Influence of sociometric status on internalizing and externalizing problems of children from Dharwad and Wokha regions

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Abstract: A differential research design was employed to compare the behaviour of peer accepted and peer rejected children of Dharwad and Wokha regions. Children in the age group of eight to twelve years studying in class 3, 4, 5 and 6 from Dharwad and Wokha constituted the population of the study. A sample of five each peer accepted and rejected from each class with a total of 156 children from Dharwad and 158 from Wokha were drawn out through sociometry from two government and two private schools in both the regions. Teacher's Report Form (TRF) by Achenbach (2001) was used to assess behaviour problems of the children. The results revealed a significant association between internalizing, externalizing and total behaviour problems by sociometric status in Dharwad region and an association of total behaviour problem by sociometric status in Wokha region. Results also revealed that rejected children had more behaviour problems than the peer accepted for both the regions. This implies that peer relationships have a great influence on the behaviour of children at an early age and serves as a protective factor for desirable behaviour. It is thus a necessity to provide an intervention for parents and teachers to monitor social relations of children with peers and protect them from risks of isolation and rejection.

Keywords: Behaviour problems, Children

Introduction

Children in the late childhood stage often regarded as 'gang age' because it is characterized by interest in peer activities, an increasingly strong desire to be accepted member of a gang and discontent when children are not with friends. Once children reach late childhood both the nature of the children's relationships with peers and their understanding of the relationships become more intimate and complex. Children's status within the peer group, whether they are popular or not becomes an issue of social relationship during late childhood. Until recently, most psychologists thought of relationships with peers as much less important because emphasis was strongly on parent-child interaction alone. This view is slowly changing now as it is becoming clear that peer relationship play a unique and significant role in child's development. Critical reviews of empirical research have indicated that rejection by one's peer group in childhood is associated with later maladjustment, especially externalizing behavior problems. Moreover, being rejected by one's peer group in middle childhood has been linked to subsequent involvement with antisocial peers during adolescence, which also has been identified as a correlate and possible precursor to antisocial outcomes. Findings from previous research have demonstrated that children who display aggressive and disruptive behaviour are likely to be rejected by peers (Rubin et al., 2006; Perdersen et al., 2007).

Researchers and practitioners often conceptualize problem behavior as either externalizing or internalizing problems. Internalizing behavior is actions that are taken out toward the self which may hurt him or herself but not lash out on others. The symptoms of internalizing behavior include depression, anxiety, substance abuse and withdrawal (Perle *et al.*, 2013). Externalizing behavior is the reverse actions of

internalizing behavior. It is expressed outward towards others or has an impact on the child's environment, which often makes it most disruptive. Problematic peer relations, such as peer rejection, are associated with a variety of developmental and psychological difficulties in childhood and adolescence (Rubin et al., 2006). Rejected children are at risk for negative outcomes in a broad spectrum of developmental domains, including behavioral adjustment, academics, and psychological wellbeing. Studies have also shown that peer rejection is associated with heightened risk for internalizing problems in childhood, including depressed mood and loneliness (Lopez and DuBois, 2005).

Most of the studies have been in the Western context. Therefore, it is important to know the trend in the Indian context. Thus, the study was undertaken during the year 2013-2014 in two districts of two Indian states with an objective to compare the internalizing, externalizing and total behaviour problems of peer accepted and peer rejected children.

Material and methods

The population of the study consisted of children in late childhood (8 to 12 years) studying in class-3 to class-6 from private and government schools at Dharwad of Karnataka and Wokha of Nagaland. The study was carried out in the year 2013-2014. There were 83 private and 63 government schools in Dharwad and 17 private and 6 government schools in Wokha. From these schools, two each of private and government schools were randomly selected for the study in both the regions. In each school 10 students were selected from each of the four classes 3 to 6 through sociometric technique (*i.e.*, 5 peer accepted and 5 peer rejected from each class). Thus a total of 40 students were selected from each school. The total samples

selected for the study was 320 (*i.e.*, 160 from Dharwad and 160 from Wokha). But the final sample for the study was however 314 as 6 samples were dropped because of incomplete data.

The Heads of the institutions of the randomly selected schools were contacted and permission was taken for conducting the study. A class wise list of the children studying in 3rd, 4th, 5th and 6th standard was made. For the classes which had more than one section, one section was selected randomly. The students were selected from each class through sociometry. The Teachers Report Form was administered to the respective class-teacher for rating the ten children selected.

The tools and the techniques employed for conduct of the study is enumerated and details are provided.

Sociometry: Sociometry technique of Coie *et al.* (1982) was followed for assessing the peer acceptance and rejection. By establishing a good rapport with the students they were instructed to write the names of three classmates whom they liked the most and three classmates whom they disliked. From the peer nominations, five children who got the highest number of likes and five children who got the highest number of dislikes were selected from each class.

