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STUDY ON THE INTERPLAY OF FAMILY ENVIRONMENT, PERSONALITY, AND MENTAL HEALTH IN ADOLESCENTS

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ABSTRACT

Mental, physical and social health are vital and interlace stands of life for all individuals. As our understanding grows, it becomes more apparent that mental health is crucial to the overall wellbeing of individuals as well as for societies. The state mental health enabling individuals to realize their abilities to cope with the normal stresses of life and to work productively and fruitfully. Mental health has been hidden behind a curtain of stigma and discrimination for a long period. In most part of the world, mental health is not accorded anywhere near the same degree of importance as physical health rather it has been largely ignored or neglected. The healthy functioning and interaction among family members enhances mental health of the individual. Research shows that nature of the family environment (level of cohesion, degree of conflict, and organization etc.) is strongly associated with adolescent mental health (Siddique and D'Arcy, 1984). The personality trait also like neuroticism found to be associated negatively with mental health and well-being, whereas the other dimensions like extroversion found to be associated positively with the same. The present study is an attempt to investigate the relationship of personality and family environment with mental health. The sample comprised of 200 adolescents (100 boys and 100 girls), randomly selected from various district of Uttar Pradesh. They were assessed on NEO Five-Factor Inventory (Costa & McCrae, 2010), Family Environment Scale-Hindi (Bhatia and Chadha, 1993), and General Health Questionnaire-30 (Goldberg & Williams, 1988) to measure the personality, family environment, and mental health, respectively. Results reveal that personality and family environment correlate significantly with mental health. Multiple regression analysis found that some of the dimension of family environment and personality contribute substantially in mental health. The linear combination of cohesiveness, Conscientiousness, conflict and neuroticism share the variance approximately (R^2 = .30).

Keyword: *mental health, family environment, personality, adolescents.*

INTRODUCTION

Mental health is a state of wellbeing in which every individual realizes his or her own potential, cope with the normal stresses of life, work productively and fruitfully, and is able to make a contribution to her or his community (WHO, 2010). In modern world mental health is a most crucial issue affecting adolescents predominantly. Mental health affects sense of wellbeing as well as physical health of individuals. Adolescents with good mental health are able to achieve and maintain optimal psychosocial functioning and well-being. Adolescence period is crucial for developing and maintaining social and emotional habits and mental well-being. Studies show that better mental health outcomes in adolescents are characterized by greater adjustment in family, society, school environment and improved quality of life (Hoagwood., Jensen., Petti., & Burns, 1996; USDHHS,1999). Supportive environment in the family at school and in the community is very important for better mental health of adolescents. It is estimated that around 20% of the world's adolescents have mental health or behavioural problems and up to 50% of mental,

behavioural and psychological problems have their onset during adolescence period (Kessler, Berglund, Demler, Jin, Merikangas, et al. 2005). Srinata, Girimaji, Gururaj, Sehhadr, &Subbakrishna (2005) reported that prevalence rate of mental disorders in India is 12.5% among children aged 0-16 years and 12% among the 4-16 year's children. Kessler, Abelson, Demler, Escobar, Gibbon and Guyer (2004) also observed in their studies that the most mental disorders occurring between the age of 15 to 24.

