THE QUALITY OF PEER RELATIONS IN A SCHOOL ENVIRONMENT: FROM INDIFFERENCE TO MUTUAL SUPPORT

Agnieszka Ilendo-Milewska
Affiliation with Private University of Pedagogy, Faculty of Psychology Bialystok, Poland
ilendoa@wp.pl

Joanna Nawrocka
Affiliation with Private University of Pedagogy, Faculty of Psychology Bialystok, Poland
joan.nawrocka@wp.pl

Abstract

The quality of peer relationships is one of the traditional issues of social psychology. Extensive knowledge of this area enables us to deeper the understanding of different types of conflicts among peers, but does not allow their effective prevention. This research sought to investigate the students' perception of peer relation and estimate behavioral tendency related to the psychological theory. The article is based on the humanistic conception of students' support as well as the Stereotype Content Model (SCM), the BIAS Map (Fiske et al., 2002; 2007) and the Integrated Threat Theory (Stephan, 2002). To measure the aspects of the quality of peer relations, three questionnaire were used: the Semantic Differential Technique 'Typical Peer' (A. Ilendo-Milewska, 2007), the Data Sheet to evaluate the behavioral tendency and to recognize the emotion (A. Ilendo-Milewska, 2013), and the Scale of Social Support by Roman Cieślak (1995) to measure the mutual support in students' perception. The results present two main themes in the field of the quality of peer relation: (1) the students in the 1st grade experienced unpleasant emotions towards a typical peer and they perceived 'a typical peer' as less competent than students in the 3rd grade, (2) in the area of currently received support, the group of 1st grade students significantly more often declares that a typical peer did not show the understanding for
the school situation. The results help understand that the intervention programs should be implemented in order to shape the deeper level of peer relation in the school environment.

Keywords
School, School Environment, Peer Relation, Emotion, Conventional and Dysfunctional Behavior

1. Introduction

The subject of peer relations is one of the traditional topics of social psychology. Broad knowledge of that field enables us to understand better and provides us with more efficient solution to resolve all sorts of conflicts and tensions among peers. It also helps to prevent isolation and rejection of children, although, it does not enable us to effectively prevent hence requires further systematic research, analysis, honest diagnosis of the field of quality of peer relations performed at every stage of child development in all types of schools. Based on the subject literature a premise was formulated that the peer relations constitute a background to an adolescent’s development in all their aspects, that they are not the goal of the young people growth but provide environment for a proper development (Poleszak, 2004). Establishing and upholding satisfactory peer relation is crucial for a proper growth of students. These include joining a peer group with a socially valid lifestyle, peer support and control, socially acceptable peer hobbies or positive peer pressure (Gaś, 2004).

The scientific problem of this paper, related to the peer-relation qualities as well as behavioral tendencies towards a typical peer, requires intergroup risk theory reference. The way we perceive social groups is described by the Stereotype Content Model SCM as well as BIAS Map model (Behaviors from Intergroup Affect and Stereotypes Map) (Fiske and others, 2002) provided that the given individual/group is placed onto two-dimensional space: competence and good will.

Based on theoretical consideration as well as on a need of a deep recognition of peer relation quality in the school environment there was created a cognitive goal of this paper. The goal is to recognize and analysis of the peer relation quality. The solid diagnosis of these should be of help to teachers, school management as well as to parents in preventing of spreading risky behavior in a group.

2. Theoretical Background

Models that are of interest to us relate to typical terminology in the area of school environment and peer relations such as: school environment, peer relations, emotions, dysfunctional behavior. School environment constitutes all of the factors, institutional, personal and didactical that are in school. The existence and quality of relation of a student with important
people, both teachers and students are an indicator of a better evaluation of how the student functions in a school environment (Gryniuk, Tuszyńska-Bogucka, 2004). The peer relations do not constitute the goal of a teenager development but create condition for a proper growth in all the areas: psychological, physical, social and spiritual. In some of the areas they are of crucial importance (Poleszak, 2004). Emotions are the short, complex adaptive reactions (consisting of a number of components – physiological, cognitive, subjective, expressive, motivational and triggering a great many processes) to a given situation and events (Frijda, 1986; Lazarus, 1991; Niedenthal et al., 2006).

Dysfunctional behaviors are those who are against social expectations, norms and standards for sex and age and they endanger health and they are associated with difficulties in assuming social roles. Psychologist (Jessor, 1977, 1992; Lindsay, 1983; Gaś, 2004) suggest to consider them as an element of a teenager development that plays a crucial role in becoming an adult.

Talking of theoretical framework of the peer relations should be commenced with focus on development norms and patterns in adolescence, the key period in the growth of personality as well as in realizing life goals. At this stage occurs a transition from an external obligations expressed in the forms of rules of behavior and instructions into internal obligations i.e. a system of needs moral principles, motives perceived by an individual as an internal necessity to behave in a certain way (Jessor, 1977; Hefnawi, 2017). An important aspect of the adolescence period is decreasing dependability on family expressed, among others, in the area of interpersonal relations with peers. It should also be said that in the period of adolescence a person starts to discover a rich world of emotions and thoughts as well as realizing one’s independence and ingenuity. Young people adopt then all sorts of convictions, attitudes, opinions, language or dress code from a surrounding society. The peer group has a special role to play in shaping the identity written about by E.H. Erikson (Mesarosova, 2017). The peer group sets standards of behavior, provides safety and creates an opportunity to develop social competences as well as provides an environment to accept examples and follow them (Harwas-Napierala, Trempała, 2005, p. 183). In the adolescence period a need to be recognized and accepted comes into prominence more than ever before. Being accepted by the peer group provides a social status and popularity of a big group that in turn gives a sense of belonging (Brown, Lohr, 1987) and formed friendships that provide a sense of safety, respect, sympathy and recognition have a direct impact on reducing the sense of loneliness (Bukowski, Hoza, Boivin, 1993).

In such a way, adolescence becomes the time when the friendships are formed and one becomes a member of a peer group. This kind of social connection provides young people with
important psychological benefits, such as sense of trust, acceptance and friendship (Turner, Helms, 1999, p. 362). Young people undertake actions to form closer acquaintances, built small social groups and when it comes to a conflict and threat situation various reactions are explained by an *Intergroup Threat Theory* (Stephan, 2002) which says that tendencies of a human behavior should be analysed first of all as a cognitive reaction, then emotional one and then behavioral.

