

## Interpersonal Relationships and Emotional Distress in Adolescence

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### **Abstract**

The aim of this study was to examine positive and negative qualities in adolescents' interpersonal relationships and their relative importance in predicting emotional distress. Participants were 260 students from three schools in the Dublin area (119 girls; 141 boys), aged 12-18 years ( $M = 15.32$ ,  $SD = 1.91$ ). Students completed questionnaires assessing qualities in important interpersonal relationships in their lives and emotional distress. Girls reported more positive qualities in their relationships with mothers and best friends than boys. Younger students reported more positive qualities in their relationships with parents than older students. Stepwise multiple regression analysis revealed high levels of satisfaction in interpersonal relationships were predictive of low levels of emotional distress whereas high levels of criticism and exclusion were predictive of high levels of distress. High levels of support and disclosure were also linked to emotional distress. These findings and their implications are discussed in detail.

**Keywords:** Interpersonal Relationships; Relationship Quality; Emotional Distress; Adolescence

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## **Introduction**

Adolescence is a time of changing social relationships. During this period, young people move away from parental authority and increasingly turn to peers as a source of support and companionship (Helsen, Vollebergh & Meeus, 2000; McElhaney, Allen, Stephenson & Hare, 2009). In Western culture, adolescence is also the time when most individuals experience their first romantic relationships (Furman, Low & Ho, 2009). Theory suggests that the formation and maintenance of stable interpersonal relationships is a fundamental human motivation (Baumeister & Leary, 1995) and research findings have consistently indicated that poor quality relationships are linked to negative mental health outcomes in young people (Allen, Porter, McFarland, McElhaney & Marsh, 2007; Branje, Hale, Frijns & Meeus, 2010; Jenkins, Goodness & Buhrmester, 2002; La Greca & Harrisson, 2005; Molcho, Nic Gabhainn & Kelleher, 2007; Sheeber, Davis, Leve, Hops & Tildesley, 2007; Stice, Ragan & Randall, 2004). The overall quality of a young person's relationship can be conceptualised as comprising of a number of positive and negative components, which represent the overall supportive and discordant qualities in the relationship. Positive relationship qualities are comprised of companionship, disclosure, emotional support, approval and satisfaction and negative relationship qualities are comprised of conflict, criticism, pressure, dominance and exclusion (Furman & Buhrmester, Network of Relationships Questionnaire Manual).

### *Relationship with parents during adolescence*

During adolescence individuals' relationships with their parents undergo change. As they struggle to develop autonomy, they spend a decreasing amount of time with

their parents and throughout this period a moderate degree of parent-adolescent conflict is normal (Montemayor, 1983; Santrock, 2003). Research suggests that conflict with parents is at its highest in early to middle adolescence and then decreases as adolescents mature (DeGoede, Branje & Meeus, 2009; Furman & Buhrmester, 1992). Older adolescents tend to report less support (Cheng & Chan, 2004; Helsen et al., 2000; Scholte, Van Lieshout & Van Aken, 2001) and more autonomy (Mayseless, Wiseman & Hai, 1998) in their relationships with their parents than younger adolescents, however studies have suggested that overall emotional closeness with parents remains stable across age (Mayseless et al., 1998; Smetana, Metzger & Campione-Barr, 2004).

Girls generally report better quality, more supportive relationships with their mothers than boys (Branje et al., 2010; Furman & Buhrmester, 1992; Paterson, Field & Pryor, 1994; Smetana, Metzger, Gettman & Campione-Barr, 2006). There is also evidence to suggest that boys perceive their relationships with their fathers to be closer and more supportive than girls (Furman & Buhrmester, 1992; Starrels, 1994) and young people generally identify with their same-sex parent more than their opposite-sex parent (Starrels, 1994). Interestingly, in terms of conflict, previous research has suggested that both boys and girls report higher degrees of conflict with their mothers than with anyone else in their social network (Laursen, 1995; Montemayor, 1983).

#### *Parental relationships and mental health*

Positive qualities in parent-adolescent relationships such as high levels of support (Helsen et al., 2000; Jenkins et al., 2002; Meadows, Brown & Elder, 2006; Sheeber et al., 2007; Vazsonyi & Belliston, 2006), warmth (Greenberger, Chen, Tally & Dong, 2000) and approval (Vazsonyi & Belliston, 2006) are associated with lower

levels of depressive symptoms in young people. While some degree of conflict with parents is considered to be normal during adolescence (Smetana, Campione-Barr & Metzger, 2006), prolonged, intense and repeated conflict is frequently associated with poor psychological adjustment (Barber & Delfabbro, 2000; Branje et al., 2010; Jenkins et al., 2002; Sheeber, et al., 2007; Vazsonyi & Belliston, 2006). Other negative qualities such as high levels of over-intrusive and authoritarian parental control (Rigby, Slee & Martin, 2007), and low levels of perceived parental communication (Ackard, Neumark-Sztainer, Story & Perry, 2006) have also been significantly associated with negative well-being in adolescence. Furthermore, a concerning finding by Wedig and Nock (2007) was that high levels of parental criticism were associated with self-harm behaviour in young people. To date there is a lack of research examining the relationship between parental criticism and symptoms of emotional distress in adolescents and further exploration of this relationship is needed.

