



BSc in Psychology
Department of Psychology

Perceived Parental- and Peer Support and Relations to
Depressed Mood and Self-Esteem: Comparison Between Age
Groups and Gender.

June, 2023

Students: Hrafnhildur T. Thorlacius and Lena D. Gunnarsdóttir

ID numbers: 090701–2820 / 220401–2350

Foreword

Submitted in partial fulfilment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

Abstract

During the past decade, there has been a dramatic increase in mental health conditions among adolescents. The impact of social support on mental health has been examined, and it has been recognised as an important aspect of positive mental health. The aim of this study was to examine how parental and peer support related to depressed mood and self-esteem among adolescents and if those relationships differed by gender and age. The current study is a cross-sectional study that uses data from two separate surveys (one from secondary public schools and the other from upper secondary schools) from the Youth in Iceland 2018 study conducted by the Icelandic Centre for Social Research & Analysis. The sample consisted of 2,349 adolescents born between 2001 and 2003. The results indicated that both parental and peer support had positive relations to depressed mood and self-esteem in adolescents. Additionally, the findings showed that parental and peer support had more prominent relations to depressed mood and self-esteem in girls than in boys. Furthermore, in terms of the two age groups, parental support was more strongly related with depressed mood and self-esteem in the younger group. Peer support also had stronger relations to depressed mood in the younger group but had no significant relations to self-esteem across age groups.

Keywords: Adolescents, Parental support, Peer support, Depressed mood, Self-esteem

Útdráttur

Undanfarinn áratug hefur orðið gífurleg aukning á geðröskunum meðal unglunga. Áhrif félagslegs stuðnings á geðheilbrigði hafa verið skoðuð og hefur félagslegur stuðningur verið viðurkenndur sem mikilvægur þáttur jákvæðrar geðheilsu. Markmið þessarar rannsóknar var að kanna hvernig stuðningur foreldra og jafningja tengist þunglyndi og sjálfsáliti ungmenna og hvort þau tengsl væru mismunandi eftir kyni og aldri. Núverandi rannsókn er þversniðsrannsókn sem notar gögn úr tveimur aðskildum könnunum (önnur framkvæmd meðal grunnskólanema en hin meðal framhaldsskólanema) úr rannsókninni Ungt fólk á Íslandi 2018 sem framkvæmd var af Rannsóknnum & Greiningu. Úrtakið samanstóð af 2,349 unglungum sem fæddust á árunum 2001 til 2003. Niðurstöðurnar bentu til þess að bæði stuðningur foreldra og jafningja hefði jákvæð tengsl við þunglyndiseinkenni og sjálfsálit unglunga. Einnig kom í ljós að stuðningur foreldra og jafningja hafði sterkari tengsl við þunglyndiseinkenni og sjálfsálit hjá stelpum en strákam. Enn fremur, hvað varðar aldurshópana tvo, þá hafði stuðningur foreldra sterkari tengsl við þunglyndiseinkenni og sjálfsálit hjá yngri hópnum. Jafningjastuðningur hafði einnig sterkari tengsl við þunglyndiseinkenni í yngri hópnum en hafði þó engin marktæk tengsl við sjálfsálit á milli aldurshópa.

Lykilord: Unglingar, Foreldrastuðningur, Jafningjastuðningur, Þunglyndiseinkenni, Sjálfsálit

Perceived Parental- and Peer Support and Relations to Depressed Mood and Self-Esteem: Comparison Between Age Groups and Gender

Over the past few years, mental health conditions have become more widely recognised due to their significant impact on all aspects of life (World Health Organization, n.d.). During the past decade, there has been a dramatic increase in mental health conditions, with one out of seven children between the ages of 10 and 19 experiencing various mental health conditions (World Health Organization, 2021). A growing body of literature has therefore been focusing on the different factors that impact adolescent mental health.

Numerous studies on the influence of social support on mental health have been conducted in recent years, and support has been acknowledged as a crucial factor in positive mental health (Harandi et al., 2017). Social support involves providing assistance or comfort to others, usually in order to assist them in overcoming biological, psychological, and social challenges. There are many forms of social support, such as financial aid, emotional support, or physical assistance that can come from a variety of sources, such as parents or peers (American Psychological Association, n.d.).

Social support provides both physical and psychological benefits, as it is thought to reduce psychological distress when faced with stressful situations (Harandi et al., 2017). Furthermore, it has been shown that it can decrease the likelihood and severity of depression, suicidal behaviour, low self-esteem and anxiety (Macalli et al., 2020; Macalli et al., 2018; Hoffman et al., 1988; Ikiz & Cakar, 2010; Scardera et al., 2020). Research has also demonstrated that social support during adolescence, specifically from parents and friends, plays an important role in their mental health (Macalli et al., 2020; Macalli et al., 2018; Seok & Doom, 2022; Stice et al., 2004).

