completion of practicum, internship and project work. The emphasis on information dissemination should also be given as majority of learners gave written suggestion that timely information should be provided and this gap should be bridged for the benefit of the learners by using on line mode frequently. It was also suggested that the LSC and Regional Centre should be equipped with the reference books in the Library for the benefit of the learners, nevertheless majority of the learners were satisfied with the programme development and delivery.

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Relationship between Organizational Climate and Job Satisfaction Among Teachers

Sino Abraham Vijayashri Ravi** S.V. Surya Rekha*** Ashok H.*****

Abstract

Job satisfaction is of major interest in the field of organizational behavior and in the practice of human resource management (HRM). It reflects employees' attitudes towards their job and their organizational commitment. The aim of the present study was to understand the relationship between organizational climate and job satisfaction among college lecturers. A sample of 100 lecturers from two different educational institutions (regular degree college and technical degree college) in Bangalore was selected using simple random sampling procedure. The survey method was used. Standard scales were used to study the organizational climate of the institutions and the teacher's job satisfaction. T test and Pearson's co-efficient correlation were used to analyze the data. The results showed no significant difference in job satisfaction among teachers, although a significant relationship was found in the organizational climates of the two institutions. The education level or experience did not lead to any major difference.

Keywords: *Job satisfaction, organizational climate, teachers.*

*About Authors : * & ** Dept. of Psychology, Bharathiar University, Coimbatore.*

**** Professor, Montfort College, Bangalore*

*Co-author: ****Professor, Montfort College, Bangalore.*

Introduction

Job satisfaction is of major interest in the field of organizational behavior and in the practice of human resource management (HRM). It reflects employees' attitudes toward their job and their organizational commitment. Job satisfaction is an emotional response to a job condition which can be inferred. The definition by Locke (1976) brings out this context as "... a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304). Job satisfaction is determined by how well the outcomes are met or how expectations are exceeded. The more happier people are with their jobs, the more satisfied they are said to be. In fact, job satisfaction may be regarded as a significant aspect of life satisfaction. Job satisfaction is a relatively recent term since in previous centuries the jobs available to individuals were often predetermined by the

occupation of their parent's. Although job satisfaction and motivation are interlinked, they are not the same.

Factors contributing to Job Satisfaction

The causes of employees' satisfaction are not restricted to ingrained factors alone but they sum the whole gamut of human needs and aspirations. There are a lot of factors besides money that contribute to job satisfaction. Scholars suggest that there are six job dimensions that represent the most important characteristics of a job, namely, the job itself, compensation, career growth, supervision, co-workers and work environment. In essence, the fulfilment of these six aphorisms leads to job satisfaction and causes employees to be more productive and creative.

Organization Climate

Organizational climate (sometimes known as corporate climate) is the process of quantifying the "culture" of an organization. A

very useful metaphor for thinking about and describing the social system, organizational climate is referred to as the situational or environmental determinants that affect human behavior. To some extent, it can also be equated to the personality of a person.

Literature Review

Sierpe(1999)used Spector's Job Satisfaction Survey (JSS) in his study to measure the job satisfaction of librarians in the three English-language universities in the province of Quebec, Canada. On analysing 81 responses (74.3%) the authors found that the generally satisfied librarians working in these institutions were dissatisfied with the operating procedures and communication. The relationship between demographic characteristics(such as age, gender, academic rank and tenure status) and job satisfaction were also analyzedand compared with prior research outcomes.

Morgan and O'Leary(2004)studied the factors associated with beginning teachers' satisfaction in a survey of 468 former students of a teacher education college who had spent between 6 and 18 months in the classroom. The survey identified curricular competence, perceived self-efficacy and school support as important factors. Pre-entry characteristics, including quality of degree, and the grade level at which teachers were teaching were not considered important. Teachers in small schools expressed high levels of job satisfaction.

Teachers in various schools serving disadvantaged communities did not differ from one another in their reported level of job satisfaction. However, the patterns of association with job satisfaction differed in schools in other locations and in schools serving students in disadvantaged locations.

Arani and Abbasi(2004)investigated secondary school teachers' job satisfaction in relation to the school organizational climate on a

random sample of 512 teachers from Arak city in Iran and Mysore city in India. Teacher's job satisfaction scale andorganizational climate questionnaire were used. It was found that organizational climate had more influence on job satisfaction among teachers in Indiathan in Iran.

Sharma and Jyoti(2006) conducted a study to empirically discover the nature of relationships between job satisfaction and different factors and independent aspects of job satisfaction.The sample comprised of 120 school teachers working in government and private schools in Jammu city. The questionnaire covered six aspects of the job: principal's behavior, colleagues' behavior, work itself, pay and rewards, growth opportunities and recognition, and students' behavior. The analysis revealed that each of these aspects played a role in job satisfaction. The degree of job satisfaction was not high among teachers due to insufficient pay. Secondary level teachers were more satisfied than primary level teachers. Contrary to expectation and despite the poor pay package, private school teachers were more satisfied than government school teachers due to the congenial atmosphere in private schools. Female teachers were more satisfied due to the nature of the job and the socio-cultural value of the profession. The level of education inversely affected the pay satisfaction of employees working at the same level. Satisfaction with teaching as a career, not merely as a job, was an important policy issue since it was associated with teacher effectiveness, which ultimately affected students' achievement. Sharma and Jyoti (2006) suggested some steps to raise job satisfaction among school teachers.

Adeyemi(2008) conducted a study to investigate the relationship between organizational climate and job satisfaction among primary school teachers in Ondo state, Nigeria on a random sample of 360 schools. A

questionnaire on organizational climate and teachers' performance in schools was used and it was found that most of the schools run an open climate type of organization. However, a significant relationship was found between organizational climate and teachers' job performance.

Adeniji(2011) aimed to explore organizational climate as a predictor of job satisfaction of academic staff of a private Nigerian university. The study was conducted on 384 staff members. A significant relationship was found between organizational climate and job satisfaction.

Özen(2013) conducted a study by using two questionnaires to determine the relationship between organizational climate and job satisfaction. There was no significant relationship among organizational climate subscales, which showed that subscales were independent of each other. There was a significant interrelationship among job satisfaction factors which showed their interdependencies. Supportive principal behavior and directive principal behavior were found to be significantly correlated with job satisfaction; on the other hand, restrictive principal behavior was found to have no significant correlation with job satisfaction. Collegial teacher behavior and intimate teacher behavior were found to have no relationship with job satisfaction.

Selamat, Samsuand Kamalu(2013) examined the influence of organizational climate on job performance. A sample of 37 school teachers was selected by using simple random technique. Survey method was used to collect data. It was found that secondary school teachers were unable to finish their work and that the organizational climate was unhealthy. The study also revealed that organizational climate chiefly contributed to job performance.

Treputtharat and Tayiam(2014) studied organizational climate and job satisfaction among 329 teachers based on Krejcie and Morgan's(1970) table. It was found that job satisfaction was generally high and organizational climate affected job satisfaction. Career and job characteristics were the most considered aspects while remuneration and related payments were the least considered.

Chinthala(2014) concluded after a review of various researches that there was an impact of organizational climate on the job satisfaction of teachers.

Ghavifekr and Pillai(2016) examined the relationship between school organizational climate and job satisfaction on a sample of 245 teachers from six government secondary schools in Malaysia. Organizational climate index and teachers' job satisfaction questionnaire were used. It was found that there was a significant positive relationship between organizational climate and job satisfaction. There was no significant difference between male and female teachers' job satisfaction. Experience was found to cause a difference in the level of job satisfaction.

Alajmi (2016) explored organizational climate as a predictor of job satisfaction on employees of six selected companies out of which about 293 employees responded. A significant positive relationship was found between organizational climate and job satisfaction among these respondents. Leadership and performance evaluation led to variations in job satisfaction.

It can be comprehended from the above studies that a significant relationship exists between job satisfaction and organizational climate. It was found that teachers were more satisfied when their payments were at par with their level of education. There was no significant difference between male and female teachers. Experience did bring a difference in job satisfaction.

Aim and Method

The aim of the study was to understand the difference in job satisfaction among teachers of two different institutions and to find out the factors that contributed to the difference in job satisfaction. A comparative study and a survey method on a sample of 100 teachers from different institutions were employed for the present study. The following problems were analyzed and discussed:

Problems

1. Is there a significant difference in organizational climates of two different educational institutions?
2. Will there be any significant difference in job satisfaction among lecturers of two different educational institutions?
3. Is there a significant relationship between organizational climate and job satisfaction?

Hypotheses

The following null hypotheses were formulated and tested.

1. There will be no significant difference in organizational climates of two different educational institutions.
2. There will be no significant difference in job satisfaction among lecturers of two different educational institutions.
3. There will be no significant relationship between organizational climate and job satisfaction.

Tools

The following tools were used for the study:

Organizational climate scale developed by Pethe, Chaudhari and Dhar (2001). This scale is standardized and the inventory consists of 22 statements which are divided among four factors. The inventory has a seven point scale and the respondent can mark the appropriate choice in the response sheet. The final score can be calculated by adding the scores of all factors to get the total organizational climate score. The validity of the test was 0.93 and the reliability was 0.87.

Teacher's job satisfaction scale developed by Mudgil, Muhar and Bhatiya (1991). This inventory consists of 75 items based on Likert scaling technique. They are presented on a 5 point scale and the respondent has to respond according to the extent of agreement. The items are given a score from 1 to 5, the sum of which gives the score of job satisfaction. The validity of the test was 0.87 and the reliability coefficients were 0.85 and 0.95, respectively.

Results

Hypothesis I: There is no significant difference in organizational climates of two different institutions.

Table I shows the mean, SD and 't' value for difference in organizational climates of two different institutions.

Groups	N	Mean	SD	't'	Level of significance
Regular degree college lecturers	50	95.460	21.567	2.758	Significant at 0.01 level of confidence.
Technical degree college lecturers	50	122.160	22.924		

The above table represents the mean value, SD and 't' value for difference in organizational climates of two different institutions.

The mean value indicates difference in organizational climates of two different institutions.

SD indicates that there is variance with regard to difference in organizational climates of two different institutions.

The 't' value indicates that there is a significant difference in organizational climates of two different institutions.

It can be concluded from the above data that there is a significant difference in the organizational climates of two different institutions, thus rejecting the null hypothesis.

Studies were not found to support the above findings. Therefore, the present study may be useful for both theoretical and practical purposes.

Hypothesis II: There will be no significant difference in job satisfaction among lecturers of two different institutions.

Table II showing the mean, SD, and 't' value for job satisfaction among lecturers of two different institutions.

Groups	N	Mean	SD	't'	Level of significance
Regular degree College lecturers	50	226.560	59.51	0.197	Not Significant at both levels of Confidence
Technical degree College lecturers	50	254.740	49.77		

The above table represents the mean value, SD and 't' value for job satisfaction among lecturers of two different colleges i.e. regular degree colleges and technical degree colleges.

The mean value indicates a difference in job satisfaction among the lecturers of two different institutions.

SD indicates that there is a variance with regard to job satisfaction among regular degree college lecturers and technical degree college lecturers.

The 't' value indicates that there is no significant difference in job satisfaction among the lecturers of the aforementioned two institutions.

It can be concluded from the above data that there is no significant difference in job satisfaction among lecturers of two different institutions. Hence, the null hypothesis is accepted.

The results are in accordance with the findings of Arani and Abbasi(2004), Sharma and Jyoti(2006) and Ghavifekr and Pillai(2016).

Hypothesis III: There is no significant relationship between organizational climate and job satisfaction in two different institutions.

Table III showing the mean, SD, correlation and p value for the relationship between organizational climate and job satisfaction in two different institutions.

Groups	N	Mean	SD	Correlation coefficient	Level of significance
Total organizational climate score	100	108.810	25.891	0.771	Significant at 0.05 and 0.01 level of confidence.
Total job satisfaction score	100	240.650	57.047		

The above table represents the mean value, SD, correlation, and p value for relationship between organizational climate and job satisfaction in two different institutions.

The mean value indicates a relationship between organizational climate and job satisfaction among two different institutions.

SD indicates that there is variance with regard to relationship between organizational climate and job satisfaction among two different institutions.

The correlation coefficient shows that there is a significant relationship between organizational climate and job satisfaction in the two different institutions, thereby rejecting the null hypothesis.

It can be concluded from the above data that there is a significant relationship between organizational climate and job satisfaction between two different institutions. Such a significant relationship could be because of the organizational factors that influence employees' job satisfaction.

The findings are in accordance with the study outcomes of Lynch (1960), Arani and Abbasi (2004), Sharma and Jyoti (2006), Ghavifekr and Pillai (2016) and Alajmi (2016).

Discussion

The present study was conducted to find out the relationship between organizational climate and job satisfaction among college lecturers. The findings of the study are discussed below.

With reference to organizational climate, it is found that there is a significant difference between the organizational climate of two different educational institutions. Such differences may be due to the influence of the management, working population, subjects taught and also the teachers' attitude towards the organization and vice versa.

It is understood from the present study that there is no significant difference in job satisfaction between two different educational institutions. This could be because of the management policies, amount of freedom given to teachers, interpersonal as well as management-employee relationships in the institution.

A significant relationship is found between organizational climate and job satisfaction in the two different institutions. Management style, relationship with employees and scope for development are some of the contributory factors of such a relationship.

Summary and Conclusion

The aim of the present study was to find out the relationship between organizational climate and job satisfaction among college lecturers.

A detailed review of related literature was carried out, on the basis of which the objectives of the study were finalized and the scope of the study identified.

The study sample comprised of a total of 100 lecturers who were chosen on a random basis from two different institutions in Bangalore.

The study was conducted by using the survey method with the help of two tools, viz. 'Organizational climate scale' by Pethe, Chaudhari and Dhar (2001) and 'Teacher's job satisfaction scale' by Mudgil, Muhar and Bhatiya (1991).

The data thus collected were analyzed by using test statistics, p value, t test and Pearson's correlation for testing the formulated hypotheses and the results were discussed for the same.

It can be inferred that good organizational climate is important for job satisfaction among employees. Further research needs to be done in this field for bringing about better changes in organizational climate, which will lead to greater job satisfaction and better employee retention.

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A Comprehensive Understanding of Prenatal Maternal Stress

Sreeja Gangadharan SPK Jena***

Abstract

Pregnancy, though being a state associated with extreme joy and happiness, it is also a period of physical and emotional transition in women. Since reproductive events are associated with substantial hormonal changes and subsequent mood swings, some women may perceive the events as extremely stressful if aligned with other adversities in life. Evidences from previous studies suggests that prenatal maternal stress is an intrauterine environmental risk for fetal neural development and adverse birth outcomes such as preterm birth and babies with low birth weight. This requires a proper assessment of the construct to identify the risks, in the early stage of pregnancy itself. But this is largely hindered by poor conceptualization of the construct and the absence of a multidimensional scale to assess the construct more comprehensively. The present study follows a qualitative approach to understand the construct more comprehensively by exploring various themes directly from the experiences of pregnant women.

Key words: *prenatal maternal stress, intrauterine environmental risk, intimate partner relation, pregnancy specific stress, social support.*

About Authors : **Research Scholar, Department of Psychology, University of Delhi, Delhi 110007*

***Associate Professor, Department of Applied Psychology, University of Delhi*

Introduction

A large amount of epidemiological attention has been paid to the links between prenatal maternal stress (PNMS) and postpartum depression, (Ahluwalia, Merritt, Beck, & Rogers, 2004; Skouteris, Wertheim, Rallis, Milgrom, & Paxton, 2009) adverse birth outcomes such as preterm birth, babies with low birth weight (Dole, Savitz, Siega-Riz, Mc Mahon, & Buekens, 2003; Hoffman & Hatch, 1996; Lobel, 1995; O'Donnell, Bugge, Freeman, Khalife, O'Connor, & Glover, 2011; Wadhwa, Sandman, Porto, Dunkel-Schetter, & Garite, 1993), major health and subsequent developmental and mental health challenges; that may persist in to childhood, adolescence and even adulthood (Buss, Davis, Hobel, & Sandman, 2011; Davis & Sandman, 2012; O'Connor, Heron, & Glover, 2002).

Foetal programming hypothesis as advanced by DJ Barker (1989) suggests that

PNMS has a programming effect on foetus and may leaves indelible impression on adult organ functioning, including the functioning of brain and the nervous system. This hypothesis is supported by later studies suggesting; if the mother is prenatally stressed, the foetal level of cortisol will matches with the maternal level and such prolonged exposure to stress hormones such as cortisol may have an indelible impression on the growth and development of the foetus (Talge, Neal, & Glover, 2007).

Though stressful events during pregnancy are considered as an intrauterine environmental risk, assessment and evaluation of PNMS suffers from serious methodological errors. Earlier studies had employed different approaches to assess the construct, (Lobel, 1994) and much of this attention had given to stress that is general or nonspecific to pregnancy (Lobel, Jennifer, Schneider, & Meyer, 2008).

But these approaches, which attempts to assess PNMS by focusing on state anxiety or stressful life events have inconsistent association with birth outcomes such as preterm birth and babies with low birth weight (Dunkel-Schetter, 1998; Hogue, Hoffman, & Hatch, 2001; Stanton, Lobel, Sears, & DeLuca, 2002). Whereas few other studies, which adopted a multidimensional operationalization of the construct: conceptualizing prenatal maternal stress as an aggregate of stressful events, their perception and negative emotional states have more consistent association with birth outcomes (Lobel, 1994; Roesch, Dunkel-Schetter, Woo, & Hobel, 2004).

Another concern across the research is the use of a general stress scale to assess prenatal maternal stress. General stress scales fails to account for the unique experiences during pregnancy such as physical symptoms, parenting concerns, relationship strains, bodily changes, anxiety about labor and delivery and concerns about the baby's health. (Affonso & Mayberry, 1990; Misra, O'Campo, & Strobino, 2001). Since studies had already distinguished perception of pregnancy specific stress from more general stress during pregnancy (Huizink, Mulder, Robles de Medina, Visser, and Buitelaar, 2004), a mere focus on general stressors and anxiety by those studies which intends to assess PNMS may undermine stress specific to pregnancy (McMahon, Boivin, Gibson, Hammarberg, Wynter, & Saunder, 2013) and there by compromises the very purpose of such research.

Studies also says pregnancy specific stress predicts adverse birth outcome more accurately as compared to general stress and anxiety, but a systematic approach to assess prenatal maternal stress comprehensively is still missing in the literature. This is mainly due to the absence of a comprehensive study which focuses on exploring various dimensions of

PNMS directly from the experience of pregnant women (Bayrampour, Ali, McNeil, Benzies, Tough, & MacQueen, 2015).

As suggested by Bayrampour and colleagues (2015), a comprehensive tool which includes all dimensions of the construct and that also examines levels of PNMS is the need of the hour. To ensure such comprehensibility in the assessment of the construct, it is essential to have a clear understanding of it's dimensions. This requires a direct investigation to the attributes of prenatal maternal stress (Bayrampour et al., 2015). Hence the present study focuses on filling this gap in the PNMS research by refining and redefining the construct more comprehensively to include the direct experiences from the lives of pregnant women.

Method

The study was conducted from 2014 to 2015 in a prenatal maternal clinic, Raji Nursing home, located in Kerala, India.

Procedure

From the review of prenatal maternal stress research and its assessment scales, developed an initial pool of constructs. Experts including gynecologists, sociologists and psychologists were consulted for their opinions on various aspects that could probably be a concern for pregnant women. Twenty five in-depth interviews were conducted with pregnant women. The interviews were largely unstructured and these women were asked to share their experiences and concerns during pregnancy.

The study used a purposive sampling method; women were selected from socioeconomically diverse population of different parity and trimester (Table 1). Interviews were continued until the response seems redundant or no new concerns were reporting.

The entire data set were subjected to qualitative analysis and screened thoroughly by following an inductive method, keeping in view, the broad objective of identifying various concerns expressed by pregnant women. The data set was screened thoroughly to identify responses reflecting negative connotations. An essentialist or realistic method (McLeod, 2001), which gives primacy (Holloway & Todres, 2003) to the experiences, meanings and reality of the participants was followed to understand the phenomenon in question.

The entire process of thematic analysis in the study was guided by two criteria; internal homogeneity and external heterogeneity, i.e. data within themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes (Braun & Clarke, 2004). The refinement process was continued until no new themes were emerging. At each level of the analysis, validity of the individual themes in relation to the entire data set was considered to ensure that the thematic map accurately reflects the meanings evident in the data set as a whole (Figure 1).

Results and Discussions

Interviews with pregnant women had revealed a detailed description about their experiences; concerns and worries, and were grouped in to nine major themes after a thorough analysis of the entire data set (Figure 1). A pattern of association among various themes had also identified from the data set (Figure 2). Based on the analysis, the construct PNMS is comprehensively defined as: perceived lack of planning and preparedness to pregnancy, intimate partner relations and perceived social support, physical, emotional and economic concerns associated with pregnancy, fear about health of foetus, fear of labour and delivery, concerns about the baby or any other stressors which are emotionally or physically taxing or

exceeding resources or endangering wellbeing of pregnant women. The nine major themes generated from the data set are defined and discussed in detail.

Intimate Partner Relations (IPR)

Poor support and understanding of intimate partner is a major concern experienced by pregnant women. It is natural for a woman to expect emotional support from the partner during their pregnancy. The absence of this may leads to perpetual miseries. IPR is comprehensively defined as the perceived care and support to a pregnant woman from her intimate partner during their pregnancy, which involves physical, emotional and economic support. About 60% of the women interviewed had reported some sorts of emotional concerns and mood swing. An understanding partner who views these changes positively will help to keep the situation under control.

A satisfying physical and emotional bonding is one of the major joy in a marital relationship and women who were satisfied with their sexual life had reported greater wellbeing (Davision, Bell, La China, Holden, & Davis, 2009). In a study, Bobak, Lowdermilk, and Jensen (1993) had reported that, for a woman the two major needs from their marital relationship during pregnancy are: the need for love, value and acceptance of the child and willingness of the partner to assimilate the infant to their family.

Emotional experiences of the male partner also vary during pregnancy. When the pregnant woman gets engrossed in her own thoughts of unborn child, the partner may at times feel "left out". Some may engage in nurturing behaviour while others may feel left alone, lonely and alienated, they may seek comfort and understanding from outside world; others may engage in new hobbies or preoccupied with their own emotional development and often fails to be the emotional

support to their partner (Bobak et al., 1993). This may result in perpetual miseries and unwanted strains in their relationship. Counselling and support of mental health professionals is essential to alleviate such strains in the relations due to poor understanding of the emotional concerns of the partner.

Foetal Health

Pregnancy loss, regardless of the type and timing cause serious emotional strains in women, which may lead to a brief period of depression or even persist in subsequent pregnancies, especially to those pregnancies which immediately follow the loss. Studies further say that, such pregnancies are often associated with heightened fear and anxiety and 'Fear of loss of foetus' (Giannandrea, Cerulli, Anson, & Chaudron, 2012) as compared to women who are pregnant for the first time or those who had a full-term pregnancy (Armstrong, 2004).

A pregnant woman who had prenatal loss twice in her previous pregnancies had reported a heightened fear and anxiety about the health of the foetus. The study had also noticed that, such fear disappears gradually after the initial three months of pregnancy, especially among women who had an early prenatal loss. This suggests that only if the women had an advanced prenatal loss, such fear persists throughout the entire span of subsequent pregnancies. Primigravidas were also reported a heightened fear or anxiety and confusion during this period.

With greater societal changes and diversity of life choices either in terms of partner or in terms of career, women delay childbearing decisions into later reproductive years. Women, who are in their advanced age or late pregnancies are considered as having high risk and they also express a heightened fear about the health of the foetus (Carolan & Nelson, 2007).

Hence the fear of pregnant women about health of the foetus or fear of loss of foetus

due to late pregnancy, history of foetal loss, medical complications or due to any other reasons could be considered under this aspect of prenatal stress.

Financial concerns

Though 24% of women interviewed were belonging to lower economic group, none of them had expressed any financial concerns associated with child birth or medical expenses during this period. Poverty is regarded as the primary factors leading to injustice of health and disparities (Hernandez, Montana, & Clarke, 2010) which in turn compromises the wellbeing of the vulnerable and oppressed. Compromised environment might put individuals under perpetual stress due to poor support for psychological and physiological functioning (Weinstock, 2001).

Hence financial concerns are considered as a candidate for prenatal maternal stress and are briefly defined as concerns associated with pregnancy, delivery or having a new born as a result of one's own compromised economic status.

Planning and Preparedness

It is defined as couple's physical and emotional preparedness to pregnancy. Physical preparedness means, ensuring there are no medical risks involved in getting pregnant and emotional preparedness means, preparing oneself to accept and assimilate the new born to the family, and to take new roles and responsibilities associated with parenthood.

Nearly 20% of the women interviewed were reported that they are having an unplanned pregnancy. An unplanned pregnancy causes various concerns if it coincides with other major events in life such as job, promotions, housing etc.

Previous studies also suggest that period before conception is very important for physical and mental health and wellbeing of a pregnant woman. Lack of preconception care may even lead to maternal death and babies

with genetic abnormalities (Ben –Shlomo & Kuh, 2002; Hansen, Slagsvold, & Moum, 2009). Hence preconception planning and preparedness should be given due importance.

Perceived Social Support (PSS)

PSS is the perceived physical, emotional and/or economic support to a pregnant woman by her family and friends. Perceived social support is found to improve confidence among pregnant woman and prepares her physically and emotionally to face the challenges during pregnancy.

Women who were having no social support or those who were staying away from their family, especially primigravidae were reported a heightened fear of labour and delivery, loneliness, depression and confusion.

They also expressed great concern and difficulties to accommodate and accept the physical changes associated with their pregnancy. Perceived support of parents especially of mother's is of most important during this stage. Emotional support of the mother prepares a young women to assume new roles and responsibilities associated with motherhood. At the same time reaction of a mother to her daughter's pregnancy should be respect for her anatomy; helping the young women to adapt to her pregnancy and to motherhood (Boback et al., 1993).

The young women may have difficulty to accept her identity with her own mother; hence the mother could lend a helping hand to her daughter to overcome this. If there is any constrains in their relationship, the young women may consider every offer of help or advice as a hostile gesture and may compromise the emotional support and care that may arises out of a good, healthy relation.

Concerns about baby

Any general or specific concerns of pregnant women about health, appearance, gender of the baby or future baby care are

considered under this dimension. As compared to the appearance, which is only 8% among the women interviewed, majority had expressed their concern about the health of the baby. Previous studies had also identified concerns about the health of the baby and the fear of giving birth to a handicapped child as a major concern among pregnant women (Huizink et al., 2004).

Only 8% of women interviewed were expressed a strong preference for male child but no women had expressed a strong preference for a girl child. Such preference for a male child is higher among multigravidae who is already having a girl child in her previous pregnancy. In most of these cases such preferences are not personal but it is shaped by the culture and traditions practiced in the family and society. This is one of the major reasons for a skewed sex ratio in favor of males in various parts of the world (Gangadharan, 2016; Sen, 1995).

Emotional concerns

The most pronounced emotional concern of pregnant women, especially primigravidae is an unknown fear of a danger that may hurt the foetus. Previous studies had also acknowledged the presence of such emotional concerns including nervousness during this period (Brenes & Milo, 2000; Harpel, 2008).

Mood swings and extreme sensitiveness are other major emotional concerns expressed by pregnant women. Lack of emotional maturity to accept the roles and responsibilities associated with parenthood is another major concern. Hence variations in the emotions experienced by pregnant women including extreme sensitiveness and mood swings could be considered under emotional concerns.

Physiological concerns

Pregnancy presents vibrant physiological symptoms which may vary in each

trimester. Most of the major physical concerns during pregnancy triggers with the onset of the second trimester. Those who are in their later stage of pregnancy had reported (second and third trimester) fatigue, shortness of breath, nausea and vomiting, gastrointestinal discomforts, increased palpitation, back ache and swelling, which is in consistent with previous studies (Bobrowski, 2010; Hegewald & Crapo, 2011).

In addition to the commonly reported physical concerns, increased body weight and changes in the body image are the other major concerns expressed by pregnant women (Huizink et al., 2004). During this period, young women, especially primigravidae had reported increased concern over their body image. Hence various physical discomforts and concerns regarding body image and other compromises in life associated with the physical changes are considered under physical concerns during pregnancy.

Labour and Delivery

Being the last and the most crucial stage of pregnancy, women experiences heightened fear and anxiety about labour and delivery from the early stage of pregnancy itself. This includes, fear of labour pain and fear of falling unconscious in the labour room or losing self control and fear of any other complications during delivery.

'Fear of giving birth' is also identified as one of the factor in the three factor model of pregnancy anxiety proposed by Huizink et al., (2004) along with 'fear of bearing a handicapped child' and 'concern about one's appearance.

Though there is an increase in the rate of Caesarean Sections globally (McCarthy, Rigg, Cady, & Cullinane, 2007), voluntary preference for the same is only 4%. Previous studies had also states that, majority of pregnant women prefer vaginal delivery to caesarean delivery (Ali Gholami & Shaker, 2013) though there is a

heighted fear of pain. Hence fear of labour and delivery either due to the pain or any other apprehensions associated with this could be broadly considered under this domain.

Conclusion

While being pregnant, women expose to a wide range of stressors either due to the events specific to the pregnancy or more general to their life events. Expose to such chronic stressors for a prolonged period during pregnancy is an intrauterine environmental risk for growth and development of the foetus and for the health and wellbeing of the mother. In the study nine major sources or dimensions of PNMS were identified among pregnant women across different parity, trimester and socioeconomic status. These includes: planning and preparedness, intimate partner relations, perceived social support, foetal health, physical, emotional and economic concerns, labour and delivery and concerns about baby. Hence the study facilitates better understanding of the construct, PNMS and provides a reference for further development of a comprehensive assessment scale.