Various factors associated with a human reaction to a threat. Cognitive reactions to a threat by other people belonging to another group could influence the shift in perceiving perception of the other group as a stereotype change, intolerance or hatered (Shamir, Sagiv-Schifter, 2006), changes in perception of the other group behavior (Costarelli, 2005); perception of homogeneity of the other group (Rothberber, 1997) and increased probability of perceiving the danger associated with unpleasant emotions i.e. anger towards others (Maner et al., 2005). For instance, existing threat could increase a risk of attribution error (Pettigrew, 1979) when inappropriate other group actions (and appropriate one’s own group actions) are explained in categories of their members features, while the opposite situation is associated with a situation.

Emotional reactions to a threat will probably be unpleasant ones: fear, anxiety, anger and indignation (Davis, Stephan, 2006), contempt, disgust (Mackie, Devos & Smith, 2000) and anger, hatred, humiliation, fear, helplessness, despair and indignation.

Behavioral reactions in response to a number of threats manifest in withdrawal, submission and negotiation in an aggressive situation (direct or indirect one), lying, cheating, stealing, revenge and other forms of conflict. Evaluation of responses to a threat should be recognized by the fact whether the threat is considered aimed at a group or at individual members of a given group. In other words they can be considered on both individual and group level. When the threats are directed at particular group members they cause emotions concerning with self-care (i.e. personal safety, positive self-esteem) such as fear and sensitivity, vulnerability to harm. When, on the other hand, the threats are directed at a group as a whole they invoke emotions associated with the wellbeing of the group (its resources or reputation) such as anger, remorse or collective sense of guilt. In both cases the purposes and behaviors could vary. They mostly depend on the evaluation of individual/or collective potential to react to a situation (Stephen, Renfro, 2002). People, then, react to threats in various ways. Their cognitive reactions will probably hinder their logical thinking and their emotional reactions, which can be unpleasant could influence their behavioral reactions to existing danger. For instance, fear lead often to escape when we are alone and feel weak but it can, as well, lead to an attack if we are in a group or we can count on the strength of the group. So the cohesion of the group, a degree of
identification with it as well as individual dispositions can condition our reaction to a threat from others.

There is another assumption in theory of intergroup threat that says that among general images that can be derived from various configuration of intergroup relation evaluation the five of them are recognized as particularly important in international affairs. They were defined as an image of 'enemy', an image of 'ally', an image of 'barbarian', dependent (colonist), 'imperialist' (Hermann, Fischerkeller, 1995).

This model was introduced to theoretical study associated with the quality of relation between students in middle school due to a possibility of evaluation of behavioral tendencies and/or reactions to a typical peer as well as identification of emotions ascribed to a group of students on different class level (class I and III). Taking into consideration the above theoretical assumption a creation of a research program aimed to recognize emotions/feelings experienced in relation to a typical peer and to identify behavioral tendencies toward one. In the course of further considerations it will be attempted to present how the group of students of classes I and III perceives the image of a group according to this model.

Similar aspects of evaluation of intergroup relations (i.e. status and group aims) are pointed by Stereotype Content Model and BIAS Map model (Behaviors from Intergroup Affect and Stereotypes Map) (Fiske, Cuddy, Glick & Xu, 2002) which is a further development of that model. Both assume an existence of two dimensions, by which the individuals/groups are perceived: competency (i.e. independent, able, self-confident, talented, features associated with abilities and skills) and generosity (i.e. amiable, reliable, honest, friendly, features associated with motivation and intentions). Identified, after a long research, (Rosenbert, Nelson & Vivekananthan, 1968) and labeled by various terms (i.e. value and dynamism: Osgood, 1962) social positivity/negativity or intellectual positivity/negativity (Rosenberg, Sedlack, 1972), self-advantage and advantage for others (Peeters, 1972) morality and competence (Wojciszke, 1994), efficacy and social desire (Dubois, Beauvois, 2008) etc. The special no. of European Journal of Social Psychology published in December 2008 ed. By Abele, Cuddy, Judd and Yzerbyt presents the most recent research related to the two dimensions of social perception which are vital to both evaluation and anticipation of our relations with others.

Placing the group in this two-dimensional space determines perception of social structure of relation between groups, especially the status and competence (Fiske, Cuddy, Glick & Xu, 2002). Why the two dimensions? Deeply rooted in this wide research stereotype content model (SCM) postulates that perception of a group/individual status leads to their perception through a stereotype of competence while perceived lack of competence determines perception of an
individual/group in 'generous' categories. S. Fiske also postulates a hypothesis that individuals/group other than ours will be perceived as competent if they are seen as strong and having high status or incompetent when seen as helpless and having low status and that specific emotions between the groups: contempt, envy, remorse or pride will accompany each combination in evaluation of competence of 'generosity' (Fiske, Cudy & Glick, 2002).

The above assumptions led to formulating four categories of a group and corresponding emotional attitudes. To individuals/groups having high status i.e. highly set in the area of competence correspond two types of emotional attitude depending on their generosity evaluation:

- Individuals/groups that are competent and evaluated as generous (usually close to an affiliation group or perceived as its ally) evoke recognition, admiration or pride;
- Individuals/groups that are competent but evaluated as non-generous (perceived as competition) evoke envy and ambivalent emotions (their high competence evokes admiration but at the same time because of the fear of competition evoke envy).

Individuals/groups having low status, placed low in the competence dimension have also two types of attitude in relation to the evaluation of their generosity:

- Individuals/groups with a little competence but perceived as generous (non-competitive) evoke paternalistic attitude so ambivalent as well because on one hand it is caused by affection on the other by pity;
- Individuals/groups with a little competence but perceived as not very generous evoke contempt and, at times, even repulsion or anger.

The BIAS Map model (Cuddy, Fiske & Glick, 2007) associates the generosity dimension with active behaviors (both with active help as well as with active harm) and the competence dimension with 'passive' ones (passive help and passive harm). The four type of behaviors in relation to other groups resulting from it are as follows:

- Active help (engagement in acts of open support for a group or its protection),
- Active harm (engagement in an open hostility or acts of harm),
- Passive help (declared willingness for cooperation, establishing relations),
- Passive harm (declared willingness for rejection, humiliation of the group).

As the results of some research, concerning perception of groups with low status and competence, show (Fiske, Cuddy, Glick & Su, 2002) evaluation of their amiability and emotional attitude depend mostly on how their ability to manage with difficulties and reason of having ones. Contempt is often directed at groups that are believed to have the difficulties due to their own actions or/and groups that are believed to be able to overcome them but not trying hard
enough. Pity is, however, shown toward groups perceived that are having problems not resulting from their actions and/or not having the ability to overcome them. The former are seen as not requiring any help or even not deserving one the later to the contrary.

