

Family Relations and Relationships with Peers as Determinants of Self-Esteem in Adolescents

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Introduction

Adolescence is a time of rapid changes in the child's physical, cognitive and social development that place great demands on all family members. The adolescent becomes increasingly separated from his or her parents, the importance of close friends increases, and attachment relationships gradually shift from parents to friends and romantic partners (1). Previous research emphasized the disconti-

Objective – The aim of this study was to examine to what extent the quality of family relationships (attachment to mother, attachment to father, family cohesion) and relationships with peers (attachment to peers and social acceptance) predict global self-esteem of boys and girls in adolescence. **Materials and methods** – The sample included 221 high school students aged 14-18 years old. Attachments to parents and peers were assessed using the Inventory of Parent and Peer Attachment. Family cohesion was measured with the Family Cohesion Scale of the Colorado Self-Report Measure of Family Functioning. Adolescent perceptions of global self-worth and social acceptance among peers were measured using the Self-Perception Profile for Adolescents. **Results** – The results showed that girls are more attached to their peers than boys. Boys and girls did not differ in their attachment to mother and father, perception of family cohesion, self-conceptions of global self-worth and social acceptance. Stepwise regression analyses were conducted on the results for the boys' and girls' samples with adolescent global self-esteem as a criterion variable and measures of attachment to peers, social acceptance, family cohesion, attachment to mother and attachment to father as predictor variables. The results revealed that attachment to the same-sex parent and peer acceptance significantly contribute to boys' and girls' global self-esteem. **Conclusion** – The findings of this study point to the importance of approval from significant others (family and peer group) in different socialization contexts for fostering global self-esteem in adolescents.

nity in parent-child relationships during adolescence, while contemporary theoretical models conceptualise adolescence as a period of both growing autonomy and connectedness to parents (2). The idea that parents continue to be influential in providing support during adolescence is supported by research based on attachment theory. A central feature of attachment theory is the notion that children differ in the degree of emotional security and type of "internal working models"

they derive from interactions with primary caregivers. Their relationships with caregivers early in life are later reconstructed in other close relationships, including relationships with peers (3).

Research on parent-adolescent relationships has shown that a secure attachment to parents has positive repercussions on adolescent self-esteem, life satisfaction, school achievement and psychological adjustment (4), while depressed adolescents are more likely to perceive their family relationships as being low in parental warmth and family cohesion (5). Parental child-rearing styles have similar effects on adolescent adjustment and well-being. Studies with Croatian high school students have shown that mother's and father's authoritative parenting, characterized by warmth and acceptance, supervision of a child and encouragement of psychological autonomy, have positive effects on adolescent self-esteem life satisfaction, happiness (6) hope and optimism (7). Family functioning is also important for psychological adjustment in adolescence. Decreased family cohesion and increased interparental conflict are associated with problems in adolescents' social interactions (8), while higher family cohesion is related to higher hope and optimism in adolescents (9). Research on the role of peers has shown similar results to the research on family influences on adolescent development. Adolescents who have better relationships with friends have higher self-esteem, are more satisfied with their life, feel happier (6) and show less internalized problems, compared to adolescents whose friendships are of an inferior quality (10).

In sum, family and peers are socializing contexts that work together on the development of adolescents. However, past studies have usually considered the individual roles that adults and peers play in adolescent well-being (11). In addition, research on adolescents' emotional and behavioural problems still dominates the literature on adolescent

development, while their competencies and positive social behaviour are neglected. Recent research has focused more on the study of family and peer relationships as determinants of positive developmental outcomes in adolescence (11). This paper will tackle the issue of the importance of the contribution of different socialization systems for adolescent self-esteem by examining family and peer contexts concurrently. A positive sense of self has been postulated to be central to the adaptive functioning of the individual (12). High self-esteem in children and adolescents is related to various positive academic, psychological and behavioural outcomes and the reverse is true for low self-esteem (13, 14). Given the desirable effects of a high level of self-esteem, it is important to investigate its origins as such knowledge might facilitate the design of effective interventions for self-esteem enhancement (15). Global self-esteem or self-worth is the evaluative aspect of self-concept and refers to an overall evaluation of one's value as a person. It is distinguishable from domain-specific self-conceptions, such as physical appearance, scholastic competence and social acceptance (12, 16). The strongest relations between domain-specific self-concept facets and global self-esteem in adolescents have been demonstrated for peer acceptance and physical appearance self-perceptions (12,15, 16). A meta-analysis of studies that examined gender differences in self-esteem revealed a small but significant overall trend for lower self-esteem among adolescent girls than among adolescent boys (17). Differences in adolescent boys' and girls' experiences of peer relationships are more consistently found in empirical studies. Adolescent girls are significantly more attached to their peers than boys (18).