Teacher report form of behaviour problem by Achenbach (2001): The internalizing, externalizing and total behaviour problems were measured through the Teacher Report Form (Achenbach, 2001). The checklist consists of 113 statements about the child's behavior, e.g. Acts too young for his/her age. Responses are rated on a Likert scale with 0 for Not True, 1 for Somewhat or Sometimes True, 2 for Very True or Often True. Similar items are grouped into a number of syndromes, e.g. aggressive behavior, and their scores are summed to produce a score for that syndrome. There are eight syndrome subscales. Out of these, the subscales withdrawn, somatic complaints and anxious/depressed are grouped under Internalizing Problems and delinquent behavior and aggressive behavior are grouped under Externalizing Problems. The total behavior problem is obtained by summing up the scores of all the items. The raw scores are converted to T scores and are classified as normal, borderline or clinical category. For internalizing and externalizing behaviour, T score of \geq 70 are in clinical range, 65-69 in borderline and ≤64 in normal range. For total behaviour, T score of ≥ 64 are in clinical range, 60-63 in borderline and ≤59 in normal range.

Results and discussion

The comparison of behavioural problems between peer accepted and rejected children is made for the two regions and presented in Table 1 and 2.

Dharwad children

Table 1a shows the comparison of internalizing, externalizing and total behaviour problems by sociometric status of Dharwad children. The chi square (χ^2) test revealed that there was a highly significant association between internalizing, externalizing and total behaviour problems by the sociometric status of the children. It indicates that the

Table 1a. Association between internalizing, externalizing and total behaviour problems by sociometric status among children from Dharwad

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Sociomertc	Normal	Borderline	Clinical	Total	
status				N=156	χ^2
	Inte	rnalizing prol	olem		
Accepted	60	16	4	80	
	(75.0)	(20.0)	(5.0)	(100)	12.39 **
Rejected	50	8	18	76	
	(65.8)	(10.5)	(23.7)	(100)	
	Exte	ernalizing pro	blem		
Accepted	66	9	5	80	
	(82.5)	(11.2)	(6.2)	(100)	16.25**
Rejected	41	15	20	76	
	(53.9)	(19.7)	(26.3)	(100)	
	Total	behavior pro	blems		
Accepted	67	9	4	80	
	(83.8)	(11.2)	(5.0)	(100)	13.36**
Rejected	45	14	17	76	
	(59.2)	(18.4)	(22.4)	(100)	

^{**}p≤0.01 level of significance.

Figures in the parenthesis indicate percentages

peer accepted and the peer rejected children differed significantly with respect to internalizing, externalizing as well as with total behavioural problems. With respect to internalizing problem, a higher percentage of peer rejected children (23.7%) were observed in clinical category compared to the peer accepted children (5%). In borderline, 20 percent of the accepted and 10.5 percent of the rejected children were observed. In case of externalizing problem as well, a higher percentage of peer rejected children (26.3%) were observed in clinical category compared to peer accepted children (6.2%). Similarly for borderline, 19.7 per cent of the rejected and 11.2 per cent of the accepted children were observed. The same trend was observed for total behaviour problems where 22.4 per cent of peer rejected children and only 5 per cent of peer accepted children were in clinical category and with 18.4 per cent of rejected and 11.2 per cent of accepted children in borderline category.

The comparison of mean scores (peer accepted and peer rejected children of Dharwad) of internalizing, externalizing and total behaviour problems tested through t test (Table 1b) revealed that the peer rejected children scored significantly higher than the peer accepted children on internalizing, externalizing as well as on total behaviour problems. The mean of accepted children for internalizing problems was 5.72 while for rejected children it was 9.51. Similarly for externalizing

Table 1b. Comparison of mean scores of internalizing, externalizing and total behaviour problems by sociometric status among children of Dharwad

Behaviour problems	Sociometric status		't' test
	Accepted	Rejected	
	Mean scores	Mean scores	
Internalizing problem	5.72 (4.2)	9.51 (6.2)	3.56**
Externalizing problem	4.0 (4.7)	9.13 (7.5)	5.11**
Total behaviour problems	19.15 (17.0)	36.16 (22.9)	5.28**

^{**}p≤0.01 level of significance, *p≤0.05 level of significance.

Figures in the parenthesis indicate standard deviations

behaviour, the mean of rejected children (9.13) was higher than the mean of accepted children (4). For total behaviour problem as well, the mean of rejected children (36.16) was higher than accepted children (19.15).

