

Predictors of Behavior Problems in Adolescents: A Path Model

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Just as health and illness in general, mental health is determined by multiple social, psychological, and biological factors. During adolescence, psychosocial issues could have different kinds of manifestations amongst which includes behavior problems. Therefore, it is essential to understand certain important determinants of behaviour problems among adolescents which helps to address these issues. In the present study, an attempt was made to identify the influence of parental expectations, unfulfillment of parental expectations, self-esteem, optimism, school environment and social support on behaviour problems among adolescents. Further, it also aimed to identify the direct and indirect effect of certain factors on behavior problems of adolescents. Correlation and Regression analysis were used to analyze the data. Self-esteem, optimism and peer acceptance emerged as protective factors and perception of unfulfillment of parental expectations, pressure to achieve and competition among pupil emerged as risk factors for behavior problems of adolescents. The direct and indirect effects of the psychosocial determinants of behaviour problems were also explored.

Keywords: Behaviour problems, Adolescents, Direct and indirect effects, Path model

Adolescence is a transitional period that requires special attention and protection. According to Erikson's (1950, 1968) theory, a unique development task awaits the individual at every developmental stage with a crisis that must be resolved. Successfully resolving the crisis may enhance the well-being of an individual. Healthy and positive path helps to achieve a positive identity, but when it is forced upon an adolescent by parents or less explored and if a positive future path is not defined, then identity confusion reigns (Erikson, 1968). This leads to withdrawal, isolation from peers and family, or they immerse themselves in the world of peers and lose their identity in the crowd (Santrock, 2007).

Many studies in India have proven that there is more number of psychosocial problems during adolescence. A six-year longitudinal study has found that among 186 children who scored below the cut-off for psychiatric disorders, 20 children developed a psychiatric disorder indicating a high rate of incidence (Malhotra, Kohli, Kapoor, & Pradhan, 2009). Dhoundiyal and Venkatesh (2009) reported conduct problems as the primary problem among the children followed by problems in peer relations, prosocial behaviour

and emotional symptoms. Anees, Najam, Zulfia and Ali (2006) reported a prevalence of problem behavior as 25.2% in 14-15 years age group and 10.3% in the 10-13 years age group. Srinath et al. (2005) found 12.5% of the prevalence rate of psychiatric disorders in 4-16-year-old children.

Chen and Simons-Morton (2009) identified psychosocial and family factors as vulnerable precursors to the co-occurrence of conduct problems and depressive symptomology. Gaylord-Harden (2008) reported that positive parenting was related to higher achievement and lower behaviour problems. Parental goals and aspirations are best described as internal representations of desired states or outcomes that parents hold for their children. The common thread that runs through the parents and their wards is the agonizing anxiety in fulfilling parental aspirations. Many parents believe that transmitting a sense of high expectations to their offspring is one of the ways of helping them to build confidence, self-esteem, and personal standards of merit and value. To strive for academic excellence is perceived as a moral obligation and children become stressed when they haven't met the demands and expectations of their parents (Xing, Huang, Huang, Sanchez,

& Ye, 2005; Yu & Chen, 2001).

Low global self-esteem has been related to externalizing problems, aggression, coping with stress, and antisocial behaviour (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Fergusson & Horwood, 2002). High pessimism and low optimism are directly or indirectly linked to feelings of hopelessness, emotional distress, and other psychological symptoms (Chang, 2002; Hardin & Leong, 2005). Optimism is also related to greater life satisfaction, more positive affect and fewer depressive symptoms (Chang & Sanna, 2001; Scheier, Carver & Bridges, 2001). Hence, self-esteem and optimism are also important factors that could reduce behaviour problems in adolescents.

Schools, as an environment affects multiple aspects of adolescents' development. Research findings indicated that positive interpersonal relationships and optimal learning opportunities for students in all demographic environments can increase achievement levels and reduce maladaptive behaviour (McEvoy & Welker, 2000). Reis, Trockel and Mulhall (2007) reported that elements of school climate were found to be a factor in the psychological adjustment of middle school students.