Using this model for the theoretical consideration related to peer relation quality it is worth stressing that dimensions presented in this model are vital for both evaluation as well as for anticipation our relation with others. They will allow to determine if the picture of peer relation remains in the dimension of amiability or competence thus whether it is related to active behaviors – both with helping and hurting or with passive behavior undertaken by peers. It is of vital importance to know whether we are dealing with a person or a group that has friendly or antagonistic attitude and whether a person or a group is able to help us or to hurt us. It could prove crucial in peer relations and in polish literature, so far, we have not found research based on these models.

3. Research Issue

The problem stated in this paper is formulated in a form of a question: What is the quality of peer relations among middle school students? The problem formulated in such terms requires to consider the qualities of peer relations in the dimensions: the image of a typical peer among students, emotions associated with such, behaviors associated and the type of support received from a peer or need for support as well as looking for such support.

Attempting to recognize the opinion of middle school student about their image of a typical peer, declared emotions toward a typical peer, the average value of declared behaviors/reactions toward a typical peer and an average evaluation of social support given by a typical peer a zero hypothesis was formulated: I assume that the average value of opinion expressed about a typical peer among the group of students from classes I and classes III does not differ. The alternate hypothesis is contrary to the zero hypothesis.

4. Methodology

The research was conducted in March and April of 2012 among 120 randomly chosen students of the Public Middle School in Białystok. The selection of a trial group was level oriented where the levels were classes: three first classes of students starting their education in middle school (13 years old) and three third classes completing their education (16 years old).

The students filled, created by the autors, semantic differential 'Typical peer' and 'The Scale of Social Support SWS 8 by Roman Cieślak'. The students also received research form containing the list of experienced emotions associated with a typical peer (in accordance with
Stereotype Content Model SCM and BIAS Map Model). The form also contained a list of different possible reactions towards a typical peer (according to Theory of intergroup threat). The schematic of methodological aids contains the following elements.

**Table 1: Methodological Aids**

| Independent variables | Dependent variables |
|-----------------------|---------------------|
| **1. The Image of a typical peer**  
*Research tool:* Semantic Differential ‘Typical peer’  
*Theory:* Counselling Theory by L. M. Brammer (1984) adapted by Zb. B. Gaś (2004) | Perception of middle school students in the area of students’ declaration describing from 'the lowest level' to 'very highest level' |
| **2. Emotions experienced by a typical peer**  
*Research tool:* List of experienced emotions associated with a typical peer  
*Theory:* Stereotype Content Model and BIAS Map (Fiske, 2002) | |
| **3. Declared behaviors/reactions toward a typical peer**  
*Research tool:* List of different possible reactions towards a typical peer  
*Theory:* Intergroup Threat Theory (Stephan, 2002)  
Theory of Intergroup Threat (Hermann, Fischerkeller, 1995) | |
| **4. A type of support**  
*Research tool:* 'The Scale of Social Support SWS 8 by Roman Cieślak'  
*Theory:* Erik Erikson's Theory of Psychosocial Development (1993) | |

Source: Own research

The statistical analysis was done using a T-Student test for two independent groups. The relevance level was determined on the 0,05 level. The analysis was done using the SPSS Statistics 17.0 software. The calculations done with a T-Student test require presenting the average data and standard deviations, latitude degree and validity.

**5. Analysis**

The analysis of our research will be based on selected data, which will be used to describe quality of peer relations. We commence our considerations with presenting data gathered using semantic differential filled by students. Giving their answers their task was to mark on a 5-point scale (from 5 – very to 1 – little) how they perceive a typical peer.

Data from table no. 2 concerning a typical peer in perception of middle school students show that 50.0 % of young people declare that a typical peer is very sociable, moderately: competent (35.8%), understands me (38.3%), interested in me (28.3%) and conscientious (33.3%). A typical peer is also indifferent (31.6% answers “not at all” and 25.8% answers “almost none” not-indifferent).

Comparing the answers of students of particular classes in the dimension sociable there can be seen a tendency pointing that the students of class I perceive a typical peer as average sociable (43.3%) when in older classes a typical peer is very sociable (in class III 65.0%). In the
category sociable there are important differences between the group of class I and the group of class III (t = -3.069; p<0.05) showing that the group of class III more often declares that a typical peer is sociable.

In the category competent students of class I declare that a typical peer is neither competent nor non-competent (this answer “neither nor” declare 40.0% of students), while students of class III declare that a typical peer is of average competence (38.3% among students of class III).

Tendencies in the category conscientious and interested in me seem to be similar. Students of class I declare that a typical peer is neither conscientious nor non-conscientious (35.0%); similarly neither is interested in me nor not interested in me (35.0%). The students of class III, however, declare that a typical peer is average competent and interested in me.

