

Characteristics of Students without Reciprocal Friendship during School Work

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Children's relationships with peers emerge from about 3 years of age. During preschool years the friendship group becomes more structured. In the same period some children are at risk to become rejected by peers. Most essential in middle childhood is the desire to be included in peer-group activities (Lease, Musgrove, & Axelrod, 2002). During adolescence the peer networks become considerably more complex. Forces that are maintaining relations with peers have impact on social competence, but also, social adjustment gain from good quality relationships with peers. The wellbeing of classmates is affected by good networks; since it has been shown that classrooms without outliers indicate a lower risk of malaise (Östberg, 2003). Children with low acceptance by their peers have more limited opportunities to adapt socially, and poor peer relationships might also undermine academic progress (Parker, & Asher, 1987). The sociometric subgroups have been shown to predict adjustment to school in longitudinal studies (e.g. Wentzel, 2003).

Both repulsion and popularity emerge within peer groups (Cillessen, 2009). Traditionally, peer measures of acceptance/rejection have been performed: each child lists in order which peers he/she likes best and also which peers he/she dislikes. Either a nomination or a rating scale can be used. The procedure gives crude groups, e.g. popular, average, controversial and rejected children. Questions about behaviour or reputation have also been given to the students or the teacher (Parker, & Asher, 1987). In classrooms, popular or rejected groups have been shown to be stable over several years. Peer interaction conserves and exaggerates the cluster label (Zettergren, 2007). Students' status as either popular or rejected belongs to the extremes but includes an unexpected similarity. However, individual students within both extremes have differing self-concepts (Jackson & Bracken, 1998).

The question: Are low-accepted children at risk for serious adjustment problems in later life has been studied by many investigators. A critical review of the literature has been made by Parker and Asher (1987). They conclude that there is a "general support for the hypothesis that children with poor peer adjustment are at risk for later life difficulties". Low acceptance and aggressiveness may predict dropping out of school and later criminality. However, there is no simple cause and effect from being rejected to problematic behavior (Hay, Payne, & Chadwick, 2004).

There may be several different reasons when individuals are not popular but have low status and are not chosen as members of networks within classrooms (e.g. Adler, Kless & Adler, 1992). Heterogeneity has been reported both for peer-rejected boys (French, 1998; Cillessen et al., 1992) and for girls (French, 1990). There is a relation between lonely children's feelings, social dissatisfaction and their sociometric status. Investigations including a

combination of students' self-report measures and their sociometric choices of friends to work with are relatively rare (Asher, Hymel & Renshaw, 1984).

In the present explorative investigation a different method was used compared to the more traditional ones shortly described above. The report deals with lonely students who were not chosen as workmates in the classroom by their peers. Their attitudes to school, teacher and peers were compared between each lonely student (LS) and the classmates who were included in bilateral networks in the same class.

Attitudes are hidden until a response is asked for. In similar situations attitudes tend to show stable responses (Snow, Corno & Jackson III, 1996). When a personal identity is formed both attitudes and expectations towards the future life may be of great importance (Passow et al., 1976). Social status and physical appearance are of great importance to adolescents. In early adolescence more extensive involvement in social and sport activities and in extra curricular activities are common (Wigfield, Eccles & Pintrich, 1996). The definition of attitudes is related to individual affective senses of phenomena. Student achievement is not so classroom specific as individual student attitude (Andersson, Ryan & Shapiro, 1989).

The hypothesis was that the relationship between loneliness during school work and individual student's attitudes towards school, teacher and peers offers unique information.

Research question: Are lonely student's attitudes to school, teacher and peers different compared to students within networks during school work?

The aim was to visualize possible different categories among lonely students (LS) through their attitudes to school, teacher and peers.

Methods

Self reports on attitudes from 1540 students in 78 classes in grade 6 in Göteborg were used. As previously described (Holfve-Sabel, 2006) the students' responses to 40 questions with five alternatives was used in confirmatory factor analysis on individual (within-class level) and between classes. On within-class level seven attitude factors were found, describing students' Interest in School (IS), View of Teacher (VT), and Work Atmosphere (WA). These first three factors were labeled "school factors" while the following four; Relations with Classmates (RC), View of Peers (VP), Lack of Anxiety (LA) and View of Fuss (VF) were labeled "relational factors". Each student was also asked to write the name of the 3 peers he/she preferred to work with in the class room, in the order 1-3. A semi-symmetrised matrix was used for calculation in a Matlab program (Holfve-Sabel & Bengtsson, 2009), that is only reciprocal choices were included in the networks. Lonely students, which was not chosen by any member of the class were thus identified, and verified by calculation in a transposed data matrix. Each lonely student was then compared to the classmates within networks using one-sample t-test for each of the 7 attitude factors (SPSS 17.0). Statistical significance was set at $p < .05$. Different types of lonely students were detected by inspection of their level of significance compared to the classmates and their attitude profile.