Macalli and colleagues (2020) conducted a longitudinal study and found that when parents were perceived as unsupportive of their children, the likelihood of serious mental

health disorders increased by approximately four times compared to those who were perceived as generally supportive. The study also found that a total absence of perceived parental support resulted in approximately two times higher risk of suicide behaviour, nearly four times increased risk of generalised anxiety disorders, and roughly seven times the risk of severe depression, compared to those who perceived extremely strong parental support (Macalli et al., 2020). Macalli et al. (2020) findings are consistent with existing research, which has demonstrated a negative correlation between perceived parental support and mental health outcomes (Gariépy et al., 2016; Harandi et al., 2017; Needham, 2008; Seok & Doom, 2022).

Receiving support from peers has also been shown to be effective in preventing the internalisation of mental health problems, such as depression, social anxiety, and low self-esteem (Colarossi & Eccles, 2003; Coyle & Malecki, 2018; Rueger et al., 2016). In fact, Colarossi & Eccles (2003) found that support from friends had the strongest positive effect on adolescent self-esteem in the long run. In addition, Adedeji and colleagues (2022) discovered that reductions in depressive symptoms among adolescents in Germany were significantly related to enhanced peer acceptance, reliability, and the ability to make new friends (Adedeji et al., 2022). To further substantiate, both findings by Adedeji et al. (2022) and de Matos et al. (2003) also identified a significant link between anxiety, depression, and peer relationships.

The literature presents conflicting evidence regarding which type of support, parental or peer support, has a stronger correlation with adolescent mental health. Throughout childhood and the early adolescent years, parents have a significant impact on their children and are a big part of their social network (Stanford Medicine Children's Health, n.d.). However, in later adolescence, peer relationships are thought to become more important (Stanford Medicine Children's Health, n.d.).

Jakobsen et al. (2022) found that perceived friend support had the strongest impact on positive mental health in early adulthood. This finding contradicts the results of other studies that have emphasised the importance of parental support for good mental health (Bi et al., 2021; Helsen et al., 2000; Lyell et al., 2020; Macalli et al., 2020; Raja et al., 1992; Stice et al., 2004). Possibly, this difference occurs because Jakobsen et al. (2022) examined the link between social support and positive mental health outcomes whereas other researchers have primarily examined negative mental health outcomes (Lyell et al., 2020; Raja et al., 1992).

Furthermore, Helsen et al. (2000) found that there was a decline in perceived parental support and an increase in perceived friend support throughout early and middle adolescence. However, there was no distinction between parental and friend support after participants reached late adolescence. When examining the effect of social support on mental health, Helsen et al. (2000) found that parental support was negatively correlated with emotional problems. However, they did not find a direct correlation between friend support and emotional problems. Nevertheless, Helsen et al. (2000) discovered that, although parental support seemed to have greater effects on emotional problems than friend support, receiving support from both parties appeared to have the strongest correlation with emotional problems (Helsen et al., 2000). These findings are in line with recent literature that has shown that friend support plays an important role when it is combined with other sources of support (Lyell et al., 2020; Moore et al., 2018; Raja et al., 1992).

Research has consistently indicated that there is no notable disparity between genders in terms of perceived parental support (Bokhorst et al., 2010; Helsen et al., 2000; Ikiz & Cakar, 2010; Jakobsen et al., 2022). However, studies have found that girls report greater support from peers than boys (Bokhorst et al., 2010; Helsen et al., 2000; Ikiz & Cakar, 2010; Jakobsen et al., 2022; Raja et al., 1992). Girls also tend to report higher levels of depressive symptoms and lower levels of self-esteem compared to boys (Bleidorn et al., 2016; Helsen et

al., 2000). Furthermore, the relationship between depressive symptoms and support is more prominent for girls than for boys (Adedeji et al., 2022; Helsen et al., 2000; Jakobsen et al., 2022).

In a study conducted by Helsen et al. (2000), it was discovered that as individuals grow older, they tend to receive less support from their parents but more support from their friends. Additionally, the researchers observed an increase in emotional problems during adolescence. Another study by Bokhorst et al. (2010) revealed that children between the ages of 9 and 15 perceived parental and friend support as equally supportive. However, among 16 to 18 year olds, there was a greater perception of friend support than parental support.

Despite differences in measures, samples, and dependent variables across studies (Lyell et al., 2020; Helsen et al., 2000; Moore et al., 2018; Raja et al., 1992), they demonstrate similar results indicating a significant link between social support and mental health outcomes in diverse contexts and populations (Bi et al., 2021; Helsen et al., 2000; Lyell et al., 2020; Moore et al., 2018; Raja et al., 1992). Furthermore, evidence suggests that the function of social support varies based on age, gender and the person providing support.

The objective of this study is to repeat previous findings as well as provide new knowledge throughout the study, since the sample consisted of adolescents in Iceland and the results were compared across age groups. Due to the increasing prevalence of mental health conditions and their detrimental effects, it is critical to better understand potential causes and ways to prevent and reduce the incidence of mental health conditions. Therefore, the main question that this study seeks to address is: How are parental and peer support related to depressed mood and self-esteem among adolescents, and do those relationships differ by gender and age?