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Thematic Map

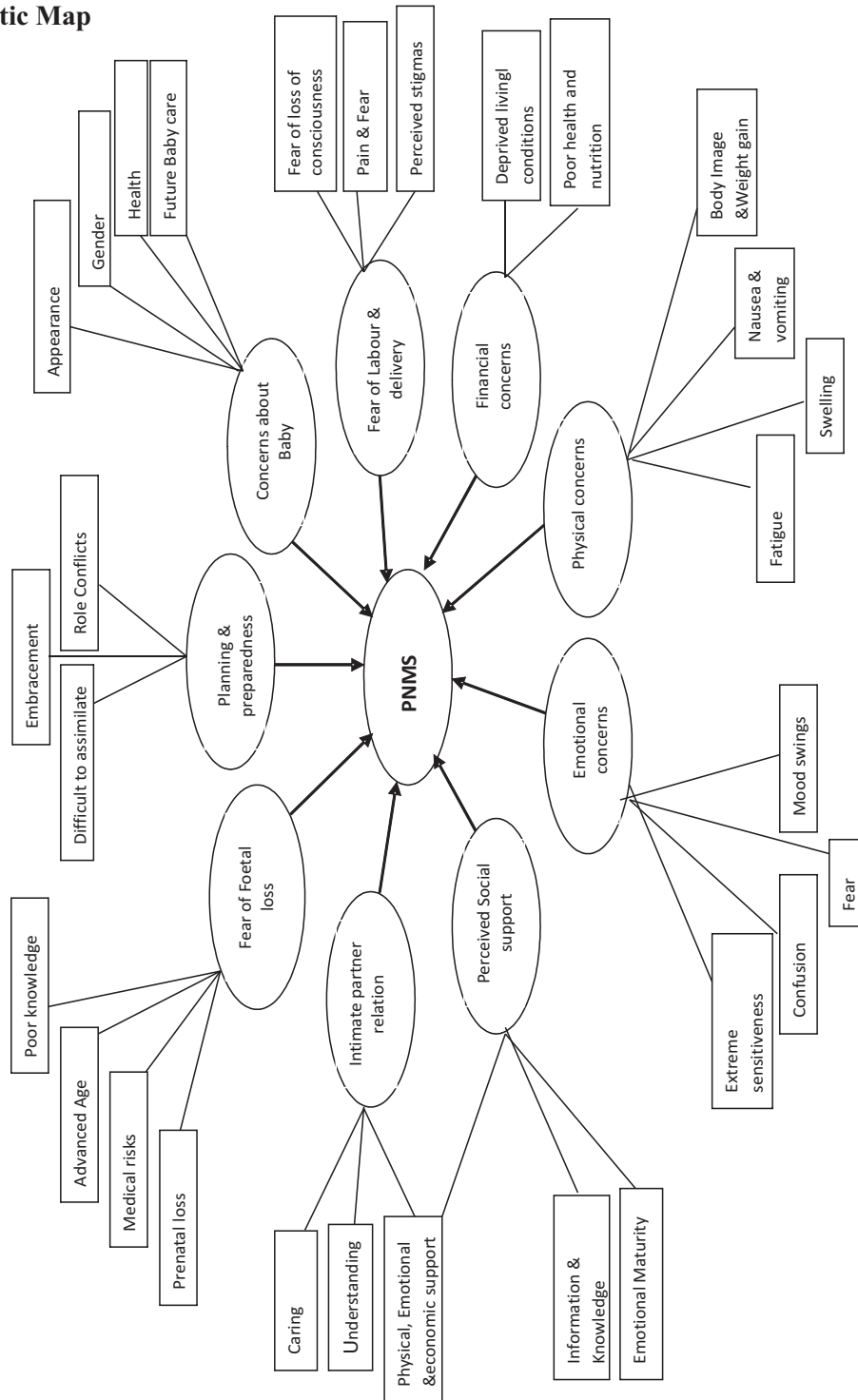


Figure 1. Thematic Map depicting the themes and meanings identified from the Data set.

Association among various themes

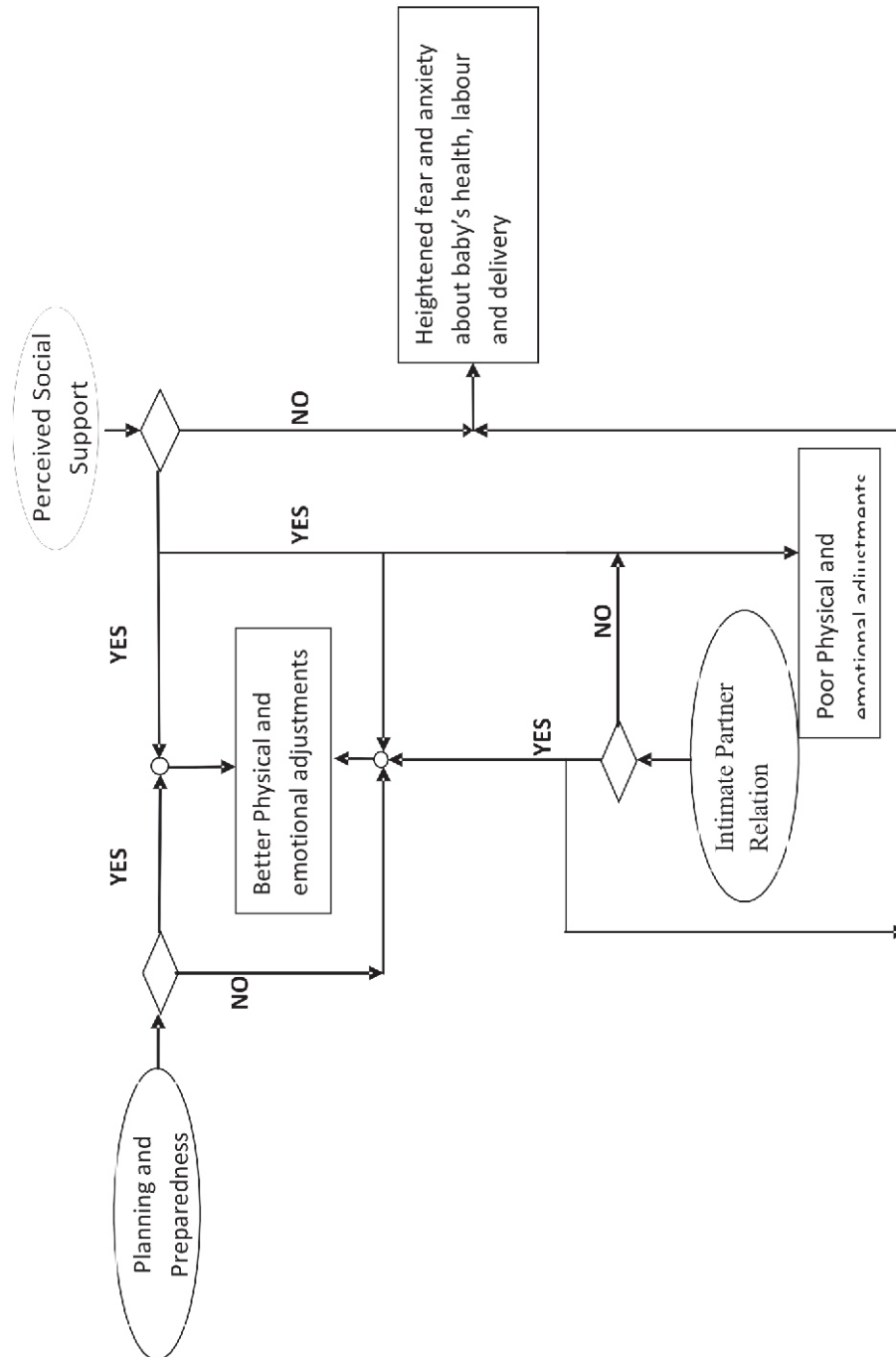


Figure 2: Flow chart depicting the pattern of association among various themes as identified from the data set

Table 1: Demographic Details of the sample (N=25)

Demographic variables	Values	Percentage
Age	23-35	27.44*
Gravidity	Primigravidae	76
	Multigravidae	24
Stage of Pregnancy (Trimester)	1 st trimester	12
	2 nd trimester	44
	3 rd trimester	44
Education	Graduate	48
	Post Graduate	52
Economic Status	Lower	24
	Middle	48
	Upper	28

Note: Table showing the details such as gravidity, trimester, education and economic status of the sample. *Mean age of the sample.



Association Between Premenstrual Symptoms, Attitude Towards Menstruation and Mindfulness in Female Students.

Harshitha.S. T. Srinidhi** Ayesha Arif Zinna****

Abstract

Hormones can influence a woman's mood throughout her lifetime. Premenstrual syndrome (PMS) is a collection of physical, emotional, and behavioural symptoms that affects women of reproductive age and interferes with their daily functioning. In spite of understanding the biological factor for menstruating, there has been distorted and negative insinuation. The impact of PMS may affect the quality of life with low level of mindfulness. Thus, the purpose of the study was to determine the relationship between pre-menstrual symptoms, the attitude towards menstruation and mindfulness among the adolescents and young adult women. The study was ex post-facto research. The sample consists of 200 female students from Chennai City. The age range of the sample was from 12 to 25 years. Study procedures included the administration of the following measures (1) Premenstrual Symptoms Screening Tool for Adolescents, PSST-A (Meir Steiner, 2011) (2) Menstrual Attitude Questionnaire (Yu-Ting Chang, 2009) (3) 5 facet mindfulness questionnaire: short form (Baer et al, 2008). Pearson' Correlation coefficient and 'z' test was computed to test the hypotheses. Results are discussed in the light of the findings of the study.

Keywords: *Premenstrual symptoms, menstrual attitude, mindfulness, female students.*

*About Authors : *II M.Sc Applied Psychology, **II M.Sc Applied Psychology, ***Assistant Professor
Department of Applied Psychology and Behavioural Research,
Justice Basheer Ahmed Sayeed College for Women.*

Introduction:

Transitioning to new surroundings is always challenging, especially for adolescents entering adulthood. Many students find the transition from middle school to high school and high school to college to be an especially effortful time, as many key aspects of their lives start. This is the time where they also experience changes in the biological functioning. Hormones can affect a woman's mood throughout her lifetime. Changes in the hormonal functioning and in the environment can cause Premenstrual syndrome. Premenstrual syndrome (PMS) is a collection of physical, emotional, and behavioural symptoms that affects women of reproductive age and interferes with their daily functioning. PMS often includes both physical and emotional

symptoms, such as acne, swollen or tender breasts, feeling tired, trouble sleeping, bloating, headache or backache, appetite changes or food cravings, joint or muscle pain, trouble with concentration or memory, tension, irritability, mood swings, or crying spells and anxiety or depression. The symptoms of PMS are usually mild to severe. According to the journal of American Family Physician (2011), nearly 80 percent of women report one or more symptom that does not substantially affect daily functioning. It is also found that 20 to 32 percent of women report moderate to severe symptoms that affect some aspect of life and 3 - 8 percent report PMDD. This, in turn affects their academic, social and family relationships and other aspects of their daily functioning. Constraints such as forbidding from religious

practices, attending functions, playing and cooking etc confines the daily activities and routines of women. Most girls are unaware about the physiology of menstruation. According to Cronje and Kritzinger (1991) conducted a study on the attitudes towards and management of menstruation in Afrikaans speaking university students found that severe symptoms (leading up to and during menstruation) were important factors contributing to women's attitudes towards menstruation. In particular, women with severe symptoms indicated not wanting to menstruate at all (Cronje & Kritzinger, 1991). Due to these reasons, girl's attitude and expectations about menstruation change. These restrictions or ignorance about the physiological changes and symptoms they experience, may negatively impact women psychologically causing declivity in the level of mindfulness.

Mindfulness is the psychological process of bringing one's attention to experiences occurring in the present moment. Mindfulness can also be viewed as a means to develop self-knowledge and wisdom which consecutively can reduce the level of PMS that individuals experience before menstruation. In this usual state, most experiences pass by completely unrecognized, thus mindfulness can help the students to maintain a positive well-being in their life. According to Douglas & Lustyk (April, 2010) studied 127 female students from a small liberal arts university between the age group of 18-26 years of age found that more mindfulness is associated with less symptom severity. Although there are some studies that investigated the association between premenstrual symptoms and attitude towards menstruation, limited studies were found in the literature regarding the association between attitude towards menstruation and mindfulness. Hence, this research study was conducted to fill the gap.

Objectives of the study

1. To assess premenstrual symptoms among female students.
2. To investigate the attitude towards menstruation in female students.
3. To determine the level of mindfulness in female students.
4. To examine if there is any relationship between attitude towards menstruation and mindfulness in female students.
5. To find out whether school and college students differ in their attitude towards menstruation and mindfulness.

Hypotheses

1. There will be no significant relationship between attitude towards menstruation and mindfulness among female students.
2. There will be no significant difference in attitude towards menstruation between school and college students.
3. There will be no significant difference in mindfulness between school and college students.
4. There will be no significant difference in attitude towards menstruation based on menstrual period length in school students.
5. There will be no significant difference in attitude towards menstruation based on menstrual period length in college students.
6. There will be no significant difference in mindfulness based on menstrual period length in school students.
7. There will be no significant difference in mindfulness based on menstrual period length in college students.

Research design

The Research design is Ex post facto research.

Sample

The sample consisted of 200 postmenarchael female students from Chennai

City. The age range of the sample was from 12 to 25 years. Purposive sampling technique was used to select the sample.

Tools used

Premenstrual Symptoms Screening Tool for Adolescents, PSST-A (2011) by Meir Steiner

Premenstrual Symptoms Screening Tool for Adolescents (PSST-A) is a reliable and valid measure to screen for PMS syndrome in adolescents, developed by Meir Steiner. It consists of 19 items, 14 premenstrual symptoms, and 5 functional items, in line with DSM-IV criteria. Items are rated as “not at all,” “mild,” “moderate,” or “severe.”

Menstrual Attitude Questionnaire (2009) by Yu-Ting Chang

The MAQ was developed by Yu-Ting Chang. The questionnaire contained 12 questions designed to assess participants' attitudes toward menstruation. Scores on each question ranged from 1 to 4 (1 = strongly agree, 4 = strongly disagree). All items used negative declarative sentences, with higher scores representing stronger positive attitudes toward

menstruation. The overall Content Validity Index of the instrument was .95. The internal consistency by Cronbach's alpha is .65 and face validity. Internal reliability in this study was confirmed with a Cronbach's alpha value of .67.

Five Facet Mindfulness Questionnaire (FFMQ-15, 2016) by Baer et.al

Five Facet Mindfulness Questionnaire (FFMQ-15) developed by Baer et al., includes the same five facets as the long form: Observing, Describing, Acting with Awareness, Non-Judging of inner experience, and Non-Reactivity to inner experience. The 15-item FFMQ (FFMQ-15) was includes three items for each facet of the previous version with 5-point rating scale as never true of me, never rarely true, some-times true, often true, very often or always true. The FFMQ-15 is a reliable and valid instrument.

Statistics used

Percentage analysis, Pearson's Product Moment correlation, z-test and ANOVA were used to analyse the data.

Results and Discussion

Table 1. Relationship between attitude towards menstruation and mindfulness in female students.

Variable	N	Correlation Coefficient	Significant Level
Attitude towards menstruation	100	0.054	NS
Mindfulness	100		

NS – Not significant

The correlation coefficient is not significant indicating there exists no relationship between attitude towards menstruation and mindfulness in female students. This indicates

that there is no link between attitude towards menstruation and mindfulness. This is contradictory to the study done by Lustyk and colleagues (2016) who examined

interrelationships among premenstrual symptom severity reports (PMSR), menstrual attitudes, and mindfulness qualities in a sample of 127 women (age range 18–26 years). Results revealed several statistically significant positive relationships between menstrual attitudes and PMSR. Also, higher scores on measures of mindfulness were significantly associated with

lower PMSR. Moderating effects revealed that mindfulness significantly buffered the relationships between menstrual attitudes and PMSR, specifically between: anticipation of menses onset and PMSR as well as anticipation of menses onset and premenstrual water retention. Hence, Hypothesis 1 is accepted.

Table 2. Mean, standard deviation, 'z' value on attitude towards menstruation and mindfulness in school and college students.

Variable	Nature of Sample	N	Mean	Standard Deviation	Z Value	Significant Level
Attitude towards menstruation	School	100	27.16	5.782	0.675	NS
	College	100	27.68	5.081		
Mindfulness	School	100	45.82	5.262	0.222	NS
	College	100	45.65	5.566		

NS – Not significant

The table 2 shows attitude towards menstruation and mindfulness between school and college students. There exists no significant difference in attitude towards menstruation and mindfulness in school and college students. However, the mean scores indicate that both school and college students hold a favourable of

attitude towards menstruation. This is in support with the study done by Gulden Guvenc (2012) which reported that the nursing under graduate students had a moderate attitude towards menstruation. Hence, Hypothesis 2 and 3 is accepted.

Table 3. Mean, standard deviation, 'F' value on attitude towards menstruation and mindfulness in school students based on their period length.

Variable	Nature of Sample	N	Mean	Standard Deviation	F
Attitude towards menstruation	Below 4 days	34	27.65	5.057	
	5-6 Days	38	27.61	6.275	
	7+ Days	28	25.96	5.941	
Mindfulness	Below 4 days	34	46.44	4.717	
	5-6 Days	38	46.37	5.879	
	7+ Days	28	44.32	4.869	

NS – Not significant

The table 3 indicates the difference in attitude towards menstruation and mindfulness in school students based on their menstrual period length. There is no significant difference in attitude towards menstruation and mindfulness based on menstrual period length.

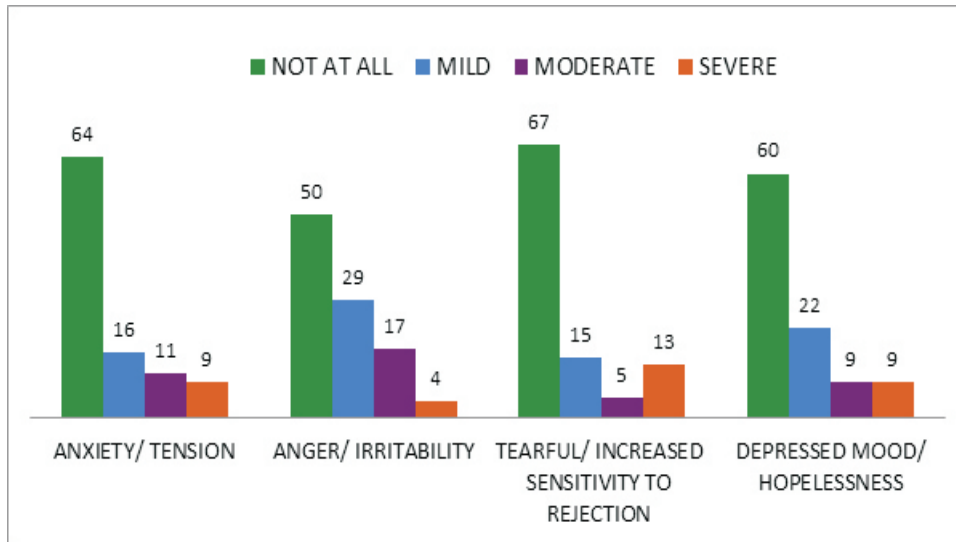
This is contradictory to the study done by Jarrah (2012) found that poor attitude toward menstruation and low menstrual practices were significantly associated with inadequate premenstrual preparation. Hence, Hypothesis 4 and 5 is accepted.

Table 4. Mean, standard deviation, 'F' value on attitude towards menstruation and mindfulness in college students based on their period length.

Variable	Nature of Sample	N	Mean	Standard Deviation	F
Attitude towards menstruation	Below 4 days	20	26.20	3.254	
	5-6 Days	47	28.00	4.800	
	7+ Days	33	28.12	6.239	
Mindfulness	Below 4 days	20	45.95	5.969	
	5-6 Days	47	46.91	5.307	
	7+ Days	33	45.70	5.812	

NS – Not significant

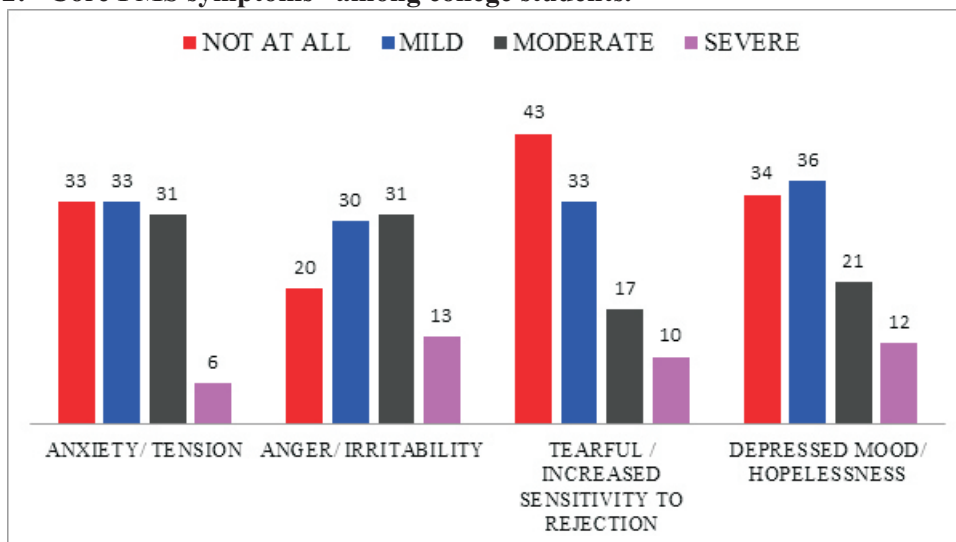
Graph 1: “Core PMS symptoms” among school students.



A little more than 50 of school students reported that they do not experience core PMS symptoms such as anxiety, tearful and depressed symptom. However, the graph also depicts that almost 50 of the school students do experience core PMS symptoms ranging from mild to severe level. It is found that 13% of them experience severe level of tearful / increased sensitivity to rejection followed by 9% of them

having anxiety, depressed mood / hopelessness (9%) and individuals experiencing anger for about 4% in severe level. It is also clear that 11% of them experience anger to moderate level followed by anxiety (11%), depressed mood or hopelessness (9%) and tearful (5%). Few students also experience mild level of anger (29%) followed by depressed mood (22%), anxiety (16%), tearful (15%).

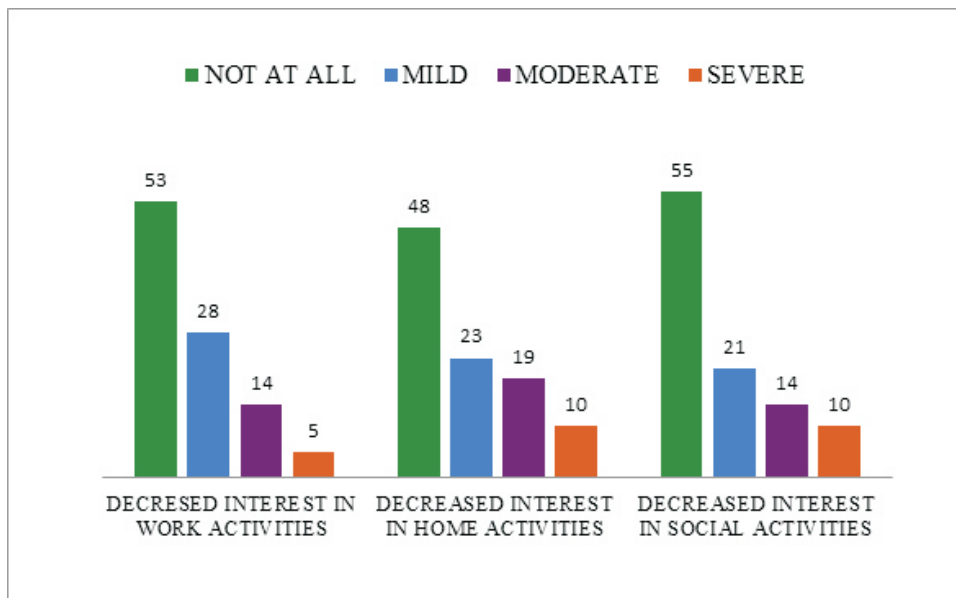
Graph 2: “Core PMS symptoms” among college students.



Approximately 50% of college students are not experiencing core PMS symptoms such as anxiety, anger, tearful / increased sensitivity to rejection and depressed mood/ hopelessness. However, nearly 50% of the college students are experiencing core PMS symptoms from mild to severe level. 36% of them are experiencing depressed mood/ hopelessness to a mild level while 33% of them are experiencing anxiety and tearful/ increased sensitivity to rejection followed by anger (30%) on a mild level. It is

also clear that 31% of them are experiencing moderate level of anxiety and anger subsequently 21% of them are experiencing depressed mood / hopelessness and 17% of them are experiencing tearfulness to a moderate level. It is also distinct that 13% of them are experiencing anger to severe level followed by 12% of them feeling depressed and 10% of them feeling tearful while 6% of them experienced anxiety to severe level.

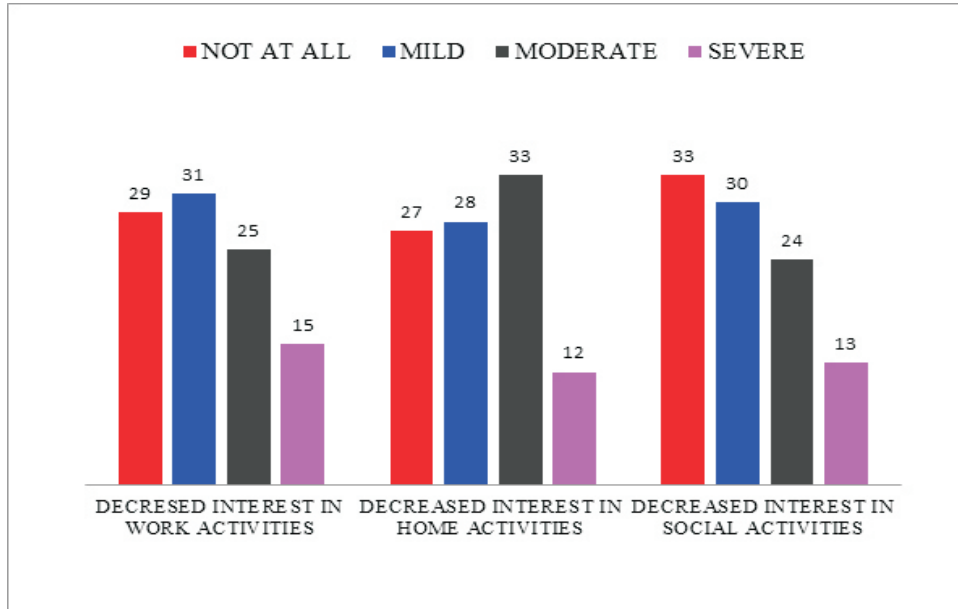
Graph 3: Other PMS symptoms among school students.



Majority of them are not experiencing PMS symptoms such as decreased interest in work activities, home activities and social activities. However, nearly 50% of them are experiencing PMS symptoms from mild to moderate level. 28% of them have mild level of decreased interest in work activities followed by

23% in home activities and 21% in social activities. It is also evident that 19% of them have decreased interest in home activities to a moderate level and 14% of less interest over work and social activities on a moderate category. It is also significant that 10% students have decreased home and social activities on a severe level.

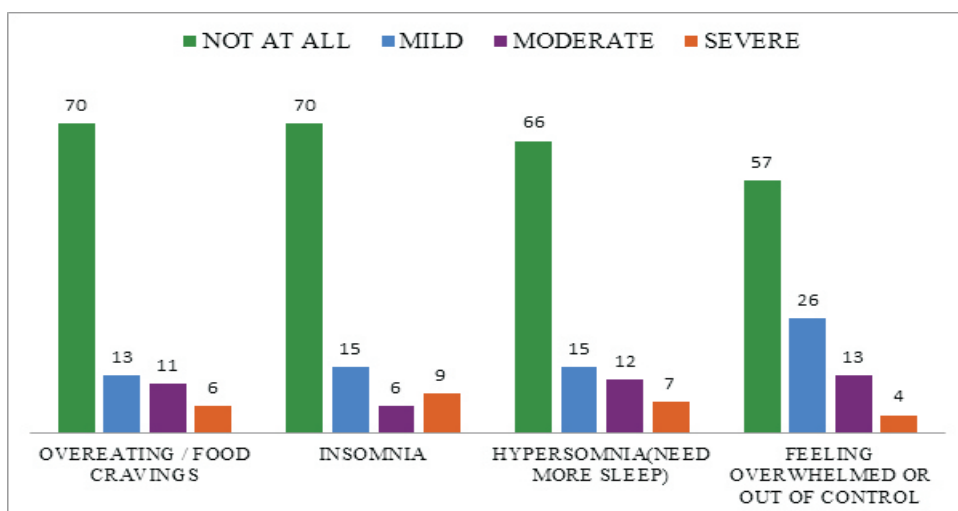
Graph 4: Other PMS symptoms among college students.



It is apparent that nearly 30% of the college students do not experience PMS symptoms. Nevertheless, the majority of them are experiencing PMS symptoms from mild to severe level. Nearly 30% of them do experience PMS symptoms such as decreased interest in work, home and social activities to a mild level. It is also significant that 33% of decreased

interest in home activities followed by 31% of them having decreased interest in work activities and 30% of them having decreased interest in social activities. 15% of them do experience PMS symptoms to a severe level in decreased interest in work activities followed by 12% in home and 13% in social activities.

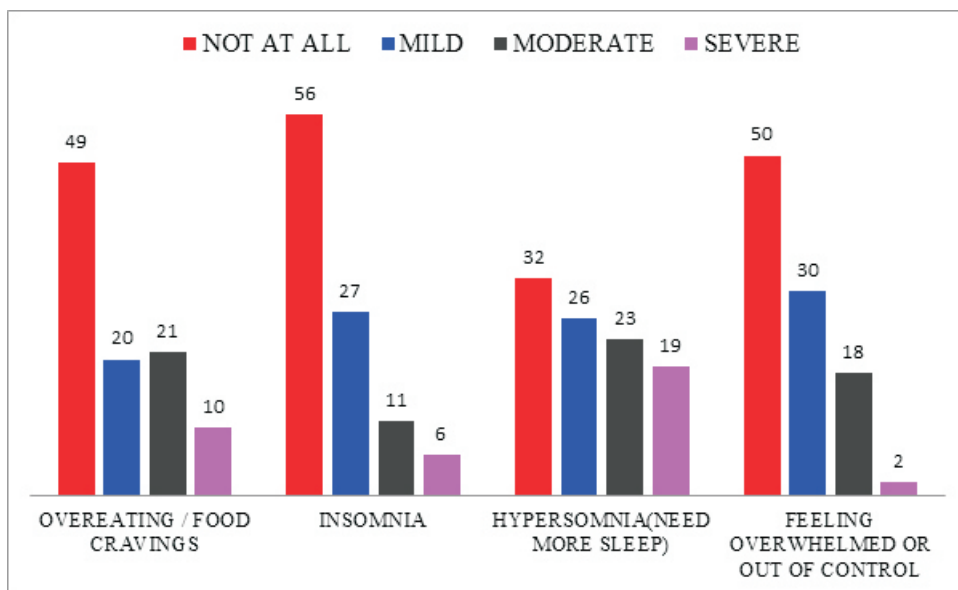
Graph 5: Other PMS symptoms among school students.



Majority of them are not experiencing PMS symptoms like overeating, insomnia, hypersomnia and feeling overwhelmed or out of control. Yet, many number of students do experience PMS symptoms from mild to severe level. 26% of them experience overwhelming feeling followed by 15% of them experiencing insomnia and hypersomnia and 13% of them

experiencing food cravings or overeating on a mild level. 13% of them feels out of control to a moderate level, 12% of them having hypersomnia, 11% of them having food cravings and 6% of them experiencing insomnia on a moderate level. There is significant number of people experiencing the same on a severe level.

