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An Ecological Study of Adolescent Psychosocial Risk and Protection and Wellbeing

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Abstract

A vast majority of the literature that deals with the developmental implications on adolescent wellbeing often gives importance to one or other contexts. This paper builds on this work and explores the interplay between individual and several social contexts, focusing on how these multiple contexts come together to affect adolescent internalizing and externalizing behaviors. Based on Richard Jessor's theoretical framework about protective factors (models protection, controls protection, support protection) and risk factors (models risk, opportunity risk, vulnerability risk) this paper presents five psychosocial contexts of adolescent life—individual, family, peers, school, and neighborhood—in a study of adolescent wellbeing among adolescents in Navi Mumbai. (n=1126). Measures of psychosocial protection and risk in all the five contexts are seen contributing uniquely in determining adolescent problem behavior and wellbeing.

Key Words: Adolescents, Risk and Protection, Wellbeing

Introduction

Adolescence in general is a complex period and often not well understood either by adolescents themselves or by adults. This is particularly true in relation to their health behavior. (Ciairano 2004). Psychology Today (2019) describes wellbeing as the experience of health, happiness and prosperity. It includes having good mental health, high life satisfaction, and a sense of meaning or purpose. It is now widely recognized that individuals' health and wellbeing is influenced equally by structural factors such as the social and community context as well as physical factors.

Concern with the context of human action—its content, structure, organization, and implications for behavior—has mushroomed in recent decades, and research designs in developmental psychology have increasingly pursued to incorporate measures of the social environment along with individual difference measures. The current focus on context based on Uric Bronfenbrenner (1986), emphasizes the importance of adolescent's experience in human ecology. Several studies have included various domains of the social environment, including the family, the peer group, the school, and the neighborhood to examine a wide range of adolescent experiences. The present study employed a psychosocial theory of protective factors and risk factors to express the content of four social contexts of adolescent life namely—the family, the peer group, the school, and the neighborhood. The risk and protection conceptual framework used in the present research arises from a reformulation and extension of Problem-Behavior Theory by

Richard Jessor and his colleagues in the last two decades.

Three types of protection are specified by the reformulation of Problem-Behavior

Theory—models protection, controls protection, and support protection; and three types of risk are specified—models risk, opportunity risk, and vulnerability risk. Multiple item measures of each type of protection and risk are used for measuring the four different social contexts and the individual context. The present study aims to explore the variation in adolescent wellbeing brought about by psychosocial protection and risk factors in social and individual contexts.

The theoretical role of protective factors is to decrease the likelihood of engaging in problem behavior: protective factors provide models for positive, prosocial behavior; informal and formal social controls against problem behavior; and a supportive environment to sustain prosocial commitment. The theoretical role of risk factors, by contrast, is to increase the likelihood of engaging in problem behavior: risk factors provide models for problem behavior, greater opportunity to engage in it, and contextual vulnerability for its occurrence.

With regard to the three types of context protection, Models Protection has to do with contextual models for positive, prosocial, or conventional behavior, and it includes such measures as parental involvement in volunteer work, and friends' participation in school clubs and community organizations. Controls Protection has to do with regulation and sanctions for transgressions, and it includes measures of parent sanctions for misbehavior, and disapproval from neighbors for problem behavior. Support Protection has to do with expressed interest and support from others, and it includes measures of teacher interest in students, and of family closeness.

With regard to the three types of contextual risk, Models Risk has to do with social models for problem behaviors, and it includes such measures as friends' smoking, and neighborhood models for drinking and substance use. Opportunity Risk has to do with access to engaging in problem behavior, and includes measures of the availability of cigarettes, alcohol and drugs in the home, and of the prevalence and activity of gangs in the neighborhood. Vulnerability Risk has to do with contextual aspects likely to instigate or promote problem behavior, and it includes measures of tension in the family, and of stress at school.

Psycho-social Risk and Protection factors and Wellbeing

Psychosocial factors are those factors that affect a person psychologically or socially. Besides aspects of quality of the physical environment that influence health and well-being, the social environment plays a key role in both physical and mental health. Risk factors are those conditions or variables that are associated with a higher likelihood of negative or undesirable outcomes-morbidity or mortality, in classical usage, or, more recently, behaviors that can compromise health, well being or social performance (Jessor, etal., 1995). Protective factors are those factors that mediate or moderate the effect of exposure to risk factors, resulting in reduced incidence of the problem behavior

(Garmezy, 1985; Hawkins, Catalano and Miller, 1992; Rutter, 1979). Risk and protective factors have been identified in different domains, including the broader community, the school, the family, the peer group, and the individual (Hawkins, Arthur, and Catalano, 1995).