Table 2: The image of a typical peer

| Typical peer       | Answers | I class students | II class students | Total | Comparisons between groups |
|--------------------|---------|------------------|-------------------|-------|---------------------------|
|                    |         | N=60   | %     | N=60   | %     | N=120 | %     | t    | df  | p.i. |
| Sociable           | very    | 21     | 35.0 | 39     | 65.0 | 60    | 50.0 | -    | -    | -    |
|                    | average | 26     | 43.3 | 15     | 25.0 | 41    | 34.16| -    | -    | -    |
|                    | Neither nor | 5     | 8.3  | 3     | 5.0  | 8     | 6.66 | -    | -    | -    |
|                    | Almost non | 6     | 10.0 | 3     | 5.0  | 9     | 7.5  | -    | -    | -    |
|                    | little   | 2      | 3.3  | 0     | 0    | 2     | 1.66 | -    | -    | -    |
| Average             |         | 3.968  | 4.500 | -      | -    | -     | -    | -0.649| 118  | 0.003 |
| Standard deviation  |         | 1.0730 | 1.1363 | -      | -    | -     | -    | -    | -    | -    |
| Competent           | very    | 8      | 1.3  | 9      | 15.0 | 17    | 14.16| -    | -    | -    |
|                    | average | 20     | 33.3 | 23     | 38.3 | 43    | 35.83| -    | -    | -    |
|                    | Neither nor | 24    | 40.0 | 13     | 21.7 | 37    | 30.83| -    | -    | -    |
|                    | Almost non | 8     | 13.3 | 13     | 21.7 | 21    | 17.5 | -    | -    | -    |
|                    | little   | 0      | 0    | 1      | 1.7  | 2     | 1.66 | -    | -    | -    |
| Average             |         | 3.467  | 3.383 | -      | -    | -     | -    | -1.447| 118  | 0.656 |
| Standard deviation  |         | 0.8919 | 1.1363 | -      | -    | -     | -    | -    | -    | -    |
| Understands me      | very    | 9      | 15.0 | 18     | 30.0 | 27    | 22.5 | -    | -    | -    |
|                    | average | 22     | 36.7 | 24     | 40.0 | 46    | 38.33| -    | -    | -    |
|                    | Neither nor | 14    | 23.3 | 4      | 6.7  | 18    | 15.0 | -    | -    | -    |
|                    | Almost non | 12    | 20.0 | 8      | 13.3 | 20    | 16.66| -    | -    | -    |
|                    | little   | 3      | 5.0  | 6      | 10.0 | 9     | 7.5  | -    | -    | -    |
| Average             |         | 3.367  | 3.667 | -      | -    | -     | -    | -1.348| 118  | 0.180 |
| Standard deviation  |         | 1.1194 | 1.3105 | -      | -    | -     | -    | -    | -    | -    |
| Interested in me    | very    | 7      | 11.7 | 13     | 21.7 | 20    | 16.66| -    | -    | -    |
|                    | average | 15     | 25.0 | 19     | 31.7 | 34    | 28.33| -    | -    | -    |
|                    | Neither nor | 21    | 35.0 | 10     | 16.7 | 31    | 25.83| -    | -    | -    |
|                    | Almost non | 6     | 10.0 | 12     | 20.0 | 20    | 16.66| -    | -    | -    |
|                    | little   | 11     | 18.3 | 6      | 10.0 | 17    | 14.16| -    | -    | -    |
| Average             |         | 3.017  | 3.350 | -      | -    | -     | -    | -1.429| 118  | 0.156 |
| Standard deviation  |         | 1.2554 | 1.2996 | -      | -    | -     | -    | -    | -    | -    |
| Non-indifferent     | very    | 9      | 15.0 | 7      | 11.7 | 16    | 13.33| -    | -    | -    |
|                    | average | 6      | 10.0 | 16     | 26.7 | 22    | 18.33| -    | -    | -    |
|                    | Neither nor | 19    | 31.7 | 19     | 31.7 | 38    | 31.66| -    | -    | -    |
|                    | Almost non | 21    | 35.0 | 10     | 16.7 | 31    | 25.83| -    | -    | -    |
|                    | little   | 5      | 8.3  | 8      | 13.3 | 13    | 10.83| -    | -    | -    |
| Average             |         | 2.883  | 3.067 | -      | -    | -     | -    | -0.842| 118  | 0.402 |
| Standard deviation  |         | 1.1802 | 1.2054 | -      | -    | -     | -    | -    | -    | -    |
| Conscious           | very    | 14     | 23.3 | 16     | 26.7 | 30    | 25.0 | -    | -    | -    |
|                    | average | 1      | 1.7  | 1      | 1.7  | 2     | 1.66 | -    | -    | -    |
|                    | Neither nor | 19    | 31.7 | 19     | 31.7 | 38    | 31.66| -    | -    | -    |
|                    | Almost non | 21    | 35.0 | 10     | 16.7 | 31    | 25.83| -    | -    | -    |
|                    | little   | 5      | 8.3  | 8      | 13.3 | 13    | 10.83| -    | -    | -    |
| Average             |         | 2.883  | 3.067 | -      | -    | -     | -    | -0.842| 118  | 0.402 |
| Standard deviation  |         | 1.1802 | 1.2054 | -      | -    | -     | -    | -    | -    | -    |
Presenting a middle school student of the first and the third class opinion concerning a typical peer image there are no grounds to reject the formulated zero hypothesis that an average opinion about a typical peer among students from the first and the third class is not very different in dimension of competent, understands me, interested in me, non-indifferent, conscientious, amiable. The zero hypothesis should be rejected and the alternative one should be accepted in a dimension sociable – an average value of opinion presented concerning a typical peer in the researched groups differs significantly statistically in the dimension sociable.

Summarizing the analysis of the results, it can be stated that a typical peer is rather competent (after accumulating close categories very and average), keeping in mind that students of the third class perceive a typical peer as more competent than the students of the first class (46.6% answers from the first class and 53.3% answers from the students of the third class) and rather amiable in opinion of both the first and the third class students (after cumulation of close categories very and average). As for Stereotype Content Model S. Fiske (Fiske, Cudy & Glick, 2002) who stresses that individuals/groups of identity perceived as competent and amiable evoke recognition, admiration or pride – it is worth noticing that the image of a typical peer among students of the third classes is a peer that evokes both recognition as well as envy while among students of the first classes – either compassion or anger. The summary of the results of the research in relation to the theory is presented in the table number 3.

Table 3: Model BIAS MAP: summary of the research results

| Group tested | Dimension: Competence-warmth | Emotions | Behavior types |
|--------------|--------------------------------|----------|----------------|
| I class students | Less competent<br>More warmth | Compassion<br>pity | Active facilitation or passive impediment |
| III class students | More competent<br>More warmth | Pride<br>Ambivalent feelings | Passive facilitation or active impediment |
Source: Own research

Further analysis of the research results based on theoretical basis of stereotype content model (SCM) and BIAS Map Model reveals that the students of the first class perceive a peer as less competent but more amiable and feel toward such a person compassion what allows to assume that their tendencies of behavior will remain in the category active facilitation (participating in help action or protection of a group) or passive impediment. The students of the third class perceive a peer as more competent and more amiable and feel recognition but also have ambivalent emotions what suggest that their behavioral tendencies will remain in a category either passive facilitation (declared willingness to cooperation, establishing relations) or active facilitation (participation in helping or protection of a group). It might be worthwhile to extend the issue and incorporate an attempt to establish status of power and an analysis of individuals/groups’ goals.

The image of a typical peer as perceived by a middle school student should be augmented with the research of undertaken actions/reactions towards a typical peer. The following table presents opposite answers given by the students: not at all and I am very likely.

