

Peer reputation of adolescents: sociometric status differences

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Summary. Successful communication with peers, positive classroom acceptance influence psychosocial health of children, while social maladjustment in childhood has emerged as high risk predictor of later delinquency and conduct problems (dropping out of school, criminality, psychopathology). Though these issues have devoted increasing attention in recent years, but still there is a lack of studies analyzing peer relation of adolescents. The primary purposes of the present study were to examine sociometric status, peer reputation and peer relations of adolescents and reveal connections between these results. Data were obtained on 502 adolescents (mean age 13 ± 0.03) attending secondary schools of Kaunas city. The findings revealed peer reputation connections with status and sex groups.

Introduction

Though a number of studies had been pointed towards common health risk factors (smoking, increased blood pressure, overweight, low physical activity, etc.) that influence the health of children and adolescents, in recent years researchers have devoted increasing attention to such factors as aggression, somatic complaints, delinquent behavior (1), depressiveness (2), anxiety (3). Little research has examined how mental health of adolescents is influenced by their communication peculiarities. Sociometric status studies help to display these peculiarities as the past decades have seen a resurgence of interest in using this research method during childhood and adolescence. An increasing number of researchers (social psychologists, mental health professionals) studying sociometric status try to analyze peer relationships. The interest of sociometric status research is based on an assumption that communication with peers, first of all close friends, is essential in the lives of pupils. Successful communication with peers, positive classroom acceptance influence psychosocial health of children and reduce the risk of mental illnesses; disturbances in peer relationships are one of the best predictors of psychiatric problems. According to research results, 11–15 years old adolescents, who had successful socialization in their classroom community, have better health than peers whose socialization was not so successful, and that feeling of loneliness correlates with other indicators of health such as using medicine (4). Also social processes in so called “classroom society” have strong influence on

interaction between social integration and physical health. Five different sociometric status categories exist in a classroom (group): negative (neglected and rejected), positive (popular, controversial) and neutral (average). Children of high-status are the most popular in the group. Controversial status individuals tend to have features common both for popular and rejected status categories – very high scores of sociability and aggressiveness. In contrast, on the other edge of the scale – rejected and neglected pupil in the group. Rejected children lack friends and are actively disliked by peers; neglected children also lack friends but are not actively disliked by their peers and usually have somebody who likes them. This shows that social climate of the classroom can be risk a factor for mental/ psychosocial and physical health (5–7).

According to data of other researches, rejected and isolated schoolchildren in comparison with more popular peers, appear in the pro-social interactions that stimulate interrelations more rarely, they involve into destructive relations more often (8), use alcohol, become the object of the peers’ aggression (9). Higher social stress is also typical to them; they are lonely more often (10). Such social maladjustment in the childhood lets forecast later problems of maladjustment and serious behavioral perturbations (dropping out of school, criminality, psychopathological disturbances) (11).

The presented propositions show the importance of such kind of research. The overwhelming emphasis of the research analyzing interrelations has been based on the sociometric status of pre-school and young

school age children while more attention has been paid to analyzing peer relationships among boys. Not much is made to analyze the correlations of sociometric status and reputation among peers of adolescents, revealing sex differences.

The purpose of this research is to establish sociometric status of the adolescents, their reputation among peers and to reveal the connection between these data.

Material and methods

The contingent of the examined consisted of 502 schoolchildren of seventh grade (244 boys and 258 girls), chosen from 11 secondary schools of Kaunas, using a random clustering method for independent size forming. Size capacity, based on the data of a pilot study ($n=100$), was calculated in a way that the difference between the group chosen for the research and the common population average would not be more than 3%, at confidence level of 95%. The mean age of the examined was 13.0 ± 0.03 years. It was chosen because according to the psychopathology this adolescent period is approached as one of the critical periods in an individual's life (12).

The method of questionnaire survey was used, based on the assumption that peers, not adults, are the best at evaluating the adolescent communication (13), because behavior assessed by them remains stable (14). Therefore, the main information collected during the research was obtained from the examined adolescents.

In this study of scientific observation of declarative character the instantaneous research method was used. The questionnaires were encoded for the purpose of securing the juridical privacy of the research findings. A researcher participated when the surveys were carried out using all the described research methods (in case the problems would emerge, the examined could get a direct answer). The examined got as much time as the needed to answer the questions. One lesson was enough for the survey. The purpose of the research and its anonymity were introduced to the examined pupils. They were also explained how to fill in the questionnaire.