In various studies,poor mental health i.e. a sense of helplessness has been recognised as the leading cause of suicidal behaviour, (Kay, Li, Xiao, Nokkaew& Park, 2009).According to some studies, factors that influence mental health are demographic backgrounds such as age, gender (Yen, Hsu, Liu, Huang, Ko, Yen & Cheng, 2006), academic field and academic year (Dahlin, Joneberg, &Runeson, 2005), personality traits (Goodwin & Friedman, 2006) and loneliness (Wang, Yuen & Slaney, 2009). Many mental health problems emerge in late childhood and early adolescence. Family environment has crucial importance throughout adolescence and young adulthood (Van Wel, 2000). The favourable home environment facilitates adolescents for better mental health and adjustment. Family cohesion and supportive relationships between family members are associated with adolescent psychological adaptation and lower depression (Herman, Osteander & Tucker, 2007).The positive family environment (i.e., open communication, low conflict, high support, and moderate affective involvement) supports youths' healthy adjustment (Grant et al., 2006, Conger & Conger, 2002). In his research Wolman et al. (1994) pointed that there is a strong association between family connectedness and adolescent wellbeing. Adolescents having positive relationship with their family are more likely to report high levels of perceived well-being or mental health (Hair, Moore, Garrett, Kinukawa, Lippman, & Michelson 2005). Researchsuggestedthat poor family functioning (e.g., higher conflict, lower support and open communication) is associated with emotional problems such as anxiety and depression (Auerbach & Ho, 2012; Hughes, Hedtke & Kendall, 2008; Knappe.,Lieb, Beesdo, Fehm, Low, Chooi, Wittchen, 2009) and conduct problems (Karriker- Jaffe, Foshee, Ennett, & Suchindran, 2012; Pagani, Japel, Vaillancourt, & Tremblay, 2010; Schofield, Conger, Conger, Martin, Brody, Simons, Cutrona, 2012).

Along with family environment personality traits has also been found strongly associated with mental health.Family environment is most important factor in the development of various personality traits. Researches show that personality is a significant predictor of mental health (Cloninger et al., 1997; Gestsdottir and Lerner, 2007; Davydov et al., 2010). Haslam, Whelan and Bastian (2009) found that personality traits i.e. neuroticism, extraversion, agreeableness, conscientiousness and openness are significantly associated with subjective wellbeing and these traits are significantly contribute in individuals mental health. It has been observed that some individuals are more prone to mental illness and psychopathology because of their characteristics in personality traits (Hampson & Friedman, 2008), whereas some others are able to tolerate higher level of stress or mental health problems because of their personality traits (Cloninger, 1999, 2004; Seligman et al., 2005; Wood & Tarrier, 2010).

Goodwin and Friedman (2006) also observed that mental health is linked with personality traits. They reported that individuals who scored high on conscientiousness, extraversion, and agreeableness dimension of personality had a lower chance of having mental disorders. The researchers found that higher level of conscientiousness, extraversion and agreeableness would significantly decrease the probability of mental disorders (Antonovsky, 1987; Feldt, Metsapelto, Kinnunen, and Pulkkinen, 2007). Individuals high on neuroticism were found to be significantly associated with mental disorders. Whelan & Bastian, (2009) also reported an association between personality traits like agreeableness, openness and subjective well-being.

Need for the Study

It has been a great matter of research whether adolescents face less or more mental health problems as compare to adults? Also to what extent personality and family environment contributes in mental health of adolescents. Although some studies have explored the relationship between family environment and mental health and personality and mental health among adolescents separately. The present study is an attempt to investigate the relationship of family environment and personality with mental health altogether with following objectives:

Objectives:

1. To find out the contribution of personality and family environment in predicting mental health among adolescents.
2. To examine the relationship between personality and mental health among adolescents.
3. To examine the relationship between family environment and mental health.

Hypotheses:

- There exist positive relationship of openness, extroversion, conscientiousness, and agreeableness dimensions of personality with mental health among adolescents.
- There exist negative relationship between neuroticism and mental health among adolescents.
- There exist positive relationship between family environment and mental health among adolescents
- Personality and family environment will contribute substantially in mental health among adolescents

Method Participant:

The sample comprised of 200 (100 boys and 100 girls) adolescents from various schools of Uttar Pradesh. The students between the age ranges of 14-16 were selected from class XI and XII. Before selection of participant's formal consent was taken from head of the institutions concerned. Only those participants were included in the study who has given their consent to participate in the study. In general participants were free any ailments. The participants included in the study belong to middle socio-economic status.