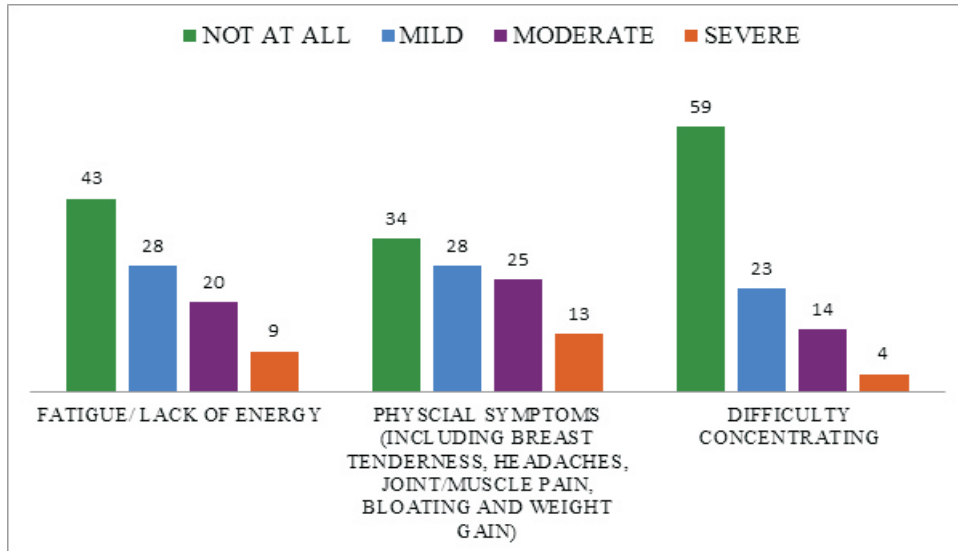
Graph 6: Other PMS symptoms among college students.



Approximately 50% of college students did not experience any PMS symptoms such as overeating, insomnia, hypersomnia and feeling out of control. However, almost 50% of them do experience these symptoms from mild to severe level. Nearly 30% of students experienced out of control, followed by insomnia (27%), hypersomnia (26%) and overeating (20%)

symptoms on a mild level. 23% of them experience hypersomnia followed by overeating (21%), feeling out of control (18%) and insomnia (11%). It is also clear that 19% of them experience hypersomnia to a severe level tracked by overeating (10%), insomnia (6%) and feeling out of control (2%).

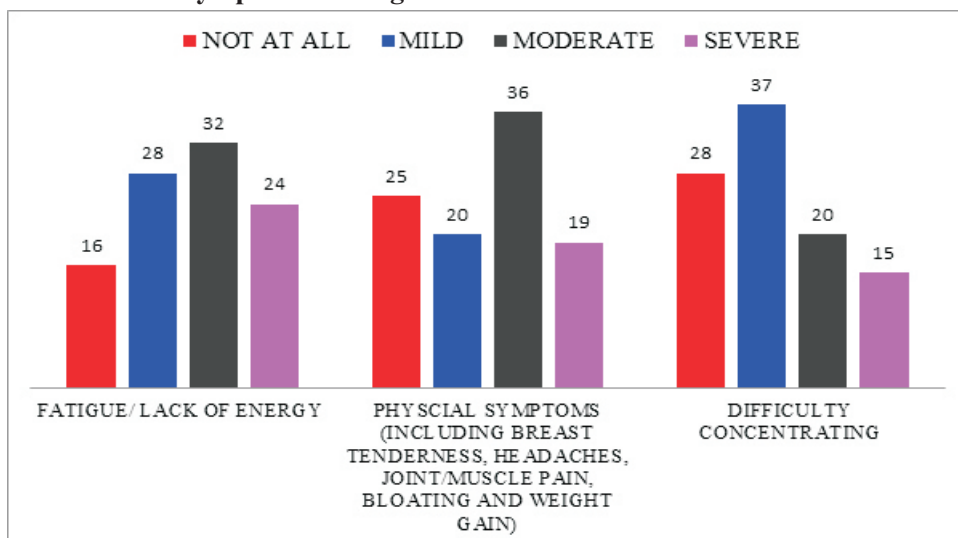
Graph 7: Other PMS symptoms among school students.



Closely 50% of individuals do not experience PMS symptoms such as Fatigue, Physical symptoms and concentration problem however the remaining 50% of them experience from mild to severe level. 28% of them experience lack of energy and physical symptoms on a mild level followed by concentration problem (23%). 20% of them

experience physical symptoms to a moderate level trailed by lack of energy (20%) and concentration problem (14%). It is also evident that 13% of them experience physical symptoms to a severe level followed by 9% of them feeling fatigue and 4% of them having concentration problem.

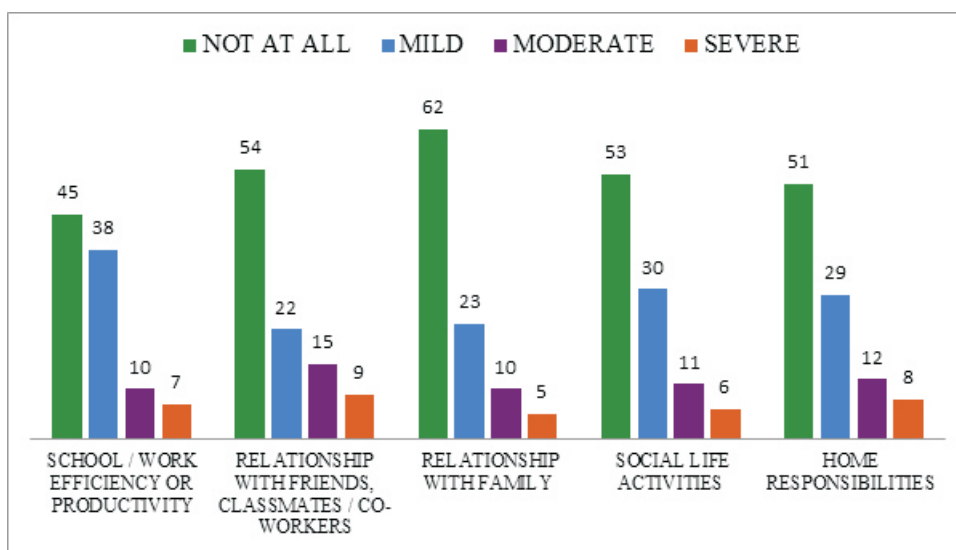
Graph 8: Other PMS symptoms among school students.



It is found that college students experience PMS symptoms from mild to severe level such as fatigue, physical symptoms and concentration problem. 24% of them experience PMS symptoms to severe level followed by 19% of them experiencing physical symptoms and 15% of them having concentration problem. It is

also significant that 36% of them experience physical symptoms on a moderate level followed by 32% of them feeling fatigue and 20% of them having problems in concentration, It is also clear that 37% of them experience concentration issues on a mild level followed 28% feeling fatigue and 20% experiencing physical symptoms.

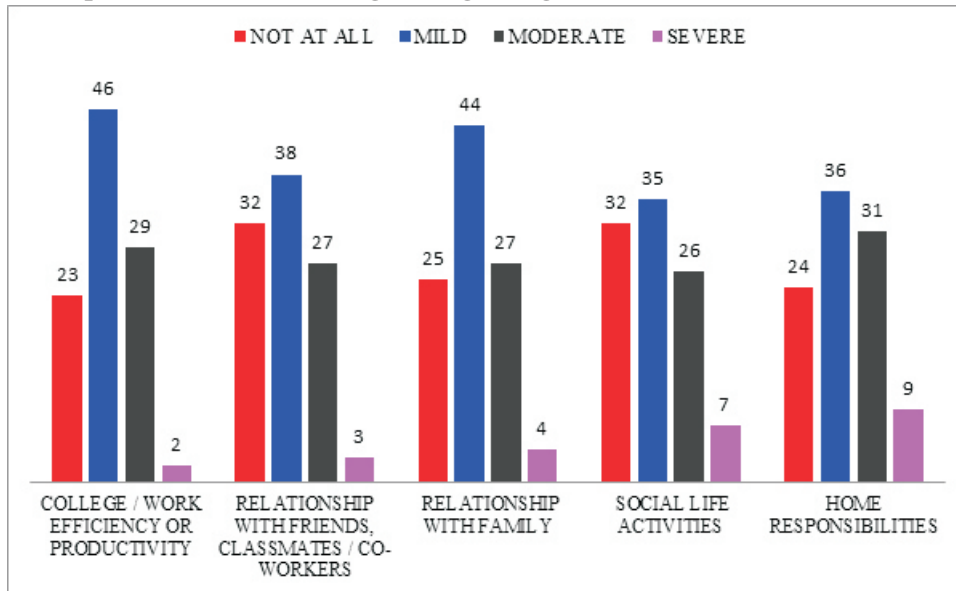
Graph 9: Impairment in functioning among school students.



Half the number of school students have reported that the PMS symptoms have not interfered their functional life such as school efficiency or productivity, relationship with friends or classmates, relationship with family, social life activities and home responsibilities. Almost 50% of them have indicated that their PMS symptoms are interfering their daily life. 38% have difficulty in school productivity or efficiency followed by social activities (30%), home responsibilities (29%), relationship with family (23%) and friends (22%) on a mild level. 15% of them have specified that PMS symptoms have caused obstruction in their relationship with friends (15%), 12% in home responsibilities, 11% in social life activities, 10% in relationship with family and in school

productivity on a moderate level. It is also significant that 9% of them have severe level of interference in their relationship with friends followed by home responsibilities (8%), school productivity (7%), social life activities (6%) and relationship with family (5%).

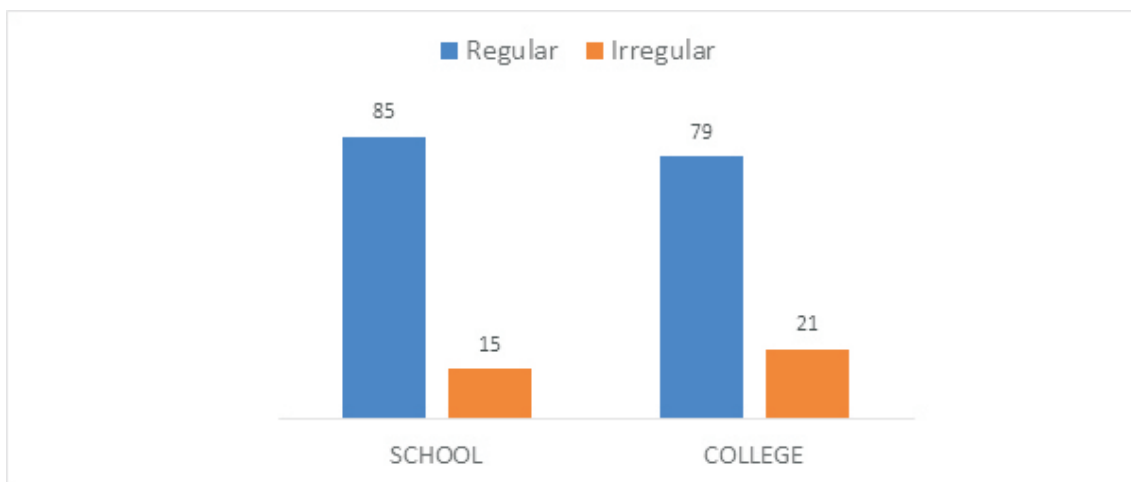
Graph 10: Impairment in functioning among college students.



It is evident that less than 50% of the college students have reported that their PMS symptoms are not interfering with their daily life while the majority of them have reported that there is some influence of PMS in their

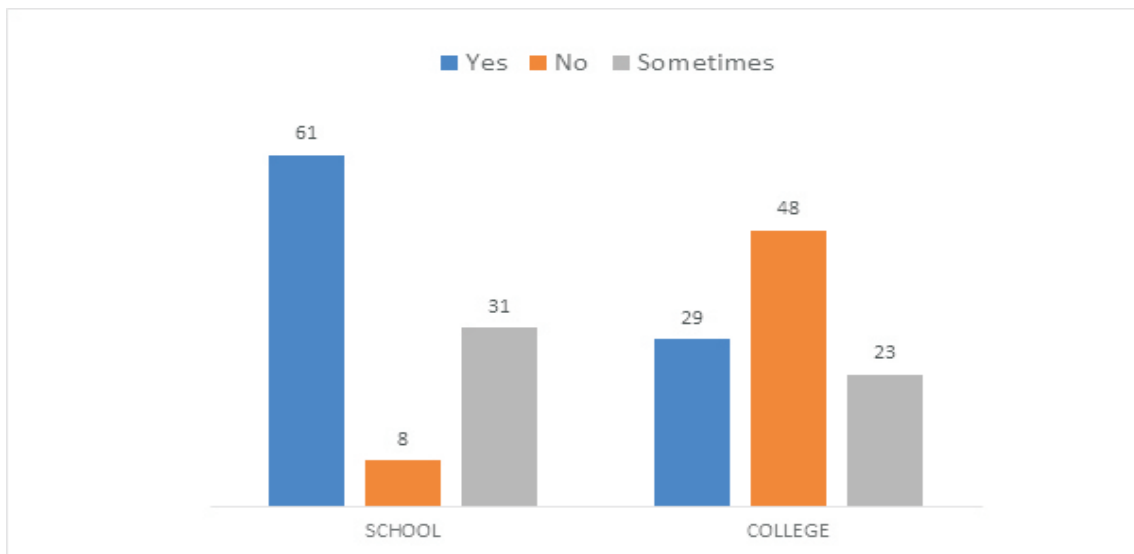
functional life on a mild to severe level. However, nearly 30% of them have indicated their PMS interference on a moderate level. Few students have also indicated severe level of intrusion in their functional life

Graph 11: “Menstrual cycle” of school and college students.



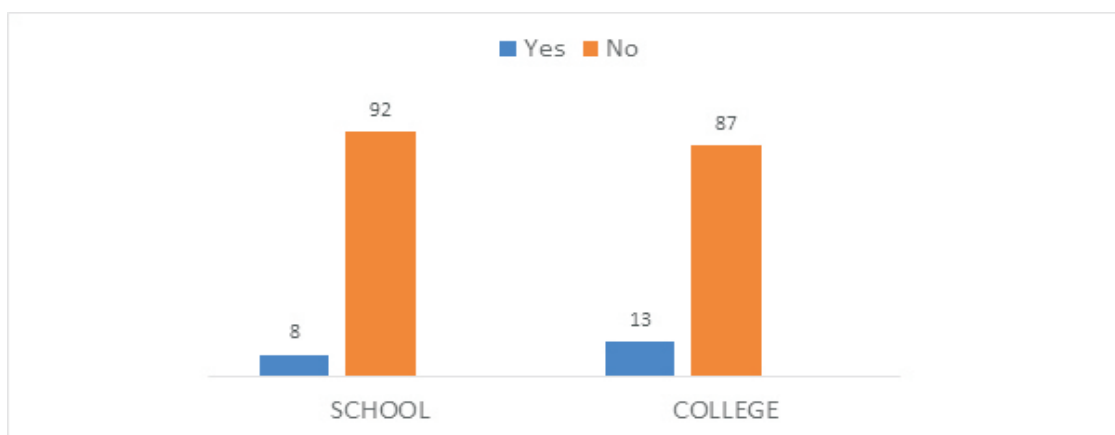
85% of the school students are having regular menstrual cycle while 15% of them are experiencing irregular menstrual cycle. Among college students, it is found that 79% of them are having regular menstruation while 21% of them are having irregular menstrual cycle. Comparing both the groups, college students have more of irregular menstruation when compared to school students.

Graph 12: Percentage of female students experiencing stomach aches.



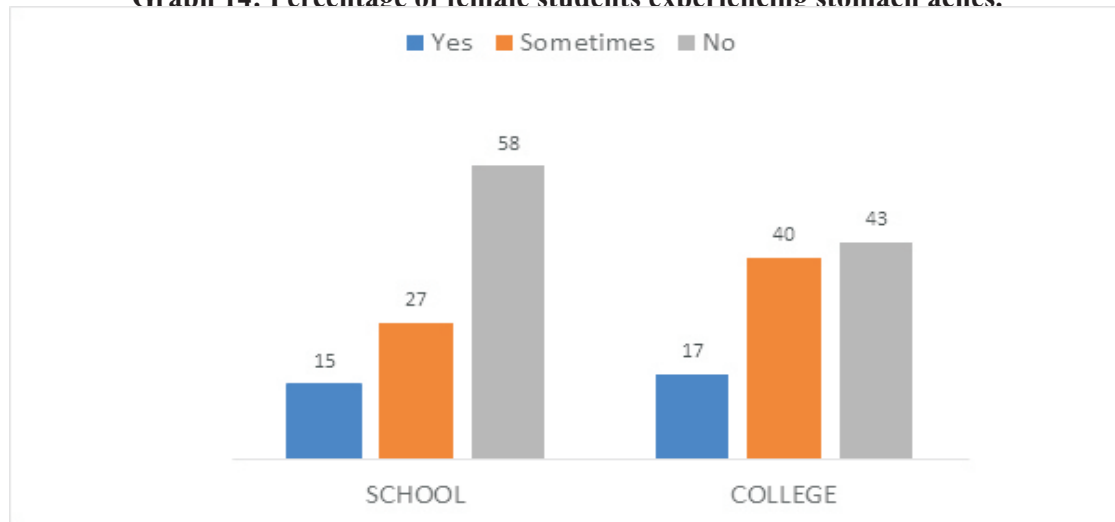
61% school students are experiencing stomach aches while 31% are experiencing it sometimes and 8% of them are not experiencing it stomach aches. Among the college students, it is found that 29% of them are experiencing stomach aches while 23% of them are experiencing it sometimes and 48% of them are not experiencing stomach aches. Comparing both the groups, majority of school students are experiencing stomach aches.

Graph 13: Percentage of female students exercising regularly.



8% of the school students are exercising regularly while 92% of them are not exercising regularly. 13% of school students are regularly exercising but 87% of them are not exercising regularly.

Graph 14: Percentage of female students experiencing stomach aches.



15% of the school students experience sleep disturbances during menstruation, 27% of them experience sleep disturbances sometimes and 58% does not experience any sleep disturbances. It is also clear that 17% are experiencing sleep disturbances while 40% of them experience it sometimes and 43% of them do not experience any sleep disturbances. While comparing both the groups, it is clear that college students are experiencing sleep disturbances to a higher level than school students.

Conclusion

- There is no significant relationship between attitude towards menstruation and mindfulness among female students.
- There is no significant difference in attitude towards menstruation between school and college students.
- There is no significant difference in mindfulness between school and college students.
- There is no significant difference in attitude towards menstruation based on menstrual period length in school students.
- There is no significant difference in attitude towards menstruation based on menstrual period length in college students
- There is no significant difference in mindfulness based on menstrual period length in school students.
- There is no significant difference in mindfulness based on menstrual period length in college students.
- Majority of the students do not experience PMS symptoms such as breast tenderness, bloating, headache or backache, appetite changes, muscle pain, tension, mood swings, or crying spells and anxiety or depression.
- Almost less than half of the students do experience PMS symptoms such as acne, tender breasts, feeling tired,

trouble sleeping, bloating, headache or backache, appetite changes, muscle pain, trouble with concentration or memory, tension, irritability, mood swings, or crying spells and anxiety or depression ranging from mild to severe level.

- Almost fifty percentage of students in school and college reported that symptoms of PMS interfered their functional part of life such as school and work productivity or efficiency, relationship with family and friends, social activities and home responsibilities.
- Comparing symptoms of PMS in school and college students, college students experience more PMS symptoms.
- Majority of students have regular menstrual cycle.
- Majority of the students are not exercising regularly.
- There is a moderate level of sleep disturbances and stomach aches during menstruation among female students.

Implications

It is evident that female adolescents are experiencing PMS which is interfering their daily functioning. Thus, an awareness program can be provided for female students and women about PMS. Psychoeducation program can help the students to cope with their symptoms. Psychosocial intervention programs can be given to enhance their well-being.

Limitations

1. The research was done with only 200 female students.
2. The geographical area was restricted to the state capital- Chennai.

Suggestions for further research

1. A larger sample could have been used.

2. Other psychological variables related to premenstrual symptom can be investigated.
3. Research can be done on perimenopause women to investigate their level of PMS. Studies can also focus on comparing PMS symptoms between working and non-working women.
4. Comparative study to assess PMS among adolescent girls, young adult women and middle age women.
5. Comparative study can be done to assess the level of PMS among women with PCOD and without PCOD.

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Socio-Economic Status and Gender: Effect on Marital Adjustment

Gayatri Raina Dipika Sharma***

Abstract

The present investigation was conducted to examine the effect of socio-economic status and gender on marital adjustment of couples. Samples of 50 married couples (50 husbands and 50 wives) in the age range of 30 to 50 years were selected from Shimla town of Himachal Pradesh. Marital Adjustment Inventory developed by Dr. Harmohan Singh (1987) was used to measure the marital adjustment among the selected sample of married couples. A 2 × 2 analysis of variance was used to find out the effect of socio-economic status and gender on marital adjustment of couples. Results revealed that socio-economic status has a significant effect on marital adjustment of couples and that shows the couples belonging to higher socio-economic status have better marital adjustment as compared to couples belonging to lower socio-economic status. Results also reported that husbands have better marital adjustment than wives. Furthermore, findings also indicate that the two factor interaction effect between socio-economic status and gender was not found to be significant.

Key Words: Marriage, Marital Adjustment, Socio-Economic Status, Gender.

About Authors : *Asstt. Prof., Dept of Psychology, Himachal Pradesh University, Shimla-171005. (H.P.)

**Research Scholar, Dept of Psychology, Himachal Pradesh University, Shimla-171005. (H.P.)

Introduction:

Marriage involves the union of two individuals who decide to live in a relationship for the major portion of their life. It is said to be one of the deepest and most complex forms of human relationship. It provides for the reliable satisfaction of certain vital personal needs at both physical and psychological level.

Marriage provides a person an opportunity for a secure and protected satisfaction of his needs for companionship, affection and sexual expression. It involves the most intimate type of emotional relationship between two individuals. But, a good marriage does not simply happen, not even when choice of marriage partner is most carefully made. Many marriages suffer because the two partners fail to develop a relationship which is characterized by mutual acceptance, trust, care, concern, love, and admiration and sharing of role responsibility.

The success in marriage is said to depend partly on finding the right person and partly on being the right person. But the mere fact that two persons are suited to each other does not guarantee that they will make a successful marriage. They must learn to live together to share, accommodate, compromise, adjust and plan together. In short, a good marriage does not simply happen it has to be worked out.

Studies covering many cultures show that the likelihood of marital disruption is greatest in the first few years of marriage and declines thereafter (Preston, 1975; Becker, Landes and Michael, 1977; Howell, 1979; Morgan and Rindfuss, 1985). Part of the explanation, no doubt, involves the selection process whereby only the stronger marriages survive to later duration. However, other explanations stress that marriages form new bases for stability over time. A couple may marry

for one set of reasons but acquires additional reasons to stay married as the marriage progresses.

Marital adjustment in the Indian society comprises of balancing various thoughts, values, custom and family systems. With the changing times the scope of marital adjustment is widening as the female of present era is becoming conscious about her own individual identity, social strength and future ambition. For women with children, feeling disadvantaged in marriage may result from having to do a disproportionate amount of domestic work and child care, or from unmet expectations when fathers spend little time with children. Wives are more satisfied and perceive a greater degree of fairness when husbands share household chores, particularly those that are traditionally considered women's work (Keith and Schafer, 1987; Benin and Agostinelli, 1988; Blair and Johnson, 1992). A great sense of fairness increases wives' marital satisfaction (Yogev and Brett, 1985; Sutor, 1991) and when wives say they are more satisfied, they are less likely to perceive their marriage as unstable. The state of marital adjustment has, hence, evolved as a two way process where both partners sensibly and reasonably put efforts for making a comfortable and respect worthy married life.

Most couples marry with the expectations of leading a happy life with true companionship and hope of living a happy and prosperous family life. Marital Adjustment calls for maturity that accepts and understand the needs and aspirations of the spouse and affectionately accepts all positive and negative that comes out due to this relation. It can be seen that the phenomenon of marital adjustment is important for happiness in all cultures, as marriage is the most important commitment an individual makes in his or her life. A good marriage not only produces a satisfied life but also generates a sense of well-being.

Marital adjustment is an overall feeling of happiness and satisfaction among both the partners (Thomas, 1997). Cherlin (1996) conceptualized marital adjustment as the degree of personal satisfaction an individual feels about his or her marriage. This global evaluation can be a reflection of how happy people are in their marriage in general (Brockwood, 2007).

Marital harmony is the globally important social phenomenon, which plays a vital role in an individual's life. Successful marital relationships are based on many factors but economic resources are considered to be most essential. There is ample research evidence to support the argument that the socio-economic status of a couple plays a very significant role in stabilizing their marital relationship. Voyandoff (1990) studied and reported the advance effects of economic distress and family relations. Rose & Mirowsky (1992) studied that employment of spouses and the sense of control in various types of stressors of marital life. Gudmundsun et al (2007) reported similar findings and found that economic strain is directly linked to increased couple disagreements. Kerkmann, Thomas, Jean & Scot's study (2009) reported that financial problems and socio-economic status significantly contributed to lower reported marital satisfaction among married couples.

Marriages which are stressed by economic uncertainties are more likely to be disrupted (South and Spitz, 1986). Similar study in Finland was conducted by Kinnunen and Feldt (2004) and they concluded that husband's unemployment is strongly associated with his marital adjustment. This has been authenticated by many studies that couples facing more financial obstacles and spending less time together are more at risk for divorce (Cleek & Pearson, 1985; Poortman 2005).

Blekesaune (2008) used the data from the British Household Panel Survey between 1991 and 2005 and found that low income increased the risk of partnership dissolution and

marital discord. Financial stress is not, of course, confined to times of recession, but is a continual feature of life for some families. However, it is observed that in a recession, this is spread more widely (James, 2009).

Evidences have suggested that people with higher income felt happier, more satisfied and better adjusted with their lives because higher income could be used to have a better lifestyle through greater leisure opportunities and improved nutritional intake, fewer uncertainties, better access to health services and improved living environment through better housing and the ability to move to places that are more prosperous (Ayub & Iqbal, 2009).

There is empirical evidence to demonstrate that there are gender differences in marital adjustment. Previous research has repeatedly reported that males are mentally strong when the situation calls for adjustment in comparison to their fair sex. In support of our study there are several studies which show that men seem to derive more advantages from marriage than women (Tudor, 1973).

Conceptually, there are two possible explanations for gender differences in marital quality. The first explanation is based on the premises that male and female roles in the marital relationship are different and that the roles of married females are more stressful and disadvantaged but less gratifying than married males (Bernard, 1972; Gove & Tudor, 1973). Since females' roles are more demanding and less rewarding in the marital relationship, married females would derive comparatively lesser benefit from marriage and they would regard their marriages as less positive than males. Williams (1988) said that the negative nature of the females' roles in the marital relationship might further be intensified by the fact that females are more likely to use the marital role to define their identities and that

females are socialized to rely more on marriage as a source of gratification.

The second explanation for gender differences in marital quality is operated in terms of the differential expectations held by males and females regarding marriage. According to this view, females are less satisfied with the marital relationship and even perceive the marital relationship to be less positive than males because females tend to place higher expectations for intimacy and emotional support in the marital relationship which cannot be easily satisfied by men who are not socialized to provide relationship with such qualities (Bernard 1976). The failure for females to fully attain the marital expectations might also be intensified by the fact that women often have relationship which are close and intimate and such relationships are frequently used as the bases to evaluate their marriages (Williams, 1988). Hence, in marital adjustment males have upper hand in comparison to females.

Method

Sample

The present study was conducted to examine the marital adjustment among couples of Shimla town of Himachal Pradesh. The total sample of 50 married couples was selected for the present study. 25 couples were taken from high socio-economic status and 25 couples from low socio-economic status. Couples were in the age range of 30 to 50 years. The income of couples belonging to high socio-economic status was ₹ 30,000 and above and the income of couples belonging to low socio-economic status was below ₹ 15,000. The couples were from diverse educational and occupational background.

Research Tools Used

In order to study the marital adjustment of couples, Marital Adjustment Inventory

developed by Singh (1987) was used. The inventory has two forms, Form-A for husbands and Form-B for wives. Each form contains ten questions and may be replied either in 'Yes' or 'No' only. Each Yes or No item is then to be answered by placing () tick on only one point on a ten point rating scale ranging from +10 (most favourable) to +1 (least favourable). To obtain the score for general marital adjustment, the scoring key was used and the scores for each question were summed up. Each question may have a maximum score of 10 and minimum of 1 and zero score when the reply is other than expected according to the scoring key. The reliability coefficient for this inventory is .94 for general population.

Results

In the present study, a 2×2 analysis of variance was carried out to find out the effect of socio-economic status and gender on marital adjustment of couples. The independent variables studied were socio-economic status and gender. Socio-Economic status varied at two levels-high socio-economic status and low socio-economic status. Gender also varied at two levels-males and females. Dependent variable studied was marital adjustment.

Marital Adjustment

The summary of analysis of variance for the effects of Sex × Socio-Economic Status on Marital Adjustment is reported in Table 1.

Table 1: Summary of ANOVA for the variable of Marital Adjustment

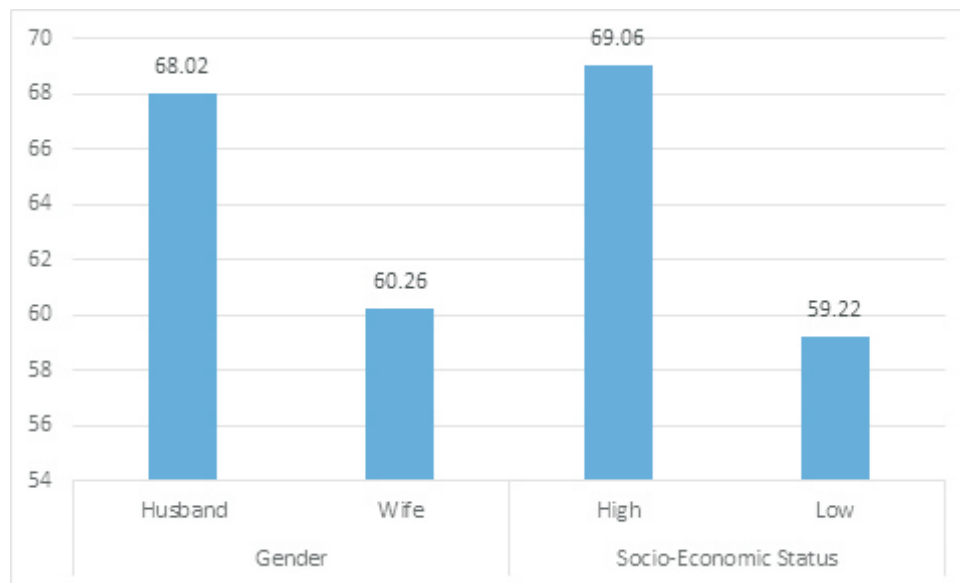
Sr.No.	Sources of Variation	Sum of Square	df	MS	F-Ratio
A	Socio-Economic status	2420.64	1	2420.64	6.96*
B	Sex	1505.44	1	1505.44	4.33*
InteractionA×B	Status × Sex	21.16	1	21.16	0.06ns
	Within	33378.80	96	347.69	
	Total	448720	100		

*p< .05

The mean scores of marital adjustment among both groups i.e., sex and socio-economic status are presented in Table 2 and graphically depicted in Figure 1.