Method

Sample

The current study included a total of 2,349 participants living in Iceland in 2018, 50.9% were girls ($n = 1196$) and 49.1% were boys ($n = 1153$). The sample included responses from two separate surveys. One survey was conducted with a questionnaire that was distributed in secondary public schools and the other in upper secondary schools. This analysis is limited to adolescents born in 2001-2003 respectively.

Procedure

The current study utilised a population-based sampling method and a quantitative research design. All secondary public schools and upper secondary schools in Iceland conducted the surveys. Teachers distributed the questionnaires to all available students. All the students that were present at school on the day the questionnaire was distributed were invited to participate. Participants were asked not to enter their name or social security number on the questionnaire to maintain total anonymity and ensure that the questionnaires were untraceable. They were also advised to answer the questions to the best of their abilities and to notify the teacher if any of the questions were unclear. When participants completed the questionnaire, they placed it in the unmarked envelope that was provided. All completed questionnaires were sent back to The Icelandic Center for Social Research and Analysis for optimal scanning, data cleaning and processing for analyses.

In order to access the secondary data for the study, the National BioEthics Committee of Iceland (Reference number: VSNb2023010017/03.01) and The Icelandic Data Protection Authority (Case number: 23-007), reviewed and approved the study.

Measures

The following questions used for our analyses addressed the following topics: perceived parental support, perceived peer support, depressed mood, and self-esteem, and

control variables for gender and age. Gender was measured on a nominal scale: 0 = “boy” and 1 = “girl”. Only the questionnaire distributed to the upper secondary schools included a third option for gender ($n = 13$) so that option was excluded from the data set in order to maintain coherence. Age was measured on an interval scale, years of birth used in this study included 2001, 2002 and 2003. Participants were divided into two groups based on their age. Students in the ninth and tenth grades of secondary public schools in the spring of 2018 were computed into one variable referred to as the “younger age group,” which was assigned the value 0, while those in the first and second years of upper secondary schools in the autumn of 2018 were computed into one variable referred to as the “older age group,” which was assigned the value 1.

Parental Support

Parental support was measured with the Perceived Parental Support Scale (Thorlindsson et al., 1998; Kristjansson., 2008). Participants were asked “how easy or hard is it for you to receive the following from your parents”: a. caring and warmth, b. talks about personal affairs, c. advice about schoolwork or work, d. advice about other issues (projects) of yours, and e. support with other things. Participants answered on a four-point ordinal scale: 1 = “very hard”, 2 = “rather hard”, 3 = “rather easy”, 4 = “very easy”. Scores were summed to form a scale ranging from 5 to 20 (Cronbach's Alpha: younger = .879, older = .903). The Perceived Parental Support Scale has demonstrated significant internal consistency and test-retest reliability, with Cronbach’s Alpha varying from 0.77 to 0.87 (Thorlindsson et al., 1998; Kristjansson., 2008; Kristjansson et al., 2011).

Peer Support

Peer support was measured with the Perceived Peer Support Scale. Participants were asked “how easy or hard is it for you to receive the following from your friends”: a. caring and warmth, b. talks about personal affairs, c. advice about schoolwork or work, d. advice

about other issues (projects) of yours, and e. support with other things. Participants answered on a four-point ordinal scale: 1 = “*very difficult*”, 2 = “*rather difficult*”, 3 = “*rather easy*”, 4 = “*very easy*”. Scores were summed to form a scale ranging from 5 to 20 (Cronbach's Alpha: younger = .894, older = .909).

Depressed Mood

Depressed mood, which is part of the SCL-90 Outpatient psychiatric rating scale, was used to measure depressive symptoms (Derogatis et al., 1973). Participants were asked “how often did you experience the following negative feelings or discomfort during the past week?”, the statements were as follows: “you were sad or had little interest in doing things”, “you had a little appetite”, “you felt lonely”, “you cried easily or wanted to cry”, “you had trouble falling asleep or staying asleep”, “you were sad or blue”, “you weren't excited to do anything”, “you felt the future was hopeless”, “thought about committing suicide”. The response scale was on a four-point ordinal scale: 1 = “*almost never*”, 2 = “*seldom*”, 3 = “*sometimes*”, 4 = “*often*”. Scores were summed to form a scale ranging from 10 to 40 (Cronbach's Alpha: younger = .908, older = .911).