Measures:

The participants were assessed on the following measures:

Family Environment Scale (Bhatia and Chadha, 1993): This family environment scale is based on the family environment scale developed by Moos (1974). It consists of 69 items which includes under 8 sub scales under three broad dimensions namely relationship dimensions consisting of 4 sub scales i.e. Cohesion, Expressiveness, Conflict, Acceptance and Caring. Personal Growth Dimension includes two sub scales of Independence and Active Recreational Orientation. Dimension of System maintenance includes two sub scales of Organization and Control. Each sub scale has some positive and some negative statements. Five response options are provided for each statement like strongly agree, Agree, Neutral, Disagree and strongly disagree. Positive items will be scored as 5, 4, 3, 2 and 1 for strongly agree, agree, neutral, disagree and strongly disagree respectively. The scoring is reversed for negative items (1, 2, 3, 4 and 5). Accordingly statements will be added to obtain raw scores. The scale consists of overall reliability coefficient 0.95.Both face and content validity has been tested by eighteen experts. Only those items with at-least 75 percent agreement among the judges have been retained.

NEO Five-Factor Inventory 3 (Costa & McCrae, 2010). The NEO-FFI-3 is a 60-items version that provides a quick, reliable, and accurate measure of the five domains of personality (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness). The NEO-FFI-3 is appropriate for respondent's age of 12 years and older. The correlations between the brief NEO-FFI-3 scales and the corresponding full NEO-PI-3 scales range from .87 to .95 and show that the NEO-FFI scales are good approximations of the full domain scales. The NEO- FFI show correlations of .75 to .89 and internal consistency values range from .74 to .89. The internal consistencies for each domain of personality reported in the manual were: N=.79, E=.79, O=.80, A=.75, C=.83. Validity of NEO-PI-R with many related majors has been found in the range of 0.80.

General Health Questionnaire (Goldberg & Williams, 1988): General Health Questionnaire GHQ-30 consists of thirty items in a four point rating scale. The total score is the summation of scores obtained on individual items. Higher score indicates worse mental health. The scale is reported to have high internal consistency (coefficient alpha =

0.96) and high split half reliability (r = 0.92).GHQ-30is derived by factor analysis and consists of four sub-scales such as: Somatic symptoms, Anxiety and insomnia, Social dysfunction and severe depression. Each item consists of a question asking whether the respondent has recently experience a particular symptoms of item of behaviour on a scale ranging from "less than usual" to much "more than usual". Likert type scoring (0-1-2-3) was opted for it. '0' scores indicates good mental health and toward '3' scores would indicate the sign of mental health problems.

Administration of measures: For collecting the data the measures, NEO-FFI 3, FES, and GHQ-30 were administered in the classroom situation. Before administering the tests good rapport was established with the participants, then participants were requested to read the instruction carefully and then respond on the questionnaire in true spirit. When the questionnaire was completed, the researcher collected it back from participants, and thanked for their participation and cooperation. After scoring the tests, the scores were arranged in tabular form for further process of analysis.

Results and Discussion

Table 1: Correlation between measures of Personality and Mental Health:

VAR	N	E	O	A	C
ANX	.229**	-.096	.006	.110	-.154*
SOMA	-.008	-.103	-.074	-093	-.295**
SD	.073	-.014	-.178*	-.041	-.268**
DEP	.131	-.102	-.072	.074	-.194**
MH	.180*	-.118	-.076	.037	-.300**

****significant at 0.01 Level and *significant at 0.05 Level**

The perusal of table-1 reveals that there is significant correlation between the measures of personality and mental health. Anxiety (ANX) has found to be correlated positively significant with neuroticism (N) (r= 0.23, p<.01) and negatively significant with conscientiousness (E) (r=-.15, p<.05). In addition significant negative correlation has found between somatic symptoms (SOMA) and conscientiousness(C) (r=-.29, p<.01). Social dysfunction (SD) is negatively correlated with openness (O) (r=-0.18, p<.05) and conscientiousness(C) (r=-0.268, p<.05). Depression (DEP) has found to be correlated negatively with conscientiousness (C) (r =-.19, p<.01). In overall mental health (MH) has found to be correlated positively significant with (r = .18, p<.05) and negatively significant with conscientiousness (C) (r= -0.30, p<.01). As the higher score on mental health questionnaire indicate higher mental problems. The relationship between the measure of neuroticism and mental health reveals that participants high on neuroticism tend to have more prone toward mental health problems. The negative relationship between conscientiousness and mental health suggest that participants high on conscientiousness show the tendency to have less mental health problems.