Table 2: Mean Table for the Main Effects of Sex and Socio-Economic Status

Variables	Sex		Socio-Economic Status	
	Husband	Wife	High	Low
Marital Adjustment	68.02	60.26	69.06	59.22



Main Effects

Socio-Economic Status

The 'F' ratio for the main effect of socio-economic status i.e., high and low socio-economic status was 6.96 which was significant at .05 level. This indicates that the mean difference between couples belonging to high and low socio-economic status was significant. As is evident from Table 2 the mean value on marital adjustment of couples of high socio-economic status (M=69.06) was found to be high as compared to couples belonging to low socio-economic status (M=59.22). Hence, the couples belonging to high socio-economic status have significantly better marital adjustment as compared to couples belonging to low socio-economic status.

Sex

The 'F' ratio for the main effect of sex i.e., males and females was 4.33 which was significant at .05 level. This indicates that the mean difference between males and females on marital adjustment is significant. As is evident from Table 2 the mean scores of husbands

(M=68.02) was found to be high as compared to wives (M=60.26). Thus, the husbands regardless of high or low socio-economic status have significantly better marital adjustment in comparison to wives.

The two factor interaction effect i.e., socio-economic status \times sex (F=0.061, df=1/96,ns) was not found to be significant.

Discussion

It is evident from the above results that socio-economic status played a vital role in the marital adjustment among couples. The results of present study indicate that couples belonging to high socio-economic status are significantly well adjusted in comparison to the ones with low socio-economic status.

The result of this study are supported by many of the previous researches. For example, many researchers have concluded the negative effects of economic hardship on marital quality and stability (e.g. Voydanoff, 1990; Oggins, 2003; Miller et al., 2003). Gudmunson et al (2007) reported that, economic strain is directly

linked to increased couple disagreements. Kertmann, Thomas, Jean & Scot (2009) observed that financial problems and socio-economic status significantly contributed to lower reported marital satisfaction among married couples. Thus, it can be concluded that socio-economic status have a great impact on marital adjustment of couples.

Social class differences in customs, values and beliefs are reflected in marriage and family attitudes and behaviour. Marital adjustment is greater in middle and upper ranges of the social class spectrum than in lower ranges since lower class marriages are subject to chronic stresses and strains related to menial jobs, low income, unemployment, poor housing etc. which contributes to the feelings of disenchantment, apathy and low self-esteem and ultimately poor marital adjustment.

Previous research has repeatedly reported that males are mentally strong when the situation calls for adjustment in comparison to their fair sex. In support of our study there are several studies which show that men seem to derive more advantages from marriage than women (Tudor, 1973). Bernard (1972) suggests that while marriage is beneficial to married males, it seems to be less so to married females. A survey of the studies generally provides support for Bernard's claim (Gove & Tudor, 1973; Goves, Hughes & Style, 1983). Fowers (1991) said that the differential impacts of marriage on husbands and wives might be produced at the marital interaction level which might benefit husband at certain ways and it was further argued that if this reasoning is correct then it ought to be reflected in higher marital satisfaction for husbands than wives. No matter how satisfactory and inevitable marriage is, some conflict theorists assert that marital relationships reflects and reinforces gender inequalities (Degler, 1980).

Thus, on the bases of our present study and previous studies by several researchers we can say that marital conflicts and dissatisfaction in marriage affects the wives more as compared to husbands.

The results further reveal that there was no significant difference between husbands belonging to high and low socio-economic status. Furthermore, the results also indicate that the mean difference on marital adjustment between wives from high and low socio-economic status failed to reach the level of significance.

Conclusion

It can be concluded from the present study that socio-economic status and gender plays an important role in marital adjustment of couples. Couples from high socio-economic status shows better marital adjustment as compared to couples from low socio-economic status. And husbands have better marital adjustment than wives. On the other hand, the two factor interaction effect between socio-economic status and gender was not found to be significant.

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A Comparative Study Of Family Involvement Between High Socio-Economic And Low Socio-economic Status Students

Aishwarya Rathore

Abstract

The present study was conducted with the aim to compare the involvement of high socio-economic and low socio-economic status of school students with their families. The dimensions of Family Involvement are Intrinsic Motivation, Identification with family and Affective Involvement. The sample consists of 30 low socio-economic status students and 30 high socio-economic status students of age group 16 to 18 years. Socio-Economic Status Scale Questionnaire and Family Involvement Scale were used to categorize the sample and measure their psychological involvement with family and importance of family to the individual. Data was treated with Mean, Standard Deviation and T-Test. The result indicates that there is no significant difference between them.

Keywords: *Family involvement, High socio-economic status, Low socio-economic status, Intrinsic Motivation, Affective Involvement.*

About Author: Jai Narain Vyas University, Jodhpur

Introduction:

Family Involvement

Family Involvement promotes and supports an individual's social, emotional, physical, academic, and occupational growth of students. Successful family involvement shows high achievements in life. Family includes a lot of different type of activities, some families have time to get involved in many ways, other may only have time for one or two activities, and whatever the level of involvement is present between family outcomes is shown in every aspects of life.

The definition of family includes parents and siblings are also each child's perfect family picture, but a family may also include new spouses and partners of parents, extended families (grandparents, aunts, uncles, cousins, etc.), step-relatives, or any other person a youth or family unit considers a family member.

A family's involvement in the child's education is recognized by many as the single most important factor in school success and achievement. Research has shown that not only

does family involvement increase academic achievement, as reflected in higher test scores and graduation rates, but it also increases the likelihood that student will pursue higher education (Henderson & Berla, 1994).

Yogev and Brett (1995) defined 'family involvement as the degree to which a person is identified psychologically with family roles, the importance of family roles to the person's self image and self-concept, and the individual's commitment to family roles.'

Mishra, Ghosh, and Kanungo (1990) describe family involvement as an un-dimensional cognitive or belief state of psychological identification (or separation) within the family contexts.

Neither income nor social status helps in family involvement, but the extent to which that student's family is able to create a home environment that encourages learning. Express high (but unrealistic) expectation for their child's achievement and future career.

Intrinsic Motivation

Intrinsic Motivation refers to the behavior that is driven by internal rewards; the motivation to engage in a behavior arises from within the individual because it is naturally satisfying to you. No external rewards are required to incite the intrinsically motivated person into action. The reward is the behavior itself. One of the theories of intrinsic motivation is Self-Determination Theory, developed by Edward Deci and Richard Ryan. SDT (1975) states that humans have three innate psychological needs: a need to feel competent, a need to feel related and a need to feel autonomous. Intrinsic motivation develops out of the support of these needs. The theory will go on to say that when people feel competent, autonomous and self-determined, they will freely seek what interests them.

Identification With Family

Identification with family refers to the degree to which the child wants to be similar to the parent. The schemas and representations that children form of them in comparison with family members likely provide the basis for later self-concept and identity consolidation and contribute to psychological health.

Affective Involvement

Affective involvement is concerned with how much family members are involved with each other. The degree to which family members are involved in each other's lives is an important factor in family functioning. Families that show little interest in each other except for practical functions, such as handling money are an example of an under involved family. In this case, family members act more like boarders in a house than like family members. The members of such families are self absorbed and invest in other family members only when they can gain something from the involvement. In over-involvement families, the members become too involved and sometimes are overprotective of

other family members. As a result, the over protected member remain dependent and fail to grow and develop.

Objective:

- a. To study the Family Involvement of high school students of High socio-economic and Low socio-economic status.
- b. To study the Family Involvement of the age group of 16 to 18 years.
- c. To find out the significance difference of High socio-economic and Low socio-economic status in relation to Family Involvement.

Hypotheses:

There will be no Significance Difference of high school students of High socio-economic and Low socio-economic status in relation to their Family Involvement.

Method:

Sample

A sample of 60 high school students of age group 16 to 18 years are collected for the study through purposive sampling. Out of these 30 samples are of high socio-economic status and rest 30 are of low socioeconomic status. Data of high socio-economic status was collected from Kendra Vidhyalya School, Jaisalmer (Rajasthan) and data of low socio-economic status was collected from a government school in Jodhpur district (Rajasthan).

Design

The present study cannot be attempted in laboratory situation, therefore a co-relational field approach is taken for such problem. This is a non-experimental research design.

Tools

Family Involvement Scale: This scale is made by Prof. A.P. Singh & Dr. Akhilender K. Singh. This is a five point Likert- type rating scale having total of 20 items. The 20 items which were related to the following areas-

Intrinsic Motivation, Identification with family and Affective Involvement. Each statement has five response alternatives, namely, strongly agree, agree, uncertain, disagree, strongly disagree. The items of the scale were framed in such a way that they can be used for measuring the family involvement.

Socio-Economic Status Scale Questionnaire: This scale is made by Dr. S.D Kapoor and H.C Kocher in both English and Hindi version. It consist of 12 items, it seeks information about following component variable:- parental occupation, parental education, economic index income, house type, cultural level of the family, level of aspiration, concept of social prestige and belief in the family. When raw score is 45 or below, it is

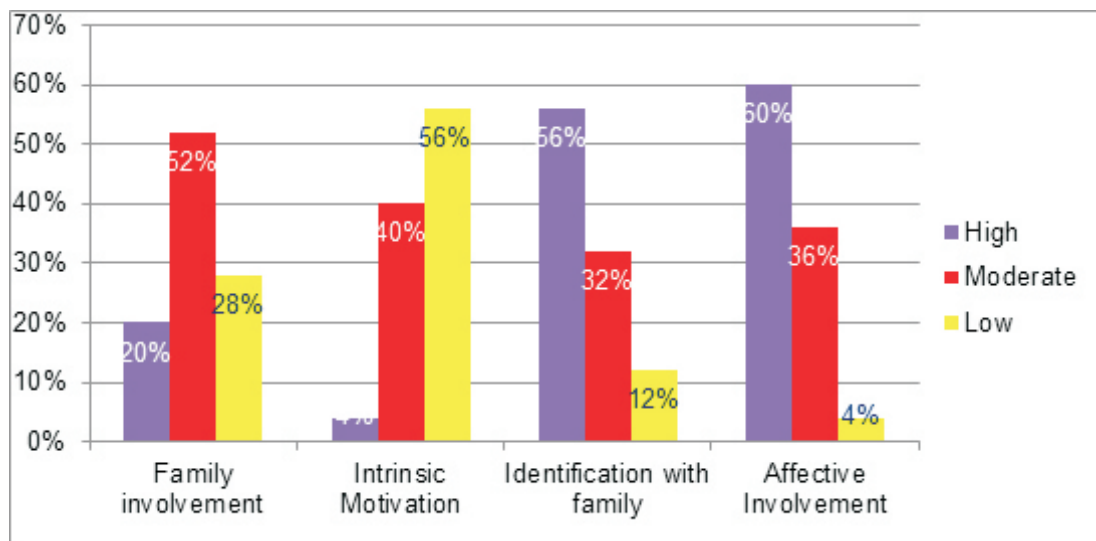
categorized into lower strata and the total possible score of the S.E.S Scale is 75.

Procedure

After taking the consent from the school Principal of both the schools, data collection was done on school students of selected class 11th and 12th standard. Answer sheets were distributed to whole class which includes two test i.e. socioeconomic scale and family involvement scale. Proper instructions were given to them.

Result

Percentage wise distribution of high socio-economic status



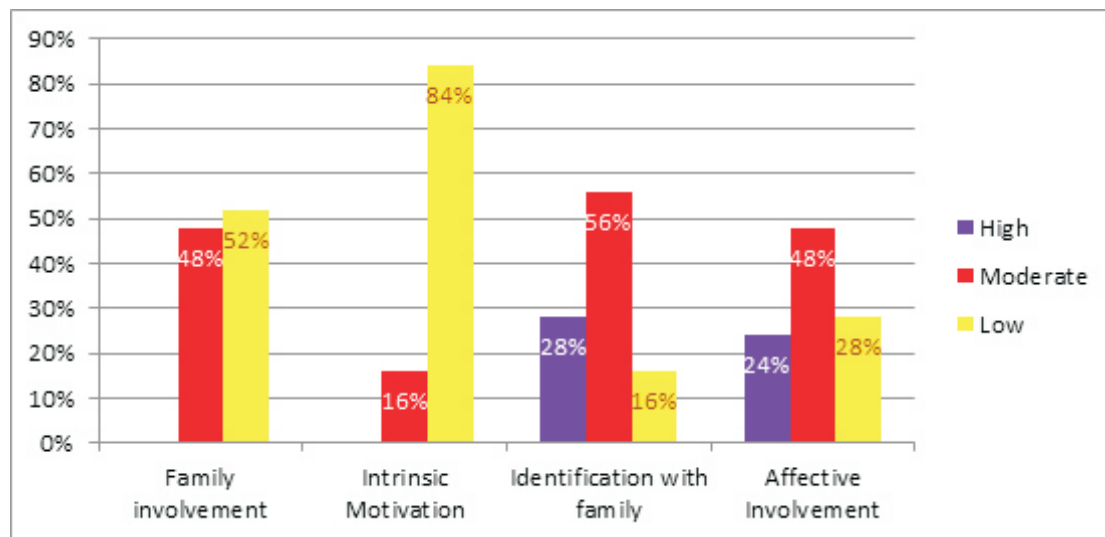
Result of high socio-economic status students: The above chart shows that 52% of students have moderate level of family involvement. In today's time high school students are more diverted towards their peer group and less inclined towards their involvement with family, as they don't like interference in their life and want to enjoy freedom and space. In intrinsic motivation low

category is maximum with 56%, which shows that there is lack of motivation in inner self to involve with family because of distractions present in today's world like inclination towards opposite sex, involved with virtual friends than real ones, they are busy with their education and pressure on them to prove themselves. But their identification with family and affective motivation is high with 56% and 60%

respectively, which shows that these students are concerned about their family and want to lead a happy family life. In spite of distraction in

their life the children of high socio economic status have maximum identification with family and affective involvement.

Percentage wise distribution of low socio-economic status



Result of low socio-economic status students:

The above chart shows that, there is no high category present in overall family involvement and intrinsic motivation. It may be due to lack of parent and child communication because family with low socio-economic status is busy in earning daily needs and they are less expressive about their feelings, they lead a simple life and festivities and celebrations are limited. The concepts of mothers day, rose day etc are alien to

them. In identification with family and affective involvement low socio-economic status students have moderate category with 56% and 48% respectively, this shows that they are emotionally connected to their family and this approach is balanced. So we can say that these children with low socio economic status are neither under involved nor over involved, case of over protected children are not found in this category.

Statistical Analysis:

SOCIO-ECONOMIC STATUS	MEAN	SD	t-TEST
HIGH	74	9.119576	3.6375
LOW	66	7.874008	

Conclusion:

As shown in the table- Mean calculated for High socio-economic is 74, for low socio-economic status is 66. SD calculated for high socio-economic status is 9.11, for low socio-economic status are 7.87. In this study calculated t-test from Mean and SD is 3.63, this value shows no significant difference between high socio-economic and low socio-economic status on the level of family involvement. It indicates parenting style and family environment plays same role in both high socio-economic and low socio-economic status groups and status doesn't affect their family involvement. Hence hypotheses "There will be no Significance Difference of high school students of High socio-economic and Low socio-economic status in relation to their Family Involvement" is proved. We can conclude it with the study- Neither income nor social status helps in family involvement, but the extent to which that student's family is able to create a home environment that encourages learning.

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Gender Difference in Psychological Wellbeing: A comparative Study among Indian Youth

Shishu Kesh Kumar Das AmbikaBharti***

Abstract

In the 21st century, explosion of population, knowledge and aspiration poses various challenges to a peaceful life. The Google world opens a plethora of challenges and opportunities especially to the youth. So, their psychological wellbeing emerges as a serious issue, to be properly understood. The present study aims to study gender difference in psychological wellbeing of Indian youth. Purposive sampling method was used. The sample (N=310) comprised of 310 students; 155 male and 155 female of age range between 18 to 27 years, selected from eight different states (namely Bihar, Uttar Pradesh, Jharkhand, Haryana, West Bengal, Madhya Pradesh, Kerala and Assam) of India. The Ryff's Psychological Wellbeing Scale (Carol Ryff, 1995) was used to assess psychological wellbeing. The hypothesis was tested using descriptive (Mean & SD) and inferential statistics (t-test). The finding suggests that Indian female significantly have more sense of autonomy, positive relation with others and more self-acceptance than their male counter parts. While no significant gender difference was seen in environmental mastery, personal growth and purpose in life. Hence, significant gender difference was seen on only three dimensions of psychological wellbeing of Indian youth.

Keywords: gender, psychological wellbeing, Indian youth.

*About Authors : *Research Scholar, Centre for Psychological Sciences,
Central University of South Bihar, Patna*

*** Assistant Professor, Centre for Psychological Sciences, Central University of South Bihar, Patna.*

Introduction

According to National Youth Policy of India (2014), population of youth is found in one third of the total population that consists a person of age group 15-29 years. In this phase of life, individuals undergo several physical, psychological, physiological and behavioural changes. Meanwhile in college, an individual has to face several intrapersonal, interpersonal, environmental, and academic stressors too (Ross, Niebling, & Heckert, 1999). These stressors may not be necessarily faced by the other age groups of the population (Camatta & Nagoshi, 1995; Ross, Niebling, & Heckert, 1999; Misra & McKean, 2000; Kadison & DiGeronimo, 2004). There are many social problems which are being faced by the youth of

India like rapid social change, fierce competition and unemployment. Many changes in typical family structures are being noticed and parent child relationship is becoming fragile day by day. Adjustment issues are found in the students who are staying away from their homes and parental authorities. Towbes and Cohen, (1996) has emphasized that students need to learn to deal with the academic challenges and adjustment issues.

Psychological Well-being:

Psychological well-being is a positive mental health (Parkinson, 2006) with two major aspects- hedonic and eudemonic. Hedonic aspect deals with the subjective experience of happiness and life satisfaction and eudemonic aspect deals with the psychological functioning,

good relationships with others, and self-realization. From the view point of positive psychology, Kitchener and Jorm (2002) states that psychological well-being is a state of mind with no mental disorder. They emphasized that individual's ability to enjoy life and to keep balance between life activities and efforts to achieve psychological resilience defines one's psychological well-being. Psychological well-being gives a sense of knowledge about how people's lives are enduring the interaction between their situations, activities and 'mental capital'. "It is about lives going well and the combination of feeling good and functioning effectively" (Huppert, 2009). Giugliano (2004) elaborates that clear thinking, socially developed, and open to learning new skills reflects a student's good psychological health. At this transition phase of development, students are more at the risk of experiencing mental illness.

Review of the literature indicates that the major factors of psychological well-being among post-secondary students include family cohesion (Heras & Revilla 1994; Kazarian 2005; Dyson-Washington 2006), gender (Cook et al. 2006), and personality traits (Chang, 2006). It also includes achievement motivation (Elliot et al. 1997; Tomiki, 2000), physical exercise (Markland & Ingledew, 1997; Maltby & Day, 2001; Lee & Yuen-Loke, 2005), academic workload (Mionk & Mahmood, 1999), socio-economic status (Tong & Song, 2004), social problem solving orientation (D'Zurilla & Sheedy, 1991; McCabe, Blankstein & Mills, 1999; Miller, 2001), and social support (Jay & D'Augelli, 1991; Morris, 1997; Solberg & Villarreal, 1997; Edwards, Hershberger, Russell, & Markert, 2001; Gencoz & Ozlale, 2004; Rodriguez, Mira, Myers, Morris, & Cardoza, 2003).

Studies on gender differences in psychological well-being are important because

of the many efforts being made in contemporary society to empower all individuals to achieve self-actualisation and utilise their full potential. Thereby promoting optimal psychological well-being, whilst being offered equal opportunities. Current studies on the existence of gender differences, including those related to psychological well-being reflect contradictory result and a distinct lack of consensus (Strumpfer, 1995; Ryff & Singer, 1998). Crose, Nicholas, Gobble, & Frank (1992) believe that gender differences do exist in almost every aspect of health and health care. In a Taiwanese study, Lu (2000) discovered gender differences while examining conjugal congruence on role experiences and subjective wellbeing. Inglehart (2002) finds that in almost every society, men have higher incomes, more prestigious jobs and more authority than women--all links with relatively high levels of subjective well-being. So women show low level of happiness than men. Research supports that men and women have similar levels of happiness and overall life satisfaction. Gender related differences on psychological well-being supports the notion that males tend to score higher on psychological well-being indicators in comparison to females. In a study it was found that women scored lower than men on psychological indicators of well-being (Carmel & Nigavekar, 2007).

Rationale:

Studies on gender differences in psychological well-being are important because of the many efforts being made in contemporary society to empower all individuals to achieve self-actualisation and utilise their full potential (Akhtar, 2015). Psychological wellbeing of youth emerges as a serious issue to be studied and understand. So many studies have been done on psychological well-being but very few researches have been done on psychological well-being in relation to gender differences among Indian youth. Finding of the present study

may provide path to differential understanding of Indian youths and to cater them respective needs based on gender differences in psychological wellbeing.

Objective

To study gender difference in psychological wellbeing among Indian youth.

Methodology

To verify the objective a scientifically sound method was adopted.

Hypothesis:

Indian youth of female gender would report higher psychological wellbeing on various dimensions compared to their male counterparts.

Research Design:

The present study followed a survey research design.

Sample:

Purposive sampling method was used to select sample for the present study. Sample comprised of 310 (N=310) Indian youth of age range 18 to 27 years collected randomly across 8 states of India (namely, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Utrakhhand, Odisha, Kerala & Haryana) and a central territory state New Delhi. Participant who can read and understand English and educated up to UG or PG was selected. Participant having any chronic disease, severe physical disease, or other mental disorder was excluded from the study.

Tools:**1) Socio-demographic and Clinical data sheet:**

This tool is a semi-structured performance especially drafted for this study. It deals with the information related to socio-demographic variables like age, sex, education, marital status, religion, socioeconomic status and domicile of the patients. Information regarding any chronic disease, any severe physical disease, or any other significant physical or psychiatric illness are also included in this tool.

2) Ryff's Psychological Well-Being Scales (Carol Ryff, 1995)

This scale consists of six subscales: Positive Relations with Others (PR), Self-Acceptance (SA), Autonomy (AU), Environmental Mastery (EM), Personal Growth (PG) and Purpose in Life (PL). It is based on a 6-point rating scale which ranges from "strongly disagree" to "strongly agree". There are 42 items (7 per dimension) in this scale. The range of test-retest reliability coefficients of this scale is 0.81 to 0.85. The internal consistency coefficients was between 0.86 and 0.93.

Procedure:

Participants were selected from 8 different state of India. The questionnaires were administered on each participant that took 25-30 minutes. Throughout the process the ethical guidelines of American Psychological Association (APA, 2010) were followed while dealing with the human participant of the study. The data was collected and analyzed using SPSS version- 20.

Result:

Result table: Showing Descriptive statistics (Mean & SD) and t-value for various dimension of psychological wellbeing in male and female among Indian youth-

Dimension of Psychological Wellbeing	Gender	N	Mean	SD	t-value	Sig. value
Autonomy (AU)	Male	155	26.247	4.2874	1.404	0.01
	Female	155	27.034	5.5145		
Environmental mastery (EM)	Male	155	25.706	3.9902	1.683	0.39
	Female	155	26.660	5.8171		
Personal growth (PG)	Male	155	26.492	5.9703	2.037	0.71
	Female	155	27.830	5.5944		
Positive relation (PR)	Male	155	26.632	4.7688	4.022	0.01
	Female	155	29.171	6.2464		
Purpose in life (PL)	Male	155	27.004	4.6626	1.071	0.070
	Female	155	26.397	5.2964		
Self-acceptance (SA)	Male	155	25.948	4.1169	0.665	0.01
	Female	155	26.312	5.4302		

Result table reveals among Indian youth that, female score higher on autonomy (M = 27.034, SD = 5.5145), environmental mastery (M = 26.660, SD = 5.8171), personal growth (M = 27.830, SD = 5.5944), positive relation (M = 29.171, SD = 6.2464) and self-acceptance (M = 26.312, SD = 5.4302) than male with score on autonomy (M = 26.247, SD = 4.2874), environmental mastery (M = 25.706, SD = 3.9902), personal growth (M = 26.492, SD = 5.9703), positive relation (M = 26.632, SD = 4.7688) and self-acceptance (M = 25.948, SD = 4.1169). Whereas male youth (M = 27.004, SD = 4.6626) scored high on purpose in life than their female youth (M = 26.397, SD = 5.2964) counterparts.

However this ($p < 0.01$) difference is reported only on the following dimensions of psychological wellbeing: autonomy (27.034), p

ositive relation (29.171) and self-acceptance (26.312) than their male counterparts where mean values were autonomy (26.247), positive relation (26.632), self-acceptance (25.948) respectively. Hence, it may be said that our hypothesis is partially accepted. Result table also indicates that there is no significant gender difference on the following dimension of psychological wellbeing (environmental mastery, personal growth and purpose in life)

Discussion:

The main objective of this study was to study the gender difference on psychological wellbeing of Indian youth. The result table of descriptive statistics and t-value gives a clear picture that there is a significant gender difference on dimensions of

psychological wellbeing (namely autonomy, positive relation and self-acceptance) of Indian youth. Here it can be stated that female youth are self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behaviour from within; evaluates self by personal standards as compared to their male counterpart. Female also possess positive attitude toward self; acknowledges and accepts multiple aspects of self, including good and bad qualities; feels positive about past life as compared to the males. It can also be said that female youth has warm, satisfying, trusting relationships with others; are concerned about the welfare of the others; capable of strong empathy, affection, and intimacy; understands give and take relationships as compared to male youth of India. Hence it is evident that females have more sense of autonomy, positive relation with others and a better sense of self-acceptance than males in India. Therefore, it can be concluded that female's psychological well-being is higher than that of male's psychological well-being on dimensions of autonomy, positive relation with others and self-acceptance.

Hasnain, Wazid and Hasan (2014), also found significant difference between young adult males and females with respect to psychological well-being. Females were reported to be higher on psychological well-being as compared to their male counterparts. In the same way, females were found to be significantly happier than the males.

In accordance with the present study, a study done by Akhter (2015) on 10th standard student also found that psychological wellbeing of female student is higher than that of male counterparts.

Conclusion:

The present study aimed to study gender difference on psychological wellbeing of Indian youth. Based on the result it can be concluded that female's psychological well-being is higher

than that of male's on dimensions of autonomy, positive relation with others and self-acceptance of psychological wellbeing. Indian female have more sense of autonomy, positive relation with others and a better sense of self-acceptance than Indian males. Overall it can also be concluded that the psychological wellbeing of Indian female youth is higher than that of male counterparts.

Implication:

- To understand the impact of gender on psychological wellbeing of youth.
- Create short term and long term gender specific health police and awareness programs to enhance the psychological wellbeing of male youth.

Limitation:

This study is done on a smaller sample due to time constrain, however, for better generalizability larger sample may be used. Mostly self-report measures have been used so social desirability effect may have taken place. Other methods of data collection may have been used to check it.

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Cognitive Preparedness Training

Silky Arora Roopali Sharma***

Abstract

Humans follow 'preparation' during number of general instances such as during exams or an interview. Preparedness for any process can be explained as the readiness to adapt or absorb involved information. Generally in order to attain efficient results. Preparedness, in terms of cognition is the adequacy of arousal state in order to procure efficient session learning. Cognitive Preparedness may be regarded as a crucial stage in the direction of progression in counselling and psychotherapy. The relationship between level of arousal and relaxation (sleep or without sleep) is a well known concept in understanding behavioural efficiency in individuals. This interrelationship is implied as cognitive preparedness training for childhood depression. This research paper outlines the process and relevance of cognitive preparedness training for psychotherapy administered on subjects with depression.

Keywords: *Cognitive, psychotherapy, counselling, depression, relaxation, arousal*

About Authors : **PhD Scholar, Amity Institute of psychology and allied sciences, Amity University, Noida*

***Associate Professor, Amity Institute of psychology and allied sciences, Amity University, Noida*

Introduction

Cognition refers to perception of the world (Morgan et al., 1986), in simpler words the information our brain processes of surroundings or environment. Variety of mental performance applications including learning, memory, behavioural aspects, adaptability, problem solving is termed as cognition. Implicitly, cognition and mental performance may be enhanced through physical activity (Sibly & Eitner, 2003), combined physical and mental training (Shors & Curlik, 2013), healthy regular nutritional diet (Bellisle, 2004); Deep breathing practices inducing relaxation (Yadav & Murtha, 2016; Block & Arnott, 1989; Busch, Genberg & Muench, 2012). Research shows that music fosters cognitive development through rhythm (Miendlarzewskar & Trost, 2014). Caffeine is also known to show higher cognitive functioning temporarily and working memory in adults (Koppelstaetter et al., 2010), but its effect on children has not been supported as such. Psychopharmacology therapies are

prescribed in neurological and neuropsychiatric disorders to alleviate cognitive dysfunctions (Wallace & Porter, 2011).

'Cognitive readiness is defined as the mental preparation for effective changes in response to unpredictable situations in fast changing world' a definition stated in a research by Neil. Et al. (Neil. et al, 2014). The application of cognitive readiness is practiced for modern military operations, disaster management and navy, which demands solution navigating abilities during unpredictable situations (Morrison & Fletcher, 2002; Fletcher & Wind, 2013).

Cognitive Preparedness is distinct from cognitive readiness. The preparation can be described as relaxed stimulation of brain, during the initiation stage of a psychotherapeutic session. It may be compared as mild heating of the pan, just before directing the batter on it or a warm up exercise before an athlete starts his actual competition. The 'mild heating' or 'warm up' is the preparedness. This barrier results in

distinct separation of the arousal states of the subject. Altering the high or disturbed arousal level to a relaxed one, resulting in behavioural efficiency during session is '**Cognitive Preparedness**'. Noticeable enhanced attention of the subject is observed post cognitive preparedness training.

What is Cognitive preparedness?

This paper outlines the procedure, application and benefits, of '**Cognitive Preparedness**'. It was performed as the starting step in psychotherapy sessions held once a week. Preparedness for any process can be explained as the readiness to adapt or absorb involved information. Specifically, **Cognitive Preparedness** includes the techniques for enhancing subject's assimilating capacity in learning of the followed psychotherapeutic session.

The basic techniques are relaxed sitting posture with back inclined on the chair comfortably, deep breathing exercise (*details under method section*) with closed eyes. Further details are mentioned in the procedure section. The objective of this step is to act as a barrier to the subjects' automatic thought generation process. Research supports that negative automatic thoughts corresponding to neuroticism are recurrent (Kercher, Rapee & Schmering, 2009). It was concluded that interconnected automatic negative thoughts intimidates over mental control in patients with depression (Wenzlaff, Wegner & Roper, 1988). Cognitive preparedness produces an intentional hurdle to automatic thought processing and may empower mental control. It is found that the subject was more attentive after such cognitive warm up. This seems promising in psychotherapies pertaining to alleviation in depression. Cognitive preparedness provides a platform for effective absorption of involved session goals by the subject, based on either cognitive or psychodynamic based intervention.

During the cognitive preparedness training, subject's relaxation may induce mild sleep, which was observed in many cases but not all. The basis of preparedness is the amalgamation of *relaxation and arousal* component.