For the purpose of evaluating the sociometric status of adolescents a sociometric measurement procedure was used (15). The social preference rate was estimated after the scores of the negative choice were subtracted from the standardized scores of positive choice. The sum of those scores displayed the social impact variable. The popular group consisted of all children who received a social preference score

greater than 1.0, a Liked Most standardized score of greater than 0, and a Liked Least standardized score of less than 0. The rejected group consisted of all of those children who received a social preference score of less than -1.0, a Liked Least standardized score of greater than 0, and a Liked Most standardized score of less than 0. The neglected group consisted of all children who received a social impact score of less than -1.0 and Liked Most and Liked Least standardized scores of less than 0. The controversial group consisted of those children who received a social impact score of greater than 1.0 and who received Liked Most and Liked Least standardized scores that were each greater than 0. The rest of the adolescents belonged to the average group.

For the purpose of evaluating the peer reputation Revised Class Play (RCP) (16) was used which was approved in Lithuania (17). It helped to find out how adolescents evaluate peers' conduct. RCP consists of 30 roles: 15 positive and 15 negative. Children were instructed to select only one classmate per role, although the same classmate could be selected for more than one role. Self-selections were not allowed. Evaluating the peer reputation some factors that characterized it were displayed. This methodology measured one positive (Sociability-Leadership) and two negative (Aggressive-Disruptive, Sensitive-Isolated) peer reputation factors. The number of selected scores evaluated their expression. Sociometric status and peer reputation methodology was one of the main strategies for assessing peer communication quality, so the comparison of the interfaces among results achieved while practicing this methodic could help to better display peer communication characteristics.

A special social isolation/integration questionnaire (4) was used to analyze peer relations. It described the main peculiarities of adolescents' social life. The main questions given were about how easy it is for an adolescent to find friends, is it hard to discuss their own problems with peers, etc.

Data analysis was made using SPSS package for Windows. Descriptive statistics was used for the ratings of single characteristics. The arithmetical means and their standard errors were calculated. Statistical significance of the difference was rated according to the tests of Student (t) and Fisher (F) and the criterion of chi-square (χ^2).

Results

The findings of the sociometric test showed that the greatest part of the examined adolescents belonged to the average sociometric status. A smaller part of

them (15%) was evaluated negatively (the rejected – 11.8%, the neglected – 3.2%), 8.8% - positively (the popular – 6.8%, the controversial – 2%). While comparing the distribution of boys and girls in the groups of sociometric status the tendency was noticed that in the group of popular status there were more girls than boys (58.8% and 41.2%, respectively) and boys dominated in the group of the neglected (31.3% and 68.8%, respectively). The differences in percentage of boys and girls in other social status groups were small.

While analyzing the sociometric status interface with peer reputation using characterizing variables, at first it was tried to determine the proportion of positive (Sociability-Leadership) peer reputation factor with the groups of different status. The results of the research showed the significant differences of reputation variables among the different status groups (Table 1). The controversial adolescents of the class got the highest peer evaluation according to Sociability-Leadership factor. This result differs from the adolescents who belong to the group of the popular ($p<0.01$). The Sociability-Leadership factor of the neglected adolescents group got the lowest score. This evaluation had a significant difference from the ones that were achieved by the popular ($p<0.001$) and neglected ($p<0.001$) adolescents. The data given in the table also display that higher Sociability-Leadership scores were given to the neglected adolescents, comparing them with the peers of average sociometric status, though this difference is insignificant.

While analyzing the expression of the factor (Aggressive-Disruptive) which characterizes negative peer reputation in different groups of sociometric status it was proved that the rejected adolescents got the highest estimates of Aggressive-Disruptive, that significantly differed from the ones of the popular adoles-

cents ($p<0.001$). According to peers the conduct of the neglected adolescents is pro-social and they are not aggressive. Their Aggressive-Disruptive factor is lower than the one of the rejected peers ($p<0.001$).

The findings, showed in the first table, prove the connection between the sociometric status and the Sensitive-Isolated factor that reflects negative peer reputation. The Sensitive-Isolated scores of the popular group adolescents are lower than the scores of their peers who have controversial ($p<0.05$) and rejected ($p<0.001$) status. Interestingly, that this factor is not expressed so much among the neglected adolescents as it is among the rejected ones ($p<0.001$). In addition, the neglected adolescents had similar evaluation to the one of the adolescents with average sociometric status.

The findings of peer reputation research were analyzed according to the sex groups' aspect (Table 2). The data in the second table prove that positive peer reputation is more typical of the girls than boys ($p<0.05$). A statistically significant difference was found between the Aggressive-Disruptive criterion and sex groups. This negative peer reputation factor was more expressed among boys ($p<0.05$).

