ADOLESCENTS’ ASSESSMENTS OF PARENTS AND PEERS: RELATIONSHIPS TO SELF-ESTEEM AND SELF-EFFICACY

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ABSTRACT

The study investigates how perceived parent and peer/friend relationships influence two aspects of global self-evaluation, self-esteem and self-efficacy, during middle adolescence. The growing influence of friends/peers on self-evaluation was expected, especially on self-efficacy. We also expected a stable parent influence on self-esteem. Also, sex and age differences were assumed. As results reveal, perceived relationships to parents and perceived relationships to friends/peers are two consistent blocks of predictors of self-esteem and self-efficacy. Both aspects of global self-evaluation are higher in older adolescents than in younger ones. Regarding self-esteem, parent variables (warmth and trust) are more influential predictors. Peer/friend variables and age have stronger influence on girls’ self-esteem than on boys’. Regarding self-efficacy, the block of friend/peer variables explains more variance than the block of parent variables. Especially, global comparison with peers is strongly influential, especially in girls. Boys’ self-efficacy is also related to the perceived warmth of father.

Key words: self-esteem, self-efficacy, adolescence, relationships with peers and parents

INTRODUCTION

In terms of a metaphor used by Hartup (1989), the social world of children and adolescents is represented by a set of vertical and horizontal relationships. Vertical relationships form between individuals of different abilities and status. In this respect parents have greater knowledge and power than children and assume a controlling role to which children are expected to defer. Horizontal relationships represent interactions with peers where all the participants have comparable social power, roles, and competence. Parent and peer relationships serve different functions in adolescent development but their origins and functions are closely intertwined (e.g. Hartup, 1989; Petersen, Silbereisen and Sorensen, 1992; Durkin, 1995; Meeus and Dekovic, 1995).

Traditionally, parents are supposed to be more influential than peers, the school, and media during early adolescence. During middle and late adolescence parents play a less central role in the cognitive and self-concept development and identity formation. However, due to different agents having different functions and meanings at different times and situations, it is very difficult to quantify and compare the influence of various socialization agents. The generally accepted opinion that the importance of parents decreases during adolescence and the importance of peers increases is now being revised. Studies of the adolescents’ family and peer relationships show that these two types of relationships are not an “either/or” phenomenon (Durkin, 1995; Macek and Štěfánková, 2006). It is the basic characteristics of relationships between parents and children that changes during adolescence (Youniss and Smollar, 1985). Adolescents act more and more often as equal partners in communication with their parents. Parents have more chances to assume the symmetrical roles of friends instead of the role of authority. Grotevant and Cooper (1985) suggested that a good bond between adolescents and their parents and appropriate self-assertion could establish a positive balance and strengthen the adolescent self.

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Compared to the life experience of a child, the adolescent peer context is more differentiated too. The meaning and importance of close friendship is growing along with peer conformity and peer pressure. If friendship is mainly defined in terms of reciprocity and mutuality, peer relationships and peer groups are defined in terms of unilateral assessments of relative standing and reputation (Hartup and Stevens, 1997). However, both types of horizontal relationships influence each other. Both form during adolescence on the basis of interpersonal attractiveness, physical attributes, and achievement. Being involved in various peer groups is an important basis for the development of close friendships (Heaven, 1994). As Seltzer (1989) wrote, the question that is still open is whether „true friendships“ can exist in adolescence because the boundaries of personal and social identity are not yet clear – relationships with peers (age-mates) are not the same as friendships at other times of the life span. As adolescents undergo the emotional, cognitive, and social development, the nature and quality of friendship change too. Self-development and identity formation are the main developmental tasks of adolescence and friendship and peer relationships should be considered in this context (Erikson, 1968; Heaven, 1994).

Meeus' and his colleagues’ study of the developmental changes of the influence of parents and peers also shows that if parental support is stronger than peer support in early adolescence then the level of both is very similar in middle and late adolescence. They show as well that parental support has stronger causal effects on the general well-being and school performance of adolescents. Parental support and peer support are presented as related forms of support (Meeus, Helsen, and Vollebergh, 1995; Meeus and Deković, 1995).

Our cross-sectional research (including seven age cohorts from 11 to 17 years) that focused on the changes in the role of parents and peers during adolescence brings similar results. Parents’ influence is slowly decreasing and peers’ influence is increasing during early and middle adolescence. Although the influence of friends is strongly growing in domains of school problems and future occupation, parents remain more important as advisers than peers (Macek, Osecká, 1999).