Relaxation

Relaxation is one of objective of cognitive preparedness training. A Research found that the induced relaxation process through deep breathing, meditation like process, resulted in integrated changes at various brain locations such as dorsolateral prefrontal & parietal cortices and hippocampus (Lazar et al., 2000). Relaxation induced mild sleep in most subjects. Activation occurs at the neural areas involving attention. Distinguished control of parasympathetic nervous system over sympathetic nervous system was noticed during relaxation techniques (Lazar et al., 2000). Review suggests that relaxation training has been a vital inclusion in numerous psychotherapeutic treatments for depression (Blaney, 1981) and hyperactivity disorder. Some of the classic work pertaining to relaxation training suggests it as an effective training for reduction of depression symptoms (Agras, 1983; Biglan & Dow, 1981). Relaxation training was found to be effective in lowering the impulsivity scores and improving attention in hyperactive male children (Rivera & Omizo, 2006). Short term psychological therapies based on relaxation training for moderately depressed adolescents, were capable in attaining non-depressed levels at post intervention stage (Reynolds & Coats, 1986).

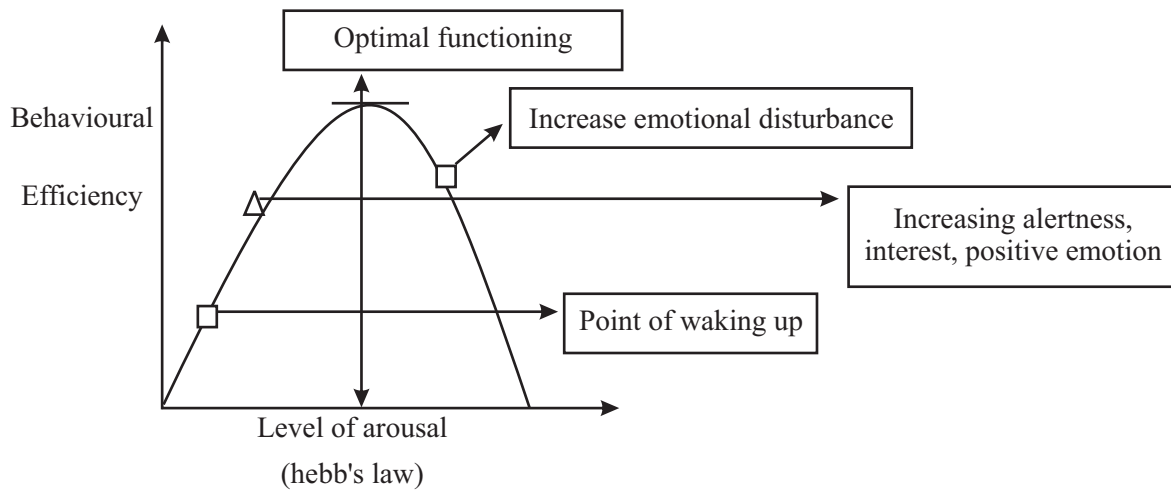
Arousal

During cognitive preparedness training, it was observed that many subjects had a *mild sleep* effect. Studies show that sleep induces low electrical activity in the brain, thus arousal is low. Arousal component is referred to the combined electrical activity of the millions of nerve cells in the brain. *Electroencephalogram*

(EEG) is used to study the electrical activity of the brain, with the help electrodes placed on the head. Combined electric voltages and amplifications are spiked on the graph, in process to display the respective activity during EEG monitoring. Studies show that low arousal corresponds to deep sleep and high arousal is related to emotional unregulated states such as anger (&violent behaviour). Hebb's law, for arousal and efficiency (1955) stated that efficiency is the optimal functioning that takes place at a certain level after the point of waking from a sleep. On the curve, after the point of waking up, increasing alertness and positive emotions are generated. Optimal functional efficiency is achieved at the highest point of the inverted U shaped graph. Beyond the maximum point of efficiency functioning, emotional disturbance and anxiety occurs that corresponds to the high emotional arousal. Following is the graphical representation:

cognitive preparedness training is closely associated with the application of hebb's law. Although the 'sleep' timing was short but the consequence of the activity was promising. Subjects were comparatively attentive post cognitive preparedness training. This stage pertains to the position of 'point of waking up' to increasing alertness and positive emotions generation on the hebb's law inverted U shaped curve.

According to a book '*Sleep Disorders and Sleep Deprivation*' published in 2003, sleep is categorised broadly as NREM (Non rapid eye movement) and REM (Rapid eye movement). Non rapid eye movement sleep or NREM is the initial most stage that lasts from one to seven minutes. Any sound disturbance can result in 'waking up' during this phase. The concept of sleep and wakefulness is important in respect to the pursuit of cognitive preparedness (explained in procedure section).



Considering various studies, relationship among sleep, electrical activity of the brain and its result in aspects of behaviour has already been established. The hebb's law describes the interdependence of behaviour and arousal explicitly. The *sleep effect* during the

Cognitive Preparedness and Attention

Cognitive preparedness training prior to a psychotherapeutic session is timed and short. Improved cognitive functioning and enhanced attention may be achieved on daily basis as well. A significant positive relationship was found to

be existing between physical activity and cognitive functioning in children; evident through a meta analytic research (Sibley and Etnier, 2003). A study showed that enhancement of nutritional status resulted in better cognitive aspects. Further elaboration suggests that thiamine treatment in adolescents reverses aggression to a significant level (Bellisile, 2004). It was found that omission of breakfast declined the mental performing efficiency in children who were malnourished. Thus, nutritional food related habits may be one of the ways to acquire optimal mental performance and behaviour (Bellisile , 2004). All the above aspects are meant to perform on the regular basis. But in concern to psychotherapy session, relaxation induced cognitive preparedness training assures of appropriate arousal in subjects. This helps in attentive assimilation of instructions during session. Thus, it strengthens the fulfilment of session goals productively.

Objectives of the study

To understand the process, relevance and application of Cognitive Preparedness Training in psychotherapy and counselling.

Method

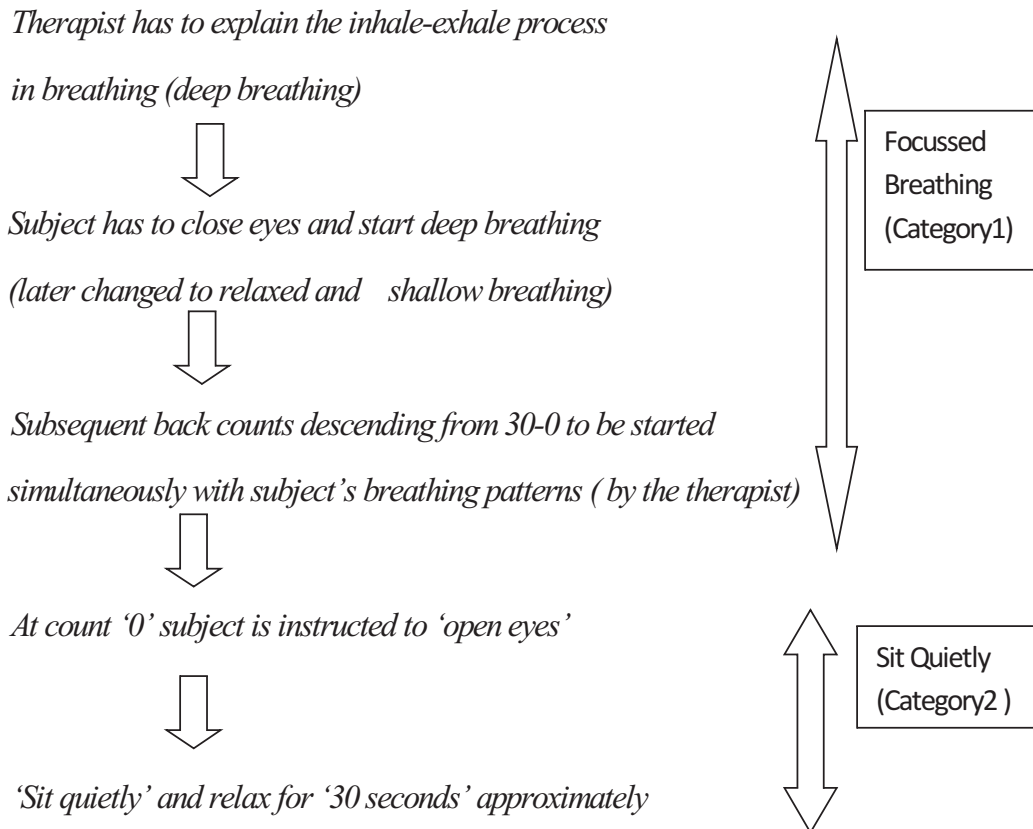
Sample

Purposive sampling was done in a psychiatric hospital. Children's depression inventory (Kovacs, 1992) was administered on the screened subjects. Subjects were under the age group of 9-12 years, symptomatic of behavioural and emotional problems. 10 subjects were shortlisted on the basis of the depression score. Informed consent from parents and authorities was taken. Subjects symptomatic of childhood depression had undergone 15 sessions of psychotherapy with cognitive preparedness training.

Procedure

Cognitive preparedness training was performed in the beginning of a psychotherapy session. A room with a table chair setting was used. Therapist and subject were seated on the opposite table sides. The subject has to be seated comfortably with back reclined on the chair. The entire process of cognitive preparedness process can be divided in two stages. First, the focussed breathing part (descending counts from 30 to 0) and Second, 30 seconds relaxation (sitting quietly) post '0' count.

Following are the instructions used for the subject (by the therapist) and categorised under two categories:



There has to be a gap of at least 4 seconds in between subsequent counts. The setting may not necessarily be a sound proof arrangement. It was observed that subjects started with deep breathing but subsequently switched to relaxed, shallow breathing within the initial 10 counts. At count '0' subject is instructed to relax and sit quietly for 30 seconds approximately.

Results and Discussion

Cognitive Preparedness training was a significant part of psychotherapy. It was considered as a barrier in arousal states of the subject. Relaxation potentially balanced the arousal level by initiating calming effect on the brain. Thus, activating parasympathetic nervous system in individuals. The process of cognitive preparedness was studied on the basis of distraction level, sleep and post training attentiveness. The observation was made in accordance of the following :

<p>(1) Distraction</p> <p>(1.1) pinching/ squeezing eyes or eyebrows</p> <p>(1.2) opening eyes</p> <p>(1.3) Random eye movement while the eyes are closed</p> <p>(1.4) No/Negligible random eye movement while the eyes are closed</p>	<p>Level</p> <p>Moderate</p> <p>Severe</p> <p>Mild</p> <p>Low</p>
<p>(2) Sleep</p> <p>(2.1)Mild Sleep</p> <p>(2.2)No sleep</p> <p>(2.3)Yawning</p>	
<p>(3)Attentiveness</p> <p>(3.1)Subject's viewing the surroundings with increased focus post Cognitive preparedness training.</p> <p>(3.2)Enhanced attention(post cognitive preparedness training)</p> <p>(3.3)Active listening (post cognitive preparedness training)</p>	

In the above checklist, (1) Distraction; (2) Sleep; were the categories considered during the '*focussed breathing*' part one, whereas (3) Attentiveness was under the second stage '*sit quietly*' of cognitive preparedness training. It was observed the less distracted subjects were more attentive during the '*sit quietly*' stage. Sleep was another factor to be considered in relation to attentiveness. The ones who had mild sleep or repetitive yawning during part one, were comparatively more attentive than the ones who had neither. In simpler words, better was the attention, if the subject had mild sleep like effect and less distraction during cognitive preparedness training. Also subjects with less or negligible distraction had much lower scores in depression inventory post intervention than the others. Irrespective to the subjects of mood disorder, cognitive preparedness training may prove beneficial in enhancing attention and better academic performance. This was an additional benefit observed in subjects in

relation to their academic performance in schools.

Another important aspect of efficiency in attainment of psychotherapy and counselling goals was the completion of assigned home work by the subject. Less distracted, *sleep like effect*, was present in subjects who regularly completed home tasks given during sessions. Regular Practice of cognitive preparedness may prove competitive in enhancing attention, mental control empowerment and lowering depressive symptoms. Considering that patients participate in psychotherapy and counselling sessions regularly in case of persistent mood disorders.

Conclusion

Cognitive preparedness training was meant for attaining the appropriate arousal level in subjects. The training seems significant because it neutralises unregulated emotion in individuals. Although, the control through

Cognitive preparedness training is exhibited for a specific short amount of time, but it seems promising. Emotional and behavioural malfunctions are prominent in depressed individuals and associated with disturbed arousal states. Thus cognitive preparedness proves beneficial in controlling and alleviating such high and disturbed arousal states which may lead to depression and anxiety. The fragility of the subject right after cognitive preparedness training is pivotal. Such phase has to be carefully utilized as an advantage effective assimilation of session learning. With the advantages mentioned above, the training of cognitive preparedness is an effective step in psychotherapy or counselling processes.

Limitations

Research shows promising path but has few limitations. The study was done on one group only. A control group would be advantageous. The sample size may be expanded as well. The diverse age groups may be included for the study.

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Internet Overuse as Cause of Mental Ill Health among Female College Students

Sudha Rathore Rupali Ruhela***

Abstract

Objective: *Since problematic internet use has long been a matter of public concern. The purpose of this study was to evaluate prevalence of internet addiction and its relation with depression, anxiety and stress among female college students.*

Design: *A causal research design.*

Method: *Sample of the study includes 254 college students aged between 18-14 years. To analyze data, mean and standard deviation were used in the descriptive statistics and the Pearson correlation and single-variable regression were used. These analyses were carried out via SPSS 20.0.*

Results: *findings revealed that Internet addiction has a positive significant relationship with Depression, Anxiety and Stress as a whole and all its components. The Regression results revealed that in general, addiction to internet can predict about 25.5% of depression, 23.4% of anxiety and 25.8% of stress variable.*

Conclusion: *The study of the underlying causes of Internet addiction and consequently, prevention of it seems necessary based on the findings of this study.*

Keywords: *Depression, anxiety, stress, Internet addiction.*

*About Authors : *Assistant Professor, **Student,
The IIS University, SFS, Gurukul Marg , Mansarovar, Jaipur, Rajasthan*

Introduction:

Internet today has become an essential tool and removing it from everyday life is inevitable. It is considered as a newly established technologies of the modern world has a great role in changing lives of the individuals of the society (Farshbaf, 2009). In spite of the widely perceived merits of this tool, psychologists and educators have been aware of the negative impacts of its use, especially the over or misuse and the related physical and psychological problems (Greenfield, 2000). Internet Addiction has become an increasingly researched area in many westernized countries. However, there has been little research in developing countries such India. This study was therefore planned to look into the effect of

Internet addiction on Teeneger's Mental Ill health.

APA (2013) in its Statistical manual of mental disorders (DSM-V) published some cases to identify this disorder (Frod & Schroeder, 2010). Nevertheless, today the use of the term Internet addiction is seen frequently by scholars such as Kandell and Young (1998). Ivan Goldberg first introduced Internet Addiction Disorder in 1959. Internet addiction creates a behavioral dependency to the Internet and is determined with the following properties: increasing costs for the Internet and its related issues, feeling unpleasant emotions (such as anxiety, depression, ...) when the individual does not contact with the Internet, the ability to tolerate and adapt to the effects of being in the

Internet, a denial of problematic behaviors; according to this point of view, the disorder is considered as tension disorder or impulse control disorder such as pathological gambling and those who reach this level, face psychological, social and vocational problems (Gonzalez, 2008).

The growing increase and unpleasant disorders that are generated by Internet addiction have caused that this addiction is considered as an addiction which is the source of the other behavioral addictions (Hamidian, 2000). In an article by Waugh (2012) in Mail Online, it has been said that that Internet addiction disorder disrupts the wiring in the brains of teenagers, causing damage normally seen in heavy substance abusers which sometimes on denied access from the user may cause distress & withdrawal symptoms, even involuntary typing movements of the fingers. In simple words it can be said that when suffers spend unhealthy amount of time “online” to the extent that it impairs their quality of life.

Internet addiction has changed the human beings to the abandoned ones and affects their social relationships influence. For example, researchers has proved in several studies (Ko et al, 2008; Yen et al, 2008; Ha et al, 2007; Hakimzade et al, 2007) there is a prevalence of depression among internet addicts than normal users. A study by Akini and Iskender (2011) suggested that depression and anxiety contribute variance in predicting Internet addiction among Turkish students. Another study also reported that anxiety is a significant predictor of Internet addiction. Internet addiction relates to psychological variables such as shyness, loneliness, anxiety, depression, and interpersonal relations (Ko et al, 2007).

Internet Addiction is indicative of symptoms such as anxiety, loneliness, depression, temperament and weaknesses in self-confidence (Nademi & Rezvani, 2006). The

pathological consequences of Internet use on psychological status includes feelings of isolation, depression, etc and have provided conflicting result (Barak & King, 2000; Goel, Subramanyam & Kamath, 2013).

Stress can also be the byproduct of excessive internet use. Stress is defined as “a state of psychological and physiological imbalance resulting from the disparity between situational demand and the individual's ability and motivation to meet those needs.” (Akrani, 2011). Same situation cab be perceived as threat for someone and safe for someone else (Clark, 2010). Internet addiction can contribute in every kind of stress be it social, economic and psychological. Addicts to internet have considerable anxiety and apprehension. Using internet act as a escape mechanism for such addicts, and when access is denied person becomes anxious and to reduc his/her anxiety he precedes internet (Nastizaei, 2010). There were studies by which explored the relationship Psychiatric disorders and Internet addiction. Findings revealed that Internet addiction has positive significant relationship with psychosis, aggression, depression hypochondriasis, interpersonal sensitivity, anxiety, compulsion, phobias, social phobias, stress and paranoia (Alavi et al, 2010; Jafari & Fathizade; 2012; Sharma, Bharati, De Sousa & Shah, 2016).

The Present Study

Internet Addiction has been studied by different sciences in several angles. There are theories in these sciences to explain this disorder. The biomedical theory emphasizes that internet addiction can be traced in hereditary and congenital factors. They also suggested that chemical fluctuations in the brain, and neurotransmitters are also responsible for such addiction. While the socio-cultural theories point out that addiction differs in connection with age, gender, socioeconomic status, race and nationality; therefore, it can be assumed that

Internet addiction is more prevalent in certain groups, but since there is little research in this area, we cannot properly indicate which groups are more susceptible for Internet addiction (Davoodabadi, 2005). Although Internet Addiction has been studied with social, physical and educational variables has gained a lot of scholarly attention. However having it in context of emotional variables like depression, anxiety and stress have received scarce attention. Therefore, according to the mentioned subjects, examining the factor providing the ground for Internet addiction and consequently prevention of it seems necessary, so the present study was conducted on students of The IIS University to examine the relationship between Internet addiction and anxiety, depression and stress. Researcher therefore hypothesized that internet addiction would be associated positively with depression, anxiety, and stress.

Procedure

Permission for participation of students was obtained from authorities and students voluntarily participated in the research. Confidentiality and anonymity was guaranteed. Prior to administration of measures, all participants were told about purposes of the study.

Methodology

This study is a correlative one and the statistical population included the students of The IIS University of Jaipur, Rajasthan of the academic year 2016-2017. The sample size includes 254 female college students (aged between 18-14 years) which were selected using purposive sampling method. To analyze data, calculating mean and standard deviation were used in the descriptive statistics and the Pearson correlation and single-variable regression were used to study hypotheses.

Tools of the Study

The Internet Addiction:

Internet Addiction Test is and a reliable and valid method for measuring the addiction to the use of Internet. This questionnaire consists of 20 items and had been prepared to measure the level of dependence of the individuals to work with the Internet or computers by Dr Kimber Li Yang (1996). Its responses have been set on a five-scale continuum from “rarely”, “sometimes”, “often”, “very often” and “always” which measures the degree of the Internet addiction as mild, moderate, and severe. The lowest received score is 20 and the highest score is 100. The above test measures six aspects that include being prominent, overusing, negligence, waiting, and lack of control and neglect of social life. In performing Internet Addiction Test, Young et al (1998) achieved Cronbach's alpha over 0.90. In the present study, the reliability in Cronbach's alpha was obtained equal to 0.73.

Depression, Anxiety and Stress Survey (DASS-21):

This questionnaire was prepared by Lovibond and Lovibond in 1995. This scale has two forms. The short form contains 21 items that any psychological construct of “depression”, “anxiety” and “stress” is evaluated by 7 different terms. The long form includes 42 items that each measures the 14 terms of an agent or a mental construct. Antony et al (1998) reported the reliability of this tool with Cronbach's alpha equals to 0.95 for depression, 0.90 for anxiety and 0.93 for stress. In the present study, reliability through Cronbach's alpha was obtained as 0.67 for depression, 0.73 for anxiety and 0.90 for stress. Related with the criterion-related validity of the scale, correlation coefficients between the DASS and the Beck Depression Inventory (Beck, Steer, & Brown, 1996), and the Beck Anxiety Inventory (Beck, Steer, & Garbin, 1988) were computed as .87 and .84, respectively.

Results

Table1 Results of the Research Subscales

Variables	Mean	Std. Deviations	Lowest Score	Highest Score
Depression	7.95	3.98	0	21
Anxiety	7.83	3.62	0	21
Stress	8.51	3.81	0	21
Internet Addiction	46.31	16.16	20	100

As the above table shows Internet addiction in the whole is 46.31 ± 16.16 .

Table 2 The Relationship between Internet Addiction with Anxiety, Depression and Stress

Variables	Depression	Anxiety	Stress
Internet Addiction	.505**	.484**	.508**

**Significant at 0.01 level.

According to above table, there is a significant positive correlation between anxiety, stress and depression with Internet Addiction among female college students ($p < 0.01$).

Table 3 Regression Analysis of variance related to the role of Internet Addiction on Depression

The Sources of Changes	Sum of Squares	Degree of Freedom	Mean of Squares	F	Std. β Coefficient	Determination Factor
Internet Regression	1024.57	1	1024.57	86.21**	.505	.25
Addiction Remainder	2994.85	252	11.88			
Total	4019.43	253				

**Significant at 0.01 level.

The above table shows that to what extent Internet addiction explain the variable depression, single variable regression test (stepwise) was used. Findings suggested that Internet addiction contribute 25% variance in predicting depression which is statistically significance ($p < 0.01$ & $F = 86.21$).

Table 4 Regression Analysis of variance related to the role of Internet Addiction on Anxiety

The Sources of Changes	Sum of Squares	Degree of Freedom	Mean of Squares	F	Std. β Coefficient	Determination Factor
Internet Regression	776.85	1	776.85	76.96**	.484	.23
Addiction Remainder	2543.52	252	10.09			
Total	3320.38	253				

**Significant at 0.01 level.

The above table shows that to what extent Internet addiction explain the variable anxiety, single variable regression test (stepwise) was used. Findings suggested that Internet addiction contribute 23% variance in predicting anxiety which is statistically significance ($p < 0.01$ & $F = 76.96$).

Table 5 Regression Analysis of variance related to the role of Internet Addiction on Stress

The Sources of Changes	Sum of Squares	Degree of Freedom	Mean of Squares	F	Std. β Coefficient	Determination Factor
Internet	948.20	1	948.20	87.55**	.508	.25
Addiction	2729.25	252	10.83			
Total	3677.46	253				

**Significant at 0.01 level.

The above table shows that to what extent Internet addiction explain the variable Stress, single variable regression test (stepwise) was used. Findings suggested that Internet addiction contribute 25% variance in predicting depression which is statistically significance ($p < 0.01$ & $F = 87.55$).

Discussion

The objective of this study is to investigate the relationship between Internet addiction and anxiety, depression and stress in students of The IIS University, Jaipur. Internet addiction has been recently addressed as a mental disorder and gradually the number of patient referrals to psychiatric clinics because of this disorder is increasing. The Internet is not an enemy, but the people depend on it for various reasons, because it goes them away from their real life and has a negative impact on their life. Using the Internet due to its false appeal to the people slowly makes them addicted to it and can provide them the emotional and psychological needs. It is while overusing Internet causes the mental, social and emotional growth of the users become behaviorally disordered due to lack of conventional and group experiences with the other people and leads them to self involvement (Atashpour & Nadi, 2004).

Results of the present study revealed that Internet addiction not only has positive significant relationship with Depression,

Anxiety and Stress but as predictor variable Internet addiction also contribute significant variance in predicting these criterion variables of the study viz. Depression, anxiety and stress.

These findings are consistent with Orsal et al. (2012) as there was a positive significant relationship between depression and internet addition. It can be suggested that factors like concentration, motivation and others aspects of veryday life is afflicted by deoression. It disruots sleep and it interferes with appetite.

As far as anxiety is concerned there are studies by Azher et al. (2014) and Prizant-Passal et al. (2016) indicated that tht anxiety has a positive significant relationship with Internet addiction. It has been that student who are anxious, spend most of their time on computer on surfing social networking sites as they can talk and make new friends to whom they can easily talk to them as they are not making face to face contact and can therefore easily communicate.

There are studies like Busari et al. (2016) on stress and Internet Addiction which suggested that there was significant interaction among both the variables. In analysis of our study stress showed as the major factor which caused Internet Addiction. It was seen throughout the data collection that the people who are suffering

from stress are likely to use Internet more and more as internet served as a medium for them to help them from many problems (college work, assignments, projects, exam preparation) and also to spend some leisure time by surfing on net, playing games, chatting online with new friends. These all activities helped them to overcome their stress.

Also the study can be supported by Beck's Cognitive Behavioral Model (1983) in which the three components are related to each other which are: Thoughts, Feelings and Behavior. What an individual think, he/she feels in the same way which in result contributes to his/her behavior which is seen our study also that the person suffering from depression takes Internet as a medium to overcome those ill thoughts and feelings and which turns it to be a behavior for him/her. As whenever the person feels depressed or stressed or anxious, the thought of using the Internet comes to his/her mind and it becomes a behavior for them to avoid the problems through using Internet.

Thus, it is difficult for the adolescents to develop their own leisure culture and activities. The additional data analysis in this study revealed that adolescents who were participating in sports activities or who had several hobbies were more likely to have low levels of academic stress, suggesting the beneficial effects of appropriate leisure and cultural activities. Therefore, stress can be reduced if people try to engage in other activities rather than simply wasting their time on internet.

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The Role of Family Income and Educational Level of Father in Depression and Aggression Orientation of Male and Female Young Adults

Gyanashruti Mukherjee* Ankita Ghosh** Subrata Dasgupta***

Abstract

Mental health is critical to young adult health, as the onset of 75% of psychiatric disorders occurs by age 24 and psychiatric disorders early in life predict later behavioral health problems. So, the present study examined the effect of family income and father's education on depression and aggression orientation of male and female young adults. The sample consisted of 540 male and female college students, between 18-22 years. Beck Depression Inventory (BDI-II) and Aggression Orientation Scale (AOS) were used. The study could identify the demographic risk factors of depression and aggression orientation among young adults. The findings hold valuable implication for prevention of psychological disorders in a vulnerable group.

About Authors : *Research student, Department of Applied Psychology, University of Calcutta

**Junior Research Fellow (UGC), Department of Applied Psychology, University of Calcutta

***Associate Professor, Department of Applied Psychology, University of Calcutta

Introduction:

During young adulthood, physical, cognitive, and emotional maturation combine with a transition in social roles to set the stage for life as an adult (Sawyer et al., 2012). Although the majority of young adults are able to cope successfully with these transitions, others experience significant mental health difficulties—depression and aggressive behavior being common among this age group. Depression and aggression have grave negative consequences both for the individual and the society at large. Therefore, identification of risk factors is of vital importance, since early identification of problem is the key to prevention.

Gender is a factor that plays a role in human aggression. The traditional view is that males are the more aggressive sex. Researchers have historically focused on measuring physical aggression and so it was mistakenly thought that girls are less aggressive than boys (Conway, 2005; Crick & Grotpeter, 1995; Hadley, 2003; Lagerspetz, Bjorkqvist & Peltonen, 1988). However, recent research (Bjorkqvist, Lagerspetz and Kaukiainen, 1992; Bjorkqvist,

Osterman and Lagerspetz, 1994; Crick and Grotpeter, 1995; Cowan and Underwood, 1995) questioned this gender polarized view of aggression and suggested that gender differences may be qualitative rather than quantitative. This recent research unearthed forms of aggression more likely to be found in girls. When relational aggression is measured in addition to physical aggression, levels of aggression are more or less equal between the genders (Crick & Grotpeter, 1995; Crick & Rose, 2000). So, instead of studying aggression as only physical aggression, aggression orientation which includes directional and qualitative aspects should be studied, to better understand the role of gender in aggressive behavior.

The other common psychological problem of young adulthood, depression, has several gender based studies. However, gender is much less frequently used as a framework for understanding depression in men. In fact, publications on men and depression are outnumbered by those focusing on women by a ratio of over three to one (Addis, 2008). The

relative paucity of studies focused on men's experience raises several public health concerns. First, although it is well documented that women are twice as likely to be diagnosed with major depression, population-based estimates indicate that there are still a significant number of men who suffer from the disorder, and there is evidence that the gender gap is narrowing (Kessler et al., 1994; Stoolmiller, Kim, & Capaldi, 2005). Moreover, researchers and practitioners working in the area of men's mental health have increasingly suggested that major depression can be "masked" in men. Men who present with problems other than depression actually experience an underlying depression that is transformed into other more externalizing symptoms due to proscriptive gender norms. Masculine gender norms against men experiencing or expressing sadness, grief, or depressive affect may produce an underestimate of the true rates at which men suffer from the disorder (Cochran & Rabinowitz, 2000; Real, 1997). Second, although women are twice as likely to attempt suicide, men are four times more likely to die from suicide attempts (Moscicki, 1997; Oquendo, Ellis, Greenwald, Malone, Weissman, & Mann, 2001). Third, studies of help-seeking behavior consistently demonstrate that, on average, men are less likely than women to utilize mental health services for psychiatric disorders (Addis & Mahalik, 2003). For all of these reasons, there is a pressing need to enhance the quality and quantity of research in the area of gender and depression, with due emphasis on men's depression.

Several studies have found family income and parental education to be significant socioeconomic predictors of mental health. However, these studies mostly involved children. For example, in Bergen Child Study, it was found that family economy was associated with a wide range of mental health problems, whereas parental education levels had more

specific associations with externalizing problems (Boe, overland, Lundervold, & Hysing, 2012). Higher maternal education levels were associated with increased knowledge about childrearing and child development, and more supportive mothering (Morawska, Winter, & Sanders, 2009; Waylen & Stewart-Brown, 2010). Few studies have investigated the influence of paternal education levels on fathering. One study found that highly educated fathers had more positive engagement with their school-aged children (Blair, Wenk, & Hardesty, 1994). Others have found paternal education to have little influence on such involvement, although with younger children.

So the aim of the present study was to examine the effect of family income and father's educational level on depression and aggression orientation of male and female young adults.

Objectives

1. To determine the role of gender on depression and aggression orientation of young adults.
2. To determine the role of family income (low: 7000-10,000; middle: 20,000-25,000; high: 45,000-50,000) on depression and aggression orientation of young adults.
3. To determine the role of father's education (low: below school final; medium: school final-graduation; high: post graduation and above) on depression and aggression orientation of young adults.

Method

Sample

The sample consisted of 540 college students (male-270 and female-270) between 18-22years, pursuing graduation (honours). All participants were Bengali, Hindu, residents of Kolkata. Only those, whose mothers were housewife, had number of siblings not more than

two and number of family members not more than six was selected.