Wokha children

Table 2a depicts the comparison of internalizing, externalizing and total behaviour problems by sociometric status of Wokha children. The chi square (χ^2) test revealed that there was a significant association with respect to total behaviour problems by the sociometric status of the children. It shows that the peer accepted and the peer rejected children differed significantly with the total behaviour problems. However for internalizing and externalizing behaviour, there was no significant association. As evident from Table 2a, for total behaviour problems 11.5 per cent of peer rejected children and only 3.8 per cent of peer accepted children were in clinical category. For borderline category, 30.8 per cent of rejected and 18.8 per cent of accepted children were observed. The chi square value of 9.56 was significant at 1 percent.

However, the comparison of mean scores (peer accepted and peer rejected children of Wokha) of internalizing, externalizing and total behaviour problems as analysed by the t test (Table 2b) was similar to Dharwad. The t test revealed that the peer rejected children of Wokha scored significantly higher than the peer accepted children on internalizing, externalizing as well as on total behaviour problems. For internalizing problem, the mean of rejected children (9.47) was higher than the mean of accepted children (7.38). With regard to externalizing behaviour as well, the mean of rejected children (7) was higher than accepted children (5.10). Similarly for total behaviour problems, the mean of rejected children (33.87) was higher than the mean of accepted children (23.82).

Table 2a. Association between internalizing, externalizing and total behaviour problems by sociometric status among children from Wokha

Sociometric	Normal	Borderline	Clinical	Total	χ²
status				N=158	,,
	Inte	ernalizing pro	blem		
Accepted	52	15	13	80	
	(65.0)	(18.8)	(16.2)	(100)	2.67ns
Rejected	41	18	19	78	
	(52.6)	(23.1)	(24.4)	(100)	
	Ext	ernalizing pro	blem		
Accepted	56	20	4	80	
	(70.0)	(25.0)	(5.0)	(100)	2.65ns
Rejected	54	15	9	78	
	(69.2)	(19.2)	(11.5)	(100)	
	Total	l behaviour pr	oblem		
Accepted	64	14	3	80	
	(80.0)	(18.8)	(3.8)	(100)	9.56**
Rejected	45	24	9	78	
	(57.7)	(30.8)	(11.5)	(100)	

^{**}p≤0.01 level of significance, ns- non significant.

Table 2b. Comparison of mean scores of internalizing, externalizing and total behaviour problems by sociometric status among children from Wokha

Behaviour problems	Sociometr	't' test	
	Accepted	Rejected	
	mean scores	mean scores	
Internalizing problem	7.38 (4.7)	9.47 (6.2)	2.38**
Externalizing problem	5.10(4.6)	7.0 (5.8)	2.28*
Total behaviour problems	23.82 (14.8)	33.87 (18.9)	3.77**

^{**}p≤0.01 level of significance, *p≤0.05 level of significance. Figures in the parenthesis indicate standard deviations

Peer relationships are an important social context for individual adaptive and maladaptive development (Rubin et al., 2006). Peer relationships are often considered a major source of emotional support that is associated with a sense of security and belongingness. Children who are rejected or isolated by peers may feel frustrated and distressed and develop negative attitudes and feelings about others and self. A number of studies have shown that peer relationships play a significant role in the development of psychological adjustment and problems such as depression (Fontaine et al., 2009). Several studies have also documented the link between peer rejection and externalizing behaviour problems (Ladd, 2006; Ellis and Zarbatany, 2007; Veronneau and Dishion, 2010). Similarly, studies have also shown that peer rejection is associated with heightened risk of internalizing problems in childhood including depressed mood and loneliness (Lopez and DuBois, 2005). Various research programs have also demonstrated that children who display aggressive and disruptive behaviors are likely to be rejected by peers and experience difficulties in establishing close dyadic relationships with others (Rubin et al., 2006).

Researchers have also found that in both urban and rural areas, the mean scores of internalizing and total behaviour problems were higher for rejected children than accepted ones (Pushpa *et al.*, 2002). Sturaro *et al.*, 2011 also showed that experiences of peer rejection added to the development of externalizing problems and children's externalizing problems subsequently predicted peer rejection. Similarly, Chen *et al.*, 2012 revealed that aggression negatively contributed in both direct and indirect manner to later peer relationships and positively contributed to depression in late childhood.

Conclusion

Children who were rejected by their peers had more behaviour problems than the accepted children. This depicts that peer relationship is very important for normal development and these need to be developed in a structured environment. Hence, children's relationship ought to be strengthened at an early age to prevent negative consequences. The findings indicates that peer relationships have a great influence on the behaviour of children at an early age and these peer relationships serve as a protective factor in the context of desirable behaviour of children. It is thus a necessity to provide an intervention for children who are at greater risks of behavioural disorders.

Figures in the parenthesis indicate percentages.

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