Research results also suggest that the quality of parent relationships influences peer relationships and support, especially in early adolescence (Širůček and Širůčková, 2006). If children trust their parents they do not prefer extreme forms of peer orientation. If they perceive too few opportunities from their parents to be involved in decision-making, as well as no increase in these opportunities, they are higher in extreme peer orientation and peer advice seeking (Fuligni and Eccles, 1993). Family life characterized by conflict and lack of support for early adolescent development is related to the increased involvement with peer groups and more conformity to peer pressure (Shulman et al., 1995). During middle and late adolescence, parental and peer (friend) support seem to be relatively independent support systems. If there are some relationships, they are rather positive than the opposite: high parental support is connected with positive friend support and low parental support is connected with negative effect of friend support (Helsen, Vollebergh and Meeus, 2000).

Both types of adolescent relationships are closely related to self and identity development. There is much evidence about the roles of parents, peers, and friends as important „significant others“ in the process of adolescent self-definition and self-evaluation (Dusek and Flaherty, 1981; Markus and Nurius, 1986; Damon and Hart, 1988; Nurmi and Pulliainen, 1991; Oosterwegel, 1992; Harter, 1993). According to Meeus (1992), there is no aspect of identity development during middle and late adolescence that is not primarily influenced by peers. On the other hand, parents very often have additional influence and the „final word“ in many domains of adolescent everyday life.

Also our former research on self and identity development confirmed the meaning of parents as „significant others“ in the process of adolescent self-definition and self-evaluation. Despite the fact that the importance of the self according to parents (self-presentation: „How I think my mother/father sees me“) decreased with age and that the importance of the self according to peers increased with age, the general importance of the self according to parents remained highest of all the other possible self-representations (Macek and Osecká, 1996; Macek, 1997).

It is evident that the adolescent self-evaluation and perceptions and evaluations of peers and parents are mutually dependent. However, we can consider some further specifications of this relationship. If parental warmth and support forms a base for adolescent global self-esteem, then the peer arena and friend relationships represent a space for testing and confirming social and personal competency (Seltzer, 1989) and self-efficacy (Land, 1998). General self-efficacy and global self-esteem are conceptualized as two aspects of general self-evaluations (Judge et al., 1997). As many authors have mentioned, an important difference between global self-esteem and general self-efficacy is that self-efficacy captures more of a motivational belief (or a judg-
ment) regarding task capabilities, whereas self-esteem captures more of an affective evaluation of (or feeling regarding) the self (Betz and Klein, 1996; Brockner, 1988; Chen et al., 2001; Gardner and Pierce, 1998).

The aim of this study is to investigate how the perceived parent and peer/friend relationships bear on global self-esteem and generalized self-efficacy (GSE) during middle adolescence. The following gender differences are expected: deeper anchoring of girls' self-esteem and self-efficacy in close relationships with parents and friends, stronger influence of peer comparison and acceptance on boys' self-esteem and self-efficacy (Macek, 1997; Macek and Osecka, 1999; Macek et al., 1999). With respect to the different roles of parents and peers during adolescence we also hypothesize that self-esteem is more based on parental warmth and support from family (especially for younger adolescents), while generalized self-efficacy, representing a feeling of personal competency, is closely related to perceived peer support and evaluation (especially for older adolescents).

METHOD

Participants
The sample (N = 710) used in this study consists of the participants from the Moravia Longitudinal Youth Study (Macek et al., 2002). However, the results presented in this paper are based on cross-sectional data. The sample includes two cohorts. The younger one includes adolescents born from 1986 to 1987 (age 12.5 to 14 at the time of data collection), the older one includes adolescents born from 1983 to 1984 (age 16.5 to 18). The sample includes more girls (n=424) than boys (n=286) but this is not an issue because the genders are treated separately in the analyses and the proportion of younger to older children is the same within both gender subgroups.

All participants come from the South Moravia region of the Czech Republic. They were randomly selected according to the type of attended school. About one fourth of the younger cohort attends high-track grammar schools (Gymnasium), the rest attends various basic schools. The composition of the older cohort reflects the three types of secondary education in Czech Republic – one third of this sample attends vocational schools, one third attends specialized schools leading to secondary school certificate and the last third attends grammar schools (Gymnasium).