Table 2: Correlation between measures of between family environment and mental health.

VAR	COH	EXP	COF	AC	IND	ARO	ORG	CON
ANX	-.337**	-.262**	-.326**	-.248**	-.269**	-.294**	-.233**	-.243**
SOMA	-.287**	-.167*	-.228**	-.221**	-.033	-.257**	-.171*	-.030
SD	-308**	-.230**	-.258**	-.290**	-.076	-.334**	-.152*	-.205**

DEP	-.290**	-.168*	-.288**	-.211**	-.283**	-.251**	-.181*	-.292**
MH	-.437**	-.307**	-.396**	-.340**	-.245**	-.399**	-.275**	-.260**

****significant at 0.01 Level and *significant at 0.05 Level**

Table 2 shows a significant negative relationship of cohesion (COH), a measure of family environment with the measure of mental health i.e. anxiety (ANX) (r = -.34, p <.01); somatic symptoms (SOMA) (r = -.29; p < 0.01); social dysfunction (SD) (r = -.31; p< 0.01); severe depression (DEP) (r = -.29, p< .01) and overall mental health (MH) (r = -.44, p<.01). The negative relationship between the measures suggests that participants high on cohesiveness tend to have less mental health problems. Therefore, the negative association signifies that in families, where the high cohesiveness has been found, are having better mental health among adolescents.

Expressiveness (EXP) a measure of family environment is found to have significant negative correlation with anxiety (ANX) (r = -.26, p<.01); somatic symptoms (SOMA) (r = -.29, p<.01); social dysfunction (SD) (r = -.23, p<.01); severe depression (DEP) (r = -.17, p<.01) and overall mental health (MH) (r = -.31, p<.01). The association between the measures reflect that lower scores on domains of mental health and higher score on the expressiveness may lead to good mental health among adolescents.

Results also depict negative correlation between conflict (COF) and all the dimensions of mental health i.e. anxiety (ANX), (r=-.33, p<.01), somatic symptoms (SOMA), (r=-.23, p<.01), social dysfunctions (SD), (r=-.26, p<.01), depression (DEP) (r=-.29, p<.01) and with overall mental health (MH) (r=-.40, p<.01). These results reveal that lower level of expressed aggression and conflict among family decreases the level of mental health problems. It is pertinent to mention that the high score in the measure conflict reflect the low level conflict and vice-versa.

Correlation coefficient between acceptance and caring (AC) and different dimensions of mental health i.e. with anxiety (ANX), (r=-.25, p<.01), somatic symptoms (SOMA), (r=-.22, p<.01), social dysfunctions (SD), (r=-.29, p<.01), depression (DEP)give (r= -.21, p<.01) and with overall mental health (MH) (r=-.34) at (p<0.01). The correlation between the measures suggest that if family members unconditionally accept adolescents and give them proper care it reduce the problems related to their mental health.

Independence (IND) a measure of family environment has found negative significant correlation found with anxiety (ANX) (r=.-27, p<.01), with depression (DEP) (r=.-28, p<.01), and overall mental health (MH) (r=.-24, p<.01). The relationship suggests that assertive and independent decision style within the family have tendency to reduce anxiety, depression and overall mental health among adolescents.

Negative relationship is found between active-recreational orientation (ARO) a measure of family environment with anxiety (ANX) (r = -.29, p <.01); somatic symptoms (SOMA) (r = -.26, p<.01); social dysfunction (SD) (r = -.33, p<.01); depression (DEP) (r = -.25, p<.01) and overall mental health (MH) (r = -.40, p<.01). The negative relationship of ARO with all measures of mental health reveals that increasing social and recreational activities in family reduce the level of mental health problems.

Organization (ORG), a measure of family environment dimension shows significant negative relationship with anxiety (ANX) (r = -.23; p<.01); somatic symptoms (SOMA) (r = -.17, p<.05); social dysfunction (SD) (r = -.15, p<.05); depression (DEP) (r = -.18, p<.05) and overall mental health (MH) (r = -.27, p<.01). The negative relationship suggests that participants high on organization tend to have low score on the measures of mental health. Therefore participants high on organization face less mental health problems.