Tools

A detailed information schedule was used to collect personal and familial related information about the subjects. Apart from that the following tools were administered:

BECK DEPRESSION INVENTORY (SECOND EDITION, BDI-II): BDI-II developed by Aaron T. Beck (1996) is a 21-item self-report instrument for measuring the severity of depression in adults and adolescents. This version of the inventory was developed for the assessment of symptoms corresponding to criteria for diagnosing depressive disorder listed in diagnostic and statistical manual of mental disorders, fourth edition. It is scored by summing the ratings of all the 21 items. Each item is rated on a four-point scale ranging from 0 to 3. The test-retest correlation is 0.93.

AGGRESSION ORIENTATION SCALE (AOS): This scale was developed by Basu (2001). It consists of two major parts, namely, Readiness for Aggression and Expression of Aggression. The Readiness part consists of predisposition (PR), externalising tendency (ET), internalising tendency (IT). The

expression part has three sub-scales – verbal (VE), physical (PE) and indirect (IE) aggression. The respondent answers in a Yes/No format. The subscales are treated separately. The entire scale has 76 items. The test-retest and split-half reliability values for the sub-scales ranged between 0.60 to 0.80. Concurrent validity and criterion validity were reported (Basu, 2001).

Procedure

Stratified random sampling technique was used for the selection of the sample. The sample was divided into male (270) and female (270) groups. Then the two groups were divided into 3 different groups based on family income (6 groups; 90 each). Then again they were stratified into 3 different groups based on father's education (18 groups; 30 each). To conduct the study, head of the institutes were approached for permission to collect data from the students. After obtaining permission, the questionnaires were administered to the consenting students. The data collected was treated statistically by computing mean, standard deviation (SD) and ANOVA (2*3*3) using statistical package for social sciences (SPSS).

Result

TABLE 1: Mean and SDs of BDI, ET, IE, IT, PE, PR and VE of males and females of different income and father's educational levels

GENDE R	EDUCATIO N	INCOM E		BDI	ET	IE	IT	PE	PR	VE
MALE	HIGH	HIGH	MEAN	5.43	1.37	8.13	1.30	2.13	6.07	2.67
			SD	2.70	1.22	2.16	1.18	1.43	1.78	1.90
		MIDDLE	MEAN	6.33	2.03	7.43	2.03	2.20	6.27	2.87
			SD	2.52	1.30	1.96	1.22	1.19	2.50	1.78

	MIDDLE	LOW	MEAN	7.67	2.87	7.13	2.37	3.27	6.33	2.10
			SD	2.60	1.28	1.81	1.47	1.53	1.88	1.06
		HIGH	MEAN	6.47	2.03	8.47	1.60	2.00	7.80	2.87
			SD	2.80	1.43	2.58	1.40	1.41	3.19	1.85
		MIDDLE	MEAN	6.07	1.10	7.67	2.13	2.13	7.93	2.87
			SD	2.65	0.80	1.86	0.97	1.31	2.55	1.41
	LOW	MEAN	6.80	1.60	6.47	1.87	1.70	5.20	2.27	
		SD	4.17	1.40	1.48	1.25	1.56	3.25	1.60	
	LOW	HIGH	MEAN	8.47	1.33	8.43	3.03	1.23	7.60	1.90
			SD	2.93	1.24	2.85	1.69	1.01	2.71	1.56
		MIDDLE	MEAN	6.13	3.13	9.53	1.67	2.17	6.87	2.50
			SD	2.21	1.31	1.91	1.06	1.09	1.89	1.25
		LOW	MEAN	10.67	1.47	6.20	1.00	1.80	8.10	2.53
			SD	3.92	1.31	2.28	1.02	1.61	2.86	2.21
FEMALE	HIGH	HIGH	MEAN	5.43	2.50	4.27	2.47	1.23	3.27	2.03
			SD	3.95	2.11	2.83	2.33	1.14	3.27	1.87
		MIDDLE	MEAN	7.30	1.60	9.30	2.50	1.70	8.17	2.00
			SD	5.60	2.14	2.14	1.38	2.09	4.70	2.03

TABLE 2: F ratios for the effect of gender, father's education, income and their interaction effect on BDI, ET, IE, IT, PE, PR and VE

	F RATIO						
	SOURCE						
	GENDER (A)	EDU (B)	INCOME (C)	AB	AC	BC	ABC
BDI	73.136**	33.467**	17.541**	31.294**	4.478*	9.111*	2.514*
ET	.008	5.690**	.766	1.389	5.793**	8.563**	7.252**
IE	15.122**	14.336**	1.766	4.816**	19.452**	12.188**	15.436**
IT	3.352	0.618	1.010	0.523	0.095	6.388**	5.633**
PE	0.141	0.226	6.041**	10.697**	0.423	6.822**	6.208**
PR	10.276**	15.544**	4.439*	1.520	10.449**	11.145**	4.520**
VE	5.405*	2.729	0.983	8.269**	1.136	4.774**	10.506**

*p<0.05; **p<0.01

From table 1 and 2, it can be seen that females were significantly higher in BDI (female-10.20; male-7.11), IE (female-2.35; male-1.89), PR (female-7.77; male-6.91) and VE (female-2.86; male-2.51) than males. Those with highly educated fathers were significantly higher in ET (high-2.15; middle-1.65; low-1.83), while those with moderately educated fathers were significantly higher in BDI (high-6.59; middle -9.94; low-9.45), and those whose fathers have low level of education were higher in both IE (high-7.39; middle -7.67; low-8.63) and PR (high-6.32; middle-7.58; low-8.12). Those with low family income were significantly higher in BDI (high-7.595; middle-8.26; low-10.12), PE (high-1.76; middle-2.07; low-2.31) and PR (high-6.77; middle-7.595; low-7.655).

Females with fathers having moderate level of education were significantly higher in BDI, while those with fathers having low level of education were significantly higher in both IE

and VE. Males with fathers having high level of education were significantly higher in PE.

Females with low family income were significantly higher in both BDI and PR, while those with family income in the mid range were significantly higher in IE. Males with low family income were significantly higher in ET.

Those with low family income and moderately educated fathers were significantly higher in BDI. Those with low family income and highly educated fathers were significantly higher in ET and PE. Those with moderate family income and whose fathers have low education were significantly higher in IE and VE. Those with moderate family income and highly educated fathers were significantly higher in IT. Those with low family income and whose fathers have low education were significantly higher in PR.

Females with low family income and moderately educated fathers were significantly higher in BDI. Males with moderate family income and highly educated fathers were

significantly higher in ET. Females with moderate family income and fathers having low education were significantly higher in IE and VE. Females with moderate family income and highly educated fathers were significantly higher in IT. Males with low family income and highly educated fathers were significantly higher in PE. Females with low family income and fathers having low education were significantly higher in PR.

Discussion

In the present study, females were found to be high in depression compared to males. This is in accord with the findings of most of the previous studies. Across many nations, cultures, and ethnicities, women are about twice as likely as men to develop depression (Nolen-Hoeksema, 1990; Weissman et al., 1996). Many different explanations for this gender difference in depression have been offered, but none seems to fully explain it. Several biological processes including genetically determined vulnerability, hormonal fluctuations related to various aspects of reproductive function, an undue sensitivity to such hormonal fluctuations in brain systems and psychosocial events such as role-stress, victimization, sex-specific socialization, internalization coping style, and disadvantaged social status have all been considered to be contributors to the increased vulnerability of women to depression (Noble, 2005).

Focusing on the psychosocial aspect, we find that parents have different expectations for girls than boys, including beliefs that girls will be more nurturing and concerned with social evaluations of others and that boys will be more independent. Stereotypical gender socialization leads to a lower sense of mastery and control and a higher concern for external validation in girls than in boys (Ruble, Greulich, Pomerantz, 1993).

Secondly, in our society, women have less power and status than men, so they experience certain traumas, particularly sexual abuse, more often than men. Traumas may contribute directly to depression, by making them feel they are helpless to control their lives. Women's social roles also carry a number of chronic strains that might contribute directly or indirectly to depression. Even when women and men experience the same stressors, women are more likely than men to develop depression because of gender differences in biological responses to stressors, self-concepts, or coping styles (Nolen-Hoeksema, 1999).

For many years, the biological explanations for women's greater vulnerability to depression focused on the direct effects of the ovarian hormones (especially estrogen and progesterone) on women's moods. More recent biological research has focused not on direct effects of ovarian hormones on moods, but on the moderating effects of hormones, particularly adrenal hormones, on responses to stress. The hypothalamic-pituitary-adrenal (HPA) axis plays a major role in regulating stress responses, in part by regulating levels of a number of hormones, including cortisol, which is released by the adrenal glands in response to chemicals secreted by the brain's hypothalamus and then the pituitary. In turn, cortisol levels can affect other biochemicals known to influence moods. People with major depressive disorder often show elevated cortisol responses to stress, indicating dysregulation of the HPA response. Women are more likely than men to have a dysregulated HPA response to stress, which makes them more likely to develop depression in response to stress (Weiss, Longhurst & Mazure, 1999). Women may be more likely to have a dysregulated HPA response because they are more likely to have suffered traumatic events, which are known to contribute to HPA dysregulation.

One consistent difference in males' and females' self-concepts concerns interpersonal orientation, the tendency to be concerned with the status of one's relationships and the opinions others hold of oneself. Even in childhood, girls appear more interpersonally oriented than boys, and this gender difference increases in adolescence (Zahn-Waxler, 2000). When interpersonal orientation leads girls and women to subordinate their own needs and desires completely to those of others, they become excessively dependent on the good graces of others (Cyranowski, Frank, Young, & Shear, 2000). They may then be at high risk for depression when conflicts arise in relationships, or relationships end. Several recent studies have shown that girls and women are more likely than boys and men to develop depression in response to interpersonal stressors.

By adolescence, girls appear to be more likely than boys to respond to stress and distress with rumination—focusing inward on feelings of distress and personal concerns rather than taking action to relieve their distress. This gender difference in rumination then is maintained throughout adulthood. Several longitudinal and experimental studies have shown that people who ruminate in response to stress are at increased risk to develop depressive symptoms and depressive disorders over time (Nolen-Hoeksema, Larson & Grayson, 1999). The gender difference in rumination can at least partially account for the gender difference in depression. Rumination may not only contribute directly to depression, but may also contribute indirectly by impairing problem solving, and thus preventing women from taking action to overcome the stressors they face (Nolen-Hoeksema, 1995).

Besides depression, females were also found to be high in predisposition, indirect and verbal expression. For decades, many investigators have argued that girls engage in

aggression in qualitatively different ways, preferring to use 'verbal' (Muste & Sharpe, 1947), 'indirect' (Vaillancourt, 2005), 'social' (Paquette & Underwood, 1999) or 'relational' aggression (Crick, 1995; Crick, Casas & Mosher, 1997). Girls are more prone than boys are to inflict hurt on others through words and manipulation of interpersonal relationships, rather than merely using their fists. Gender refers to characteristics that are generally learned through social experiences rather than those characteristics that are biologically based and refer to a person's sex (Galambos, 2004). Experiences with parents, teachers, peers, siblings, and the mass media shape a person's gender development through role modeling, teaching, reinforcement, and even punishment of specific gender behaviors.

Zahn-Waxler and Polanichka (2004) note that in general, boys receive encouragement and reinforcement for aggressive behavior whereas girls receive firm directives for the same aggressive behavior. Girls are often over socialized with regard to expectations for aggressive behavior in that mothers and teachers frequently give girls verbal rationale for not engaging in overt aggression. As a result, Zahn-Waxler and Polanichka conclude that girls are more likely to mask their aggression and to express it indirectly.

Girls develop linguistic competence and conversational skills sooner than boys do (Dionne, Tremblay, Boivin, Laplante & Pe'russe, 2003; Hay, 2006) and thus, young girls may find it easier to adopt verbal strategies to resolve their disputes with other people. Maturational advantage held by girls over boys with respect to language development makes them better able to diffuse conflict with words, and so they do not need to resort to force.

Higher predisposition among girls suggests that they possess greater ability to be aggressive. However, owing to socialization

pressures their expression is more indirect and covert.

Low family income was associated with several negative outcomes, such as depression, predisposition and physical expression. Moderate family income was associated with negative outcomes only in females and not in males. High family income was not associated with any negative outcome; it appears to act as a protective factor against depression and aggression. Huisman, Araya, Lawlor, Ormel, Verhulst & Oldehinkel (2010) found that poor family economy was associated with both externalizing and internalizing problems. Low income families constantly face stressors such as economic strain, conflict among family members, exposure to violence, frequent moves and transitions, exposure to discrimination and other traumatic experiences (Wadsworth, Raviv, Reinhard, Wolff, Santiago, & Einhorn, 2008). This poverty-related stressors give rise to psychological problems (Hammack, Robinson, Crawford, & Li, 2004; Wadsworth et al., 2008). Increases in income, or emergence out of poverty, have been linked to declines in psychological problems such as aggression (Costello, Compton, Keeler, & Angold, 2003).

Different levels of fathers' education were associated with different negative outcomes. Unlike the positive effect of mothers' high education (Morawska, Winter, & Sanders, 2009; Waylen & Stewart-Brown, 2010), fathers' high education doesn't act as a protective factor. Highly educated fathers are perhaps engaged in highly demanding jobs, which requires them to work for long hours. Being under constant time pressure, they may not be able to spend quality time with their children and supervise their children. Young adulthood is a phase of transition when most children look up to their fathers for guidance and support. Unavailability of father perhaps creates a vacuum in the life of young adults. Previous research has found that

the experience of continuous time pressure can have a negative impact on parents' self-reported wellbeing (Johnson, 2010) and that it is associated with distress and depression among parents (Roxburgh, 2012). This compromises their role of fathering further. All of this perhaps makes the development of psychological disorders highly likely among young adults.

In a country like India, where majority of the people live under disadvantaged socioeconomic conditions, it was essential to consider the impact that SES may have. On the basis of this study, vulnerable individuals can be identified, based on the demographic risk factors, as early identification is key to prevention. Mental health professionals should take into account these risk factors and consider ways of mitigating their effects, for example, by creating awareness, arranging screening programs and providing early treatment services to the vulnerable groups, such as those from low-income families, young adult females etc.

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Relationship Between Suicide Ideation, Hopelessness and Depression among Adolescents

Rupan Dhillon Nishtha Mehra***

Abstract

Suicide Ideation refers to an individual's thoughts about ending his/her own life and carrying out related suicidal behavior. Given the myriad psychological and physical changes that occur during adolescence, this age is most sensitive for developing such negative cognitions. Depression and Hopelessness are identified as the major risk factors for developing suicide ideation. The current study was conducted in order to explore the relationship between Suicide Ideation, Hopelessness and Depression. Data were collected from 200 adolescents in the age group 16-19 years ($M_{age} = 18.8$ years). Beck Scale for Suicide Ideation (Beck & Steer, 1991), Beck Hopelessness Scale (Beck & Steer, 1993) and Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961) were used to measure between Suicide Ideation, Hopelessness and Depression respectively. Correlation analysis was used to study the relationship among the three constructs. All the three variables were found to be significantly positively correlated ($p < 0.01$). The partial correlation between Suicide Ideation and Hopelessness after controlling for Depression was also significant ($p < 0.01$). Significant difference was found between the two correlations. The obtained results are discussed along with empirical evidence.

Keywords: *Suicide Ideation, Hopelessness, Depression*

About Authors : *Assistant Professor and Principal Investigator for UGC-MRP, Deptt. of Psychology, Guru Nanak Dev University, Amritsar.

**Research and Project Fellow, Deptt. of Psychology, Guru Nanak Dev University, Amritsar.

Introduction

The age of adolescence is considered to be a period of turmoil as it is accompanied by various physical and psychological changes. Various studies have been taken up that investigate the role of psychopathological changes and their consequent outcomes in this stage of one's life. One of the major concerns for the society these days are the rising figures of suicides and suicide attempts among adolescence. India ranks number one in suicide and accounts for around 30 percent of deaths worldwide due to suicide (Lu, 2017). The rate of suicide in the age group between 15- 24 years has increased manifold in recent times and suicide is the third highest cause of death in this age group (Anderson & Smith, 2005). It has thus

become more than ever necessary, to study the causes that lead to such behavior. Suicide Ideation refers to the ideas and thoughts about suicide and the related suicidal behavior (Johnson, 2006). It incorporates the cognitions of an individual about his/her approach towards suicide. Moreover it is the detailed approach towards ending one's life including planning for the act, thoughts of self-harm, reasons for doing so, etc. Suicide Ideation comes from the negative cognition of an individual arising from an emotionally charged event in his/her life or from the negative approach one has towards the future. The prevalence of internalizing and externalizing problems in adolescents has increased, and along with, the research on exploring the relationship between such

problems and suicidal behavior is also increasing.

Adolescence is a sensitive phase for development of internalizing symptoms like depression (Saluja et al., 2004). Depression and hopelessness are identified as the common risk factors for suicide (Papakostas et al., 2003). Beck's Cognitive Triad (1976) states three types of negative cognitions of an individual viz. towards himself, towards the world and towards the future. Hopelessness is one such negative cognition of an individual where he/she feels worthless and forms a negative approach towards the time that is yet to come. Feelings of self worthlessness and uncertainty of future often lead to forming negative cognitions, with a majority of them ending up in thoughts of suicide. Various studies have established link between Hopelessness and Suicide Ideation in different populations (Konick & Gutierrez, 2005; Palmer & Connelly, 2005; Britton et al., 2008). Depression is another major cause leading to suicidal thoughts and engaging in suicidal behavior. Periods of depression and depressive symptoms are strongly related to negative cognitions of which suicidal thoughts ranks the highest. The prevalence of such thoughts is higher in adolescents, given their sensitive age and difficulty in coping with the major life changes. Higher depression levels are associated with increased risk of suicidal behaviors and suicide ideation (Garlow et al., 2008; Singh & Joshi, 2008). A meditational hypothesis suggests that Hopelessness mediates the relationship between Depression and Suicide (Weishaar & Beck, 1992).

Hopelessness and Depression are two entangled constructs and there exists a bi-directional relationship between the two. McGinn (2000) reported that during times of emotional turmoil, those who have negative cognitions are more prone to depression as they feel worthless and flawed to cope with the event

and thus form dark opinions about the future as well. Depressed individuals are more likely to indulge in thoughts of worthlessness and thus exhibit high levels of hopelessness. Even though there is a strong link between the two constructs, there exists conflicting opinion in literature as to their independent role in predicting suicide and suicidal behavior. Some studies point out that once depression is controlled, hopelessness alone does not share a strong relationship with suicide ideation and suicidal behaviors and it tends to act as a risk factor only when an individual suffers from depression as well (Dori & Overholser, 1999; Esposito, Johnson, Wolfsdorf & Spirito, 2003). Whereas few other investigations point out that hopelessness bears a strong relationship with suicide as an independent factor (Menon et al., 2000; Kuo et al., 2004).

There exists contradiction in the independent role of Hopelessness leading to suicide ideation, suicidal behaviors and ultimately the act of ending one's life. The investigation of the same has become increasing important in adolescence because of the rising number of deaths due to suicide in this age group. The current study is thus an aim to find out the relationship among Suicide Ideation, Hopelessness and Depression in adolescence.

Objective:

The study was conducted keeping in mind the following hypothesis:

1. To measure Suicide Ideation, Hopelessness and Depression in adolescence.
2. To explore the relation among Suicide Ideation, Hopelessness and Depression in adolescence
3. To find out the unique relationship between Suicide Ideation and Hopelessness after controlling for Depression.

On the basis of review of literature the following hypothesis was formulated:

1. There will be significant positive relationship between Suicide Ideation, Hopelessness and Depression
2. Hopelessness will have a significant positive relationship with Suicide Ideation independent of Depression

Method

Sample: For the current investigation data were collected from 200 adolescents between ages 16-21 years (Mage = 18.8 yrs). The sample comprised of equal number of males and females. Incidental sampling was deployed for the purpose of data collection. The data were collected from various public schools situated in the city of Amritsar. The sample is more or less homogeneous in nature.

Psychological Tools:

1. Beck Scale for Suicide Ideation (Beck & Steer, 1991):

The scale is a reliable, self report measure of suicide ideation in an individual. There are a total of 21 items in the scale. The items measure various facets of a person's thoughts about suicide and related behavior. The responses are marked from 0-2 on each statement. Higher score in the scale indicates high suicide ideation. The test is reported for high reliability and validity.

2. Beck Hopelessness Scale (Beck & Steer, 1993):

The scale is designed to measure feeling of Hopelessness in individuals. It consists of a

total 20 statements and the responses are recorded as True/False. The statements measure feelings of Hopelessness such as uncertainty about future, pessimistic thoughts and feelings of self worthlessness. Scoring is done as per the scoring key and the total score denotes the level of Hopelessness in an individual. Higher scores mean higher level of Hopelessness.

3. Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961):

The scale is a widely used scale for measuring level of depression in individuals. The scale consists of a total of 21 items. The responses are marked from 0-3. The different items measure feelings and symptoms associated with depression such as loss of interest in people, weight loss, suicidal thoughts, disrupted sleep, etc. The total score for all the items denotes the score on depression. Higher the score more is the severity of depression in an individual. The scale is reported for high internal consistency reliability ranging from 0.72 to 0.93 (Beck, Steer & Garbin, 1988).

Results:

To explore the relationship between suicide ideation, hopelessness and depression, Pearson Product Moment Correlation was computed. The correlation is presented in Table No 1. Suicide Ideation and Hopelessness were positively correlated $r = 0.52$, $p < 0.01$. Depression and Suicide Ideation were also positively correlated with each other $r = 0.47$, $p < 0.01$.

Table No 1

Correlation between Suicide Ideation, Hopelessness and Depression

Variables	Hopelessness	Depression
Suicide Ideation	0.53*	0.47*
	N (200)	N (200)

Note. * = $p < 0.01$

Further, to partial out the effect of depression, partial correlation was computed between suicide ideation and hopelessness, controlling

for depression. The results of partial correlation are presented in Table No 2.

Table No 2

Partial Correlation between Suicide Ideation and Hopelessness

Control	Variable	Hopelessness	z score
Depression	Suicide Ideation	0.36*	2.7*
		df (197)	

Note. * = $p < 0.01$; df = Degrees of Freedom

The two variables are positively correlated after controlling for the effect of depression on the relationship, $r = 0.36$, $p < 0.01$. The value of correlation coefficient has decreased from 0.53 to 0.36 after controlling for depression. To see the significance of difference between the correlations as calculated above, Lee and Preacher's (2013) method was used that is based on Steiger's Equation (1980). The formula is used to calculate the significance of difference between two dependent correlations i.e. using the same sample and not independent of one another. The computation revealed $z = 2.7$, $p < 0.001$. Thus the relationship between suicide ideation and hopelessness is significantly different with depression as the third variable and after controlling for its effect.

Discussion

The main objective of the current investigation was to explore the relationship between suicide ideation, hopelessness and depression. The aim was to investigate the effect on the relationship between suicide ideation and hopelessness after controlling for depression. To meet the objective, data were collected and the correlation analysis was carried out.

The correlation analysis between Suicide Ideation and Hopelessness revealed that the two variables were strongly correlated with one another. The correlation was positive and

significant ($p < 0.01$). This indicates that as feeling of Hopelessness increases in an individual, he/she is more like to increase on the dimension of Suicide Ideation. Occurrence of Suicidal thoughts and ideas are likely to increase with increased feeling of negativity about one's future. Especially in case of adolescents, they are vulnerable to having negative cognitions about their future during periods of emotional turmoil. The consequent outcome for such feelings of hopelessness about the future is increase in suicide ideation. The results of the current study are in line with earlier findings (Konick & Gutierrez, 2005; Palmer & Connelly, 2005; Britton et al., 2008). Perusal of Table 1 shows that the correlation between Depression and Suicide Ideation is positive and significant ($p < 0.01$). This indicates that as severity of depression increases, prevalence of suicide ideation in adolescents also rises. Depressed adolescents are more likely to indulge in suicidal thoughts and behaviors. In a state of depression, adolescents may have increased thoughts of ending their lives. It is during this phase that they give in to the thoughts of self harm and they may indulge in behavior like planning for the act. Depression is identified as the major risk factor for suicide. The current study reveals that increase in severity of depression will lead to increased Suicide Ideation among adolescents.

The outcome is similar to the one found in literature (Garlow et al., 2008; Singh & Joshi, 2008).

Further, the investigation was carried out with an objective to see the relationship between Suicide Ideation and Hopelessness after controlling for Depression. Perusal of Table 2 shows the partial correlation between Suicide Ideation and Hopelessness after controlling for Depression. The partial correlation is significant at 0.01 level. It can be hence inferred that Hopelessness shares a positive significant relationship with Suicide Ideation independent of Depression. Hopelessness and Depression are closely related to each other as both stem from increased negative cognitions of an individual. The two have emerged as significant predictors of Suicide Ideation across various studies. But the independent role of Hopelessness in its association with Suicide Ideation remained a question, given the conflicting nature of results in literature. Hopelessness is assumed to have no significant effect on Suicide Ideation once Depression is controlled (Dori & Overholser, 1999). The current study reveals opposite results, that Hopelessness shares a unique relationship with Suicide Ideation which is not affected by whether an individual suffers from Depression or not. The partial correlation is positive and significant. This indicates that a rise in feeling of hopelessness will lead to rise in Suicide Ideation and related suicidal thoughts. Kuo et al. (2004) reported similar results in their findings. The results from current investigation bear a strong implication for adolescent health and behavior. Hopelessness alone has an independent effect on Suicide Ideation and if not checked, it may lead to development of other internalizing disorders like depression which intensify Suicide Ideation.

The significance of difference between the simple correlation and partial correlation

between Suicide Ideation and Hopelessness was analyzed. The z scores are significant ($p < 0.01$). This denotes that the two correlation coefficients are significantly different from one another. The simple correlation between Suicide Ideation and Hopelessness is affected by the level of Depression experienced by individuals. This relationship translates the combination of Depression and Hopelessness in bearing a strong association with Suicide Ideation. The partial correlation controls for Depression and explores the relationship between Suicide Ideation and Hopelessness. The significant difference in the two correlations indicates that the relationship of Hopelessness with Suicide Ideation varies when Depression is controlled. The association between the two weakens after controlling for Depression and the reduced effect is significant. Due to the sensitivity of Suicidal Ideation and the dangerous consequences it may have, there is a need to highlight these differences as suicidal behavior still remains a complex phenomenon and efforts should be made to inspect the same.

Conclusion

The study was conducted in order to explore the relationship between Suicide Ideation, Hopelessness and Depression in adolescence. The relationship between Suicide Ideation and Hopelessness was investigated after controlling for depression. The results show significant positive relationship among the three variables. There is a significant difference in simple and partial correlations between Suicide Ideation and Hopelessness. Thus, we may conclude that both Hopelessness and Depression bear a strong association with Suicide Ideation. Hopelessness independently shares a relationship with Suicide Ideation independent of Depression.

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Economic Crisis and Mental Health

Mukesh Chauhan

Abstract

The economic crisis is expected to produce mental health effects that may increase suicide rates. However, the mental health effects of the economic crisis can be offset by social welfare and other policy measures. For example, active labour market programmes aimed at helping people retain or regain jobs counteract the mental health effects of the economic crisis. Family support programmes contribute to counteracting the mental health effects of the crisis. Increasing alcohol prices and restricting alcohol availability reduce the harmful effects on mental health and save lives. Debt relief programmes also help to reduce the mental health effects of the economic crisis and accessible and responsive primary care services support people at risk and prevent mental health effects.

Key words: *Mental health, Economic crisis, Stress, well being, socioeconomic factors.*

About Authors : Assistant Professor, Department of Commerce, PG Govt. College, Sector-46, Chandigarh

Mental health creates mental capital

Mental health is an indivisible part of public health and significantly affects countries and their human, social and economic capital. Mental health is not merely the absence of mental disorders or symptoms but also a resource supporting overall well-being and productivity. Positive mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and can contribute to his or her community.

Good mental health allows for cognitive and emotional flexibility, which are the basis for social skills and resilience in the face of stress. This mental capital is vitally important for the healthy functioning of families, communities and society. As with individuals, societies can be more or less resistant to such stressors as economic crises. Economic shocks can destabilize public service budgets and affect education and health care systems. However, available data show that legislation for protecting social welfare can increase the

resilience of communities to economic shocks and mitigate the mental health effects of unemployment and the stress related consequences of economic downturns.

Conversely, while economic crises may have mental health effects, mental health problems have increasingly significant economic effects. The economic consequences of mental health problems – mainly in the form of lost productivity – are estimated to average 3–4% of gross national product in European Union (EU) countries. Because severe mental disorders often start in adolescence or young adulthood, the loss of productivity can be long-lasting. Mental disorders account for more than one third of the years lived with disability in the WHO European Region.

Work changes increase the cognitive and emotional demands of work. Absenteeism and withdrawal from the labour market have impact of economic crises on mental health increased because of stress, anxiety and depression-related disorders. In many European countries, about one third of new disability benefits are attributable to mental health

conditions, and this share is increasing. Thus, mental health is an important economic factor. The shift from a manufacturing to a knowledge society emphasizes even more the importance of mental health for sustaining productivity. Good population mental health contributes to economic productivity and prosperity, making it crucial for economic growth. The successful recovery of many economies appears to crucially depend on the mental health of the population.

How can we contribute to mental health? Mental health is determined by socioeconomic and environmental factors.

An economic crisis affects the factors determining mental health. Protective factors are weakened and risk factors strengthened. Employment benefits mental health. Job security, sense of control of work and social support at work are factors promoting the mental health of employees. Stable employment, secure incomes and social capital predict good mental health. Social capital is the quality of social relationships within societies or communities, including community networks, civic engagement, sense of belonging and norms of cooperation and trust. Conversely, poverty, financial problems and social deprivation are major socioeconomic risk factors for mental health problems and disorders. In most parts of the European Region, alcohol consumption is negatively associated with population mental health. Alcohol consumption plays a

considerable role in increasing suicide, especially among men.

Mental health problems contribute significantly to inequality in health in the European Region. Relatively high frequencies of common mental disorders are associated with poor education, material disadvantage and unemployment. Suicide is more common in areas of high socioeconomic deprivation, social fragmentation and unemployment. Increasing income inequality has been linked to increasing suicide rates. The greater vulnerability of the disadvantaged people in each community to mental health problems may be explained by such factors as the experience of insecurity and hopelessness, poor education, unemployment, indebtedness, social isolation and poor housing. The foundations of good mental health are laid during pregnancy, infancy and childhood. Abstaining from alcohol, substance use and smoking during pregnancy promotes a healthy start in life. Protection from childhood neglect and negative life events promotes mental health. Feeling respected, valued and supported, high-quality parenting and a positive relationship with an adult promote positive mental health and resilience. Mental health is promoted by holistic preparation for life in preschools and schools by providing social and emotional learning opportunities. The health sector cannot achieve good mental health alone. The determinants of mental health are often outside the remit of the health system, and all government sectors have to be involved in promoting mental health.