**Table 4: Reactions to a typical peer by middle school students**

| To what extent are you willing to: | Answers | I class students | III class students | Total | Comparisons between groups |
|-----------------------------------|---------|------------------|--------------------|-------|---------------------------|
| Undertake actions in order to avoid contact with peers | the least | 26 43.3 | 19 31.7 | 45 37.5 | -0.769 118 0.444 |
| | the most | 3 5.0 | 4 6.7 | 7 5.83 | |
| Average | 2.73 | 3.05 | - | - |
| Standard deviation | 2.201 | 2.310 | - | - |
| Learn self-defence techniques in order to defend yourself against peers | the least | 9 15.0 | 15 25.0 | 24 20.0 | |
| | the most | 12 20.0 | 8 13.3 | 20 16.6 | |
| Average | 5.03 | 4.03 | - | - |
| Standard deviation | 2.810 | 2.876 | - | - |
| Not to participate in school tasks/projects involving cooperation with peers | the least | 17 28.3 | 20 3.3 | 37 30.83 | 0.813 118 0.418 |
| | the most | 4 6.7 | 3 5.0 | 7 5.83 | |
| Average | 3.48 | 3.13 | - | - |
| Standard deviation | 2.432 | 2.281 | - | - |
| Delegate to a peer an important task in a project coordinated by a teacher | the least | 5 8.3 | 5 8.3 | 10 8.33 | -1.14 118 0.255 |
| | the most | 6 10.0 | 13 21.7 | 19 15.83 | |
| Average | 4.78 | 5.30 | - | - |
| Standard deviation | 2.344 | 2.599 | - | - |
| Cross to the other side of corridor when seeing approaching peer | the least | 20 33.3 | 27 45.0 | 47 39.16 | |
| | the most | 8 13.3 | 5 8.3 | 13 10.83 | |
| Average | 4.00 | 3.20 | - | - |

Available Online at: [http://grdspublishing.org/](http://grdspublishing.org/)
The research shows that 37.5% of students declare that they do not undertake an effort to avoid interaction with peers; 20.0% declare that they would not learn self-defence techniques in order to defend themselves against peers; 16.6% declare to be ready for such effort; 30.8% declare that they would undertake school tasks/project involving cooperation with other students, 15.8% declare readiness to delegate important project tasks to a peer in a project coordinated by a teacher, 39.1% of students declare that they do not move to the other side of corridor seeing an approaching peer; 29.1% students are ready to take an effort to befriend a peer, 13.3% of students would not try to take part in social work at school with a peer and 8.3% would do it.

In all presented areas of behavior there did not occur statistically important differences between classes. Looking at the opinions of middle school students in this particular area there are no grounds to reject the formulated zero hypothesis that the average value of declared behaviors/reactions toward a typical peer among the students of the first and the third classes does not differ. The further research could be directed and deeper recognition of the students opinion in the area of behaviors associated with defending themselves against peers.

In the context of intergroup threat theory (Stephan, 2002) behavioral reactions associated with the experienced threats can take a form of e.g. withdrawal, submission and negotiations in the situation of violence (direct or indirect), lying, theft, revenge or other forms and can take various forms depending on whether the threat is perceived as aimed at a group or the particular members of that group. When the threat is aimed at the particular members of a group it evokes emotions associated with self-care (personal safety, positive image of oneself) such as fear and vulnerability to harm. When, however, the threat is aimed at a group as a whole it evokes emotions associated with a care for a good of the group (e.g. its resources or reputation) such as anger, regret or a collective guilt. In both cases the aims and behaviors taken could be different. Them mostly depend on the evaluation of individual and/or collective potential for and adequate reaction to those situations (Stephen, Renfro, 2002). So, people react to threats in many different ways. The results of the research tend to show that the average answers given by students of the
first class, in the area associated with learning self-defence techniques to protect oneself against peers is higher than among students of the third class, similarly as the average of the answers of the first class students in relation to a behavior of crossing to the other side of corridor when seeing an approaching peer, not to participate school task/project together with other peers. Behavioral tendencies of the first class students can focus around passive impediment towards their peers at middle school students.

The first class students can, then, undertake active behaviors to protect themselves in a threat situation (Table no. 3 BIAS MAP Model: summary of research) or passive behavior (in the context of intergroup threat theory; Stephan, 2002). These results seem to be interesting and require further in-depth studies in this area.

The next step in the research was, thus, recognition of emotions that are most often experienced toward a typical peer. The following Table no. 6 presents data in this area. Its analysis shows that 34.16% of students feel no sadness when thinking about a typical peer, does not feel anger (21.66%), shame (30.0%), pride (16.66%), admiration (18.3%), confusion (25.83%), envy (39.16%) nor fear 50.0%). On the other hand they strongly feel joy (17.5%), affinity (12.5%). Curiosity toward a typical peer is an emotion that the middle school students feel both ‘very strong’ or ‘not at all’.

**Table 5: The most often experience emotions toward a typical peer**

| Emotions / feelings | answer       | I class students | III class students | Total     | Comparisons between groups |
|---------------------|--------------|------------------|-------------------|----------|---------------------------|
|                     | N=60 | %   | N=60 | %   | N=120 | %    | t     | df  | p.i. |
| Sadness             |      |     |      |     |        |       |       |       |      |      |
| not at all          | 20   | 33.3| 21   | 35.0| 41    | 34.16| .579  | 118  | 0.564|
| very strongly       | 1    | 1.7 | 2    | 3.3 | 3     | 2.50 |       |      |      |
| Average             | 2.98 |     | 2.77 |     | 2.84 |     |       |      |      |
| Standard deviation  | 2.063|     | 2.037|     | 2.05 |     |       |      |      |
| Joy                 |      |     |      |     |        |       |       |      |      |
| not at all          | 3    | 5.0 | 2    | 3.3 | 5     | 4.16 | -.377 | 118  | 0.707|
| very strongly       | 12   | 20.0| 9    | 15.0| 21    | 17.5 |       |      |      |
| Average             | 6.17 |     | 6.32 |     | 6.24 |     |       |      |      |
| Standard deviation  | 2.323|     | 2.021|     | 2.16 |     |       |      |      |
| Anger               |      |     |      |     |        |       |       |      |      |
| not at all          | 13   | 21.7| 13   | 21.7| 26    | 21.66| .872  | 118  | 0.385|
| very strongly       | 5    | 8.3 | 3    | 5.0 | 8     | 6.66 |       |      |      |
| Average             | 3.82 |     | 3.43 |     | 3.60 |     |       |      |      |
| Standard deviation  | 2.514|     | 2.295|     | 2.40 |     |       |      |      |
| Liking              |      |     |      |     |        |       |       |      |      |
| not at all          | 8    | 13.3| 2    | 3.3 | 10    | 8.33 | .265  | 118  | 0.792|
| very strongly       | 9    | 15.0| 6    | 10.0| 15    | 12.5 |       |      |      |
| Average             | 5.65 |     | 5.53 |     | 5.59 |     |       |      |      |
| Standard deviation  | 2.705|     | 2.087|     | 2.48 |     |       |      |      |
| Shame               |      |     |      |     |        |       |       |      |      |
| not at all          | 17   | 28.3| 19   | 31.7| 36    | 30.0 | .117  | 118  | 0.907|
### Table 1: Emotions toward a Typical Peer

|        | not at all | very strongly | Average | Standard deviation |
|--------|------------|---------------|---------|--------------------|
| Pride  | 10         | 8             | 4.70    | 2.566              |
|        | 16.7       | 13.3          | 3.80    | 2.427              |
|        | 16.7       | 6.7           | 3.40    | 2.219              |
|        | 20         | 4             | 3.35    | 2.462              |
|        | 16.6       | 12            | 5.0     | 2.462              |
|        | 5.92       | 118           | -       | -                  |
|        | 0.555      | 0.129         | -       | -                  |