Method

Study Design, Participants, and Procedures

Analyses presented in this study employed questionnaire survey data from a sample of adolescents in Navi Mumbai. The18-page Adolescent Health and Development Questionnaire (AHDQ) was used to assess a broad range of behaviors, as well as protective and risk factors, in five domains: the individual and four key social contexts of adolescent life—the family, the peer group, the school, and the neighborhood or community. The AHDQ is the most recent version of a questionnaire developed for use over the past several decades in both local and national sample studies (e.g., Jessor et al., 1995), with its content theoretically derived from the constructs in problem behavior theory.

The General Well-being Schedule

The General Well-being Schedule (GBWS) (Dupuy H.J., 1977) is a brief but broad-ranging indicator of subjective feelings of psychological and physical well-being and distress for use in community surveys. Reflecting the theories of Kurt Lewin, the scale assesses how the individual feels about his "inner personal state" rather than about external conditions such as income, work environment, or neighborhood. The scale reflects both positive and negative feelings: five dimensions cover anxiety, general health, positive wellbeing, self control and vitality. The scales on anxiety, positive well-being and self-control constitute the psychological wellbeing while vitality and general health make up physical wellbeing. The five scales together constitute as general wellbeing measures.

Sample

The respondents of the study are adolescents from schools, junior colleges and senior colleges of Navi Mumbai chosen to best represent variation in the socio-economic background. Keeping in mind average age of 13 years (Indian Academy of Pediatricians, 2003) for attaining puberty among Indian adolescents, students from 8th standard to final year degree level were selected for the study. The upper age limit for adolescents was fixed at 20 years.

Procedure

Active school and student consent was required. Letters describing the study to the school/college administrators were distributed and consent was obtained from all students. Questionnaires were filled out at school/college class setting in large group administration sessions proctored by research staff. Confidentiality was guaranteed to all participant students of the survey. Confidentiality of information, anonymity of participants, and honesty of responses were emphasized in the set of standardized instructions.

Cognitive pretesting of survey questionnaire (AHDQ) was done with a view to improve the quality of the items of the questionnaire. The resulting AHWQ survey was pilot tested with a smaller sample of 70 students to determine the ability of students to complete the instrument. Items and scales

needing modification were then identified and necessary changes were made. These include revised language and wording of the items, where appropriate, by shaping the instrument suitable for application in cosmopolitan city of Navi Mumbai (New Bombay). The pilot test thus helped in identifying and deleting items that were inappropriate and in making meaningful substitutions.

Survey Administration: While administering the survey all care was taken to create an atmosphere of trust and rapport which was expected to enhance the validity of self-report data.

Adolescents in Navi Mumbai

Table 1: Percent Distributions of Background Characteristics with Age

		Age Group			
		13-16	17 -20	Total	
Socio-demographic factors		Row %	Row %	Count	Col %
Sex	Male	67.2	32.8	522	46.2
	Female	61.4	38.6	607	53.8
Religion	Hindu	63.1	36.9	880	77.9
	Muslim	74.2	25.8	62	5.5
	Christian	71.0	29.0	100	8.9
	Others	59.8	40.2	87	7.7
Caste	Upper Caste	65.9	34.1	851	75.4
	OBC	52.5	47.5	160	14.2
	SC/ST	66.9	33.1	118	10.5
Linguistic Group	Marathi	60.0	40.0	402	35.6
	Hindi	69.5	30.5	197	17.4
	Keralite	59.3	40.7	108	9.6
	Gujarati	57.0	43.0	79	7.0
	Tamilian	65.4	34.6	78	6.9
	Kannada	75.8	24.2	66	5.8
	Others	68.3	31.7	199	17.6
Standard of Living Index	Low	58.4	41.6	125	11.1
	Middle	62.8	37.2	774	68.6
	High	71.6	28.4	229	20.3

The cosmopolitan outlook of Navi Mumbai can be clearly observed in its linguistic composition. Linguistically there were 36 percent Marathi speaking, 17 percent Hindi speaking, 10 percent Keralites, 7 percent each of Gujaratis and Tamilians, 6 percent

kannadigas and 18 percent of other minor linguistic groups. According to the Standard of Living Index, 11 percent of them were found in low, 69 percent in middle and 20 percent in high category. This shows vast majority of Navi Mumbai adolescents are from urban background and that majority of them come from middle class families.