Studies that have examined the effects of the quality of parent and peer relationships on adolescent self-esteem have shown mixed results. Some studies have identified significant independent effects of attachment to

parents and attachment to peers on adolescent self-esteem (6, 19, 20). Other researchers have found significant effects of attachments to mother and father on adolescents' self-esteem, while the effect of peer attachment was not significant (21, 22). Studies have also found, although to a lesser extent, significant interactive effects indicating that quality relationships with peers can protect children from adverse effects of stressful relationships in the family. For example, Gauze and colleagues (23) reported high-quality friendship as being more strongly linked to higher self-esteem of adolescents from low adaptive and less cohesive families than among adolescents from more adaptive and cohesive families. Some studies indicate that attachment to parents (19) and family interactions (24) are a stronger predictor of adolescents' well-being than attachment to peers. Longitudinal studies suggest that the influence of relations with parents on various outcomes in adolescents, including self-esteem, continues into adulthood, while adolescents' relationships with peers do not show long-term effects on these outcomes (25).

Attention to gender, especially the child's gender, has been relatively neglected in research on family and peer relations as a determinant of adolescents' well-being. Researchers have also devoted more attention to mothers than fathers or have examined attachment to parents as a unique category (26). Since mothers and fathers play different roles in the socialization of children, they may have distinct effects on children's well-being. (27). In relation to the overall lack of empirical studies focusing on concurrent and differential effects of family and peer relations on adolescent well-being, this study seeks to examine self-esteem among adolescent boys and girls in relation to attachment to both parents and peers.

In sum, the aim of this study is to explore to what extent family relationships (attachment to mother, attachment to father and

family cohesion) and relationships with peers (attachment to peers and peer acceptance) contribute to the explanation of self-esteem in adolescent boys and girls.

Method

Participants

The sample comprised 221 students (116 girls and 105 boys) from two vocational schools and one secondary grammar school in a middle-sized Croatian city, with 57.9% of them attending the first year of high school and 42.1% the second year of high school (secondary education in Croatia starts after grade 8). The students ranged in age from 14 to 18 years old with a mean age of 15.6 years old ($SD=0.71$). The majority of them were living with both parents (95%). According to adolescents' reports, most of their parents completed high school (66.1% of mothers and 67.4% of fathers), about one quarter of parents (22% of mothers and 25.3% of fathers) had some college or a university degree, while 11.8% of mothers and 7.2% of fathers had completed elementary education.

Instruments

The Inventory of Parent and Peer Attachment (IPPA) (4). The IPPA assesses adolescents' perception of the positive and negative affective/cognitive dimension (degree of mutual trust, quality of communication and extent of anger and alienation) of relationships with their parents and close friends (peers). This instrument is a self-report questionnaire with a five-point response format (1 - "almost never or never true", 5 - "almost always or always true"). In this study, the revised version of the IPPA was used which consists of 25 items for each type of relationship (Mother, Father and Peer Version), yielding three attachment scores. Principal component analyses of students' ratings yielded a one-factor

solution for each section of this inventory. The percentage of total variance explained was 37.7%, 43.3% 36.7% for mother, father and peers, respectively. The total result for each subscale is calculated by reverse-scoring the negatively worded items and then summing the response values on 25 items, with higher scores denoting a higher quality of attachment. Internal consistency (Cronbach α) of the three scales that measure the quality of different attachment relationships was 0.92, 0.94 and 0.90, for mother, father and peer scales, respectively.

The Family Cohesion Scale (28). This measure is a five-item subscale from the Colorado Self-Report Measure of Family Functioning that assesses emotional bonding between family members. Students rated on a 4-point scale (1 - "very untrue for my family", 4 - "very true for my family") their agreement with the five statements. The total score is obtained by summing three positively worded items and two negatively worded items (reverse scored), with higher scores indicating higher family cohesion. The exploratory factor analysis confirmed a one-factor solution for this scale (53.2% of the total variance explained). The Cronbach α reliability coefficient was 0.77 in this study.