Control (CON), a measure of family environment has found significant negative relationship with anxiety (ANX) (r = -.24, p<.01); social dysfunction (SD) (r = -.20, p<.01); depression (r = -.29, p<.01) and with overall mental health (r = -.44, p<.01). The relationship suggests that decent control in family reduce the mental health problems.

The relationship between overall mental health measure and measure of family environment are found to be negative and significant. The relationship between the measures suggests that good family environment is helpful in reducing the mental health problems.

Table 3

Summary multiple regression analysis Dependent variable: Mental health

Variable	R	R^2	R^2 Change	df	F	Sig.
COH	.437	.191	.191	1/198	46.76	.001
CONF	.482	.233	.042	2/197	29.86	.001
C	.515	.266	.033	3/196	23.62	.001
N	.551	.304	.038	4/195	21.28	.001

Table 3 represent the results of multiple regression (step wise) and indicated that four significant predictors of mental health emerged with an overall multiple R of .304 which is significant at .001 p-level. Cohesiveness being the most potent predictor of mental health. It entered in the equation at step 1. The multiple R for the variable is =.44 which suggests that it accounts for approximately 19% of the variance (R^2=.191). The F being 46.76 (df=1/198), it is highly significant at .001 p level. Conflict appears to be another predictor which took entry at step 2. Multiple R increased to .48 with the entry of this equation after cohesiveness. The F being 29.86 (df=2/197) is significant at .001 p level. It means that cohesiveness and conflict jointly account for approximately 23% (R^2=.233) of the variance in Mental health. Further conscientiousness a measure of personality took entry at step 3. The multiple R increased to .52 indicating that these three variables account 26.6% (R^2 =.266) variance in Mental health. The F being 23.62 (df=3/196) is significant at .001 p level. Neuroticism a measure of personality took entry at step 4 in the equation, the multiple R increased =.55, the R^2 being .304 reveals that the linear combination of cohesiveness, conflict, conscientiousness and neuroticism account 30.4% of variance in Mental health among adolescents.

The empirical data supports that the nature of the family environment (e.g., level of cohesion, degree of conflict, and organization) is strongly associated with adolescent mental health (Shulman, 1987; Siddique and D'Arcy, 1984). The study points out that a warm and supportive family environment, with high levels of organization, cohesion, and expressiveness, can reduce the level of stress among adolescents and enhance mental health (Shivane, 2011). The findings of the present study are in line with previous studies done by other researchers. Okwaraji, Aguwa, & Eze (2015) reported that personality traits were significantly associated with mental health. Neuroticism emerged as the most significant predictor of psychological well-being, having negative predictive relationship with well-being and mental health i.e. as the level of neuroticism increased in the students, their mental health decreased. The same result was found in a number of studies carried out by different researchers (Diener and Seligman (2002). research findings (Yang, Chiu, Soong, and Chen, 2008) which revealed that neuroticism can be associated with depressive symptom and on personality traits like extroversion and conscientiousness.

The previous studies conducted by Booth-Kewley and Vickers (1994), Goodwin and Friedman (2006), and Zarei, et al. (2013), also concluded that certain personality traits like conscientiousness was significantly correlated and predicted physical and mental health. The previous researches support the notion that the nature of the family environment (e.g., level of cohesion, degree of conflict, and organization) is strongly associated with adolescent mental health (Shulman, 1987; Siddique and D'Arcy, 1984).

SUGGESTIONS FOR FUTURE WORK

In this study association between family environment, personality and mental health among adolescents has been

studied. Because the researcher only want to explore the predictors among family environment and personality in mental health of adolescents, the comparison among rural and urban areas adolescents, relationship of culture and gender differences in the study has not been done. Furthermore the collection of data for this study was taken from only one state which may limit the generalization beyond the study location. In future efforts should be made to carry out similar study across many locations in India. For noticing the difference between family environment and personality dimensions on mental health and their growing influence on development, research in these areas can be fruitful for the optimum mental health of the adolescents.

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