**Source:** Own research

Analysing the research taking into account the particular groups it should be noted that the first class students more often than those of the third class strongly feel anger, pride, envy while the third class students more often feel joy and they do not feel fear.

The average of given answers shows that the first class students more often experience unpleasant emotions toward a typical peer that the third class students. The results, however, are not statistically relevant so the zero hypothesis should be accepted: I assume that the average value of declared emotions toward a typical peer does not differ between students of the first and the third class. Placing the research in the frame of reference of theories presented in the first part of the paper it should be noted that more frequent experiencing of unpleasant feelings toward a
typical peer by the first class students can be related to behavioral reactions of these students to a threat from another peer – they can display tendencies to undertake active or passive actions in a violent situation to rather protect themselves rather than the group in which they function.

In the context of an intergroup threat theory (Stephan, 2002) we should relate to aforementioned Model of emotion evaluation in relation to five specific configurations.

**Table 6: Model of emotion evaluation in relation to five specific configurations**

| Researchers | Relation elements | Emotions and feelings | behavioral tendencies | Image |
|-------------|-------------------|-----------------------|-----------------------|-------|
| Class I students | Goal independence Low status Low power | Anger Compassion | Exploration Paternalism | Dependent |
| Clas III students | **Goal independence** High status High power | Envy Ambivalence Recognition | Resistance Rebellion | Imperialists |

Source: Own research

It turns out that the first class students experience unpleasant emotions towards a typical peer (e.g. anger, contempt) more frequently and perceive one as less competent. It seems then that they would tend to display dependent behavioral tendencies in relation to middle school peers. Not participating in school task involving cooperation with peers, they tend to establish relations based on a principle that involve dependence of one party what is confirmed by maintaining the image of their group as dependant. The third class students, on the other hand, experience pleasant or ambivalent emotions more frequently toward a typical peer (competence of a typical peer evoke recognition, joy but also – due to fear of competition – envy). Moreover, they perceive a typical peer competent more frequently so it seems that they would display behavioral tendencies in a form of resistance or rebellion.

According to intergroup threat theory when the group resources are perceived as low, emotions that are evoked are resentment, contempt and the group is seen as dependent. This theory claims that configuration of experiencing pleasant emotions such as admiration and trust but also envy is associated with perception of a typical peer by third class students as an “imperialist”.

I compared the results of the research with those in the area of peer support. Only the results in the area of statistically relevant differences will be presented.
Table 7: Evaluation of social support provided by a typical peer at school

| Typical peer                                                                 | Answers | Class I | Class III | Total | Intergroup comparison |
|------------------------------------------------------------------------------|---------|---------|-----------|-------|-----------------------|
|                                                                               | N=60   | %       | N=60      | %     | N=120                 | t   | df  | p.i. |
| There are people who really like me                                           |        |         |           |       |                       |     |     |      |
| 1                                                                            | 5      | 8.3     | 0         | 0     | 5                     | 4.16|      |      |
| 2                                                                            | 8      | 13.3    | 4         | 6.7   | 12                    | 10.0|      |      |
| 3                                                                            | 22     | 36.7    | 18        | 30.0  | 40                    | 33.33|      |      |
| 4                                                                            | 25     | 41.7    | 38        | 63.3  | 63                    | 52.5|      |      |
| Average                                                                      | 3.117  | 3.567   |           |       | 3.417                 |     |     |      |
| Standard deviation                                                           | 0.9405 | 0.6207  |           |       |                       |     |     |      |
| I know people I can always count on                                          |        |         |           |       |                       |     |     |      |
| 1                                                                            | 7      | 11.7    | 0         | 0     | 7                     | 5.83|      |      |
| 2                                                                            | 12     | 20.0    | 8         | 13.3  | 20                    | 16.66|      |      |
| 3                                                                            | 15     | 25.0    | 10        | 16.7  | 25                    | 20.83|      |      |
| 4                                                                            | 26     | 43.3    | 42        | 70.0  | 68                    | 30.90|      |      |
| Average                                                                      | 3.000  | 3.567   |           |       | 3.200                 |     |     |      |
| Standard deviation                                                           | 1.0577 | 0.7217  |           |       |                       |     |     |      |
| When I am worried there is someone who would help me                         |        |         |           |       |                       |     |     |      |
| 1                                                                            | 6      | 10.0    | 2         | 3.3   | 8                     | 6.66|      |      |
| 2                                                                            | 12     | 20.0    | 8         | 13.3  | 20                    | 16.66|      |      |
| 3                                                                            | 23     | 38.3    | 17        | 28.3  | 40                    | 33.33|      |      |
| 4                                                                            | 19     | 31.7    | 33        | 55.0  | 61                    | 43.33|      |      |
| Average                                                                      | 2.917  | 3.350   |           |       | 2.777                 |     |     |      |
| Standard deviation                                                           | 0.9618 | 0.8402  |           |       |                       |     |     |      |
| There are people who offer me help when I need it                             |        |         |           |       |                       |     |     |      |
| 1                                                                            | 7      | 11.7    | 0         | 0     | 7                     | 5.83|      |      |
| 2                                                                            | 13     | 21.7    | 11        | 18.3  | 24                    | 20.0|      |      |
| 3                                                                            | 12     | 20.0    | 16        | 26.7  | 28                    | 23.33|      |      |
| 4                                                                            | 28     | 46.7    | 33        | 55.0  | 61                    | 50.83|      |      |
| Average                                                                      | 3.017  | 3.367   |           |       | 2.917                 |     |     |      |
| Standard deviation                                                           | 1.0813 | 0.7804  |           |       |                       |     |     |      |
| Whenever I am down there are people who cheer me up                           |        |         |           |       |                       |     |     |      |
| 1                                                                            | 6      | 10.0    | 5         | 8.3   | 11                    | 9.16|      |      |
| 2                                                                            | 18     | 30.0    | 34        | 56.7  | 52                    | 43.33|      |      |
| 3                                                                            | 20     | 33.3    | 15        | 25.0  | 35                    | 29.16|      |      |
| 4                                                                            | 16     | 26.7    | 6         | 10.0  | 12                    | 10.00|      |      |
| Average                                                                      | 2.767  | 2.367   |           |       | 2.733                 |     |     |      |
| Standard deviation                                                           | 0.9632 | 0.7804  |           |       |                       |     |     |      |
| This person did not show much understanding to my situation                  |        |         |           |       |                       |     |     |      |
| 1                                                                            | 13     | 21.7    | 27        | 45.0  | 40                    | 33.33|      |      |
| 2                                                                            | 19     | 31.7    | 19        | 31.7  | 37                    | 30.83|      |      |
| 3                                                                            | 25     | 41.7    | 13        | 21.7  | 38                    | 31.66|      |      |
| 4                                                                            | 3      | 5.0     | 1         | 1.7   | 4                     | 3.33|      |      |
| Average                                                                      | 2.300  | 1.800   |           |       | 2.300                 |     |     |      |
| Standard deviation                                                           | 0.8694 | 0.8397  |           |       |                       |     |     |      |
| This person made me feel important                                           |        |         |           |       |                       |     |     |      |
| 1                                                                            | 12     | 20.0    | 3         | 5.0   | 15                    | 12.5|      |      |
| 2                                                                            | 15     | 25.0    | 12        | 20.0  | 27                    | 22.5|      |      |
| 3                                                                            | 24     | 40.0    | 31        | 51.7  | 55                    | 45.83|      |      |
| 4                                                                            | 9      | 15.0    | 14        | 23.3  | 23                    | 19.16|      |      |
| Average                                                                      | 2.500  | 2.933   |           |       | 2.797                 |     |     |      |
| Standard deviation                                                           | 0.9829 | 0.7997  |           |       |                       |     |     |      |