Social Acceptance Scale from the *Self-Perception Profile for Adolescents* (16). This scale (5 items) taps the degree to which the adolescent is accepted by peers, feels popular, has a lot of friends, and feels that he/she is easy to like. The structured-alternative question format requires that respondents first select the type of teenagers they are most like, those described in the first part of the statement, or those described in the second part of the statement, and then assess how true that statement is for them ("really true for me" or "sort of true for me"). Each statement is scored on a four-point scale and responses are summed within each scale with higher scores indicating higher levels of perceived social acceptance. The exploratory factor analysis

confirmed a one-factor solution (44.5% of the total variance explained), and the internal consistency was 0.68 in this study.

Global Self-Worth Scale from the *Self-Perception Profile for Adolescents* (16). This 5-item scale taps the extent to which the adolescent likes oneself as a person, is happy with the way one is leading one's life and is generally happy with the way one is. It constitutes a global judgment of one's worth as a person, rather than domain-specific competence or adequacy. The respondent is first asked to decide which kind of teenager is most like him or her, and then asked whether this is only sort of true or really true for him or her. The answers are coded on a 4-point scale, from the least adequate self-judgment (1) to the most adequate self-judgment (4). The exploratory factor analysis confirmed a one-factor solution with 47.3% of the total variance explained and the internal consistency was 0.71 in this study.

Procedure

Approval to collect data was secured from the school principals. Consent from students and their parents was obtained before administering the questionnaire. The questionnaire contained instruments described previously as well as questions about students' age, gender, type of school, grade level, family structure, and parental education. One of the researchers administered questionnaires to students in their classrooms during regular school hours. Data were collected and coded anonymously.

Statistical Analysis

Data analyses were conducted using IBM SPSS Statistics for Windows, Version 20.0. We performed t-tests to examine gender differences in students' ratings of family cohesion, attachment to mother, attachment to father, attachment to peers, social accep-

tance, and global self-worth. Bivariate correlations (Pearson's r) between the study variables were calculated separately for boys and girls. To examine the relative contribution of the predictor variables to the explanation of students' global self-worth, two stepwise regression analyses were conducted, separately for boys and girls. Stepwise regression combines forward selection and backward elimination of predictors in order to select a subset of important predictor variables. This analysis starts with the strongest predictor variable and adds another predictor if it explains significant additional variance in the criterion variable (P of F-to enter ≤ 0.05 , P of F-to remove ≥ 0.10).

Results

Gender Differences in the Study Variables

In Table 1 descriptive statistics of the examined variables are presented separately for male and female adolescents. Adolescents tend to report moderately high levels of family cohesion, attachment to parents, social acceptance and global self-worth. Significant gender differences were found for peer attachment with girls reporting higher levels of attachment to their close friends than boys. Boys and girls did not differ in their ratings of family cohesion, attachment to both parents, perceived peer acceptance and self-esteem.

Correlational and Regression Analyses

To explore the relationship between family and peer group variables and adolescent self-esteem, Pearson product-moment correlation coefficients were calculated for the samples of adolescent girls and boys (Table 2). Girls' global self-worth was significantly and positively related to attachment to both parents and peers, while boys' global self-worth was significantly related only to attachment to father. Significant positive associations were also found between girls' and boys' global self-worth and their ratings of family cohesion. Perceived social acceptance was significantly positively associated with adolescent self-esteem in both samples, indicating that positive regard from peers is closely related to the way adolescents view themselves. Significant bivariate correlations were also found between perceived social acceptance and attachment to peers, and this association was stronger among the sample of adolescent girls. In addition, peer acceptance was significantly associated with girls' attachment to their fathers. Girls who reported higher levels of attachment to peers also reported higher levels of quality in family relationships (family cohesion and attachment to both parents), while boys' attachment to peers was significantly positively related only to attachment to their mothers. Obviously, good family and peer relations are associated with both boys'

Table 1. Differences between Boys and Girls in Perceived Family Cohesion, Attachment to Mother, Father and Peers, Social Acceptance and Global Self-Worth