Table 1. Determinants of population mental health

Protective Factors	Risk Factors
Social capital and welfare protection	Poverty, poor education, deprivation, high debt
Healthy prenatal and childhood environment	Poor prenatal nutrition, abuse, harsh upbringing, poor relationship to parents, intergenerational transmission of mental health problems
Healthy workplace and living	Unemployment, job insecurity, job stress
Healthy lifestyles	Alcohol and/or drug use

Who will the crisis hit? It is the poor that will be hardest hit by the economic crisis.

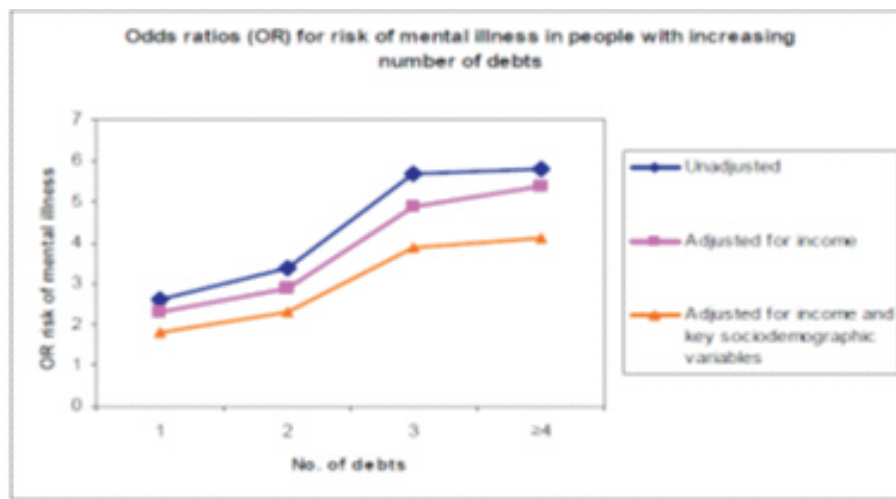
The economic crisis is increasing poverty around the globe. The economic crisis hit people with low income – and those made poor through loss of income or housing – the hardest. The economic crisis has increased the number of households in high debt, repossession of houses and evictions.

The current economic crisis is probably increasing the social exclusion of vulnerable groups, low-income people and people living near the poverty line in the European Region. Such vulnerable groups include children, young people, single-parent families, unemployed people, ethnic minorities, migrants and older people. Economic pressure, through its influence on parental mental health, marital interaction and parenting, affects the mental health of children and adolescents. The effects of extreme poverty on children include deficits in cognitive, emotional and physical development, and the consequences on health and well-being are lifelong. Social gradients of health exist in

Europe, and moving down the socioeconomic ladder due to loss of jobs and income affects people's health. During recessions, social inequality in health can widen. The least well-educated people are at greatest risk of ill health after job loss.

Unsurprisingly, substantial research has revealed that people who experience unemployment, impoverishment and family disruptions have a significantly greater risk of mental health problems, such as depression, alcohol use disorders and suicide, than their unaffected counterparts. Especially men are at increased risk of mental health problems and death due to suicide or alcohol use during times of economic adversity. Unemployment contributes to depression and suicide, and young unemployed people have a higher risk of getting mental health problems than young people who remain employed. Evidence indicates that debt, financial difficulties and housing payment problems lead to mental health problems. The more debt people have, the more likely they are to have mental disorders overall.

Figure-1: The more debt people have, the worse their mental health



The data were derived from a nationally representative sample of 8600 people living in the United Kingdom. Key socio demographic variables used for adjustment were age, ethnicity, marital status, household size, household tenure, education, social class, employment status, urban or rural, and region (Source: Jenkins et al).

How to mitigate the effects of the crisis

Policy choices determine whether the economic recession will significantly affect

mental health outcomes. Recent data suggest that active labour market programmes, aimed at helping people retain jobs and quickly regain employment, along with family support measures, restrictions in alcohol availability, debt relief programmes and access to mental health-related services can be effective in preventing or mitigating adverse effects of recession on mental health.

Figure-2: Framework linking economic crisis and mental health outcomes



Economic downturns result in smaller changes in the mental health of the population in countries with strong social safety nets (Fig. 2). European data indicate that inequality in health does not necessarily widen during a recession in countries with good formal social protection. In Finland and Sweden, during a period of deep economic recession and a large increase in unemployment, inequality in health remained broadly unchanged and suicide rates diminished, possibly because social benefits and services broadly remained and buffered against the structural pressures towards widening inequality in health. The European findings are echoed by findings in the United States of America linking increased suicide rates with reductions in state welfare spending. Data from

EU countries indicate that unemployment does not increase suicide if spending on welfare programmes is above US\$ 190 per person per year.

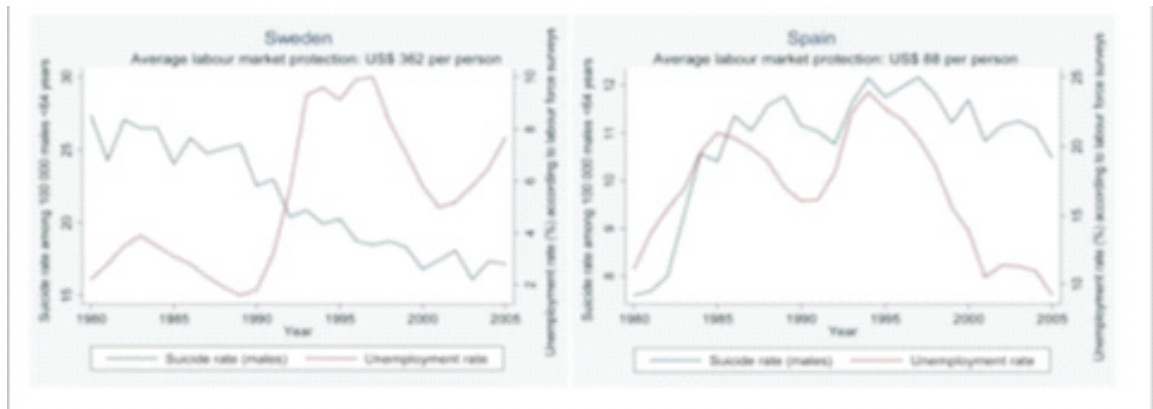
Research indicates that social protection responses are crucial in mitigating mental health in the economic crisis. Governments need to target social protection interventions to address priority needs among the most vulnerable people, providing high coverage among the people with the lowest income and providing support for families at risk.

An example is the suicide rates in Sweden and Spain from 1980 to 2005. In the early 1990s, Sweden underwent a severe bank crisis, resulting in a very rapid rise in unemployment, but suicide rates were

unaffected, falling steadily over this period. This contrasts with the situation in Spain, with multiple banking crises in the 1970s and 1980s. As unemployment rates rose, suicide rates increased; when unemployment fell, suicide rates fell too (Fig. 3). Although there are many

differences between Sweden and Spain, one argument is that a major differentiating factor was the extent to which resources were budgeted for social protection, such as family support, unemployment benefits and health care services.

Figure-3: Unemployment rate and suicide rates per 100 000 males in Sweden and Spain, 1980–2005



Current research suggests that the mental health effects of economic crises depend on action in five key areas:

1. Active labour market programmes
2. Family support programmes
3. Control of alcohol prices and availability
4. Primary care for the people at high risk of mental health problems
5. Debt relief programmes.

Active labour market programmes

Active labour market programmes that keep and reintegrate workers in jobs reduce the mental health effects of recessions. The average association observed in EU countries for a 1% rise in the unemployment rate is a 0.8% rise in the suicide rate. In EU countries, each additional US\$ 100 per person spent on active labour market programmes per year reduced the effect of a 1% rise in unemployment rate on the suicide rate by 0.4 percentage points. Active labour market programmes aim at improving the

prospects of finding gainful employment and include public employment services, labour market training, special programmes for youth in transition from school to work and labour market programmes to provide or promote employment for unemployed people and people with disabilities.

Active labour market programmes include resilience-building mental health promotion programmes for unemployed people. European studies indicate that such programmes, which provide group psychological support for unemployed people, promote mental health and increase re-employment rates. Cost-effectiveness evaluations of such interventions have reported savings for public sector providers of social welfare benefits and employers alike through increased rates of employment, higher earnings and fewer job changes.

Family support programmes

Women and children feel the effects of an economic crisis. Families with low income

are especially hurt by cuts in health and education budgets. Family strain may lead to increases in family violence and child neglect.

In EU countries, each US\$ 100 per person spent on family support programmes reduced the effect of unemployment on the suicide rate by 0.2 percentage points. Family support includes support for the costs of children and other dependants as well as support for maternity and parental leave.

Control of alcohol prices and availability

The most effective and cost-effective policies include controls on the price and availability of alcohol. Policy action to increase the price of alcohol reduces consumption and the associated harm across the whole population. Alcohol policy, and especially policy that increases the price of alcohol, reduces deaths from alcohol use disorders.

Primary care for the people at high risk of mental health problems

Improved responsiveness of health services to changes in people's social, employment and income status and early recognition of mental health problems, suicidal ideas and heavy drinking will reduce the human toll of the recession. Meeting the mental health challenges of the economic crisis requires not only protecting spending on mental health services but also restructuring services to meet the needs of the population. Well-developed community-based mental health services are linked to reductions in suicide. The primary care approach increases access to mental health care and shifts the focus to preventing mental health problems and detecting them early. The current economic crisis may create urgency and strengthen the courage to eliminate the fundamental problems in hospital-dominated health care delivery and reduce inequality in health. Responsive health services modify their services to accommodate the population needs originating from the economic crisis. Providing

psychological support in health services can modify the effects of unemployment and indebtedness. Good mental coping skills are beneficial in times of hardship. Promoting problem-solving skills may protect against depression and suicidal behaviour. Heavy drinkers will benefit from the delivery of brief interventions in primary care.

Debt relief programmes

National debt relief legislation and debt relief programmes will help to reduce the mental health effects of the economic crisis. Debt relief programmes help people who are suffering from the stress of excessive debt. Debt advice helps individuals to improve their financial situation and may also improve their mental health.

How to maintain mental health systems in the economic crisis

Mental health problems, binge drinking, suicide and (in many countries) alcohol-related deaths tend to increase during economic downturns, creating a need for governments to upgrade mental health action.

Many countries in the European Region are facing pressure from the international financial community to reduce health and welfare budgets. Despite increased need, mental health is a vulnerable target of these cuts, as it usually lacks a strong advocacy base to oppose them, unlike physical illnesses.

Evidence from past economic crises predicts what is likely to happen in the current economic downturn. Despite increased pressure on mental health services, government expenditure on health will be squeezed and will probably fall in real terms, contributing to worse health outcomes. Household income to pay for health services will drop. Insurance protection will decline. People will switch from the services that require out-of-pocket spending to less costly services: in some countries this means switching from the private to the public

health care sector. In countries without comprehensive services funded by taxes or health insurance, the people who need mental health services the most may have less access to them because of the costs involved. Overall, the health effects of the economic downturn will be less pronounced in countries with better social safety nets.

a) Tackle the stigma of mental illness:

One reason for the apparent low funding priority given to and neglect of mental illness is the high level of stigma associated with mental health problems. Countering this stigma and discrimination remains one of the most critical challenges for improving mental health in Europe because this stigma may influence the willingness of public policy-makers to invest in mental health. Past public surveys in some countries have indicated that mental health can be given low priority in terms of safeguarding services in the face of budget cuts. Although general population anti-stigma campaigns have shown only modest effects, targeted approaches seem more effective.

b) Build the case for investing in mental health:

Demonstrating that investing in mental health has economic benefits may help in persuading Governments to invest in mental health. Investing in mental health action, both inside and outside the health care sector provides resources and opportunities to reduce the risk of social exclusion and promote social integration. It is crucial to take a broader economic perspective than that of the health system alone and to communicate that investment in mental health generates savings in other sectors. Despite the availability of cost-effective interventions that can mitigate

or prevent much of the effects of poor mental health, the priority it receives in most health care systems has been remarkably low so far.

c) Continue mental health reforms: Due to financial constraints, Governments will inevitably have to review their welfare services. It is important that any changes imposed support the mental health agenda for the European Region of deinstitutionalization and strengthening primary health care. Increasing the efficiency of services can go hand in hand with developing modern mental health services. Sound financial incentives are needed to support the provision of high-quality community care and to use existing resources optimally. Linking funding to accreditation systems and assessment of provider performance will support the development of services.

d) Ensure universalism in mental health services: In times of economic hardship, access to basic social safety networks is increasingly important. Universal coverage of mental health services is a cornerstone in reducing the effects of the crisis and is likely to restrain social inequality in health.

Conclusions

The effects of economic crisis on mental health present an opportunity to strengthen policies that would not only mitigate the impact of the recession on deaths and injuries arising from suicidal acts and alcohol use disorders but also reduce the health and economic burden presented by impaired mental health and alcohol use disorders in any economic cycle. There are powerful public health arguments for social protection, active labour market programmes, family support, debt relief and effective alcohol

policy, and the present economic downturn strengthens these arguments. Governments could consider reorienting budgets to protect populations now and in the future by budgeting for measures that keep people employed, helping those who lose their jobs and their families to overcome the negative effects of unemployment and enabling unemployed people to regain work quickly. Governments could consider strengthening their alcohol policies, in particular by raising the price of alcohol or introducing a minimum price. Such a policy would have a particular effect on reducing the harm of risky and heavy episodic patterns of drinking. Mental health service provision needs to be strengthened by continued efforts to develop universal mental health care, supported by sound financial incentives for good quality community care.

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A Study on Occupational Stress and its Impact on Mental Health of Mumbai Police

Sonam Lavtepatil Rakshase Bal***

Abstract

Law enforcement is one of the pillars of the great Indian democracy. The Indian police system is critical for the healthy functioning of a democracy; but it has been long neglected. Mumbai Police are serving one of the huge metropolitan city and financial capital of the country. They are working 24x7 for maintaining law and order, ensuring safety and security of the citizens. Because of the changing and challenging working conditions they are likely to under stress which may affect their psychological well-being. This study was conducted among Class III police personnel including Police Constables, Police Naiks, Police Head Constables and Assistant Police Sub Inspectors in Mumbai. Study's objectives were to find factors responsible for occupational stress, level of occupational stress, impact of occupational stress on mental health and coping strategies adapted among police personnel. This study revealed that about 55.5% of police personnel were having high level of occupational stress. Role overload, environmental factors and lack of facilities were three major causes which are found to be responsible for high level of occupational stress among police personnel. There was significant negative impact of occupational stress on mental health status of the respondents. 55.8% of the police personnel have adapted negative coping style to overcome occupational stress. Rational/ cognitive coping was found to be the main positive coping mechanism adapted by police personnel to cope with stress.

Keywords: *Occupational Stress, Mumbai Police, Mental Health, Coping*

*About Authors : * & **School of Health Systems Studies
Tata Institute of Social Sciences, Mumbai*

Introduction

In order to ensure a normal and smooth life to the public, the government employs people in different public services. Employees of such services are expected to create a condition where one can live peacefully. But in the process of making things easier to others, these employees are sometimes forced to live a stressful life. Law enforcement comes under this category (Brough, Chataway, & Biggs, 2016).

The Mumbai police (also known as "Brihanmumbai Police") are the police force of the city of Mumbai, India. It has the primary responsibilities of law enforcement and investigation within the limits of city of Mumbai. Limited geographical area with

continuous migration and urbanization, growing number of slum structures, threat of terrorist attacks, cybercrimes, heavy rains, communal riots and violence impose great challenge towards maintaining safety and security by Mumbai Police in the city. This challenging working environment is responsible for causing occupational stress among police personnel (Staniland, 2009).

Stress is the word generally used to describe the situation in which people feel that everything seems to have become too much or overloaded. Occupational Stress is work related stress arises due to excessive work pressure and work demands which are unmanageable by police personnel and thus he or she cannot cope

with it. There are different sources other than keeping the law and order which generate the occupational stresses like long working hours, VIP *Bandobast* duty, festival *bandobast*, inadequate welfare facilities, lack of family time etc. (Mathur et al., 1999; Chandramani, & Dr. Chavan, 2015).

High levels of Occupational stress increases risk of mental (depression, anxiety, post-traumatic stress disorders, suicides etc.) as well physical health problems (cardiovascular diseases, gastro-intestinal disorder, musculoskeletal disorders, reproductive health problems, high blood pressure etc.) among police personnel (Leka, Griffiths, & Cox, 2004; Nnuro, 2012; Mosadeghrad, 2014).

In order to deal with stress, police personnel adapt some coping strategies, it may be positive as well as negative coping strategies. Positive coping strategies include sharing of problems with someone, doing recreational activities or devoting time in religious activities which help in improvement of their mental health whereas negative coping involve consumption of alcohol or smoking which result into poor health outcomes (Lazarus, & Folkman, 1984; Sundaram & Kumaran, 2012; Deb et al 2008).

Operational Definitions of Concepts used in present study:

Occupational Stress: Occupational stress is the stress due to various work roles and is measured with respect to the factors associated with work context and work content among police personnel. Self-developed Occupational Stress Index based on Occupational Stress Inventory-revised (OSI-R) by Osipow, 1998 have following dimensions:

Role Overload: It includes irregular & long working hours, irregular meals due to work load, difficulty in leave sanctions.

Role Ambiguity: It includes unclear instructions regarding duty, unequal sharing of

work responsibilities, carrying out other role than expected.

Role Boundary: It includes responsibility of policing without necessary authority, working within excessively stringent rules.

Welfare facilities: It involves organizational facilities such as housing, medical and adequate salary.

Job related pressure and responsibility: This dimension includes job pressure in policing such as political interference, media pressure & responsibility of carrying loaded weapons, dealing with criminals, patrolling etc.

Limitations in career development: It involves questions on feelings about stagnancy with same rank for prolonged period of time, less promotions, fear of transfers & suspensions.

Interpersonal relations: It includes information related to trust & communication between individual and subordinates as well as superiors.

Environmental factors: This involves questions related to working environment within which individual has to work daily such as continuous exposure to negative events, working in extreme weather conditions etc.

Mental Health: For the present study, mental health was understood by measuring the symptoms of mental health problems with the help of standard Mental Health Inventory (MHI-18). The MHI-18 has 4 subscales i.e. Anxiety, Depression, Behavioural and emotional Control, and Positive Affect.

Coping: Coping up with difficult stressful situations related to work by police personnel measured in four subscales. These subscales are based on Personal resource questionnaire (PSQ-R) by Osipow-Revised and coping Inventory.

Recreation: It includes questions related to utilization of recreational/ leisure time and engaging themselves in variety of activities such as reading, exercise, listening music etc.

Self-care: This section includes questions related to taking meals/ dinner on proper timings, avoiding use of harmful substances such as alcohol, tobacco and other substances, taking adequate sleep etc.

Social support: It includes sharing of feelings and discussing about work related problems with someone.

Rational/Cognitive coping: This section includes questions related to problem solving abilities of individuals, rationally thinking about root causes of problems etc.

Methodology:

Research Design:

Quantitative research method was chosen to conduct present study. The nature of the research design used in the study is Descriptive Cross sectional. Quantitative survey method was used to measure three major variables (Occupational stress, mental health and coping strategies adapted by police personnel) through questionnaire on large sample.

Hypothesis:

1. There is a significant impact of occupational stress on the mental health of the respondents.
2. There is a negative relationship between occupational stress and positive coping among the respondents.
3. Level of occupational stress differs according to service tenure and designation of police personnel.

Sample:

Total 12 police stations from 12 different zones of five different regions administrated by Mumbai police department have been selected randomly. Sample of 240 was considered for this study, which includes 113 Police Constables, 50 Police *Naiks*, 54 Police

Head Constables and 23 ASI. Sample was selected by the method of convenient sampling for the study depending upon inclusion criteria.

Inclusion criteria: Police constable, Police Naik, Police Head constable and Assistant Police Sub Inspector who are currently working in Department of Mumbai Police and those who have completed their 10 years of service tenure have been included in the present study.

Tools:

Three major variables of this study were measured using questionnaire. To measure Occupational stress- self developed occupational stress index questionnaire was used, to measure mental health- Standard Mental Health Inventory was used and to know coping strategies- self developed Coping Inventory was used.

The reliability of the Occupational Stress Index was tested and the Cronbach's alpha was found to be 0.85, which suggest that the item have high internal consistency. Mental Health Inventory (MHI-18) with Cronbach's alpha 0.82 has been used to measure anxiety, behavioural and emotional control, depression and positive affect. To understand coping strategies, self-developed coping questionnaire based on Personal resource questionnaire (PSQ-R) by Osipow-Revised and coping Inventory was used. Cronbach's alpha of the test was found to be 0.77 which shows good internal consistency.

Procedure of data collection:

Total 12 police stations from 12 different zones of five different regions administrated by Mumbai police department have been selected randomly for the study. Data collection happened at this 12 police stations situated in East, West, Central, South and North regions of Mumbai City. Permission was sought from the Director General of Police, Maharashtra and Commissioner of Police,

Greater Mumbai. Data collected by personal interviews of police personnel. Before conducting interviews, permission and suitable timings for conducting interviews were taken from respective Senior Police Inspectors of respective police stations.

Data Analysis and Results:

The impact of occupational stress on mental health of respondent was analysed by

regression. In Relationship between coping style and occupational stress was analysed by correlation method. Difference in the level of occupational stress among police personnel according to their designation and service tenure was analysed by ANOVA.

Level of Occupational Stress due to different dimensions among police personnel

Table No. 1 Level of occupational stress due to different dimensions of occupational stress index

Dimensions	Low Occupational stress		High occupational stress	
	(N)	Percentage	(N)	Percentage
Role overload	40	16.6	200	83.3
Environmental factors	53	22.0	187	77.9
Lack of facilities	108	45.0	132	55.0
Limitations in career development	125	52.0	115	47.9
Interpersonal relationships	123	51.2	117	48.8
Job related responsibilities and pressure	129	53.7	111	46.2
Role ambiguity	130	54.1	110	45.8
Role boundary	137	57.0	103	42.9
Occupational stress index	107	44.6	133	55.4

Table No.1 shows that more than half (55.4%) of respondents had reported high level of occupational stress, while 44.6% of respondents reported low level of occupational stress. To understand the sources of occupational stress, each dimension used under the occupational stress index were analysed.

Dimensions such as Role overload (83.3%), environmental factors (77.9%), lack of facilities (55%) and limitations in career development (47.9%) are found to be major causes of high occupational stress.

Impact of Occupational Stress on mental health of the police personnel
Table No. 2 Result of regression analysis of occupational stress and
mental health of the respondents

Dimensions of Occupational stress	Regression coefficients (B)				
	Dimensions of mental health				
	Anxiety	Depression	Behavioural & emotional control	Positive affect	Total Mental health
Role overload	-0.108	-0.099	0.090	-0.131	-0.247
Role ambiguity	-0.150	-0.020	0.013	-0.090	-0.274
Role boundary	-0.138	-0.069	-0.087	-0.096	-0.252
Lack of facilities	-0.044	-0.302*	-0.195*	-0.241*	-0.782*
Job related pressure & responsibilities	0.065	-0.004	0.092	-0.061	-0.091
Limitations in career development	-0.113	-0.099	-0.320*	-0.275	-0.803*
Interpersonal relationships	-0.318*	-0.341*	-0.282*	-0.262	-1.203*
Environmental factors	-0.166	-0.091	-0.014	-0.095	-0.366
Constant	31.656	29.292	27.27	30.293	118.516
R ²	0.219	0.269	0.333	0.332	0.407
Adjusted R ²	0.192	0.244	0.310	0.309	0.386

*Significant at 5% level.

It is observed from table No. 2 that the occupational stress variables significantly influencing mental health of the respondents. Lack of facilities (B= -0.782, P<0.05), Limitations in career development (B= -0.803, p<0.05) and Interpersonal relationship (B = -1.203, p<0.05) were found to be significantly influencing as their regression coefficients were significant at 5% level. A unit increase in the

variables of occupational stress such as lack of facilities, limitations in career development and interpersonal relationships results in decrease in mental health among police personnel by 0.782, 0.803 and 1.203 respectively. The changes in the level of occupational stress variables explain the changes in mental health of police personnel to the extent of 40.7% ($R^2 = 0.407$, $F(8,231) = 19.816$, $p < 0.05$).

Correlation between occupational stress and coping
Table No. 3. Correlation between occupational stress and coping

		Total stress score	Total score of coping
Total stress score	Pearson Correlation	1	-.297
	Sig. (1-tailed)		0.000
	N	240	240
Total score of Coping	Pearson Correlation	-.297	1
	Sig. (1-tailed)	0.000	
	N	240	240

To test the 2nd hypothesis, Point-Biserial correlation was carried out between occupational stress and coping style. The results table No. 3 showed that there is a significant negative correlation ($r = -0.297$, $p = 0.000 <$

0.05) between occupational stress and positive coping style. It means as occupational stress increases the positive coping style among police personnel decreases.

Occupational stress levels according to length of service and designation**Table No. 4. Results of ANOVA test on stress level of respondents**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Designation	955.688	3	318.563	0.913	0.435
Service tenure	52.024	1	52.024	0.149	0.700
Service tenure* Designation	129.353	2	64.677	0.185	0.831
Error	81293.70	233	348.900		
Total	4033680.00	240			
Corrected Total	84092.73	239			

Table No. 4 shows result of the Two-way ANOVA conducted to examine the effect of designation and service tenure on a level of occupational stress. There was no statistically significant interaction between the effects of designation and service tenure on level of occupational stress of the respondents, ($F(2,233) = 0.185, p = 0.831$).

Conclusion:

The study found that majority of respondents was under the high level of occupational stress due to factors such as role overload, lack of facilities and poor work environment.

This study found that majority of the respondents was having poor mental health status due to occupational stress. Respondents were having depression, low behavioural and emotional control and low positive affect. Occupational factors such as poor interpersonal relationships, lack of facilities and limitations in career development was found to be significantly affecting mental health of the police personnel.

Majority of the respondents have adapted negative coping style such as less utilization of leisure time for recreational activities, less attention towards self-care and less social support utilization to cope up with stressful situations.

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Alexithymia and Family Environment of Adolescents

Bhupendra Singh Akhilesh Vashishtha***

Abstract

In this material world no one wants misery, but it comes. Unexpectedly, like a forest fire that starts without anyone's striking a match, it comes. No one wants a war, but war is fought. No one wants famine, but famines come, no one wants misunderstanding, but there is. The present study is an effort to study such a disturbance in life of 400 adolescents (boys and girls) by finding the prevalence of alexithymia and its probable causal factors present in their family environment employing TAS 20 and Family Environment Scale. The researchers discussed the findings in light of the available literature and the contextual evidences.

*About Authors : *Dept. of Psychology, NREC College, Khurja*

***Prof. Emeritus Meerut College, Meerut(U.P.)*

Introduction

This 21st century is marked as, a highly competitive world, where each of us aspires to get ahead of the other and to excel in our respective fields. But in an effort to outdo everyone else (or even to simply keep pace with them so as not to be left out), we frequently have to undergo a lot of stress. More often than not, we crumble under the burden of such pressure and are clueless about how to effectively cope with it. The secret of coping with the strains of daily life is to effectively manage our own selves first. Only when we learn to manage our internal environment effectively can we hope to deal with our external environment. And needless to say, to manage ourselves, it is essential to understand the components of our internal environment. This internal environment is our psyche-our affective experiences that are the outgrowth of interactions between inherited constitution and environmental factors of influence.

This modern setup of human civilization is a risky one because it offers no education about relevant inquiries in to the essential principles of life. Many modern young people succeed in bridging the gap between childhood and adulthood with a minimum

number of disturbing experiences. They give evidence of a zestful attitude toward many challenges that are inherent in the growing-up process. In general, however, young people tend to conform to the cultural influences to which they are exposed. In such circumstances, Scruton has this to say:

“Our adolescent reacts, as we all have reason to know, in a strikingly predictable way in various circumstances. For eg., adolescent behavior with the respect to the clothing, music, food, group attitudes, and parental authority, to name but a few areas, is sufficiently standardized in this culture that we have a pretty good idea what to expect in specific circumstances. These preferences, habits, outlooks, and attitudes are reflection of personalities, and their repeated appearance young people in our society can only be the result of being exposed to a common body of understandings and expectations, which is to say, culture. Culture, then, creates the world in which the adolescent lives. It creates hopes, and needs, and it creates the means of achievement, and it creates the mode of expressing frustrations when they are not met. It creates obstacles, and means of overcoming them, or escaping from them. It creates problems and crises and the

means of solving and resolving them. Culture, in company with biology, creates the adolescence". This inheritance and environment are seen on crossroads when it is studied in adolescents as also described by Friedenberg :

"Adolescence is the period during which a young person learns who he is, and what he really feels. It is a time in which he differentiates himself from the culture; though on culture's terms. It is the age at which, by becoming a person in his own right, he becomes capable of deeply felt relationships to other individuals, perceived clearly as such." The present study studied a personality construct, 'Alexithymia' in such adolescents who already are on crossroads making them vulnerable to their circumstances. Alexithymia refers to difficulties in identifying and describing feelings, and to an externally oriented, unimaginative way of thinking. The term was first coined in a psychosomatic clinical setting (Sifneos, 1973) as patients with illness which were thought to have psychosomatic etiology seemed to demonstrate a paucity of inner feelings. Later, the interest in alexithymia moved beyond the psychosomatic clinics. Accumulating empirical evidence suggests associations between alexithymia and several physical diseases and mental health disorders (Lumley et al., 2007; Taylor & Bagby, 2004; Taylor, 2000).

Alexithymia is primarily seen as a personality constructs a trait (Taylor & Bagby, 2004; Taylor, 2000). It is thought to reflect a deficit in cognitive processing and regulation of emotions (Taylor et al., 1997a, b). Adverse childhood experiences, including low maternal care, general family pathology and both mental and physical abuse, living in foster homes and orphan homes, cultural differences have been proposed as psychosocial etiological factors for alexithymia.

Since alexithymia has been associated with child's growing environment it appeared to the researchers to make a comparative study of the family environment of these alexithymic and non alexithymic adolescents. This opinion gained further support from the sociologist Emil Durkheim's view (Excerpt by Robert Alun Jones) when he said that the individual is little more than an abstraction. It is difficult to imagine a person for whom others are not present, either physically or psychologically .Family is important, as it is the cradle of every society. The values inculcated in the adolescents are the results of rearing practices and the process of socialization approve by the culture of the society.

Thus the above citations impelled the researchers to carry out the present study with the objective of finding prevalence rate of alexithymia and the differences in the family environment of these adolescents.

Method

The present study was designed to achieve the following objectives:

1. To decipher the period prevalence of alexithymia in adolescents studying in schools.
2. To find out the differences in presence of alexithymia in adolescent boys and adolescent girls.
3. To find out the relationship in family environment of high & low alexithymic adolescent boys.
4. To find out the relationship in family environment of alexithymic and non alexithymic adolescent girls.

Sample:

This study is a fact finding descriptive research designed with the purpose of assessing the presence & severity of alexithymia among adolescents in relation to their family environment. Subjects for this study consisted of

400 adolescents studying in senior secondary classes of different schools. The sample included 200 adolescent boys, and 200 adolescent girls. These schools were from National Capital Region (N.C.R.) depending on their accessibility.