Self-esteem

Self-esteem was measured using the Rosenberg Self-esteem Scale (Rosenberg, 1965), which includes ten statements pertaining to participants' self-esteem. The statements were: “I feel that I am a person of worth, at least on an equal plane with others”, “I feel that I have a number of good qualities”, “All in all, I'm inclined to feel that I am a failure”, “I am able to do things as well as most other people”, “I feel I do not have much to be proud of”, “I take a positive attitude towards myself”, “On the whole, I am satisfied with myself”, “I wish I could have more respect for myself”, “I certainly feel useless at times”, “At times, I think I am no good at all”. Participants answered the statements on a four-point ordinal scale: 1 = “*Applies very well to me*”, 2 = “*Applies rather well to me*”, 3 = “*Applies rather poorly to me*”, and 4

= "*Applies very poorly to me*". To ensure consistency in the measurement of self-esteem across all ten statements, the score on five statements on the Rosenberg scale were reversed. This recoding guaranteed that higher values indicated greater levels of self-esteem consistently across all statements. Scores were summed to form a scale ranging from 12 to 40 (Cronbach's Alpha: younger = .783, older = .810). The Rosenberg Self-Esteem Scale is frequently used among researchers and has demonstrated good reliability and validity. It is highly dependable, with internal reliability and internal consistency ranging from 0.77 to 0.88 (Blascovich & Tomaka, 1991).

Data Analysis

Statistical Package for the Social Sciences (SPSS) vs. 28 by IBM was used to analyse the data. Following data cleaning and standardisation, the two datasets were merged. Descriptive statistics were utilised for analysing all variables in the current study. The findings presented a comprehensive summary of the data, as well as insight into the distribution and variability of all variables. A one-way ANOVA was also performed to see if there was a statistically significant difference between genders within the age groups for all variables. Then, a linear regression analysis was conducted to examine the relationships between the independent variables (parental support, peer support, age, and gender), and the dependent variables (depressed mood and self-esteem). Finally, a linear regression analysis with interaction tests was also performed to determine if there was a statistical difference between gender and the two age groups and the outcomes. In order to perform the regression analysis with interaction tests, new variables were computed: parental support x gender, parental support x age, peer support x gender, and peer support x age. In all instances the ordinal variables were mean-centred before calculating the interaction variables. Variance Inflation Factor was below 4.0 in all interaction models.

Results

Descriptive analysis

The younger age group consisted of 1,278 participants (Girls = 51%), and the older age group consisted of 1,071 participants (Girls = 50.8%). Table 1 presents the means, standard deviations, and a one-way ANOVA for the four variables for the four variables, parental support, peer support, depressed mood, and self-esteem, by age and gender.

Table 1

Descriptive Statistics and One-Way ANOVA for Gender Differences in all Continuous Variables

Variables			<i>M(SD)</i>	One-Way ANOVA
Parental Support	Younger age group	Girls	17.61 (2.92)	$F(1, 1230) = 0.035, p = .851$
		Boys	17.55 (2.91)	
	Older age group	Girls	17.48 (3.27)	$F(1, 1017) = 2.248, p = .134$
		Boys	17.87 (2.84)	
Peer Support	Younger age group	Girls	16.57 (3.04)	$F(1, 1214) = 66.285, p < .001$
		Boys	14.96 (3.49)	
	Older age group	Girls	16.95 (3.07)	$F(1, 1004) = 40.353, p < .001$
		Boys	15.71 (3.49)	
Depressed mood	Younger age group	Girls	19.34 (7.77)	$F(1, 1201) = 90.689, p < .001$
		Boys	15.5 (6.17)	
	Older age group	Girls	21.1 (7.45)	$F(1, 999) = 95.683, p < .001$
		Boys	16.84 (6.27)	
Self-esteem	Younger age group	Girls	28.86 (5.5)	$F(1, 1168) = 55.063, p < .001$
		Boys	31.27 (5.15)	
	Older age group	Girls	28.38 (5.45)	$F(1, 987) = 58.072, p < .001$
		Boys	31.02 (4.96)	

As shown in Table 1, there was no significant statistical difference found between As shown in Table 1, there was no significant statistical difference found between genders in both age groups regarding parental support. However, girls reported significantly higher peer support than boys in both age groups. Girls reported significantly higher depressed mood than boys in both age groups, with girls in the older age group having the highest mean score ($M = 21.1$). Additionally, girls also reported significantly lower self-esteem than boys in both age groups.

Multivariable analysis

Regression analyses with and without interaction tests were performed to examine the relationship between support from parents and peers and the outcome variables to determine if there was a statistical difference between boys and girls as well as between the two age groups and the outcomes. The results of the regression models are shown in Tables 2 and 3.

All variables relationships in Table 2 were statistically significant. For Model 1, the independent variables age, gender, parental support, and peer support accounted for roughly 22.6% of the variance in depressed mood, $F(4, 2089) = 152.467, p < .001$. As can be seen in Table 2, when gender increased by one, depressed mood increased by 4.53, taking into account other variables in the model. When age increased by one, depressed mood increased by 1.82, taking into account other variables in the model. When parental support increased by one, depressed mood decreased by 0.62, taking into account other variables in the model. When peer support increased by one, depressed mood decreased by 0.44, taking into account other variables in the model. In Model 2, all the independent variables accounted for roughly 23.1% of the variance in depressed mood $F(5, 2088) = 125.550, p < .001$. The direct relationships between parental support and gender were significant at the 99% level. However, the relationship between each step increase in parental support and depressed mood

was 0.35 points greater for girls than for boys as indicated by the interaction test for Parental support x Gender on Depressed mood.