Variable	Girls (N=116)			Boys (N=105)			t
	M	SD	Range	M	SD	Range	
Family cohesion	16.88	2.71	9-20	16.88	2.82	9-20	0.01
Attachment to mother	97.91	17.07	47-125	94.10	14.77	50-120	1.76
Attachment to father	89.46	21.73	39-124	92.80	15.76	54-123	1.30
Attachment to peers	105.26	12.41	56-122	97.01	13.10	53-121	4.81***
Social acceptance	14.91	2.79	5-20	15.11	2.61	9-19	0.57
Global self-worth	14.37	3.27	5-20	14.69	2.88	7-20	0.76

*** $P < 0.001$.

Table 2. Correlations between Study Variables by Students' Gender

Variable	1	2	3	4	5	6
Girls (N=116)						
1. Family cohesion	-	0.58**	0.58**	0.20*	-0.02	0.22*
2. Attachment to mother		-	0.50**	0.29**	0.01	0.28**
3. Attachment to father	-	-	-	0.33**	0.21*	0.25**
4. Attachment to peers	-	-	-	-	0.58**	0.28**
5. Social acceptance	-	-	-	-	-	0.34**
6. Global self-worth	-	-	-	-	-	-
Boys (N=105)						
1. Family cohesion	-	0.44**	0.52**	0.08	0.00	0.23*
2. Attachment to mother	-	-	0.42**	0.20*	0.08	0.14
3. Attachment to father	-	-	-	0.03	-0.08	0.27**
4. Attachment to peers	-	-	-	-	0.30**	0.01
5. Social acceptance	-	-	-	-	-	0.40**
6. Global self-worth	-	-	-	-	-	-

*P<0.05; **P<0.01.

and girls' feelings of self-worth, but the structures of their interrelationships are somewhat different among adolescent girls and boys.

To determine the relative importance of the quality of adolescent social relationships in different socialization contexts for the explanation of the variability in their global self-esteem, two stepwise regression analyses were conducted, separately for the results of boys and girls. In these analyses global self-worth was a criterion variable and family cohesion, attachment to mother, attachment to father, attachment to peers and social acceptance were predictors.

In the stepwise regression analysis with the results of the girls' sample (Table 3), social acceptance, entered in the first step, accounted for 12% of the variance in global self-worth scores, $F(1, 114)=14.81$, $P=0.000$. Attachment to mother, entered second, accounted for an additional 8% of the variance in global self-worth scores, $F_{\text{change}}(1, 113)=10.74$, $P=0.001$. Together, social acceptance and attachment to mother accounted for 19% of the variance in the girls' global self-worth scores, $F(2, 113)=13.41$, $P=0.000$. Family

cohesion, attachment to father and attachment to peers were not introduced into the regression equation due to their insignificant contributions ($t_{\text{cohesion}}=0.89$, $P=0.376$; $t_{\text{father}}=0.47$, $P=0.637$; $t_{\text{peer}}=0.05$, $P=0.959$) to girls' self-esteem. Further, as seen in Table 3, social acceptance was also the most significant predictor of boys' self-esteem, and it alone accounted for 16% of the variance in global self-worth scores, $F(1, 103)=19.50$, $P=0.000$. At the second step of the analysis attachment to father was entered into the regression equation and it explained an additional 9% of the variance in boys' global self-worth scores, $F_{\text{change}}(1, 102)=12.59$, $P=0.001$. Overall, 25% of the variance of boys' global self-worth scores could be accounted for by social acceptance and attachment to father, $F(2, 102)=17.15$, $P=0.000$. The remaining predictor variables, namely family cohesion, attachment to mother and attachment to peers, were not entered into the regression equation due to their insignificant contributions ($t_{\text{cohesion}}=1.01$, $P=0.316$; $t_{\text{mother}}=0.32$, $P=0.751$; $t_{\text{peer}}=1.59$, $P=0.116$) to boys' self-esteem.