During the research a question how adolescents evaluate their relations with peers was given, according to assumption (13), that their peers reflect those relations most objectively (Table 3). Analyzing data in the third table one can see that the controversial and popular adolescents assess their relations with friends in a positive way, which is not so typical of the rejected and neglected adolescents. The opinion of the neglected and the average adolescents had a significant difference ($p<0.05$).

The data of the fourth table show the number of friends that adolescents from different status groups

Table 1. Means and standard error of mean estimates of peer reputation characterizing factors in sociometric status groups (scores)

Sociometric status group	Factors of peer reputation		
	sociability – leadership	aggressive – disruptive	sensitive – isolated
Popular (n=6)	41.50±17.58	11.50±4.26	2.67±0.95
Rejected (n=20)	15.90±2.52	20.55±5.23	22.10±4.97
Neglected (n=16)	33.31±4.39	6.75±1.30	9.44±2.48
Contraversial (n=7)	75.14±10.60	10.86±2.26	4.57±1.49
Average (n=113)	26.57±2.13	8.95±1.16	6.29±1.10
	F=10.1; d.f.=4; p<0.001	F=3.5; d.f.=4; p<0.05	F=6.9; d.f.=4; p<0.001

Table 2. Means and standard error of mean estimates of peer reputation-characterizing factors in sex groups (scores)

Lyttis	Factors of peer reputation		
	sociability – leadership	aggressive – disruptive	sensitive – isolated
Girls	32.10±2.78	7.84±0.96	9.23±1.51
Boys	24.26±2.61	13.37±2.08	7.30±1.57
	p<0.05	p<0.05	p>0.05

Table 3. Percentages of self valued relationship with peers in sociometric status groups

Versions of relationship assessment	Sociometric status groups (%)				
	popular	rejected	neglected	controversial	average
Satisfied a lot. satisfied	97.1	73.2	62.5	100.0	84.8
Average of satisfaction	2.9	23.2	25.0	0	10.6
Not satisfied and not satisfied at all	0	3.6	12.5	0	3.4

$\chi^2=20.7$; d.f.=8; $p<0.01$.

Table 4. Percentages of adolescents' opinion about friends in classroom in different sociometric status groups

Have friends in classroom	Sociometric status groups (%)				
	popular	rejected	neglected	controversial	average
Always	97.1	72.9	81.3	100.0	90.6
Sometimes	0	18.6	18.8	0	7.1
Never	2.9	8.5	0	0	2.4

$\chi^2=23.8$; d.f.=8; $p<0.01$.

have. According to findings adolescents of all groups have friends in their classrooms but after comparing those findings it is obvious that controversial, popular and average adolescents have more friends than their peers from other groups. The rejected adolescents pointed out that they had no friends in their classroom more often than others. Statistically significant differences according to the sex groups were not found.

Discussion

The research results proved that 15% of the examined belong to the groups of the rejected and neglected adolescents. According to these findings the adolescents of negative sociometric status face peer relation problems that can influence various emotional

and social disadaptation features (10). Based on the statements of other authors (18), a lower social integration level is characteristic of the adolescents from the categories of lower sociometric status – the neglected and rejected. The positive peer relation helps to negotiate easier various critical situations (19). This increases the importance of peer relation as the main component of social competence (20).

The estimated sociometric status connection with peer reputation variables shows that the positive Sociability-Leadership factor could be associated with better adaptation to life being older (4). It is presumptive that the adolescents who have peer acceptance and positive reputation will adapt easier to life in the future. The small popularity among peers can cause

depression in older age (21). On the other hand, the stability of the connection between Sociability-Leadership and positive status decreases with time (17). In addition, the popular adolescents had higher Aggressive-Disruptive rates. This let us think that the popular status can be gained not only with the help of pro-social conduct. For example, it is pointed out that the pro-social conduct in any age groups is the main factor of positive status expression, but in adolescent age that expression is more complicated (22).

There are a few reasons that influence the fact that girls have higher popular sociometric status and peer reputation factors than boys. One of them – the socialization of girls and boys in early childhood proceeds in different conditions. The children from 4 to 6 years of age have tendency to have friends from the same sex group as the social environment and peer culture differ completely. Girls play the games requiring verbal involvement that are supervised by the adults. Boys like more active games without the disturbance of the adults and this does not give them many possibilities to get references of proper conduct norms and rules. Girls more have tendency to inter-cooperation and communication and boys are tend to hierarchical inter-contention (23). Another reason could be that in the adolescent age girls spend more time with their friends than boys and they do not stay alone so often as boys do (24). The social satisfaction and proximity, the emotionality of relations (12) are more important to them, they tend to be more emphatic (25). The communication differences between sex groups that show up in the period of childhood and adolescent age remain in the older age too. Being adults and looking for someone to share their problems or pain, both men and women usually choose women (26). These features are very important while communicating. Besides, women are less opponent than men; they are good at building emotionally close relations (27).