Table 2

Regression Models predicting Depressed mood

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)
Gender	4.535 (.291)**	4.582 (.290)**	4.551 (.291)**	4.592 (.290)**	4.546 (.290)**
Age	1.819 (.284)**	1.803 (.283)**	1.797 (.284)**	1.808 (.283)**	1.790 (.284)**
Parental Support	-.621 (.051)**	-.427 (.072)**	-.734 (.067)**	-.615 (.051)**	-.626 (.051)**
Peer Support	-.438 (.046)**	-.446 (.046)**	-.441 (.046)**	-.295 (.059)**	-.534 (.059)**
Parental Support x Gender		-.354 (.094)**			
Parental Support x Age			.240 (.094)*		
Peer Support x Gender				-.330 (.086)**	
Peer Support x Age					.217 (.084)*
R2	.226	.231	.228	.231	.228

**p < .01.

* p < .05.

In Model 3, all the independent variables accounted for roughly 22.8% of the variance in depressed mood $F(5, 2088) = 123.583, p < .001$. The direct relationships between parental support and age were significant at the 95% level. However, the relationship between each step increase in parental support and depressed mood was 0.24 points lower for the older age group than for the younger age group as indicated by the interaction test for Parental support x Age on Depressed mood. In Model 4, all the independent variables accounted for roughly 23.1% of the variance in depressed mood, $F(5, 2088) = 125.765, p < .001$. The direct relationships between peer support and gender were significant at the 99% level. However, the relationship between each step increase in peer support and depressed mood was 0.33 points greater for girls than for boys as indicated by the interaction test for Peer support x Gender on Depressed mood. In Model 5, all the independent variables accounted for roughly 22.8% of the variance in depressed mood $F(5, 2088) = 123.640, p < .001$. The direct relationships between peer support and age were significant at the 95% level. However, the relationship between each step increase in parental support and depressed mood was 0.22 points lower for the older age group than for the younger age group as indicated by the interaction test for Peer support x Age on Depressed mood.

In Model 1 in Table 3, the independent variables age, gender, parental support, and peer support accounted for roughly 21.3% of the variance in self-esteem $F(4, 2056) = 139.166, p < .001$. As can be seen in Table 3, when gender increased by one, self-esteem decreased by 2.89, taking into account other variables in the model. When age increased by one, self-esteem decreased by 0.71, taking into account other variables in the model. When parental support increased by one, self-esteem increased by 0.49, taking into account other variables in the model. When peer support increased by one, self-esteem increased by 0.34 taking into account other variables in the model. In Model 2, all the independent variables accounted for roughly 21.5% of the variance in self-esteem $F(5, 2055) = 112.551, p < .001$.

In model 2, the direct relationships between parental support and gender were significant at the 95% level. However, the relationship between each step increase in parental support and self-esteem was 0.16 points greater for girls than for boys as indicated by the interaction test for Parental support x Gender on Self-esteem.

Table 3

Regression Models predicting Self-esteem

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)	Unstand. coeff. (std. error)
Gender	-2.890 (.220)**	-2.909 (.220)**	-2.908 (.220)**	-2.915 (.220)**	-2.895 (.220)**
Age	-.712 (.215)**	-.698 (.215)**	-.700 (.215)**	-.703 (.215)**	-.706 (.215)**
Parental Support	.494 (.038)**	.407 (.054)**	.575 (.051)**	.491 (.038)**	.495 (.038)**
Peer Support	.338 (.035)**	0.342 (.035)**	.339 (.035)**	.255 (.045)**	.365 (.045)**
Parental Support x Gender		.158 (.071)*			
Parental Support x Age			-.169 (.070)*		
Peer Support x Gender				.189 (.065)**	
Peer Support x Age					-.058 (.064)
R2	.213	.215	.215	.216	.213

** p < .01.

* p < .05.

In Model 3, all the independent variables accounted for roughly 21.5% of the variance in self-esteem $F(5, 2055) = 112.755, p < .001$. The direct relationships between parental support and age were significant at the 95% level. However, the relationship between each step increase in parental support and self-esteem was 0.17 points lower for the older age group than for the younger age group as indicated by the interaction test for Parental support x Age on Self-esteem. In Model 4, all the independent variables accounted for roughly 21.6% of the variance in self-esteem $F(5, 2055) = 113.440, p < .001$. The direct relationships between peer support and gender were significant at the 99% level. However, the relationship between each step increase in peer support and self-esteem was 0.19 points greater for girls than for boys as indicated by the interaction test for Peer support x Gender on Self-esteem. In Model 5, all the independent variables accounted for roughly 21.3% of the variance in self-esteem $F(5, 2055) = 111.493, p < .001$. The relationship between each step increase in peer support and self-esteem was not significant between age groups as indicated by the interaction test for Peer support x Age on Self-esteem.