Procedure
Given the age of our participants, we sought permission from the participating schools, the relevant school district authority, and the parents. Data were collected using self-report questionnaires administered to adolescents in classroom-size groups (about 20 to 30 respondents) during two class periods. Respondents completed the questionnaires without the presence of their teachers.

The questionnaires consisted of a number of self-assessment scales and items from various domains: family relationships, peer and friend relationships, attitudes to school environment, risk-taking behavior.

Measures
In the present investigation we are interested in the measures of adolescents’ perceptions and evaluations of their parents, friends, peers, and self.

Self-esteem was measured by using 8 items taken from several sources (Rosenberg, 1979; Kracke and Held, 1994; Schwarzer, 1986). Four positive and four negative statements (e.g. „I do not think I am any worse than anybody else“, „I often feel useless“, „I think I am all right“) were assessed on a 4-point scale ranging from 1 (totally disagree) to 4 (totally agree). The Cronbach alpha reliability estimate for this scale was .82.

Self-efficacy was measured by 3 items („Whatever happens, I can manage it“, „Even when bigger problems arise unexpectedly I do not have trouble finding a solution“, „When I find myself in a difficult situation I usually know what to do“) (Kracke and Held, 1994; Jerusalem and Schwarzer, 1986). The participants marked their agreement with individual items on a 4-point scale from 1 (totally disagree) to 4 (totally agree). The Cronbach alpha reliability estimate for this scale was .73.

Warmth of Mother and Warmth of Father are two 11-item scales adapted from a similar inventory of parental warmth and acceptance (Greenberger and Chen, 1996). The participants marked their agreement with the statements (e.g. „My mother (father) really understands me“) on a 4-
point scale ranging from 1 (totally disagree) to 4 (totally agree). The Cronbach alpha reliability estimate for the Warmth of Mother scale was .83 and for the Warmth of Father scale was .87.

The Parental Monitoring Scale is based on an instrument by Greenberger and Chen (Chen et al., 1998). Nine items represent questions on parental knowledge of various aspects of adolescents’ lives such as „Do your parents know who you spend your time out with?“ The scale values ranged from 1 (never) to 4 (always). The Cronbach alpha reliability estimate for this scale was .82.

Trust in Parents and Friends are translated versions of two scales used in a German project on adolescent development during the time of social change (Kracke and Held, 1994; Noack and Kracke, 1997). Trust in parents and Trust in friends were measured separately. The participants marked their agreement with six items like „I can be myself when I am with my parents (friends)“ on a 4-point scale ranging from 1 (totally disagree) to 4 (totally agree). The Cronbach alpha reliability for the Trust in Parents scale was .70 and for the Trust in Friends scale it was .68.

Global Comparison with Peers was measured by a 6-item scale specially constructed for the present study. The participants were asked to compare themselves with their peers on various aspects which are important in adolescent social life (e.g. „Regarding my popularity (level of knowledge, abilities, appearance etc.), am I better or worse than most of my peers?“). The responses on a five-point scale ranged from much worse (1) to much better (5). The Cronbach alpha reliability for this scale was .61.

On the basis of principal component analysis of the set of items related to personal importance of friends, two summation scales were constructed. The Esteem from Friends (7 items) expresses the participant’s personal experience of how much friends respect him/her (e.g. „I think my friends can see my good character traits“). The Cronbach alpha reliability estimate for this scale was .74. The second scale is called Friend involvement in dealing with problems (4 items). It is based on an assessment of the amount of involvement of friends in the participant’s problems in private life, at school, or in family (e.g. „When I have personal problems I ask my friends for help“). The Cronbach alpha reliability for this scale was .82. Items of both scales were ranging on a 4-point scale from totally disagree (1) to totally agree (4).

For an aggregate analysis we constructed two additional variables: Relationship with Parents and Relationship with Peers/Friends. The variables were computed separately for boys and girls. The former one is a variable formed by summing the four parental scales (in standardized scores). The Cronbach alpha reliability estimate for the Relationship with Parents scale was .84 for boys and .84 for girls. The latter one is a variable formed by summing the four peer/friend scales (in standardized scores). The Cronbach alpha reliability estimate for the Relationship with Peers/Friends scale was .60 for boys and .62 for girls.

RESULTS

First, we present the descriptive characteristics for all variables used in this paper, including gender differences. Second, we show the correlations between the variables, followed by the results of the regression analyses. All analyses are presented separately for boys and girls.

Descriptives, effects of sex and cohort

Means and standard deviations of all variables broken down by sex and are reported in Table 1.