Source: Own research
1- not true at all, 2- not true 3- true, 4- absolutely true

The students can greatly count on the fact that in the presence of their friends they will feel secure and safe. In the area perceived available support it is entirely true, the student declare, that there are people who really like me (41.7% of the given answers among the first class students and 63.3% among the third class students), students know people they can always count
– while in the first class only 43.3% hold on to that conviction, in the third class the number is 70.0%. Moreover, it is entirely true, declare students, that there are people that offer help to students when needed (while none of the students from the third class marked this sentence as not true at all every tenth students from the first class is convinced about it). The first class students also declare that to some extent is also true the sentence that when I am worried there is someone who can help me (38.3% of given answers), while the third class students claim that this sentence is absolutely true (43.3%).

In the area of perceived available support there were statistically valid differences between a group from the first and the third class pointing to the fact that the third class students more often declare that they know people who really like me (t = -3.093; p<0.002), know people who they can always count on (t = -3.428; p<0.001), when they are worried there is someone who can help them (t = -2.628; p<0.010) and there are people who offer them help when needed (t = -2.033; p<0.044).

In the area of looking for support the first class students declare that in a moderate way true is a sentence that whenever I am down I look for someone who would cheer me up (33.3%) while it is to a small amount true for 56.7% of the third class students.

In the area of looking for support there were statistically valid differences between the first and the third class students pointing to the fact that the students from the first class more often declare that whenever they are down they look for someone who would cheer them up (t = 2.499; p<0.014).

In the area of actually received support the first class students declare that in a moderate way true is a sentence that a typical pee did not display much understanding to my situation (41.7%) while it is completely untrue for 45.0% the third class students. The first class students (40.0%) and the third class students (51.7%) also declare that in a moderate way true is a sentence that a typical peer made me feel important. The analysis in this area shows an important difference: while 20.0% of the first class students declare that the sentence that a typical peer made me feel important is not true at all, only 5.0% of the third class students is of a similar conviction.

In the area actually received support there were statistically valid differences between the first and the third class students indicating that the first class students more often declare that a typical peer did not show much understanding to my situation (t = 3.204; p<0.002), but the third class students more often declare that a typical peer made me feel important (t = -2.649; p<0.009).
In the fact of collected data in this area the zero hypothesis that an average opinion on social support given by a typical peer in a school among the first and the third class students does not differ should be rejected and the alternative hypothesis should be accepted – that an average opinion on social support given by a typical peer in a school among the first and the third class students does differ in the areas of perceived available support, looking for support and actually given support.

6. Conclusion

Summarizing the analysis of the research results it should be said that the first class students perceive a typical peer as less competent but more amiable than the third class students and have compassion toward one, what in turns allows us to assume that undertaken behavioral tendencies will remain in a category active facilitation (participation in help activity or group protection) or passive impediment toward peers in middle school what is confirmed by the analysis of research results referring to intergroup threat theory (Stephan, 2002). More frequent experiencing of unpleasant emotions toward a typical peer by the first class students might be connected with behavioral reactions of the first class students to a threat from peers – these students can have tendency to undertake active or passive behaviors in violent situations protecting themselves rather than a group in which they function. In the area of actually received support the group of the first class students indeed more frequently declare that a typical peer did not display much understanding to my situation. In the area of looking for support group of the first class students, in fact, declares more often that whenever they feel down they look for someone to cheer them up.

The third class students, however, perceive peers as sociable more competent and more amiable than their peers in the first class and feel respect, what allows to suppose that behavioral tendencies they undertake will remain in categories of either passive facilitation (declared readiness for cooperation, establishing relations) or active facilitation (participation in help or protection of a group). The third class students more often try to befriend peers, as well as are ready to delegate important task to a peer in a projects supervised by a teacher but also are more prone to undertake attempts to avoid contact with peers. In the area of actually received support the group of the third class students, in fact, more often declare that a typical peer made them feel important. In the area of perceived available support the third class students also more often declare that they know people who really like them, who they can always count on, when they are worried there is someone ready to help them, there are people who offer them help when needed.

Further research should by, then, directed into more in-depth study and evaluation of a social status of a typical peer in the perception of young people due to the fact that the results of
the research related to the stereotype content model SCM. Fiske point to a rather low social status of a typical peer in the perception of a middle school student what was not confirmed by the research based on Intergroup Threat Theory (Stephen, 2002). Further research, then, could be extended with identifying strength/power and analysis of goals of individuals/groups in peer relations of middle school students and also extend the research to another school types. Using the assumptions of Intergroup Threat Theory it would be worthwhile to analyse the extent to which the integrity of a peer group and the level of identification with such conditions the young people reactions to a threat.