#### *Peer relationships during adolescence*

Close friendships are regarded as the most important peer relationships formed during adolescence (Bukowski, Hoza & Boivin, 1993; La Greca & Harrison, 2005; Rubin, Dwyer, Kim, Burgess, Booth-LaForce & Rose-Krasnor, 2004) and the majority of young people report having at least one close friend (Brown & Klute, 2003). Girls generally attribute higher quality to their relationships with friends than boys, reporting higher levels of support (Furman & Buhrmester, 1992; Helsen et al., 2000; Jenkins et al., 2002), closeness (Johnson, 2004) and disclosure (McNelles & Connolly, 1999; Pagano & Hirsch, 2007) in these relationships. Some studies suggest that qualities in close friendships in adolescence vary with age. For example, levels of support from

peers have been found to initially increase in early adolescence before declining in mid to late adolescence (Furman and Buhrmester, 1992; Helsen et al., 2000), which may reflect the increased amount of support older adolescents receive from romantic partners (Furman & Buhrmester, 1992; Markiewicz, Lawford, Doyle & Haggart, 2006). Furman and Buhrmester (1992) found that conflict with close friends is less frequent in older adolescents than younger adolescents. This is one of the few studies looking at age differences in peer conflict during adolescence. Interestingly, La Greca and Harrison (2005) found no age differences in overall levels of positive or negative friendship qualities during adolescence which highlights the importance of looking at individual relationship components when examining friendship quality across adolescence.

Taken together, there is evidence to suggest that age and gender difference in peer friendship qualities exist during adolescence. However there is a need to identify the relative influence of peer positive and negative friendship qualities during adolescent, and whether age and gender differences in these qualities exist.

#### *Peer relationships and mental health*

While there is a body of research suggesting the importance of good quality peer relationships for psychological well-being in young people (Brown & Klute, 2003; La Greca & Harrison 2005; La Greca & Lopez, 1998; Steinhausen & Metzke, 2001), studies examining how specific relationship qualities are linked to mental health outcomes are lacking. To date only a small number of studies have examined this, such as Buhrmester (1990) who found higher levels of intimacy in peer relationships were linked to better psychosocial outcomes and La Greca and Lopez (1998) who found that lower levels of perceived intimacy, support and companionship in close friend

relationships were linked to higher levels of social anxiety. However, La Greca and Harrison (2005) found that while the presence of positive qualities in best friend relationships protected against social anxiety, they did not protect against depressive symptoms. They postulate that positive qualities such as support and disclosure in these relationships may allow adolescents to continually discuss problems and focus on negative feelings thus maintaining depressive symptoms. They found that higher levels of negative qualities significantly predicted both social anxiety and depression, suggesting the presence of negative qualities in peer relationships may be more salient in predicting mental health outcomes than the presence of positive qualities. Further research examining specific positive and negative qualities in close peer relationships and their links to emotional distress would be useful to help expand on these findings.

#### *Romantic relationships during adolescence*

Adolescence is typically a time when young people begin to engage in romantic relationships and likelihood of having a romantic partner during this period increases with age (Shulman & Scharf, 2000; Zimmer-Gembeck, 1999). These relationships may play an integral role in the lives of adolescents and are thought to have an influence on many aspects of adolescent development such as family relationships, peer relationships, identity development, academic performance and the development of sexuality (Furman & Shaffer, 2003).

Girls tend to report higher levels of positive qualities such as intimacy (Connolly & McIssac, 2011) and satisfaction (Haugen, Welsh & McNulty, 2008) in their romantic relationships than boys. Research concerning gender differences in perceived conflict remains inconclusive. Some studies suggest that boys perceive higher levels of conflict

in romantic relationships (Haugen et al., 2008), however, Pagano and Hirsch (2007) found that girls reported higher levels of hurtful conflict, while Furman and Buhrmester (1992) found no gender differences in conflict in romantic relationships. Older adolescents generally perceive their romantic relationships as more supportive (Furman & Buhrmester, 1992), however there is also an increase in romantic conflict with age (Vujeva & Furman, 2011), perhaps due to increased involvement in romantic relationships and increased time spent with romantic partners that occurs as adolescents get older (Zimmer-Gembeck, 1999). These findings suggest it is important to consider specific qualities in romantic relationships during adolescence and how they may vary with age.