No significant sex differences were found in the level of self-esteem, warmth of father, trust in parents, and global comparison of adolescents with peers.

Boys show significantly higher level of self-efficacy than girls do. Although there is no significant difference between boys and girls in the Warmth of father mean score, the variance of girls’ scores is significantly larger than the variance of boys’ scores (p < .01). Girls report higher warmth of mother and higher levels of monitoring from their parents. Also the remaining friend-related assessments are significantly higher for girls than for boys: trust in friends, esteem from friends, and friend involvement in dealing with problems.

Because the cohort (age) variable is not included in the regression analyses we wanted to be reasonably sure that any effects that we might find are not caused by cohort membership. To eliminate possible direct cohort effects the proportion of cohorts should be the same in both gender subgroups. This condition can be considered met as in the boys group 57% were from the younger cohort and in the girls group it was 55% (χ²=.44, df=1, p>.05). Also there should not be any age*cohort interaction effects on the variables under study. The last column in Table 1 reports the significances of age*cohort interaction effects. Only for self-efficacy there is a
Table 1 Means and One-Way Analyses of Variance for Effects of Gender on Variables Used in the Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>boys</th>
<th></th>
<th></th>
<th></th>
<th>girls</th>
<th></th>
<th></th>
<th></th>
<th>age*cohort interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>mean difference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>3.07</td>
<td>.46</td>
<td>3.07</td>
<td>.47</td>
<td>*</td>
<td></td>
<td>*</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>2.84</td>
<td>.49</td>
<td>2.68</td>
<td>.54</td>
<td>**</td>
<td></td>
<td>*</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Warmth of Mother</td>
<td>3.13</td>
<td>.44</td>
<td>3.30</td>
<td>.46</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Warmth of Father</td>
<td>3.12</td>
<td>.47</td>
<td>3.04</td>
<td>.63</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Parent Monitoring</td>
<td>2.72</td>
<td>.56</td>
<td>2.85</td>
<td>.58</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in parents</td>
<td>2.80</td>
<td>.53</td>
<td>2.87</td>
<td>.57</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esteem from Friends</td>
<td>3.09</td>
<td>.44</td>
<td>3.24</td>
<td>.41</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend involvement</td>
<td>2.68</td>
<td>.70</td>
<td>3.11</td>
<td>.62</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in Peers</td>
<td>2.54</td>
<td>.46</td>
<td>2.81</td>
<td>.48</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison with Peers</td>
<td>3.25</td>
<td>.48</td>
<td>3.19</td>
<td>.43</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

significant interaction effect but it is very slight (partial eta²=.009; boys have the same self-efficacy in both cohorts while girls' self-efficacy is slightly lower in the younger cohort). Thus, we consider it safe to disregard the cohort variable in the following regression analyses.

Correlations between predictor variables

Table 2 presents correlations between the four parent-related variables and the four friend-and-peer-related variables. A very consistent pattern of significant interrelations is evident among parent characteristics. As expected, perceived intensities of mother and father warmth are mutually positively dependent and they are also strongly positively related to the adolescent’s trust in parents. No strong sex differences are evident in this pattern of correlations. The high internal consistency estimates for the Relationship with Parents aggregate scale reflect the high level of intercorrelation among the parent-related variables.

The variables describing adolescents’ perception and evaluation of their friends and peers constitute a relatively clear cluster, too. All correlations are positive and most of them are significant. However, compared to the similar pattern of parent variables, this group of variables is not as tightly related.

Global comparison with peers does not reveal any significant correlations with variables representing specific roles and meaning of adolescents’ friends. Specifically, a feeling derived from comparison „I am better/worse than most of others” is relatively independent on the adolescent’s trust in friends, the esteem perceived from friends, as well as receiving help from friends.