Among the problems present at school the quality of student interaction is of a great importance and it should be associated with the support given in their development (Gaś, 2000). Evaluating the quality of peer relations – from indifference to mutual support – it should be stressed that the presented theories allow a fuller and more complete understanding of this area and more effective solutions for different types of conflicts between peers and in effect enable actions that might prevent alienation or rejection among young people.

**References**

Brown B. B., Lohr M. J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. Journal of Personality & Social Psychology, 52, 47-55. [https://doi.org/10.1037/0022-3514.52.1.47](https://doi.org/10.1037/0022-3514.52.1.47)

Bukowski W. M., Hoza B., Boivin M. (1993). Popularity, friendship, and emotional adjustment during early adolescence. W: W. Damon (Series Ed.) & B. Laursen (Vol. Ed.), New directions for child development: Vol. 60. Close friendships in adolescence. Jossey-Bass: San Francisco, 23–37.

Costarelli S., (2005). Social identity threat and experienced affect: The distinct roles of intergroup attributions and social identification. Current Research in Social Psychology, 10. W: T. Nelson (Ed.), Handbook of Prejudice. Mahwah, NJ: Lawrence Erlbaum Associates.

Davis M., Stephan W.G., (2006). Electromyographical analysis of responses to threat. Unpublished manuscript, New Mexico State University. W: T. Nelson (Ed.), Handbook of Prejudice. Mahwah, NJ: Lawrence Erlbaum Associates.

Fiske S. T., Cuddy A. J., Glick P., (2007) Universal dimensions of social cognition: Warmth, then competence. Trends in Cognitive Science, 11, 77–83. [https://doi.org/10.1016/j.tics.2006.11.005](https://doi.org/10.1016/j.tics.2006.11.005)

Fiske S. T., Cuddy A. J., Glick P., Xu J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition.
Journal of Personality and Social Psychology, 82, 878-902. https://doi.org/10.1037/0022-3514.82.6.878

Frijda N. H. (1986). The emotions. Cambridge: Cambridge University Press.

Gaś Z. B., (red.) (2004). Badanie zapotrzebowania na profilaktykę w szkole. Poradnik dla szkolnych liderów profilaktyki. Lublin: Wydawnictwo Fundacji Masz Szansę.

Gaś Z. B., (2000). Psychoprofilaktyka. Procedury konstruowania programów wczesnej interwencji. Lublin: Wyd. Uniwersytetu Marii Curie-Skłodowskiej.

Gryniuk I., Tuszyńska-Bogucka W., (2004) Psychorysunek tematyczny jako narzędzie diagnozy sytuacji szkolnej i rodzinnej ucznia. W: Gaś Z. B. (red.), Badanie zapotrzebowania na profilaktykę w szcole Poradnik dla szkolnych liderów profilaktyki. Lublin: Wydawnictwo Fundacji Masz Szansę, 127-142.

Harwas-Napierała B., Trempała J. (red.) (2005). Psychologia rozwoju człowieka, t.2, Warszawa: PWN, s.183.

Hefnavi A., (2017). Towards an Effective teachers' professional learning. People: International Journal of Social Sciences, 3 (1), p. 453-466. https://doi.org/10.20319/pijss.2017.s31.453466

Herrmann R. K., Fischerkeller M. P., (1995). Intergroup emotion and Images. W: D. Mackie, E. R. Smith (eds.). From prejudice to intergroup emotions. Differentiated reactions to social groups. New York and Hove: Psychology Press, 209.

Jessor R, (1992). Risk behavior in adolescence: a psychosocial framework for understanding and action. Developmental Review, 12, 374-90. https://doi.org/10.1016/0273-2297(92)90014-S

Jessor R., Jessor S. (1977). Problem behavior and psychosocial development. A longitudinal study of youth. Academic Press New York.

Lazarus R. S. (1991). Emotion and adaptation. New York: Oxford University Press.

Lindsay G. (1983). Problems of adolescence in the secondary school. London: Croom Helm.

Mackie D. M., Devos T., Smith E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. Journal of Personality and Social Psychology, 79, 602-616. https://doi.org/10.1037/0022-3514.79.4.602

Maner J. K., Kenrick D. T., Becker D. V., Robertson T. E., Hofer B., Neuberg S. L., Delton A. W., Butner J. M., Schaller. (2005). Functional projection: How fundamental social motives can bias interpersonal perception. Journal of Personality and Social Psychology, 88, 63-78. https://doi.org/10.1037/0022-3514.88.1.63
Mesarosova, M. (2017). Care for self-development in relation to the self-regulation in the students of helping professions. People: International Journal of Social Sciences, 3(1), 586-596. https://doi.org/10.20319/pijss.2017.s31.586596

Niedenthal P., Krauth-Gruber S., Ric F., (2006). Psychology of emotion. Interpersonal, experiential, and cognitive approaches. New York: Psychology Press.

Pettigrew T. F., (1979). The ultimate attribution error: Extending Allport’s cognitive analysis of prejudice. Personality and Social Psychology Bulletin, 5, 461-476. https://doi.org/10.1177/014616727900500407

Poleszak W., (2004). Diagnoza relacji rówieśniczych w środowisku szkolnym. W: Z. B. Gaś (red.). Badanie zapotrzebowania na profilaktykę w szkole. Poradnik dla szkolnych liderów profilaktyki. Lublin: Wydawnictwo Fundacji Masz Szansę, 155-170.

Rosenberg S., Nelson C., Vivekananthan P. S. (1968). A multidimensional approach to the structure of personality impressions. Journal of Personality and Social Psychology, 9, 282-294. https://doi.org/10.1037/h0026086

Shamir M., Sagiv-Schifter T., (2006). Conflict, identity, and tolerance: Israel in the Al-Aqsa intifada. Political Psychology, 27, 569-595. https://doi.org/10.1111/j.1467-9221.2006.00523.x

Stephan, W. G., Renfro L. (2002). The role of threat in intergroup relations. W: D. M. Mackie, E. R. Smith (eds.), From prejudice to intergroup emotions. Differentiated reactions to social groups. New York and Hove: Psychology Press, 191-208.

Turner J. S., Helms D. B. (1999). Rozwój człowieka. Warszawa, WSiP.