Despite the existence of many parent-child related problems in India, research focus on these areas is inadequate, especially for the adolescent population. Studies carried out in other countries may not be appropriate to the Indian adolescent population due to cultural variations. Hence, the researcher aimed to

identify the influence of perception of parental expectations, perception of unfulfillment of parental expectations, self-esteem, optimism, school environment, and social support on behavior problems of adolescents and to test the proposed model of parental expectations and other psychosocial factors on behaviour problems.

Proposed model

Based on theoretical evidences (Bronfenbrenner, 1979; Jessor Graves, Hanson, & Jessor, 1968) and research studies (DeMurray, Malecki, Davidson, Hodgson, & Rebus, 2005; Kobayashi, 2005; Mohanraj, 2006; Wang & Heppner, 2002), the apriori model parental expectations and other psychosocial factors on behaviour problems (in Figure 1) was proposed.

Method

Participants

Using stratified random sampling technique, higher secondary schools from the list of State Board and Central Board of Secondary Education (CBSE) were selected using lottery method from which the estimated sample size of 400 students from the two streams were chosen. The total number of sample from both the streams finally amounted to 835, among which 480 students were from State Board and 355 students from CBSE curriculum. Out of 835 sample, 517 were boys and 318 were girls.

Procedure

The Principal and the school authorities were approached and after obtaining permission from them, a convenient date was fixed with the consent of the Headmaster/Principal without affecting the regular classes. After knowing the purpose, consent form was obtained from the adolescent students. The questionnaires were distributed to a group of 25 to 35 students at a time.

Measures

Perception of Parental Expectations Inventory (Sasikala & Karunanidhi, 2011): This has 30-items in the inventory measuring the Perceived Parental Expectations (PPE) and Perception of Fulfillment of Parental Expectations.

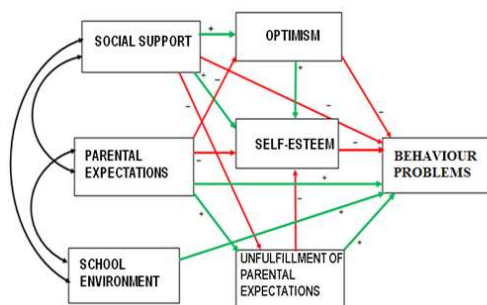


Figure 1: Initial model of parental expectations and other psychosocial factors on behaviour problems .

(PFPE) by adolescents and Perception of Unfulfillment of Parental Expectations (UPE).

Self-esteem Questionnaire (Karunanidhi, 1995): It has 83-items which has both positive and negative items. The questionnaire consists of six dimensions namely global self-esteem, competency, moral and self-control, social-esteem, family, body and physical appearance.

Life Orientation Test – R (LOT –R) (Scheier, Carver, & Bridges, 1994): The test was developed to assess individual differences in generalized optimism versus pessimism.

School Environment Scale (SES): Fend and Prester (1986) developed this scale for adolescents in Germany. The dimensions of this tool are control by teacher, pressure to achieve, competition among people, possibility to participate and peer acceptance. This German version of the questionnaire was translated to English and validated by Mohanraj and Karunanidhi (2006).

Child and Adolescent Social Support Scale (CASSS): The CASSS (Malecki, DeMurray, & Elliot, 2000) is a measure of social support for children and adolescents. It measures perceived social support of children and adolescents in grades 3-12. The reliability coefficient reported

by Aprajita and Karunanidhi (2007) ranged from .65 to .88 for all the four dimensions used in this study.

Strength and Difficulties Questionnaire (SDQ) (Goodman, 1999): It is a brief behaviour screening questionnaire that describes about 25 items. There are five dimensions viz. emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial behaviour among which the first four are named as behaviour problems.

Statistics used

Pearson's correlation analysis, Multiple linear regression and Path analysis were used to analyze the data.