The research results confirm the findings of other studies which analyzing sociometric status peculiarities according to age groups displayed the manifestations of aggressive conduct among boys more often (22). The scientists who explore the aggression point out that men are more aggressive than women (28). There is a presumption that the stronger men's aggressiveness is related to their physical aggression. It is also noted that women can be aggressive but their aggression is different (for example, psychological) (28). Therefore, discussing the research results it should be pointed out that boys have stronger tendency to physical aggression and destructive relations than girls.

One of the factors that characterize adolescent social integration is his friends. The research findings confirm the presumption that the rejected adolescents do not have as many friends as their peers from other sociometric status groups. The neglected adolescents have friends but a part of them (12.5%) is not satisfied with the relations with those friends. These findings are related to the characteristics of neglected group according to literature stating that the number of this group feel passive peer ignorance (22) and as one can guess this fact does not satisfy them. The researches carried out by psychologists display that adolescents do not have friends in classroom because of inappropriate conduct expressions such as disputing, aggression passive conduct and other immature communication forms (29). Negative evaluation, inspired by the children's disability to memorize information of important things that adolescents get from teachers can be one of the reasons why adolescents do not have friends. The reasons pointed out may have an influence on losing one's self-confidence and this increases possibility to the emergence of psychosocial health problems.

The discussed statements show that the adolescents who have difficulties while communicating with their peers need social support, which could increase the possibility of overcoming various stresses. The adolescents who face socialization problems experience common adjustment syndrome more often, because of which they get ill with contagions and malignant diseases (4). Therefore, the quality of social interface with peers is one of the main risk factors of adolescent psychosocial health. Obviously, at the range of health consolidation it is important to concentrate attention to the adolescents who have communication difficulties. The teacher, the social pedagogue and health educator could help adolescents to entrench in the social class system. According to literature if a teacher confirms that a pupil is competent in school's activities, it may mean that coherence of individual and surrounding environment with its psychosocial results is intensified (4). This proves the importance of analyzing the social environment of adolescents.

Conclusions

1. Among the examined pupils the adolescents of average sociometric status dominate (76.3%), a smaller number of them (15%) was evaluated negatively (the rejected – 11.8%, the neglected – 3.2%), 8.8% – positively (the popular – 6.8%, the controversial – 2%). The tendency was noticed that in the group

of popular status there were more girls than boys and boys dominated in the group of neglected.

2. While comparing the sociometric status adolescents it was determined that peers evaluated the controversial and the popular adolescents positively according to the aspect of Sociability-Leadership and negatively, according to the aspect of Aggressive-Disruptive and Sensitive-Isolated.

3. Positive peer reputation is more characteristic of adolescent girls than boys and Aggressive-Disruptive scores were higher among boys.

The rejected and the neglected adolescents evaluated their relations with the peers in a positive way more rarely and stated that they had no friends at school more often than the controversial and popular adolescents.

Paauglių reputacijos tarp bendraamžių raiška sociometrinio statuso grupėse

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Raktažodžiai: sociometrinis statusas, reputacija tarp bendraamžių, draugų turėjimas.

Santrauka. Sėkmingas bendravimas su bendraamžiais, teigiamas jų vertinimas ir priėmimas dažniausiai lemia vaikų psichosocialinę sveikatą, o socialinis vaikų neprisitaikymas įgalina prognozuoti vėlesnes prisitaikymo bei elgesio problemas (mokyklos nelankymą, nusikalstamumą, psichopatologinius sutrikimus). Pastaraisiais metais šiems klausimams tyrėjai skiria vis daugiau dėmesio, tačiau mokslinių tyrinėjimų, kur būtų analizuojami paauglių tarpusavio santykiai, dar nedaug. Atliekant šį tyrimą, buvo siekta nustatyti paauglių sociometrinį statusą, jų reputaciją tarp bendraamžių bei įrodyti šių duomenų sąsajas. Tyrime dalyvavo 502 Kauno miesto bendrojo lavinimo mokyklų 13±0,03 metų moksleiviai. Straipsnyje pateikiami duomenys atskleidžia paauglių socialinės reputacijos tarp bendraamžių ypatybes skirtingo sociometrinio statuso bei lyties grupėse.

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