Table 3. Regressions of Boys' and Girls' Global Self-Worth on Family and Peer Relationship Variables – Summary Results of Stepwise Regression Analyses

Global self-worth					
Girls (N=116)			Boys (N=105)		
Predictor	ΔR^2	β	Predictor	ΔR^2	β
Step 1	0.12**	-	Step 1	0.16**	-
Social acceptance	-	0.34**	Social acceptance	-	0.40**
Step 2	0.08**	-	Step 2	0.09**	-
Social acceptance	-	0.34**	Social acceptance	-	0.42**
Attachment to mother	-	0.28**	Attachment to father	-	0.31**
R ²	0.19**	-	R ²	0.25**	-
R	0.44**	-	R	0.50**	-

**P<0.01; β =The standardized regression coefficient; R=The coefficient of multiple correlation, R²=The coefficient of determination; ΔR^2 =The change in R².

Discussion

The present study was undertaken in order to address several unresolved issues concerning the role of family and peer relations as determinants of adolescent global self-esteem. In relation to the overall lack of empirical studies focusing on adolescents' self-esteem and its associations to socialization factors such as family and peer relationships, we examined concurrently adolescent attachment relationships in different socialization contexts, controlling for other important determinants of global self-esteem, such as family cohesion and domain specific self-conceptions of peer acceptance. Furthermore, we examined the quality of adolescent attachment to their mothers and their fathers in relation to characteristics of adolescents, such as gender.

The results of regression analyses showed that adolescent boys' and girls' feelings of being accepted by their peers and attachment to the same-sex parent were significant predictors of their self-esteem, when controlling for the effects of other important independent variables. Peer attachment, i.e. attachment to close friends in terms of communication, trust, and alienation did not contribute significantly to the explanation of adolescent self-esteem. This finding is in line with most studies which have found that the influence

of attachment to parents is more important for adolescent self-esteem and psychological well-being than that of attachment to peers (4, 25). According to theoretical postulations of attachment theory (3), children and adolescents with a secure attachment to their parents view themselves as worthy of love and care. Therefore, a secure attachment to parents should be related to higher self-esteem in children. Sociometer theory also states that parents who are approving, responsive and nurturing are likely to build high levels of self-worth in their children and their impact is still powerful in adolescence (29). Perceived social acceptance in terms of popularity, how easily one makes friends, and acceptance by peers significantly contributed to the explanation of individual differences in adolescents' global self-worth. This is in accordance with Harter's findings which show that support from peers in a more public domain may better represent acceptance from the "generalized others" and is perceived as more objective than the support from one's close friends. For older children and adolescents, perceived classmate and parent approval are the best predictors of global self-worth (12, 16).

The results of this study replicate the findings of other researchers in some ways but

are also unique due to the integration of the effects of father attachment and mother attachment on global self-worth in adolescent girls and boys. Attachment to mother was a significant predictor of girls' self-esteem, while attachment to father was a significant predictor of boys' self-esteem. These results raise an interesting and important question about the importance of relationships with the same-sex parent for adolescents' feelings of self-worth. The processes of family dynamics that would explain differences in fathers' and mothers' relationships with their sons and daughters are still not sufficiently explored and explained (1). Beginning in early adolescence, adolescent self-worth becomes differentiated by interpersonal context, so depending on the perceived approval from each parent, adolescents can develop different levels of self-worth with their mothers and fathers (12). Research findings indicate that parent-adolescent relationships might be different for girls and for boys as well as toward their mothers and their fathers. In Western culture, autonomy tends to be a part of the role attributed to boys, while dependence matches with the female standards (30). Adolescent females are expected to individuate while staying connected with their parents. Families with daughters show closer, more cohesive, and more supportive family relationships. Distancing is more typical for families with sons and parallels their autonomy development (2, 31). With increasing age, daughters utilize their mothers for support and proximity more than sons (32). Adolescent girls perceive their fathers, compared to mothers, as less available for interaction on a range of personal topics and are less willing to self-disclose to them (33). Boys choose their fathers significantly more than girls for advice (34). Boys and girls may also be less receptive to the involvement of their opposite-sex parent due to intensified gender socialization pressure in adolescence (35). Along with that, based on gender the-

ory (36), it can be expected that the mother-daughter relationship develops on qualities such as connectedness and intimacy, while the father-son relationship is based on shared experiences and activities.