Results

From table 2, it was observed that perception of unfulfillment of parental expectations by adolescents, pressure to achieve and competition among pupil emerged as risk factors of behaviour problems whereas self-esteem, optimism and peer acceptance emerged as protective factors. Perception of parental expectations, social support and dimensions of school environment viz. control by teacher and possibilities to participate did not emerge as significant, causal factors of behaviour problems.

Table 1: Intercorrelation Matrix between the Variables used in the Study

No	Variables	1	2	3	4	5	6	7	8	9	10	11
1	PE	1	-	-	-	-	-	-	-	-	-	-
2	UPE	.697**	1	-	-	-	-	-	-	-	-	-
3	SE	.007	-.143**	1	-	-	-	-	-	-	-	-
4	Op	.000	-.056	.236**	1	-	-	-	-	-	-	-
5	CT	.162**	.094**	-.043	-.044	1	-	-	-	-	-	-
6	PTA	.140**	.091**	-.024	-.043	.491**	1	-	-	-	-	-
7	CP	.153**	.093**	-.069*	-.002	.357**	.436**	1	-	-	-	-
8	PP	.111**	-.041	.123**	.029	.110**	.033	.040	1	-	-	-
9	PA	-.061	-.129**	.253**	.170**	-.101**	-.146**	-.371**	.184**	1	-	-
10	SS	.150**	-.069*	.267**	.132**	.169**	.083*	.046	.280**	.245**	1	-
11	BP	.105**	.185**	-.284**	-.215**	.109**	.182**	.235**	-.086*	-.324**	-.126**	1

*p <.05; **p < .01

PE – Parental Expectations; UPE – Unfulfillment of Parental Expectations; SE – Self-esteem; Op – Optimism; CT – Control by Teacher; PTA – Pressure to Achieve; CP – Competition among Pupil; PP – Possibilities to Participate; PA – Peer Acceptance; SS – Social Support; BP – Behaviour Problems

Table 2: Multiple Linear Regression Coefficient, Beta value and 't' value

Variable	Behaviour Problems	
	Standardized Beta Coefficients	t
Perception of parental expectations	-.007	.17
Unfulfillment of parental expectations	.117	2.60**
Self-esteem	-.17	5.19**
Optimism	-.131	4.02**
Control by teacher	-.015	.41
Pressure to achieve	.097	2.57**
Competition among pupil	.110	2.92**
Possibilities to participate	-.026	.77
Peer acceptance	-.182	5.01**
Social support	-.008	.23
R	.45	
R2	.20	
F	20.93**	
N	835	

**p<.01

Path model

An initial model was developed with all the latent variables placed in the model as hypothesized. A correlation was done that included each of the variables that were selected in the study. After deleting the two paths from perception of parental expectations to optimism and to self-esteem which were not related, the model was tested using path analysis which failed to produce good fit indices. The findings indicated adjustments to the model. Hence, the method suggested by Joreskog and Sorborn (1989) were applied for modification of the model. The modified model was tested via path analysis which measured the degree to which the model was congruent with the data.

In the modified model, the chi square statistic was not significant (chi-square = 11.0, df = 6, p>.05) indicating the goodness of fit. The other indices also indicated a good fit of the model.

Further, the Normed Fit Index was found to be .988, the Comparative Fit Index was found to be .994. As 1.0 indicates a perfect fit of the model to the data, these findings suggested a good fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) was .03 and Standardized RMR was .019 which indicated fitness of the model. The CMIN/DF = 1.83 which is less than 2.5 also indicated good indices for fitness of the model. The path diagram of the model with its respective standardized regression weights is depicted in Figure 2.