Table 2 Intercorrelations Between Predictors Used in Regression Analyses (boys above, girls under diagonal)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Warmth of Mother</td>
<td></td>
<td>.57**</td>
<td>.54**</td>
<td>.51**</td>
<td>.16*</td>
<td>.07</td>
<td>.04</td>
<td>.08</td>
</tr>
<tr>
<td>2. Warmth of Father</td>
<td>.50**</td>
<td></td>
<td>.53**</td>
<td>.50**</td>
<td>.13</td>
<td>.12</td>
<td>-.01</td>
<td>.10</td>
</tr>
<tr>
<td>3. Parent Monitoring</td>
<td>.58**</td>
<td>.50**</td>
<td></td>
<td>.69**</td>
<td>.12</td>
<td>.07</td>
<td>-.05</td>
<td>.02</td>
</tr>
<tr>
<td>4. Trust in Parents</td>
<td>.60**</td>
<td>.55**</td>
<td>.70**</td>
<td></td>
<td>.11</td>
<td>.09</td>
<td>-.03</td>
<td>.03</td>
</tr>
<tr>
<td>5. Esteem from Friends</td>
<td>.16**</td>
<td>.25**</td>
<td>.07</td>
<td>.00</td>
<td></td>
<td>.44**</td>
<td>.10</td>
<td>.37**</td>
</tr>
<tr>
<td>6. Friend Involvement</td>
<td>.04</td>
<td>.20**</td>
<td>.03</td>
<td>-.05</td>
<td>.60**</td>
<td></td>
<td>.32**</td>
<td>.33**</td>
</tr>
<tr>
<td>7. Trust in Peers</td>
<td>-.11*</td>
<td>-.03</td>
<td>-.10*</td>
<td>-.13*</td>
<td>.22**</td>
<td>.30**</td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td>8. Comparison with Peers</td>
<td>.11*</td>
<td>.15**</td>
<td>.00</td>
<td>.02</td>
<td>.38**</td>
<td>.18**</td>
<td>.09</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
Mutual relationships among the three friend-related variables are stronger for girls than for boys. Specifically, when adolescents feel high trust in friends they often report receiving help from friends and they also feel the high esteem from them. All correlations are significant with one exception: boys do not show significant connection between esteem from friends and trust in friends.

When we look at the relationships between the parent and peer characteristics, sex differences are evident. Concerning boys, only one significant correlation (at the 5% level) is revealed: perceived warmth of mother is positively related to esteem from friends. Concerning girls, one half of all the correlations are significant. However, we do not see any clear pattern. While trust in friends correlates negatively with most of the parent-related characteristics (trust in parents, warmth of mother, and parent monitoring), esteem from friends and global comparison with peers are related positively with the warmth of both parents.

**Parent- and peer-relationship variables as predictors of self-esteem and self-efficacy**

To examine how the adolescents’ parent-related and peer-related assessments associate with the level of their global self-evaluations, multiple regression analyses using the hierarchical method were performed. The constructs of self-esteem and self-efficacy were used separately as the dependent variables. Predictor variables were entered in two steps: parent variables as indicators of the long-term influencing factors on adolescent self-development in Step 1 and friend and peer variables representing the important current factors influencing everyday adolescent self-perceptions and self-evaluations in Step 2. Regressions were conducted separately for boys and girls.

First, we present the prediction of self-esteem. Table 3 displays the standardized regression coefficients (Beta), explained variance (R²), increases of R² in each step and the total adjusted R².

With the entry of parent-related variables in Step 1, there are substantial and significant increments in the amount of variance explained for both sexes. This shows that adolescents with higher reported feelings of warmth of both parents tend to also report higher self-esteem.

Patterns of significant predictors are similar for both sexes. However, parent-related variables increase the amount of explained variance in self-esteem more in boys than in girls (increases in R² are .171 and .118 respectively). Especially the variables of parent warmth differ with sex: warmth of father is the strongest predictor in boys, warmth of mother similarly in girls.

When friend-and-peer-related variables were entered in Step 2, predicted variance in self-esteem increased significantly for both sexes (by 9 percent points in boys and 10 in girls). Relevant final patterns of significant predictors further enhanced the differences between the sexes. For boys,