Results

Twenty-one consecutive classes of the total 78 were explored. In 17 of them 1-4 lonely students (LS) were found. Totally 29 students, 16 boys and 13 girls, of 311 were classified as lonely (9%). In each class, between 2 and 7 independent networks with bilateral connections between the members were detected with very few examples of mixed networks (boys and girls). The seven factors were used to describe the attitudes towards school, teacher and classmates, i.e. IS, VT, WA, RC, VP, LA and VF.

Remarkably high attitude scores were found in 5 LS in almost all factors in Table 1. These LS highly appreciated school, teacher and peers. They may represent highly motivated and successful students. Very high attitude scores compared with class mean of those in network was denoted by +++ ($p < 0.001$), while $p < 0.01$ was denoted by ++ and $p < 0.05$ by +. A further 6 LS either had positive or non significant (NS) scores (Table 2). They were less positive in school factors (IS, VT, WA) but had their strongest appreciation among peer relational factors. They also demonstrated substantial harmony in school.

Table 1. “Lonely” individuals with very positive attitudes compared to mean of peers (n=5)

Individual	Sex	IS	VT	WA	RC	VP	LA	VF
5	B	+++	+	+++	ns	+++	++	+++
13	G	+++	+++	+++	+++	+++	+++	+++
8	B	+++	+++	+++	+++	+++	++	+++
15	B	+++	+++	+++	+++	+++	+++	+++
24	G	++	+++	+++	+++	+++	ns	+++

Table 2. “Lonely” individuals with positive or non significant attitudes compared to mean of peers (n=6)

Individual	Sex	IS	VT	WA	RC	VP	LA	VF
25	B	ns	++	++	ns	+	++	++
17	G	++	+	+	+	ns	+	ns
16	G	ns	++	++	++	ns	ns	+++
26	G	ns	ns	ns	+	+++	+++	ns
29	B	ns	ns	ns	++	++	ns	++
11	B	ns	ns	ns	++	ns	+	+++

Three individuals had attitudes similar to their classmates (Table 3). Why they had a weaker status among the boys was not clear.

Table 3. “Lonely” individuals with non significant attitudes compared to mean of peers (n=3)

Individual	Sex	IS	VT	WA	RC	VP	LA	VF
10	B	ns	+	ns	ns	ns	ns	ns
23	B	ns	ns	ns	ns	ns	ns	ns
31	B	ns	ns	ns	ns	ns	ns	ns

Five students had uneven profiles with a mixture between positive, non significant and negative results compared to their respective classmeans (Table 4). Very low attitude scores compared with classmean of those in network was denoted by --- (p<0.001), while p<0.01 was denoted by -- and p<0.05 by -.

All LS in Table 4 had one or two positive factors. Two appreciated their teacher but not their peers. Two demonstrated that their relations with classmates were positive. Four of five seemed very anxious. All these LS seemed to have a weak interest for school and a vulnerable situation.

Table 4. “Lonely” individuals with uneven profiles compared to mean of peers (n=5)

Individual	Sex	IS	VT	WA	RC	VP	LA	VF
7	B	+	ns	+	---	---	---	---
9	G	---	++	+	--	---	---	ns
19	G	ns	++	ns	---	---	---	--
4	B	---	---	---	++	ns	++	-
18	B	ns	--	ns	++	-	---	+++

Five students varied between negative and NS scores (Table 5). All represented some negative attitudes to at least one school factor. Their attitudes towards peers were indifferent or negative. Two evaluated the classroom situation as anxious. Three of five had no confidence for the teacher.