Discussion

The aim of the current study was to investigate how parental and peer support are related to depressed mood and self-esteem among adolescents and whether those relationships differed by age and gender. This study adds to the body of research that has demonstrated a relationship between social support and mental health. We replicated previous studies and also advanced the body of literature by showing the interaction effect between age groups and gender.

Our findings showed no significant statistical difference between genders in both age groups regarding parental support, however, girls report significantly more peer support than boys. This is consistent with other findings that have indicated that both genders report equal levels of parental support, whereas girls report higher levels of peer support than boys

(Bokhorst et al., 2010; Helsen et al., 2000; Ikiz & Cakar, 2010; Jakobsen et al., 2022; Raja et al., 1992). The results of our study also indicated that girls and the older age group exhibit higher levels of depressed mood and lower self-esteem compared to boys and the younger age group. These findings are also consistent with past research that has indicated that girls have poorer mental health and that overall emotional problems for both genders increase with age (Bleidorn et al., 2016; Helsen et al., 2000).

Additionally, both types of support were associated with depressed mood and self-esteem in this study. A negative relationship was found between support received from both parents and peers and depressed mood. This suggests that higher levels of parental and peer support are associated with lower levels of depressed mood. In addition, both parental and peer support were positively related with self-esteem. This indicates that higher levels of support are associated with higher self-esteem. The same results have also been reported in other studies (Colarossi & Eccles, 2003; Coyle & Malecki, 2018; Gariépy et al., 2016; Harandi et al., 2017; Hoffman et al., 1988; Needham, 2008; Rueger et al., 2016; Seok & Doom, 2022).

Parental Support, Gender, and Age

Our findings show that parental support had greater relations to depressed mood for girls than for boys, and that the same was also true for self-esteem. This indicates that parental support may play a greater role in reducing depressed mood for girls than for boys. This pattern was also evident for self-esteem, indicating that parental support likely plays a greater role in increasing self-esteem for girls than for boys. This is in line with previous research where results highlighted the significance of support especially for girls' mental health (Adedeji et al., 2022; Helsen et al., 2000).

Differences were also found among the two age groups where parental support showed greater relations to both depressed mood and self-esteem for the younger age group.

Based on these results, it appears that the younger age group is more strongly affected by parental support in relation to depressed mood and self-esteem than the older age group. In other words, parental support seems to have less of an effect the older people are. On the other hand, both adolescent independence and mental health problems increase with age, both of which signify weakening relations to parents. Helsen et al. (2000) findings also suggest that parental support and emotional problems may vary by age. Their findings demonstrate that higher levels of parental support tend to be more effective in reducing emotional problems for the younger adolescents.

Peer Support, Gender, and Age

The results of our study show that peer support also had greater relations to depressed mood and self-esteem for girls than for boys. Indicating that girls seem to be more strongly affected by both peer and parental support in relation to depressed mood and self-esteem than boys. It could be assumed that girls require more support than boys do due to their higher prevalence of depressed mood and lower self-esteem, as well as the fact that support is more strongly correlated with those factors among girls. This is somewhat consistent with prior studies indicating that peer interactions are an important component of interventions aimed at increasing mental well-being and preventing mental health disorders in adolescents (Colarossi & Eccles, 2003; Coyle & Malecki, 2018; Rueger et al., 2016).

In addition, peer support had greater relations to depressed mood for the younger age group than the older age group. The relationship between peer support and self-esteem, however, did not statistically differ between the younger age group and the older age group. Although a positive correlation was observed between peer support and self-esteem in both age groups, it was inconclusive whether peer support had a significant impact on improving self-esteem in either group. These results suggest that different types of support may have differential effects on various mental health outcomes. Furthermore, the overall findings

suggest the link between peer support and self-esteem is complex, implying that additional research is needed to determine the overall level and significance of this relationship across age groups.

Previous research has demonstrated a link between peer support and mental health outcomes such as depressed mood and self-esteem (Adedeji et al., 2022; Colarossi & Eccles, 2003; Coyle & Malecki, 2018; de Matos et al., 2003; Jakobsen et al., 2022; Rueger et al., 2016). However, according to our knowledge, no research has explored potential differences in this relationship between different age groups. Therefore, this study contributes to the existing literature by shedding light on these age-related differences.

Limitations and Future Research

This study relied on self-report data, which is subject to social desirability bias and recall bias. Participants may be prone to underreporting certain behaviours while overreporting others. However, anonymity may help to lessen desirability bias. Furthermore, because the questionnaires were quite extensive, there was a risk of survey fatigue. Although we found a relationship between the variables, due to the nature of the cross-sectional design, causality cannot be established. Therefore, the results from this study cannot claim that there is a direct relationship between support and mental health outcomes. It is possible that other factors that were not accounted for in this study could have influenced the different relationships between variables. The study sample size was adequate; however, it is not representative of the whole population as it only consisted of students. Furthermore, given that the sample only included a population in Iceland, generalising the results to other regions may be challenging. In comparison with other studies, our study had the advantage of having an equal gender ratio.