**Table 3 Summary of Hierarchical Regression Analyses for Variables Predicting Self-esteem**

<table>
<thead>
<tr>
<th>Variable</th>
<th>boys (N=286)</th>
<th></th>
<th></th>
<th>girls (N=424)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>Warmth of Mother</td>
<td>.157</td>
<td>.133</td>
<td></td>
<td>.215**</td>
<td>.163*</td>
<td></td>
</tr>
<tr>
<td>Warmth of Father</td>
<td>.241**</td>
<td>.213**</td>
<td></td>
<td>.110</td>
<td>.035</td>
<td></td>
</tr>
<tr>
<td>Parent Monitoring</td>
<td>.140</td>
<td>.142</td>
<td>-.070</td>
<td>-.044</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in parents</td>
<td>-.062</td>
<td>-.072</td>
<td>.134</td>
<td>.189*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esteem from Friends</td>
<td>.196**</td>
<td></td>
<td></td>
<td>.186**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend involvement</td>
<td>.132</td>
<td></td>
<td></td>
<td>.104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in Peers</td>
<td>.007</td>
<td></td>
<td></td>
<td>.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison with Peers</td>
<td>.060</td>
<td></td>
<td></td>
<td>.227**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in R²</td>
<td>.171**</td>
<td>.094**</td>
<td>.118**</td>
<td>.101**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total R²</td>
<td>.171</td>
<td>.266</td>
<td>.118</td>
<td>.219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.154</td>
<td>.235</td>
<td>.106</td>
<td>.197</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
only two predictors significantly contribute to the 27% of the total explained variance in self-esteem. Warmth of Father keeps its importance from Step 1 and in Step 2 it is joined by Esteem from Friends. It may be concluded that the boys’ self-esteem grows with perceived warmth of father and with the growing esteem or respect that the adolescent perceives from his friends.

For girls, all the included predictors explain 22% of variance. Four predictors turned up significant: Warmth of Mother, Trust in Parents, Esteem from Friends, Global Comparison with Peers. The influence of trust in parents rose in the final model to the level of statistical significance. Esteem from friends and Global comparison showed as new significant predictors. All these predictors have a positive relationship with self-esteem.

The results of hierarchical regression for the self-efficacy are presented in Table 4.

In Step 1, parent-related variables explained significant portion of variance only for boys. For both sexes, the amount of variance in self-efficacy explained by parent-related variables was quite small – 6 percent for boys and 3 percent for girls.

Step 2, in which the friend and peer variables were entered, brought a significant increase in explained variance of self-efficacy in both sexes. The final patterns of significant predictors reveal some sex differences. The influence of parents is very specific. While the perceived warmth of father is positively related to boys’ self-efficacy, the standardized beta coefficient for warmth of mother is not significant. Concerning the block of friend and peer variables, general comparison with peers and trust to friends are significant predictors.

Girls’ level of self-efficacy grows with the trust in their parents and with positive feelings received from their peers – whether in the form of the feeling of acceptance or in the form of comparisons with peers.

Our aim is to compare the predictive power of parent-related and friend/peer-related variables. A problem can be seen in the fact that the correlations among parent-related variables in our sample are higher than the correlations among friend/peer-related variables. A lower level of multicollinearity among friend/peer-related variables gives them a chance to explain more variance in the dependent variable. One way to deal with this problem, though not perfect, is to aggregate the four variables for each source of influence (parents vs. friends/peers) into one composite variable. Thus, we will have one score representing each adolescent’s relationship with his or her parents (Relationship with Parents) and one score representing his or her relationship with his or her relationship with friends/peers (Relationship with Friends/Peers).

Tables 5 and 6 present the regressions done in the same manner as those presented above with the difference that only two predictor variables were used: Relationship with Parents and Relationship with Friends/Peers. Table 5 presents the results of the 2-step regression of these two variables on self-esteem and Table 6 presents their regression on self-efficacy.

The expected pattern of regression weights and explained variance did not show up in terms of statistical significance. Both aggregate variables are significant predictors of both self-es-
Table 5 Summary of Hierarchical Regression Analyses for Aggregated Variables Predicting Self-esteem

<table>
<thead>
<tr>
<th>Variable</th>
<th>boys (N=286)</th>
<th>girls (N=424)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Step 1</strong></td>
<td><strong>Step 2</strong></td>
</tr>
<tr>
<td></td>
<td><em>Step 1</em>*</td>
<td><strong>Step 2</strong></td>
</tr>
<tr>
<td>Relationship with parents</td>
<td>.38**</td>
<td>.35**</td>
</tr>
<tr>
<td></td>
<td>.32**</td>
<td>.30**</td>
</tr>
<tr>
<td>Relationship with peers/friends</td>
<td>.28**</td>
<td>.23**</td>
</tr>
<tr>
<td>Increase in R²</td>
<td>.14**</td>
<td>.08**</td>
</tr>
<tr>
<td></td>
<td>.10**</td>
<td>.05**</td>
</tr>
<tr>
<td>Total R²</td>
<td>.14</td>
<td>.22</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.14</td>
<td>.21</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Table 6 Summary of Hierarchical Regression Analyses for Aggregated Variables Predicting Self-efficacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>boys (N=286)</th>
<th>girls (N=424)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Step 1</strong></td>
<td><strong>Step 2</strong></td>
</tr>
<tr>
<td></td>
<td><em>Step 1</em>*</td>
<td><strong>Step 2</strong></td>
</tr>
<tr>
<td>Relationship with parents</td>
<td>.19**</td>
<td>.16*</td>
</tr>
<tr>
<td></td>
<td>.14*</td>
<td>.13*</td>
</tr>
<tr>
<td>Relationship with peers/friends</td>
<td>.29**</td>
<td>.26**</td>
</tr>
<tr>
<td>Increase in R²</td>
<td>.04**</td>
<td>.08**</td>
</tr>
<tr>
<td></td>
<td>.02*</td>
<td>.06**</td>
</tr>
<tr>
<td>Total R²</td>
<td>.04</td>
<td>.12</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.04</td>
<td>.12</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