Socio demographic factors and wellbeing

Table 2 Percent Distribution of Socio Demographic Factors by General Wellbeing

Socio Demographic Factors		General Wellbeing			Total	
		Low	Medium	High		
		Col %	Col %	Col %	Count	Col %
Sex	Male	50.3	40.5	45.6	522	46.2
	Female	49.7	59.5	54.4	607	53.8
Age Group	13-16	61.4	61.8	69.5	724	64.1
	17 +20	38.6	38.2	30.5	405	35.9
Religion	Hindu	78.7	77.4	77.5	880	77.9
	Muslim	4.9	5.4	6.3	62	5.5
	Christian	9.4	8.1	8.8	100	8.9
	Others	7.0	9.1	7.4	87	7.7
Caste	Upper Caste	74.4	75.0	76.9	851	75.4
	OBC	13.6	16.2	13.2	160	14.2
	SC/ST	11.9	8.8	9.9	118	10.5
Linguistic Group	Marathi	33.5	35.8	38.2	402	35.6
	Hindi	19.6	15.2	16.5	197	17.4
	Keralite	9.6	9.1	9.9	108	9.6
	Gujarati	6.2	7.8	7.4	79	7.0
	Tamilian	6.8	6.1	7.7	78	6.9
	Kannada	6.4	6.4	4.7	66	5.8
	Others	17.9	19.6	15.7	199	17.6
Standard of Living Index	Low	10.2	12.5	11.0	125	11.1
	Middle	65.9	72.3	69.1	774	68.6
	High	23.9	15.2	19.8	229	20.3

About 54 percent of females experienced high levels of general wellbeing while only 46 percent of boys experienced high levels of general wellbeing. More than two third (69.5 percent) of younger adolescents

reported experiencing high general wellbeing while less than one third (30.5 percent) of older adolescents reported the same. There are no major differences noticed among the adolescents of different religion, caste, linguistic groups, based on length of stay in Navi Mumbai, according to previous stay and according to standard of living index with regard to experience of general wellbeing.

The measures of the three kinds of context protective factors (model protection, control protection, support protection) and the three kinds of context risk factors (model risk, opportunity risk, vulnerability risk) were based on the problem behavior theory. The protection and risk factors were measured on four point scale that describes the respondent's experiences as mild, moderate, high or very high.

Relationship between Composite Protection Measures and Wellbeing

Table 3 Showing Correlation between Psychosocial Protective Measures and Wellbeing Measures

	General Wellbeing	Physical Wellbeing	Psychological Wellbeing
Model Protection	**.095****	**.034**	**.134****
Control Protection	**.128****	**.050***	**.161****
Support Protection	**.212****	**.115****	**.244****

****Correlation is significant at the 0.01 level (1-tailed).**

***Correlation is significant at the 0.05 level (1-tailed).**

The Pearson correlation coefficient is used to assess the relationship between psychosocial protective factors and wellbeing factors to obtain a measure of strength and direction of association between these variables.

Results showed that correlations between risk and protective measures were quite modest, suggesting that the procedure did indeed result in accumulating substantially different (i.e., independent) sources of risk in the various contexts.

Correlation coefficient between model protection and general wellbeing is .095. Since the relationship between model protection and physical wellbeing is non-significant it could be inferred that model protection and physical wellbeing are not related to each other. Whatever the poor correlation was observed it might have occurred by chance factor only. Model protection and psychological wellbeing are correlated positively. This indicates that as the model protection increases psychological wellbeing also increases.

The correlation coefficient between control protection and general wellbeing is .128 which is significant at 0.05 level. This indicates that as the control protection

increases the general wellbeing also increases. Since the correlation coefficient is positive it indicates that as the control protection is increasing the general wellbeing is also increasing. Control protection and physical wellbeing are positively correlated to each other. This indicates that as the control protection is increasing the physical wellbeing also increases. Correlation coefficient between control protection and psychological wellbeing is .161 which is significant at 0.05 level. Since the correlation coefficient is positive it indicates that as the control protection is increasing the psychological wellbeing is also increasing.

Support protection and general wellbeing are positively correlated. This indicates that as the support protection is increasing the general wellbeing also increases. Correlation coefficient between support protection and general wellbeing is .212, which is low correlation between support protection and general wellbeing. Support protection and physical wellbeing are positively related to each other. The Correlation coefficient was .115 which is negligible relation between support protection and physical wellbeing. Support protection and psychological wellbeing are positively correlated to each other. This indicates that as the support protection is increasing the psychological wellbeing also increases.

It should be noted that the above correlation coefficient figures are significant often because the df (degree of freedom) are very large.