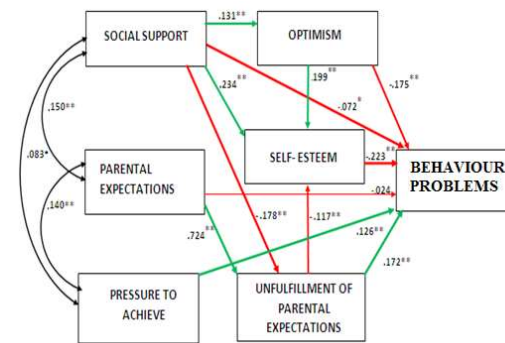


Figure 2: Modified model of parental expectations and other psychosocial factors on behaviour problems

Discussion

In India, expectation of parents from their wards to excel in academic pursuits generally seems to be high which can be attributed to multiple reasons. One plausible reason could be the feeling of insecurity experienced by parents fearing stiff competition in getting admission in a reputed college/university for their wards after their schooling. This makes the Indian parents pressurize their wards to score high marks which would help them get admission in top universities, and better employment in India and abroad. In addition to these, many Indian parents wish to fulfill their unrealized wishes and desires through their offspring. Finally, parental success in a collectivistic society is measured in terms of educational accomplishment of their wards. These demands and pressure exerted by parents tend to have an impact on the well-being of adolescents when parental expectations are unfulfilled or

unrealistic. This pressure manifests among the adolescent population as behavioural problems, emotional problems, conduct problems, fleeing away from home and sometimes to the extent of committing suicide. This warrants the researcher to conduct a study, with a view of identifying determinants contributing for behaviour problems in adolescents.

In the present study, correlation analysis revealed that perception of parental expectations and unfulfillment of parental expectations were positively related to behaviour problems of adolescents. Parents expect their wards to score high marks and obtain good grade irrespective of their capabilities and interests. When adolescents perceive their inability to fulfill parental expectations, it ends up in behavioural problems such as poor adjustment, low self-worth etc. (Agliata & Renk, 2007). However, multiple linear regression analysis had revealed that parental expectations was not a significant contributing factor of behaviour problems, on the other hand unfulfillment of parental expectations was a causal factor of behaviour problems. Studies have also reported that living up to parental expectations or perceived discrepancy between parental expectations and fulfillment by the adolescents are better predictors of psychological distress than parental expectations per se (Kobayashi, 2005; Wang & Heppner, 2002).

It was also found that self-esteem was negatively related to behaviour problems. Many studies have also reported the negative relationship between self-esteem and behaviour problems (Barry, Frick, & Killian, 2003; Donnellan et al., 2005; Moran & Dubois, 2002). Individuals with low self-esteem tend to have low confidence in their abilities, expect poor outcomes before trying, have less perseverance, let things happen to them rather than make things happen, feel they have little control over their own life, give power to others, become overtly defensive when questioned, etc. An individual with such characteristics might be unable to face the challenges in life due to their diffidence which could result in problem behaviours. Self-esteem was also found to be a protective factor of behavior problems.

While analyzing optimism and behaviour problems, it was found that both were negatively related to each other. In general, people with optimistic attitude tend to have a positive outlook towards life, anticipate success, and perceive things in a positive direction. Regression analysis further indicated that optimism is a protective factor of behaviour problems. Optimism has been reported to be negatively related to active coping, low depressive symptoms, hopelessness, behaviour problems, so on (Chang & Sanna, 2003; Lemola et al., 2009; Mosher Prelow, Chen, & Yackel, 2006).

The dimensions of school environment viz. control by teacher, pressure to achieve and competition among pupils were positively related to behaviour problems of adolescents. However, the dimensions viz. possibility to participate and peer acceptance were found to be negatively related to behaviour problems of adolescents. Due to the high academic pressure at higher secondary level adolescents themselves perceive the pressure to score maximum marks, which in turn makes them to compete with other students. Moreover, students are compared and criticized based on the marks scored by the toppers. This could create unhealthy competition among the students.

Adolescents generally attach more importance to be accepted by peers during this stage and they tend to turn to them for advice. It is a fact that friendships often fulfill developmental needs at this stage better than their relationships with parents. Many studies support the present findings too (Mohanraj, 2006; Thuen & Bru, 2009; Wang, Selman, Dishion & Stormshak, 2010). Multiple linear regression analysis revealed that the dimensions of school environment namely pressure to achieve and competition among pupil as risk factors of behaviour problems and peer acceptance as a protective factor.