What this study adds to the previous literature is the discovery of an interaction effect between gender and age. We discovered that parental and peer support have relations to

depressed mood and self-esteem for both age groups and gender. Notably, the relationship appears to be more pronounced among girls and the younger age group. This might indicate that those two groups require additional support to decrease the negative effects of mental health.

This study offers insight on the relationship between parental and peer support, depressed mood, and adolescent self-esteem. Certain topics, however, will require greater examination in the future. To begin, it is important to investigate why this gender disparity occurs and why girls appear to require greater support than boys. It would also be important to look further into the difference that seems to accrue between age groups. As a result, a longitudinal study would be beneficial as it would provide evidence closer to cause and effect, as well as the long-term effects of support and a better understanding of age-related differences. To increase the generalizability of the findings, it would be beneficial for future research to include a sample of more varied participants, such as from multiple places. Such a study could provide us with valuable insights into disparities between different cultures and other contextual factors that can affect the findings.

To conclude, this study, along with previous work on the relations between social support and mental health outcomes, shows the importance of carrying out further research on the topic. Considering that it allows us to better understand the role of social support in adolescent mental health, which can contribute to the implementation of systematic procedures for the prevention, recognition, and treatment of mental health conditions.

References

- Adedeji, A., Otto, C., Kaman, A., Reiss, F., Devine, J., & Ravens-Sieberer, U. (2022). Peer Relationships and Depressive Symptoms Among Adolescents: Results From the German BELLA Study. *Frontiers in Psychology, 12*, 767922.
<https://doi.org/10.3389/fpsyg.2021.767922>
- American Psychological Association. (n.d.). *APA Dictionary of Psychology*.
<https://dictionary.apa.org/social-support>
- Bi, S., Stevens, G. W. J. M., Maes, M., Boer, M., Delaruelle, K., Eriksson, C., Brooks, F. M., Tesler, R., van der Schuur, W. A., & Finkenauer, C. (2021). Perceived Social Support from Different Sources and Adolescent Life Satisfaction Across 42 Countries/Regions: The Moderating Role of National-Level Generalized Trust. *Journal of Youth and Adolescence, 50*, 1384–1409.
<https://doi.org/10.1007/s10964-021-01441-z>
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In Robinson, J.P, Shaver, P.R, Wrightsman, L. (Eds.) *Measures of personality and social psychological attitudes* (pp. 115–160). Elsevier. <https://doi.org/10.1016/B978-0-12-590241-0.50008-3>
- Bleidorn, W., Arslan, R. C., Denissen, J. J. A., Rentfrow, P. J., Gebauer, J. E., Potter, J., & Gosling, S. D. (2016). Age and gender differences in self-esteem—A cross-cultural window. *Journal of Personality and Social Psychology, 111*(3), 396–410.
<https://doi.org/10.1037/pspp0000078>
- Bokhorst, C. L., Sumter, S. R., & Westenberg, P. M. (2010). Social Support from Parents, Friends, Classmates, and Teachers in Children and Adolescents Aged 9 to 18 Years :Who Is Perceived as Most Supportive? *Social Development, 19*(2), 417–426.
<https://doi.org/10.1111/j.1467-9507.2009.00540.x>
- Colarossi, L. G., & Eccles, J. S. (2003). Differential effects of support providers on

adolescents' mental health. *Social Work Research*, 27(1), 19–30.

<https://doi.org/10.1093/swr/27.1.19>

Coyle, S., & Malecki, C. K. (2018). The Association Between Social Anxiety and Perceived Frequency and Value of Classmate and Close Friend Social Support. *School Psychology Review*, 47(3), 209–225. <https://doi.org/10.17105/SPR-2017-0067.V47-3>

de Matos, M. G., Barrett, P., Dadds, M., & Shortt, A. (2003). Anxiety, depression, and peer relationships during adolescence: Results from the Portuguese national health behaviour in school-aged children survey. *European Journal of Psychology of Education*, 18(1), 3–14. <https://doi.org/10.1007/BF03173600>

Derogatis, L. R., Lipman, R. S., & Covi, L. (1973). SCL-90: An outpatient psychiatric rating scale—Preliminary report. *Psychopharmacology*, 9, 13–28.

Gariépy, G., Honkaniemi, H., & Quesnel-Vallée, A. (2016). Social support and protection from depression: Systematic review of current findings in Western countries. *British Journal of Psychiatry*, 209(4), 284–293.

<https://doi.org/10.1192/bjp.bp.115.169094>

Harandi, T., Taghinasab, M., & Nayeri, T. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic Physician*, 9, 5212–5222.

<https://doi.org/10.19082/5212>

Helsen, M., Vollebergh, W., & Meeus, W. (2000). Social Support from Parents and Friends and Emotional Problems in Adolescence. *Journal of Youth and Adolescence*, 29(3), 319–335. <https://doi.org/10.1023/A:1005147708827>

Hoffman, M. A., Ushpiz, V., & Levy-Shiff, R. (1988). Social support and self-esteem in adolescence. *Journal of Youth and Adolescence*, 17(4), 307–316.