Tools:

1. Toronto Alexithymia Scale (T.A.S.-20.H) Hindi Version

Hindi version of Toronto Alexithymia Scale 20-item (Canada Version) was administered. TAS-20 (Bagby, Parker, & Taylor, 1994) is a 20-item, self report measure

and items are rated on a 5-point rating scale ranging from 1(Strongly Disagree) to 5 (Strongly Agree). For the purpose of the study the scores on these 3 subscales were taken comprehensively to obtain alexithymia score.

2. Family Environment Scale (Form R),(1994) Rudolf H. Moos & Bernice S.Moos. The scale is a 90-item inventory that has a 10 subscales measuring the actual, preferred, and expected social environment of families.

Analysis:

The obtained data were analyzed using t-test of significance.

Results and Discussion:

Table-1

	N
Number of adolescents studied	400
Number of adolescents who scored 61 or above on TAS 20	86
Number of possible alexithymic adolescents scoring between 52-60 on TAS 20	44
Rate per 1000 of potential alexithymic adolescents	215

Period prevalence of Alexithymia in adolescents (N=400).

Table- 2
Period prevalence of Alexithymia in adolescents
Boys and adolescents Girls (N=400).

	Boys	Girls
	N	N
Number of adolescents studied	200	200
Alexithymic	46	40
Possible Alexithymic	17	27
Rate per 1000 of potential alexithymic adolescents	230	200

The table included in the present section indicates period prevalence of alexithymia is 215/1000 in adolescents studying in schools of N.C.R. Thus slightly above than 1/5th of the sample surveyed has come out with alexithymic manifestations. A significant no. of adolescents is also evident from the table who may or may not be alexithymic (44), possibly this no. is required to be taken care of while dealing with the emotional variables in these adolescents (Table 1). Whereas, the period prevalence of alexithymia in adolescent boys is 230/1000 and for adolescent girls is 200/1000 (Table 2). Since alexithymia is a psychological as well as medical construct, the study and the findings are of great importance in understanding not only head counting of cases of alexithymia but also etiology of alexithymia. Subsequent researches during the last decades on prevalence and association of alexithymia features, such as the inability to recognize and verbalize emotions, have been found to be surprisingly common, even among the general

population. The prevalence of alexithymia has been found to be higher (from 10% up to 13% among general population samples (Salminen, 1999; Honkalampi et. al, 2000) than that of major depressive disorder (from 6.4% to 8.6%) (Ayuso-Mateos, 2001; Narrow et. al, 2002). Moreover, in various clinical samples alexithymia has been associated with organic deficiencies (Williams, 2001; Berthoz et. al., 2002). Confirming that it is a personality dimension, Salminen, et. al., found that alexithymia was normally distributed in the population in both genders. The prevalence of alexithymia was 13%. Men were alexithymic almost twice (17%) as often as women (10%). Multivariate analysis showed that alexithymia was associated with male gender, advanced age, low educational level, and low socioeconomic status. These findings are in line with the results of the study where, it was seen that adolescent boys showed a prevalence rate of 230/1000 as compared to adolescent girls i.e., 200/1000.

Table- 3: Means, SD's and t value on dimensions of Family Environment of Alexithymic and Non alexithymic adolescent Boys.

Gender	FES Dimensions	Measure	N	Mean	Std. Deviation	T	Sig.
	Cohesion	Non-alexithymic	137	5.86	1.38	-1.44	0.15
		Alexithymic	46	6.2	1.29		
	Expressiveness	Non-alexithymic	137	5.91	1.36	10.59***	0.00
		Alexithymic	46	3.52	1.16		
	Conflict	Non-alexithymic	137	5.65	1.40	4.56***	0.00
		Alexithymic	46	4.52	1.57		
	Independence	Non-alexithymic	137	5.23	1.53	-0.21	0.83
		Alexithymic	46	5.28	1.54		

Boys	Achievement Orientation	Non-alexithymic	137	6.15	1.36	-1.07	0.28
		Alexithymic	46	6.41	1.58		
	Intellectual Cultural Orientation	Non-alexithymic	137	4.68	1.28	0.31	0.75
		Alexithymic	46	4.61	1.40		
	Active Recreational Orientation	Non-alexithymic	137	4.96	1.21	-0.47	0.63
		Alexithymic	46	5.06	1.38		
	Moral Religious Emphasis	Non-alexithymic	137	5.57	1.33	2.00*	0.04
		Alexithymic	46	5.09	1.61		
	Organisation	Non-alexithymic	137	5.45	1.63	0.49	0.62
		Alexithymic	46	5.3	1.77		
	Control	Non-alexithymic	137	4.15	1.38	-0.3	0.75
		Alexithymic	46	4.22	1.28		

* p<0.05, **p<0.01,***p<0.001

Table-4

Gender	FES Dimensions	Measure	N	Mean	S.D	t	Sig.
Girls	Cohesion	Non-alexithymic	133	6.23	1.49	0.18	0.85
		Alexithymic	40	6.18	1.53		
	Expressiveness	Non-alexithymic	133	5.15	1.31	6.62***	0.00
		Alexithymic	40	3.53	1.52		
	Conflict	Non-alexithymic	133	4.98	1.64	2.44*	0.01
		Alexithymic	40	4.30	1.14		
	Independence	Non-alexithymic	133	5.53	1.57	0.97	0.33
		Alexithymic	40	5.25	1.77		
	Achievement Orientation	Non-alexithymic	133	5.98	1.52	0.39	0.69
		Alexithymic	40	5.88	1.67		

Intellectual Cultural Orientation	Non-alexithymic	133	5.13	1.50	3.75***	0.00
	Alexithymic	40	4.13	1.44		
Active Recreational Orientation	Non-alexithymic	133	4.39	1.55	0.75	0.44
	Alexithymic	40	4.17	1.66		
Moral Religious Emphasis	Non-alexithymic	133	5.78	1.57	-0.9	0.36
	Alexithymic	40	6.03	1.17		
Organisation	Non-alexithymic	133	5.77	1.23	1.17	0.24
	Alexithymic	40	5.50	1.49		
Control	Non-alexithymic	133	5.26	1.51	1.90	0.06
	Alexithymic	40	4.75	1.45		

Means, SD's and t value on dimensions of Family Environment of Alexithymic and Non alexithymic adolescent Girls.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In this section researchers have tried to seek out these dimensions of the family environment on which adolescent boys and girls differ and tried to quote the suitable evidence in support of the findings. First we shall discuss the differences in mean scores of both Alexithymic and non alexithymic adolescent boys on FES dimensions. A perusal of the table(3) shows that the means of Alexithymics and non-alexithymic boys on Cohesion are 6.2 and 5.86 respectively. The means of alexithymics and non-alexithymics on Expressiveness are 3.52 and 5.91 respectively . The means of alexithymics and non-alexithymics on Conflict is 4.52 and 5.65 respectively. The means of alexithymics and non-alexithymics on Independence are 5.28 and 5.23 respectively. The means of alexithymics and non-alexithymic boys on Achievement Orientation are 6.41and 6.15 respectively. The means of alexithymics and non-alexithymics on Intellectual Cultural

Orientation are 4.61and 4.68 respectively. The means of alexithymics and non-alexithymics on Active Recreational Orientation are 5.06and 4.96 respectively. The means of alexithymics and non-alexithymics on Moral Religious Emphasis are 5.09 and 5.57 respectively. The means of alexithymics and non-alexithymics on Organization are 5.30and 5.45 respectively. The means of alexithymics and non-alexithymic boys on Control are 4.22and 4.15 respectively.

When the adolescent alexithymic and non-alexithymic girls were compared on FES dimensions, a perusal of the result table(4) shows that the means of alexithymics and non-alexithymics girls on Cohesion are 6.18 and 6.23 respectively. The means of alexithymics and non-alexithymic girls on Expressiveness are 3.53 and 5.15 respectively. The means of alexithymics and non-alexithymics on Conflict is 4.30 and 4.98 respectively. The means of alexithymics and non-alexithymics on

Independence are 5.25 and 5.53 respectively. The means of alexithymics and non-alexithymics on Achievement Orientation are 5.88 and 5.98 respectively. The means of alexithymics and non-alexithymic girls on Intellectual Cultural Orientation are 4.13 and 5.13 respectively. The means of alexithymics and non-alexithymics on Active Recreational Orientation are 4.17 and 4.39 respectively. The means of alexithymics and non-alexithymics on Moral Religious Emphasis are 6.03 and 5.78 respectively. The means of alexithymics and non-alexithymics on Organization are 5.50 and 5.77 respectively. The means of alexithymics and non-alexithymic girls on Control are 4.75 and 5.26 respectively.

The above data confirms that alexithymic adolescent boys and girls have perceived their family environment to be less expressive, providing less opportunities for expression of their inner feelings and sharing ideas in the family. Both adolescent boys and girls having alexithymic tendency differed significantly on perception of expressiveness in their families than non alexithymic adolescent boys and girls. The same trend was observed in perception of presence of conflict in family, alexithymic adolescent boys and girls perceived more conflict among their family members than non alexithymics. This difference in perception of conflict by alexithymic and non alexithymic adolescents was proven statistically significant implying the role of intra familial stressors in developing emotional problems or personality disturbances in growing children.

On two other dimensions of FES alexithymic boys and girls seem to differ in their perceptions. On one end alexithymic boys reported more emphasis on moral religious values in their families than non alexithymic boys, whereas alexithymic and non alexithymic girls perceived no difference on perception of moral religious values in their family. The

reason behind this non difference among girls might be their high orientation toward moral religious values by virtue of nature and rearing. Strikingly, these alexithymic and non alexithymic girls differ on dimension of intellectual cultural orientation. Non alexithymic girls perceived a higher involvement of their families in political, social, intellectual and cultural activities whereas, alexithymic girls perceived this indulgence lesser in comparison to non alexithymic girls. This once again strengthens the view of Bermond et. al. (2007) who described alexithymia as a personality dimension involving both cognitive deficit and affective deficit, including difficulties in expressing and fantasizing. The alexithymic boys and girls may have been experiencing similar difficulties making them resist to participate in social, intellectual and cultural stimulations in their families. Assuming that transference implies establishing meaningful relationships with others—albeit in one's own typical style—our observation that alexithymia relates to interpersonal distance taking (low in expressiveness) and withdrawal is consistent with the idea that engaging in transference relationships is a problem for severely alexithymic persons.

Because highly alexithymic persons tend to withdraw from others and refrain from sharing experiences, it can be expected that they will be reluctant to engage in psychotherapeutic relationships as well. Attending to their own affective experiences is not their habit, nor is disclosing them to others. We suggest that psychological intervention with these patients should counter both these basic habits. From the very start of an intervention therapists should help highly alexithymic patients to discern manifestations of arousal, to describe these states, and to develop relevant explanations for them. The results of the study suggest parents to accompany the

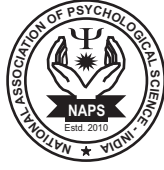
adolescents in their critical phase of growth and development which involves many unique challenges. Knowledge of the unique challenges that adolescents face in this stage of their development is vital for parents if they are to assist adolescents in meeting their problems and improving their psychosocial wellbeing. If they think that the adolescents require professional help they can refer them to professional's services existing under the government or private agencies.

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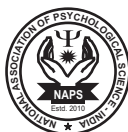
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3. Language in which it is published : English
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5. Publisher's Name : National Association of Psychological Science
Nationality : Indian
Correspondence Address : Dept. of Psychology of Panjab University
Sector 14, Chandigarh-160014 (INDIA)
6. Printer's Name : Saar Enterprises
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ISSN 0976-9218

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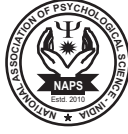
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Depression, Loneliness and Personality among Undergraduate Female College Students of Two Communities in Sikkim

Anjana Prusty* Satyananda Panda**

Abstract

Undergraduate college students are a completely unique at hazard population for the development of suicidal ideation and depression. Researchers have indicated an overall increase in risk factors related to depression and suicidal ideation amongst the college students including anxiety, eating disorders, substance abuse, fear, alcohol abuse, anger, and hostility. The present review plans to get an all-encompassing picture of personality with loneliness pattern and depression status of two different communities in Sikkim. 70 undergraduate college female students aged between 19 to 24 years from two distinct groups (35 Nepali and 35 Lepcha students) studying in 4 different colleges of Sikkim was chosen for information gathering. Varied scales like Eysenck Personality Questionnaire-Revised, Beck Depression Inventory-II, and UCLA Loneliness Scale were chosen for the collecting of information. The results demonstrated that there exists a significant and positive relationship between psychoticism, neuroticism, overall personality, loneliness and depression among Nepali and Lepcha community of Sikkim. Mean scores on loneliness, depression, psychoticism, extraversion, and neuroticism propose that undergraduate college female students from Nepali communities have scored high contrasted with female students from Lepcha community. There also exists a significant difference between undergraduate college female students from Nepali and Lepcha communities on overall personality, and in addition on psychoticism. The conclusion recommend that undergraduate female students from Lepcha community of Sikkim are showing low scores on loneliness, depression, neuroticism and psychoticism in comparison to Nepali community which could be because of the tremendously cohesive group.

Keywords: Personality, Females, Loneliness, Depression, Lepcha, Nepali

About Authors : *PhD Scholar, Department of Psychology, Sikkim University, Gangtok (Sikkim)

** Associate Professor & Head, Department of Psychology, Sikkim University, Gangtok (Sikkim)

Introduction

Rates of depression in college students are at an all-time high. A large number of emerging adults are encountering symptoms that are making everyday schedules risky. These symptoms may incorporate, however, are not constrained to, sluggishness, loss of craving, feeling of hopelessness, lack of care, and irritability. Long periods of suffering through such feelings are non-helpful for managing the demanding of college life. The reasons for depression are as unique as the person that encounters the disorder. For some students,

although, depression can be attributed to stressors, for example, academic pressure, deficient social adjustment, lack of rest, and the stress of the transition to college life. Depressive side effects are more basic in female college students than in their male partners (Barrett & Boggiano, 1991). Females are accounted for to have a 10% higher chance of encountering depressive indications, with an average of 50% of women reporting difficulty functioning in everyday exercises. In an investigation of the correlates of depression in college students declared unemployed status and not being

related with more elevated levels of depressive symptoms. Moreover, unemployment was identified with the higher level of depression and lower self-esteem in a populace of developing adults, ages 18-25 years (Swanholm, Vosvick, & Chng, 2009). Many students suffered depression a result of this plague and need encouraged from friends, family, and their college community. Education about how to perceive and adapt to depression is not suitably being conveyed to students. Changes in our society have brought about developing adult need to manage stressors that were not as a lot of an issue in generations past.

Depressive symptoms that happen as a component of borderline personality disorder (BPD) are normally transient and identified with interpersonal anxiety. Such depression normally lifts significantly when the relationship is re-established. Depressive symptoms in BPD may likewise serve to express emotions that the patient is not ready to express in more versatile ways. The patient's depression in these cases represents a maladaptive attempt to impart his or her misery about a specific individual or circumstance. Such depressive states will not react to stimulant treatment, yet to the careful explanation of the fundamental thoughts, followed by helping the patient to address the problem in more adaptive ways (Josephine & Rao, 2012).

Loneliness is a subjective, pessimistic feeling related with the individual's own experience of lacking social relations. The determinants of loneliness are frequently characterized on the premise of two causal models. The primary model examine the external factors, which are missing in the informal organization, as the foundation of the loneliness; while the second illustrative model alludes to the internal factors, for personality and psychological factors.

Loneliness may lead to serious health related problems. It is one of the three principle elements prompting to depression (Green et al., 1992), and an imperative reason for suicide and suicide attempts. A review by Hansson et al. (1986-1987) uncovered that loneliness was identified with dissatisfaction with family, social relationships, and poor psychological adjustment.

Jones et al. (1985) measured on loneliness and relevant personality and interpersonal builds to 259 Mainland US and 332 Puerto Rican students to determine the relative commitments of such indicators to the experience of loneliness for each sample. Results demonstrated that the Puerto Rican test detailed more loneliness, and most personality and interpersonal factors yielded contrasts between the groups. However, the correlates of loneliness had all the earmarks of being very comparative for both groups. Factor analysis of loneliness associated yielded interpretable components that protected the capacity of the factors to predict loneliness. Cultural components were explained about as possible clarifications for the few group differences found as for indicators of loneliness.

Significance of the Study

The impacts of modernization, particularly in Sikkim, have prompted to far-reaching changes in the financial, socio-philosophical and social fields of individuals' lives, which have extraordinarily added to the stress in life, leading to considerably higher rates of depressive related suicide in various groups of Sikkim. Rapid urbanization, industrialization and developing family frameworks are bringing about social change and trouble. The diminishing traditional support systems leave people vulnerable to depressive related suicidal behaviour. Consequently, there is an emerging need for external emotional support (Sikkim Human Developmental Report, 2014).

However, since any precise data on indicators of depression in various communities of Sikkim is not accessible, the present review to get an all-encompassing picture of the psychoticism, neuroticism, extraversion with loneliness and depression among college going female students belongs to Nepali and Lepcha communities of Sikkim.

Remembering the research of related literature, the present study aims to clear up the psychoticism, neuroticism, extraversion, loneliness, and depression patterns of undergraduate female students who belong to Nepali and Lepcha communities of Sikkim and those who are studying in different government colleges of Sikkim.

Objectives

1. To examine the relationships between psychoticism, neuroticism, extraversion, loneliness and depression among undergraduate female college students of Nepali and Lepcha communities of Sikkim.
2. To identify the role of psychoticism, neuroticism, extraversion and loneliness in determining depression in undergraduate female colleges students of Nepali and Lepcha communities of Sikkim.
3. To find out the significant difference between undergraduate female colleges students of Nepali and Lepcha communities of Sikkim with respect to psychoticism, neuroticism, extraversion, loneliness and depression.

Hypotheses

1. There will be a significant and positive relationship between depression and psychoticism among *undergraduate* female college students of Nepali and Lepcha communities of Sikkim.
2. There will be a significant and negative relationship between depression and

extraversion among *undergraduate* female college students of Nepali and Lepcha communities of Sikkim.

3. There will be a significant and positive relationship between depression and neuroticism among *undergraduate* female college students of Nepali and Lepcha communities of Sikkim.
4. There will be a significant and positive relationship between neuroticism and loneliness among *undergraduate* female college students of Nepali and Lepcha communities of Sikkim.
5. There will be a significant and positive relationship between depression and loneliness among *undergraduate* female college students of Nepali and Lepcha communities of Sikkim.
6. Psychoticism, extraversion, neuroticism and loneliness would significantly predict depression among *undergraduate* female college students of Nepali and Lepcha communities of Sikkim.
7. There will be significant differences among undergraduate female college students of Nepali and Lepcha communities of Sikkim with respect to the variables of psychoticism, extraversion, neuroticism, loneliness and depression.

Methodology

Sample

The sample comprised of 70 undergraduate female college students of Nepali and Lepcha communities of Sikkim (35 Lepcha female and 35 Nepali female students) in the age group of 19-24 years (Mean = 20.31 & SD = 1.54 years). The participants were selected randomly from different disciplines of three different colleges of Sikkim, i.e., Sikkim Government College, Namchi; Sikkim Government College, Geyzing and Sikkim Government College, Tadong, Sikkim, India. Student participation

was voluntary, and none received compensation for taking part in the study.

Participant Inclusion Criteria:

- a. Undergraduate first year female students
- b. Urban and rural students
- c. Students from Nepali and Lepcha communities of Sikkim
- d. Age group between 19 years to 24 years
- e. Regular students

Participant Exclusion Criteria:

- a. Those students who did not agree to participate in the study
- b. Students diagnosed with any brain injuries/ major psychiatric disorder/s

Measures

1. **UCLA Loneliness Scale** (Russell, Peplau, & Ferguson; 1978): UCLA Loneliness Scale was used to measure loneliness. Loneliness comprises of 20 items to measure subjective feelings of loneliness as well as feelings of isolation. Participants put answer each question as N ("I never feel this way"), O ("I feel often this way"), S ("I sometimes feel this way"), and R ("I rarely feel this way"), A measure has been changed two circumstances since its first production; once to make turn around scored things, and once to improve the phrasing. The high reliability of the scale has the coefficient alpha (0.96).
2. **Beck Depression Inventory** (BDI-II: Beck, Steer, & Brown; 1996): It comprises of 21 items assessing agitation, worthlessness, concentration, difficulty and loss of energy in order to index symptoms of typical of severe depression or depression warranting hospitalization. In each item, the respondent chooses one of four

articulations that best depict how he/she has been feeling in the course of recent days. Every announcement gets a score of 0 to 3, with 3 showing the most elevated amount of seriousness for each item. The scale score is registered as the entirety of the 21 items. Scores range from 0 to 63, with zero indicating no depressive symptoms and 63 indicating the highest level of depressive symptoms possible. The high reliability and validity of the scale has the coefficient alpha (0.93) and construct validity (0.93).

3. **Eysenck's Personality Questionnaire-Revised (EPQ-R:** Eysenck, Eysenck & Barrett, 1985): EPQ-R is 90 items surveying to measure of 4 important dimensions, for example, psychoticism, extraversion, neuroticism and lie-scale. Answer ought to put into the "Yes" Or "No". P-Psychoticism, E-Extraversion, N-Neuroticism and L-Lie. The high reliability of the scale has test-retest (0.89).

Procedure

After getting permission from the principal of the college, the researchers explained the purpose of the study and explicitly sought the consent of the students regarding participation, and to ensure that students' responses were unbroken either anonymous or confidential. The aim of the study was clearly explained to the students and consent to participate in the study was obtained from all the participants. Students were additionally informed that they could reject or end support whenever. These tests were managed independently taking after the guidelines indicated in the respective test manual. The test organization took around 45 minutes. The general testing conditions were attractive and

the technique was uniform all through. All of the tests were scored according to the technique depicted in the separate test manual.

Data Analysis

In order to present data in more intelligible and interpreted form, Statistical Package for Social Science (SPSS) Version 20 was used. Descriptive statistics like percentage, mean and standard deviation was used. Data was also calculated using Pearson's coefficient correlation, regression, and t-test.

Results and Discussion

The aim of the present study was to examine a holistic picture of the psychoticism, neuroticism, extraversion with loneliness and depression among undergraduate female students belonging to Nepali and Lepcha communities of Sikkim. In order to prove the formulated hypotheses, the obtained data have been calculated and tabulated which are being discussed below:

Table 1: Pearson's Correlation Coefficient of Psychoticism, Extraversion, Neuroticism, Loneliness and Depression of Undergraduate Female College Students from Nepali and Lepcha Communities of Sikkim (N=70)

Sl No.	Variables	Mean	SD	1	2	3	4	5	6
1.	Psychoticism	6.73	2.81	1					
2.	Extraversion	13.30	3.02	.22	1				
3.	Neuroticism	14.26	3.91	.36**	.29*	1			
4.	Overall Personality Traits	34.29	7.12	.68**	.67**	.81**	1		
5.	Loneliness	24.03	9.13	.24*	.17	.25*	.30*	1	
6.	Depression	19.13	10.41	.15	.09	.30*	.27*	.41**	1

The obtained results in Table 1 indicate that significant and positive relationship of personality characteristics with loneliness and depression exists among undergraduate female college students from Nepali and Lepcha community. The overall personality traits have significant and positive relationship with psychoticism (0.68**). It can also be observed that there exists a significant and positive relationship between loneliness and overall personality (0.30*). A significant and positive

relationship exists between depression and neuroticism (0.30*) which supports hypothesis 3. There exists a significant and positive relationship between neuroticism and loneliness (0.25*) which supports hypothesis 4. A significant and positive relationship can also be observed between depression and loneliness (0.41**) which supports hypothesis 5. Except it, a significant and positive relationship also can be observed between depression and overall personality (0.27*), overall personality and

psychoticism (0.68**) as well as overall personality and neuroticism (0.81**) among undergraduate female college students from Nepali and Lepcha communities of Sikkim. However, a significant relationship of depression with psychoticism and extraversion dimension of personality in the expected direction could not be found. Therefore, the hypothesis 1 and 2 is not accepted. According to

Marangoni and Ickes (1989), personality has shown that loneliness is associated with depressive symptoms, shyness, neuroticism, and low self-esteem, optimism, conscientiousness, and agreeableness. These results place loneliness as a potential causal factor in characteristics such as low self-esteem, depressive symptomatology, shyness, and so forth.

Table 2: Summary of Simple Regression Analysis of Depression Undergraduate Female College Students from Nepali and Lepcha Communities of Sikkim (N=70)

<i>Variables</i>	<i>Std Beta</i>	<i>R</i>	<i>R²</i>	<i>F</i>
Psychoticism	.15	.15	.02	1.61
Extraversion	.09	.09	.01	.57
Neuroticism	.30	.30	.09	6.88**
Loneliness	.47	.47	.22	19.27**

The multiple regression analysis using the step wise method was used in order to test hypothesis 6. In light of Table 2, regression examines yielded simple regression coefficients (R) of 0.15 and R² of 0.02. The simple regression analysis revealed that there were four predictors that are able to contribute to knowledge on personality and loneliness among undergraduate female college students of Nepali and Lepcha communities of Sikkim i.e. (1) psychoticism, (2)

extraversion, (3) neuroticism and (4) loneliness. The most significant contributor in this study is loneliness and neuroticism, followed by psychoticism and lastly extraversion. Therefore, the hypothesis 6 which states that psychoticism, extraversion, neuroticism and loneliness would significantly predict depression among undergraduate female college students of Nepali and Lepcha communities of Sikkim” was partially accepted.

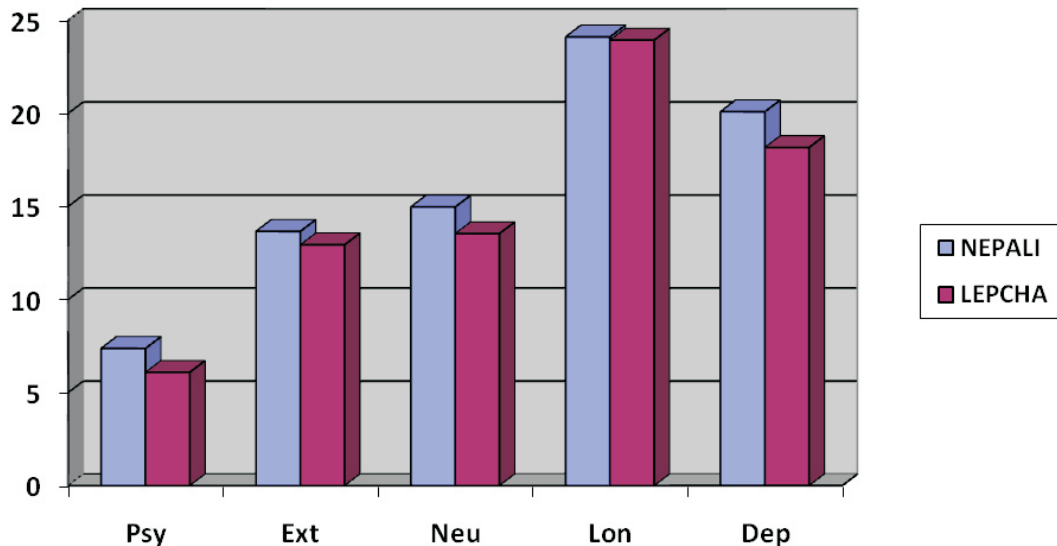
Table 3: Mean, SD and 't' Value of Psychoticism, Extraversion, Neuroticism, Loneliness and Depression of Undergraduate Female College Students from Nepali and Lepcha Communities of Sikkim (N=70)

<i>Variables</i>	<i>Communities</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>'t' Value</i>	<i>Significant</i>
Psychoticism	Nepali	35	7.37	2.51	1.96*	Significant at .05 level
	Lepcha	35	6.09	2.97		
Extraversion	Nepali	35	13.66	2.21	.99	NA
	Lepcha	35	12.94	3.65		
Neuroticism	Nepali	35	14.97	3.35	1.54	NA
	Lepcha	35	13.54	4.33		
Overall Personality Traits	Nepali	35	36.00	5.58	2.06*	Significant at .05 level
	Lepcha	35	32.57	8.11		
Loneliness	Nepali	35	24.11	9.37	.08	NA
	Lepcha	35	23.94	9.02		
Depression	Nepali	35	20.09	11.63	.77	NA
	Lepcha	35	18.17	9.11		

It can be observed from Table 3 that there exists significant difference between undergraduate female college students from Nepali and Lepcha communities of Sikkim on ***psychoticism and overall personality traits***. But, no significant differences on extraversion, neuroticism, loneliness and depression could be found between undergraduate female college students from Nepali and Lepcha communities of Sikkim. However, it can be observed that undergraduate female college students from Nepali community have high mean scores on

extraversion, neuroticism, loneliness and depression compared to the mean scores of undergraduate female college students from Lepcha communities of Sikkim.

Figure 1: Mean Difference between Undergraduate Female College Students from Nepali and Lepcha Communities of Sikkim on Psychoticism (Psy), Extraversion (Ext), Neuroticism (Neu), Loneliness (Lon) and Depression (Dep) (N = 70)



The above Fig. 1 **histogram** also shows the same trend. Therefore, the hypothesis 7 which states that “There will be significant differences among undergraduate female college students of Nepali and Lepcha communities of Sikkim with respect to the variables of psychoticism, extraversion, neuroticism, loneliness and depression” is partially accepted.

Conclusion

The overall results suggest that undergraduate female college students from Lepcha community of Sikkim are showing low mean scores on loneliness, depression, neuroticism and psychoticism compared to Nepali community which could be because Lepcha community which is the native inhabitants of Sikkim are considered to be highly cohesive in nature compared to Nepali community. A significant and positive correlation was also found between overall personality traits and loneliness among

undergraduate female college students from Nepali and Lepcha communities of Sikkim. Loneliness was also found to be one of the main predictors of depressive symptoms among undergraduate female college students from Nepali and Lepcha communities. The findings of the present study is consistent with other studies (Di Tommaso et al., 2003; Cacioppo et al., 2006; Ernst & Cacioppo, 1998; Marangoni & Ickes, 1989; Shaver & Brennan, 1991) which showed that the personality characteristics related to loneliness include traits from the “Big Five” such as greater neuroticism, less conscientiousness, and less agreeableness, and in addition bring low self-esteem and more shyness, unreliable connection styles, tension, hostility, anxiety, pessimism, and fear of negative evaluation. Loneliness, however, is distinct stochastically and functionally from these dispositions. Social isolation increases the risk of developing dementia, and this risk extends to those who perceive themselves to be socially isolated or lonely. They described that

loneliness and depressive symptoms are conceptually and empirically distinct (Cacioppo et al., 2006). Nevertheless, levels of loneliness and depressive symptoms co-vary across the life span. Moreover, despite age group differences in loneliness, the association between loneliness and depressive symptoms appears stable (i.e., moderately and equivalently positive) across age (Nolen-Hoeksema & Ahrens, 2002). This present study also showed a positive and significant relationship of personality characteristics (Psychoticism, Extraversion, and Neuroticism) with loneliness and depression among undergraduate female college students from Nepali and Lepcha communities of Sikkim. Because of the mean of loneliness as well as depression were found to be high among students of both the communities, for this study, professionals need to pay attention to undergraduate college students' psychosocial state, and need to empower them in establishing social relations.

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