The results further show that both boys' and girls' attachments to their mothers and their fathers were strongly and significantly associated, indicating that adolescents generalize across relationships with their parents. However, the pattern of their attachment relationships with significant others was somewhat different. Attachment theory posits that attachments to parents and the internal working models of these relationships affect the nature of subsequent social relationships (3). In this study, girls' stronger attachment to both their mothers and their fathers and boys' stronger attachment to their mother were significantly related to their higher attachment to peers. These findings are congruent with those of a meta-analysis which showed that parent attachment is moderately correlated to peer attachment. Moreover, the correlation between mother and peer attachment was significantly higher than the correlation between father and peer attachment (18). It might be that one's relationship with one's mother has a stronger influence on the quality of children's attachment to peers. Mothers have been found to be adolescents' primary attachment figures, more than fathers or peers (34). The pattern of correlations between the study variables also shows that girls' attachments to both parents and boys' attachment to their father were significantly positively related to their self-esteem but were not related or were less strongly related to their social competence. On the other side, attachment to peers demonstrated a significant positive relationship with social acceptance, and this association was stronger among the sample of adolescent girls. Similar results were obtained in another study which showed that a good relationship with one's parents is related to individual aspects of de-

velopment such as self-esteem, and not to social behaviour towards peers (22). Future research should attempt to find if and how different patterns of attachment relationships that boys and girls form with their mothers and fathers affect their relationships with peers and peer acceptance.

The results of our study support evidence showing differences in adolescent males' and females' experiences of peer relationships (18). Specifically, girls were significantly more attached to their peers than boys. Girls' friendships are characterized by more intimacy than boys' friendships and they receive higher levels of emotional provisions in their friendships (37), which might be reflected in girls' greater use of best friends for attachment functions. This should be explored more deeply in the future, taking a special interest in the construct of peer attachment, its operationalization, and its compatibility with attachment theory (38).

The present study did not find significant gender differences in adolescents' global self-worth. A meta-analysis that examined gender-related differences in self-esteem in adolescence has found a small but significant overall effect favouring boys (17). Gender effects favouring boys are also evident in some specific self-concept domains such as physical attractiveness and athletic competence. Effects favouring girls are seen in the measure of behavioural conduct, and close friendships during early and middle adolescence (14, 16). Wigfield and colleagues confirmed gender differences in global self-esteem in adolescence, but they also suggested that these differences might partly reflect a response bias. Namely, girls tend to be more modest and boys more self-congratulatory in their self-reports (39). The processes that explain this gender gap in self-esteem still remain unclear and need further exploration.

This study contributes to the body of knowledge on the effects of family and peer relationships on adolescent well-being by

concurrently examining the independent effects of these two important socialization contexts on global self-esteem in adolescents. The findings of this study also point to the importance of examining the gender of adolescents and their parents in research linking personal relationships and adolescent adjustment. In the present study we expanded on previous work in that father and mother attachment differentially predicted self-esteem in adolescent boys and girls, suggesting that future research should focus more on gender differences in attachment relationships, with respect to both the parent's and the child's gender.

Our findings have important implications for counselling practices. Assessing the nature and quality of adolescents' relationships with their same-sex or opposite sex parents might help counsellors identify the positive and negative influences these relationships might have on adolescent global self-esteem (40). Interventions designed to foster positive self-worth in adolescent boys and girls need to consider fostering family and peer relationships as well. For adolescents who experience lower peer acceptance, interventions should focus on improving skills in domains that are valued by peers. Knowledge about gender-specific determinants of self-esteem could also be helpful in designing self-esteem interventions appropriate for boys and girls.

Limitations of the Study

There are also some limitations of this study which need to be addressed. First, the cross-sectional methodology of the study precludes making causal inferences and thus it is not, for example, clear whether attachment to significant others affects adolescent self-esteem or adolescents with higher levels of self-esteem more easily form secure relationships with parents and peers. Longitudinal studies are needed to adequately examine the direction of the effects. Second, this study in-

cluded students from three schools in a small town, and a relatively small number of participants from families with low and high socio-economic status. Further studies should include larger, more heterogeneous sample of adolescents.

Conclusion

The results of this study affirm the importance of attachment to the same-sex parent and social acceptance by one's peer group as relational contexts in which adolescents derive their perceptions of global self-worth. Although peers become more important as children move into adolescence, parents continue to have a significant role in the development of adolescents' self-esteem. Further research should focus more on the identification of particular adolescent boys' and girls' attachment relationships with their mothers and fathers.

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