Interrelation between Composite Risk Measures and Wellbeing

Table 4 Presents Correlation between Psychosocial Protective Measures and Wellbeing Measures

	General Wellbeing	Physical Wellbeing	Psychological Wellbeing
Model Risk	**-.171****	**-.165****	**-.154****
Opportunity Risk	**-.122****	**-.096****	**-.099****
Vulnerability Risk	**.335****	**.168****	**.403****

Correlation coefficient between model risk and general wellbeing is -.171 which is significant at 0.01 level. Actually this is negligible correlation. Since the correlation coefficient is negative it indicates that as the model risk is increasing the general wellbeing is decreasing. Correlation coefficient between model risk and physical wellbeing is -.165. This is negligible relation between model risk and physical wellbeing. Since the correlation coefficient is negative it indicates that as the model risk is increasing the physical wellbeing is decreasing. Correlation coefficient between model risk and psychological wellbeing is -.154. This is negligible relation between model risk and psychological wellbeing. Since the correlation coefficient is negative

it indicates that as the model risk is increasing the psychological wellbeing is decreasing.

Correlation coefficient between opportunity risk and general wellbeing is -.122 which is significant at 0.01 level. Actually this is negligible correlation. Since the correlation coefficient is negative it indicates that as the opportunity risk is increasing the general wellbeing is decreasing. Correlation coefficient between opportunity risk and physical wellbeing is -.096. This is negligible relation between opportunity risk and physical wellbeing. Since the correlation coefficient is negative it indicates that as the opportunity risk is increasing the physical wellbeing is decreasing. Correlation coefficient between opportunity risk and psychological wellbeing is -.099. This is negligible relation between opportunity risk and psychological wellbeing. Since the correlation coefficient is negative it indicates that as the opportunity risk is increasing the psychological wellbeing is decreasing.

Correlation coefficient between vulnerability risk and general wellbeing is .335 which is positive and low. Vulnerability risk and physical wellbeing are positively related to each other. The correlation coefficient was .168 which is negligible relation between support protection and general wellbeing. Vulnerability risk and psychological wellbeing are positively correlated to each other. This indicates that as the vulnerability risk is increasing the psychological wellbeing also increases. The correlation .403 is moderate correlation and is significant at .05 level.

It should be noted that the above correlation coefficient figures are significant often because the df (degree of freedom) are very large.

Discussion and Conclusions

Adolescence is a time of great opportunity as well as risk. A common set of determinants underlies a variety of risk behaviors associated with health problems. Similarly, protective factors influence positive health behaviors and outcomes. The interaction of both risk and protective factors determining the experience of wellbeing and problem behaviors (lifestyles)

The analysis sheds light on a number of important findings that contribute to our understanding of adolescent wellbeing and problem behavior. Younger adolescents and females receive higher levels of model protection, control protection and support protection than older adolescents and males. Other socio demographic factors did not show much variation. Past research has shown for individual health risk behaviors, socio-demographic characteristics do not consistently explain differences in profiles of risk behaviors (Blum et al.2000, Goodman, E 1999; Lowry et al., 1996). This is similar to previous research by Resnick and colleagues (1997) and Blum and colleagues (2000) who found that demographic variables explain very small amounts of variance in models when predicting single health risk behaviors.

Rates of risk increase by age and more male adolescents than female adolescents experience higher levels of risk. Greater levels of wellbeing were experienced by females and younger adolescents than males

and older adolescents. Composite protective measures have positive association with wellbeing measures indicating increase in protection brings corresponding increase in wellbeing. Baring vulnerability risk, model risk and opportunity risk measures had negative correlation with wellbeing measures.

The study underlines the negative association between composite measures of protection and problem behavior measures. In summary, this study has laid some groundwork for future research on adolescent wellbeing and provided a synthesis of instruments and procedures to investigate this construct from several perspectives.

Limitations

Although this study makes a number of contributions to the knowledge about adolescent risk behaviors, it is also subject to a number of limitations. It is obvious, however, that the complexity of adolescent problem behavior and lifestyles cannot be fully captured by a selected set of measures of protection and risk. It is essential to emphasize that the sample is drawn from local, urban settings in Navi Mumbai. As such the data are appropriate only for inferences about the samples assessed and the limited, urban, school/college-based populations they may represent. It is important to note that this sample does not include the experiences of out-of-school/college adolescents, who are more likely to engage in health risk behaviors (Brener and Collins, 1998; Lindberg et al., 2000) and may have different patterns of co-occurrence of risk. A third limitation stems from the fact that the measures of both the predictor and criterion variables are based on self-report, and the obtained relationships could have been influenced by common method variance.

Recommendations for future Research

A greater focus on the explanation and assessment of protection in future research in this field would be a beneficial outcome of the present effort and a significant contribution to the design of more effective intervention initiatives. These limitations notwithstanding, the contributions of this research show clearly that adolescent contexts matter; they show that protective factors and risk factors are theoretically and empirically useful ways of describing those contexts.

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