teen and self-efficacy. Boys and girls do not differ in this pattern. However when we inspect the magnitudes of regression weights we can see that Relationship with Parents might explain self-esteem slightly better and Relationship with Friends/Peers might seem a better predictor of self-efficacy.

DISCUSSION

According to the aims of this study, relationships to parents and to friends/peers were conceptualized as two relatively independent domains of adolescents' perceptions and evaluations. In general, the empirical results indicate high consistency within the block of parent variables (for both sexes) and also relatively good consistency in the block of friend variables (especially among girls). Interrelations between the two blocks are less clear. Boys' assessments of parents are not related to their assessments of friends. Regarding girls, the assessments of parents and the assessments of friends and peers are more mutually dependent. The comparison of younger and older adolescents confirms the typical trend: the intensity of relationships to parents is rather decreasing while the intensity of friend relationships is growing. Consistently with other findings (Meeus and Deković, 1995; Macek and Osecka, 1999) it must be noted that although the intensity of parent relationships is decreasing their meaning remains positive.

The adolescents' global self-evaluation was represented by two components - self-esteem and self-efficacy. Both these characteristics were found higher in older adolescents, without sex differences. In absolute numbers adolescents report more self-esteem then self-efficacy while self-efficacy grows more with age.

Self-esteem expresses an evaluative component of self-system; a self-reflective attitude that is a product of viewing the self as an object of evaluation (Campbell, Lavalle, 1993). During middle adolescence, this aspect of self-evaluation is closely related to an experience of emotional autonomy and authenticity. To find „one’s own true self“ means high self-esteem, and parental
and peer support improves these feelings. For that reason it was assumed that especially the perceived parent acceptance (warmth, trust) will predict these feelings; more than perceived support from friends and peers comparison.

This assumption seems to be supported by the explained variance increments – for boys parent variables explain three times more self-esteem variance than peer variables, for girls it is twice as much – peers seem to have slightly more influence on girls’ self-esteem.

The relation of self-esteem to the assessment of the warmth of the parent of the same sex showed to be surprisingly strong. We expected this to happen for girls as previous studies suggested that the importance of father decreases with age while the importance of mother remains stable (Macek, 1997). For boys, father is always the key determinant but mother also stays important. The trust in parents is also an important predictor. The influence of peers and friends is stronger on girls. It is based on the trust in peers (while trust in parents is not so important anymore) and for girls also on the interpersonal comparisons with female peers. This shows a stronger tie to interpersonal evaluation. For boys this is more about feelings.

Perceived global self-efficacy represents competency as an important aspect of adolescent global self-evaluation (Harter, 1985). It is related to control beliefs (Flammer, 1995) and social skills of adolescents (Schwarzer, 1993). Adolescents with greater self-efficacy show higher quality of close friendship, and their friendships tend to increase in quality during middle and late adolescence (Land, 1998). We assumed that the perceived peer and friend relationships would be the stronger predictors here. As the results show, the strongest predictor of self-efficacy is the comparison with peers, the perception of parents is much weaker. Here, too, substantial sex differences can be seen.

When boys report high level of self-efficacy they usually feel the warmth from their father, have trust in their friends, and see themselves rather better in comparison to their peers. On the other side, low self-efficacy is connected with opposite characteristics (negative self-evaluations as a product of interpersonal comparison, low perceived warmth from father, and low experienced trust in friends).

With regard to girls, the pattern of predictors is different. The by far strongest predictor of level of self-efficacy is social comparison with peers. Mother and father do not seem to have any influence, only general trust to parents and age are still significant predictors.

**REFERENCE**


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