<https://doi.org/10.1007/BF01537672>

- Ikiz, F. E., & Cakar, F. S. (2010). Perceived social support and self-esteem in adolescence. *Procedia Social and Behavioral Sciences*, 5, 2338–2342.
<https://doi.org/10.1016/j.sbspro.2010.07.460>
- Jakobsen, A. L., Hansen, C. D., & Andersen, J. H. (2022). The association between perceived social support in adolescence and positive mental health outcomes in early adulthood: A prospective cohort study. *Scandinavian Journal of Public Health*, 50(3), 404–411.
<https://doi.org/10.1177/1403494821993718>
- Lyell, K. M., Coyle, S., Malecki, C. K., & Santuzzi, A. M. (2020). Parent and peer social support compensation and internalizing problems in adolescence. *Journal of School Psychology*, 83, 25–49. <https://doi.org/10.1016/j.jsp.2020.08.003>
- Macalli, M., Côté, S., & Tzourio, C. (2020). Perceived parental support in childhood and adolescence as a tool for mental health screening in students: A longitudinal study in the i-Share cohort. *Journal of Affective Disorders*, 266, 512–519.
<https://doi.org/10.1016/j.jad.2020.02.009>
- Macalli, M., Tournier, M., Galéra, C., Montagni, I., Soumare, A., Côté, S. M., & Tzourio, C. (2018). Perceived parental support in childhood and adolescence and suicidal ideation in young adults: A cross-sectional analysis of the i-Share study. *BMC Psychiatry*, 18, 373. <https://doi.org/10.1186/s12888-018-1957-7>
- Moore, G. F., Cox, R., Evans, R. E., Hallingberg, B., Hawkins, J., Littlecott, H. J., Long, S. J., & Murphy, S. (2018). School, Peer and Family Relationships and Adolescent Substance Use, Subjective Wellbeing and Mental Health Symptoms in Wales: A Cross Sectional Study. *Child Indicators Research*, 11(6), 1951–1965.
<https://doi.org/10.1007/s12187-017-9524-1>
- Needham, B. L. (2008). Reciprocal relationships between symptoms of depression and parental support during the transition from adolescence to young adulthood. *Journal*

of Youth and Adolescence, 37(8), 893–905.

<https://doi.org/10.1007/s10964-007-9181-7>

Kristjansson, A. L., Sigfusdottir, I. D., Karlsson, T., & Allegrante, J. P. (2011). The Perceived Parental Support (PPS) Scale: Validity and Reliability in the 2006 Youth in Europe Substance Use Prevention Survey. *Child Indicators Research*, 4(3), 515–528. <https://doi.org/10.1007/s12187-010-9095-x>

Kristjansson, A. L. (2008). *Concepts and Measures in the 2006 and 2008 Youth in Europe Survey*. Reykjavik: Icelandic Centre for Social Research and Analysis.

Raja, S. N., McGee, R., & Stanton, W. R. (1992). Perceived attachments to parents and peers and psychological well-being in adolescence. *Journal of Youth and Adolescence*, 21(4), 471–485. <https://doi.org/10.1007/BF01537898>

Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton: Princeton

Rueger, S. Y., Malecki, C. K., Pyun, Y., Aycock, C., & Coyle, S. (2016). A meta-analytic review of the association between perceived social support and depression in childhood and adolescence. *Psychological Bulletin*, 142(10), 1017–1067. <https://doi.org/10.1037/bul0000058>

Scardera, S., Perret, L. C., Ouellet-Morin, I., Gariépy, G., Juster, R. P., Boivin, M., Turecki, G., Tremblay, R. E., Côté, S., & Geoffroy, M. C. (2020). Association of Social Support During Adolescence With Depression, Anxiety, and Suicidal Ideation in Young Adults. *JAMA Network Open*, 3(12), e2027491. <https://doi.org/10.1001/jamanetworkopen.2020.27491>

Seok, D., & Doom, J. R. (2022). Adolescents' social support networks and long-term psychosocial outcomes. *Journal of Social and Personal Relationships*, 39(12). <https://doi.org/10.1177/02654075221109021>

Stanford Medicine Children's Health. (n.d.) *Teens: Relationship Development*

<https://www.stanfordchildrens.org/en/topic/default?id=relationship-development-90-P01642>

Stice, E., Ragan, J., & Randall, P. (2004). Prospective Relations Between Social Support and Depression: Differential Direction of Effects for Parent and Peer Support? *Journal of Abnormal Psychology, 113*(1), 155–159. <https://doi.org/10.1037/0021-843X.113.1.155>

Thorlindsson, T., & Bjarnason, T. (1998). Modeling Durkheim on the micro level: A study of youth suicidality. *American Sociological Review, 63*, 94–110

World Health Organization. (n.d.). *Mental Health*.

https://www.who.int/health-topics/mental-health#tab=tab_1

World Health Organization. (2021, November 17). *Adolescent Mental Health*.

<https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>