In the present study, it was found that social support and its dimensions - parents' support, teachers' support, classmates' support and close friend's support were negatively related to behaviour problems of adolescents. The encouraging and protective social environment might help adolescents in controlling the behaviour problems because of the care and

affection provided to overcome difficulties. Studies have reported that good social support enhances social skills, academic and adaptive skills and reduces conduct problems, aggression, hyperactivity, anxiety, depression, externalizing behaviour problems and withdrawal (DeMurray & Malecki, 2002; Jackson & Warren, 2000). However, social support did not emerge as a significant contributing factor of behaviour problems.

Further, the initial model was proposed based on theoretical and research evidences. The findings of path analysis revealed that unfulfillment of parental expectations, self-esteem, optimism, social support and pressure to achieve had direct effects on behaviour problems. In addition, perception of parental expectations, unfulfillment of parental expectations, optimism and social support had indirect effects on behaviour problems of adolescents. Unfulfillment of parental expectations influences behaviour problems more than perception of parental expectations itself. This indicates that if parental expectations are not in accordance with the capability of their wards and if they could not fulfill those expectations, they perceive more unfulfillment of parental expectations and the feeling of inability could result in maladaptive behaviours in adolescents.

Social support was also found to have an indirect effect on behaviour problems through optimism, self-esteem and unfulfillment of parental expectations. In the Indian culture, self-esteem is determined based on parent's love, affection, care and unconditional support from relatives and friends. The approval or support helps the individual to nurture the self-esteem, which influences behaviour problems. Encouragement, approval and acceptance from the society, help the individual to have positive expectation about the future, which makes them more optimistic. Further, approval for right behaviour also influences optimism. Similarly, when adolescents perceive less support from parents, teachers and classmates, they might lack encouragement, confidence and motivation to accomplish and fulfill their parental expectations.

The model further proved the indirect effect of perception of unfulfillment of parental expectations and optimism on behaviour problems through self-esteem. If an individual thinks that he/she cannot fulfill his/her parental expectations, it may have a debilitating effect on his/her self, self-worth and motivation to perform. Ultimately, the adolescents' self-esteem may get affected. This, in turn, may manifest as behaviour problems in adolescents. But, optimism is positively related to self-esteem as coping with the demands and expectations of the parents might result in maintaining equilibrium of self-esteem.

Optimistic individuals tend to anticipate success rather than failure, accepts feedback about their self which makes them feel good. Thus, perception of less unfulfillment of parental expectations and high optimism increases one's self-esteem; thereby precipitation of behaviour problems can be avoided.

Conclusion

From the present study, it can be concluded that self-esteem, optimism and peer acceptance act as protective factors which could reduce the likelihood of behaviour problems among adolescents. Further, the perception of unfulfillment of parental expectations, pressure to achieve and competition among pupil were found to be risk factors of behaviour problems. A favorable, positive school environment and social support may likely reduce behavioural problems of adolescents.

Finally, the model indicated the importance of the interplay between variables under the study. Altogether 20% of variance was explained in behaviour problems by the variables used in the study. Therefore, it is suggested to include other predictors of behaviour problems in future research. The study was conducted using self-report measures for adolescents. Therefore, future research could focus on multiple modality of collecting data from teachers and parents on behaviors of adolescents. Further, data were not collected directly from the parents about their expectations on their wards.

Implications

Assessments need to be done to identify the talents and potential of the students and the same can be appraised to the parents and students too by which unnecessary pressure and stress can be avoided.

It is suggested to impart self-esteem training, positive orientation training and social skills training for the adolescents in all the schools.

Adolescent students need personal counseling to manage and overcome the prevailing competitive situations. Further, teachers need to be trained on counseling skills to help these students to cope with academic pressure.

The school management also needs to be sensitized about the importance of positive school climate such as creating healthy competition among pupils, focusing on adolescents' talent, promoting cooperation among students, etc.

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