Table 5. “Lonely” individuals with negative or non significant attitudes compared to mean of peers (n=5)

Individual	Sex	IS	VT	WA	RC	VP	LA	VF
20	B	ns	---	ns	---	ns	ns	ns
22	B	---	ns	ns	ns	ns	---	ns
6	G	ns	---	---	ns	ns	ns	ns
30	G	ns	--	--	ns	ns	ns	ns
21	G	ns	ns	--	--	ns	---	--

Finally, (Table 6) 5 LS had generally very low scores, i.e. very negative attitudes. All these students seemed very critical to the overall situation. Their lowest scores were in peer

relational factors. It is possible that peers avoid them due to traits such as aggressiveness or depression

Table 6. “Lonely” individuals with very negative attitudes compared to mean of peers (n=5)

Individual	Sex	IS	VT	WA	RC	VP	LA	VF
12	B	--	--	--	--	---	--	---
14	B	ns	---	---	--	---	---	ns
2	G	---	ns	--	---	---	---	---
28	G	--	ns	---	---	---	-	---
3	B	ns	ns	--	---	---	---	---

Discussion and conclusion

This preliminary study was an attempt to investigate if lonely students (LS) may be categorised by their attitudes towards school, teacher and peers. The study was explorative in nature and represents about ¼ of the total material of 78 classes. The hypothesis was that the relationship between loneliness during school work and individual student’s attitudes towards school, teacher and peers offered unique information.

In most cases lonely student’s attitudes to school, teacher and peers differed compared to students within networks during school work. Very different profiles were found. At least three categories of LS could be visualized.

The first one (represented by Table 1 and 2) seemed satisfied both with school and peer relations. The attitudes of group 1 did not indicate that these LS suffered from loneliness or were at risk for future disorder. It may be remembered that interrelated constructs of being alone include both positive and negative feelings (Goossens & Beyers, 2002). For adolescents, like in this material, an intermediate amount of time being on your own has a positive effect on the individual’s emotional state (Larson, 1997). In the present investigation a student is defined as lonely if there was not a reciprocal nomination. Thus many of the “LS” may not feel isolated. They may have characteristics as shy or non-shy or have physical characteristics which are unknown to us. From other studies we also know that peer relations are affected by childrens’ relationship with adults, including teachers (Howes, Matheson & Hamilton, 1994). This study makes it possible to reflect upon the lonely students’ attitudes towards their teacher. Other possibilities are that family support (Dishion, Bullock & Granic, 2002) siblings, or outside school activities may even out any possible negative effects.

The second category comprised of both positive and negative student attitudes with individual uneven profiles (Table 4). Most seemed very anxious within the school situation. Their school interest was weak even if some appreciated their teacher. They seemed to have a vulnerable situation and would need further analysis and professional teacher support. A closer look on the whole material will be necessary in order to gain a deeper understanding of possible underlying patterns.

The third category comprised of either non-significant or very negative attitudes, especially in relational factors (Table 5 and 6). These LS were a core problem. The students in Table 6 were very critical to the overall school situation, and their lowest scores were in peer relational factors. It is possible that peers avoid them due to traits such as aggressiveness or depression or both. The LS in Table 5 each presents negative attitudes to 1 to 3 school factors; some have no confidence in the teacher and their attitudes to peers seem alarming. This category needs professional intervention and support to prevent further disorder or risk of school drop-out.

In this investigation a minority only had generally negative evaluations of their peers. However, rejected children are not deficient in social understanding in theory compared with popular or average children (Badenes, Estevan & Bacete, 2000). It is therefore possible that there may be an underestimation of this group. The most negative category can not be identified as aggressive in behaviour, but is certainly very disappointed towards school, teacher and peers. It is known that non-aggressive children may reject individual classmates with the effect the rejected child aggregates into increasingly aggressive peer groups (Stormshak et al., 1999). Two categories of children without friendships and in risk of disorder are those who bully or become bullied or even both (Rubin, Bukowski & Parker, 1998). These categories may well be represented within the material, but this can not be proved.

Even if only 30% of rejected children remains rejected over longer periods of time (Coie & Dodge, 1983; Newcomb & Bukowski, 1984), aggressive boys are at higher risk for being socially rejected over time (Cillesen et al., 1992).

In this small material there was a relatively even distribution between boys and girls.

In modern society with much focus on IT-technology and the importance of individual social status this investigation concentrates on a minority of students regarded as lonely during school work. When the individual attitudes are scrutinized it seems that among lonely students many are not at risk for antisocial behavior. However, the categories with mostly negative attitudes or uneven profiles need professional intervention and support.

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