#### *Romantic relationships and mental health*

While it is evident that romantic relationships are important in adolescent development, it is only over the past decade that researchers have begun to investigate the link between romantic relationships and mental health in young people. A number of studies have reported that the presence of a romantic partner is associated with higher levels of depression in young people, particularly in girls (Davila, Steinberg, Kachadourian, Cobb & Fincham, 2004; Joyner & Udry, 2000). However, a key flaw in these findings is that they generalise as to the effects of the presence of a romantic relationship in adolescence without examining the quality of that relationship. Qualities in romantic relationships are likely to vary from person to person and the psychological impact of a romantic relationship in adolescence is likely to depend on the quality of that relationship. For example, positive qualities in romantic relationships have been linked to increased social competence in young people (Zimmer-Gembeck,

Siebenbruner & Collins, 2001), while high levels of negative qualities in these relationships have been linked to depressive symptoms (La Greca & Harrison, 2005). However, there have been significant gaps in research to date on romantic relationships in adolescence. Firstly, the majority of studies examining romantic relationships have been conducted almost exclusively with North American samples of adolescents, thus knowledge of cultural variations in romantic relationships during adolescence is limited. Furthermore, there has been a distinct lack of research which examines the links between specific qualities in romantic relationships and mental health in adolescents. Given the importance of these relationships for adolescent development there is a need for research to establish links between qualities in these relationships and mental health outcomes in young people.

#### *The Irish school system*

The school environment has been identified as an important social context for adolescent development (Eccles & Roeser, 2011; Roeser, Eccles & Sameroff, 2000). In the Irish school system, there are differing social experiences associated with each school year and the ages of students within these year groups can vary substantially. In Ireland, second level education consists of six school years, where first, second and third year (ages 12-16) are comprised within the Junior Cycle and fourth, fifth and sixth year (ages 15-18) are comprised within the Senior Cycle. Two major state examinations are taken during this period; one at the end of the Junior Cycle in third year and one at the end of the Senior Cycle in sixth year. As the experiences of third year and sixth year students are dominated by preparations for these exams, it is likely that students in these year groups may experience increased stress. Fifth year is also likely to be a time of



stress as this is when students are expected to make important decisions about their future academic and career paths. In contrast, fourth year is seen as a year of transition in which there is an emphasis on promoting personal, social and vocational development (Jeffers, 2011). Unlike other years in school, academia is not the main focus and students are not usually required to take exams. The age range within these year groups may vary substantially. For example, the age of students in fifth year can range from 15 years to 18 years depending on whether or not the student completed fourth year, which is optional in some schools (Department of Education and Science, 2004). Thus school year group may be considered a more homogenous social grouping that biological age to examine differences in interpersonal relationships across adolescence.

### **The present study**

The aim of the present study was to examine gender and school year differences in qualities of young people's relationships with parents, best friends and romantic partners and to determine whether these qualities were linked to psychological distress. Previous research in this area had generally focused on overall relationship quality or on one or two specific qualities in parental, peer or romantic relationships. This study expanded on previous research by comprehensively examining a range of specific positive and negative qualities across multiple interpersonal relationships in line with Furman and Buhrmester's (1992) work. This study further expanded on previous research by determining the relative importance of these positive and negative qualities in predicting emotional distress in young people. Based on previous literature, three hypotheses were formulated. Firstly, it was hypothesised that girls would report more

positive relationships with mothers and best friends whereas boys would report more positive relationships with fathers and romantic partners. The second hypotheses was that adolescents at the later stages of second-level education would report more negative relationships with parents and more positive relationships with peers and romantic partners than those in the early years of second-level education, in line with trends seen in research focusing on age. Finally, it was hypothesised that higher levels of positive qualities and lower levels of negative qualities would be associated with lower levels of psychological distress in young people.

## **Method**

### *Participants*

Participants were students from three second level schools in the South Dublin area (119 female: 141 male), ranging in age from 12 to 18 years ( $M = 15.32$ ,  $SD = 1.91$ ). Thirty percent ( $n = 78$ ) of participants reported being currently involved in a romantic relationship, 56% of whom were male. Thirty-seven participants were in first year (12-13 years), 55 were in second year (13-14 years), 39 were in third year (14-15 years), 29 were in fourth year (15-16 years), 39 were in fifth year (16-18 years) and 61 were in sixth year (17-18 years).

### *Procedure*

This study received approval from the Research Ethics Committee in the author's university. Six second level schools in the South Dublin area (matched for socioeconomic status) were approached via telephone or email to consider participating

in the study. Those who responded were posted an information pack containing details of the study. Three schools agreed to participate, all of which were single-sex.

All potential participants were given consent forms and information sheets for themselves and their parents outlining the nature of the study. For students who were under 18, only those who returned signed parental consent forms were eligible to participate. Students under the age of eighteen also signed assent forms prior to participation. Any student over the age of 18 was given the option of signing their own consent form. Questionnaires were administered during class time and took approximately 20 minutes to complete. They contained a number of questions pertaining to demographic information (e.g. age, gender, school year group) and two standardised scales assessing quality of social relationships and emotional distress. On completion of the survey participants were given details of confidential sources they could approach if they had been distressed by the contents of the survey.

### *Measures*

#### *Relationship Quality Version of the Network of Relationships Inventory (NRI-RQV).*

This scale is one of three versions of the Network of Relationships Inventory (Furman & Buhrmester, 1985). It is a 30-item scale containing ten subscales with three items per subscale. The scale assesses five positive features of relationships (companionship, disclosure, emotional support, approval and satisfaction) and five negative features (conflict, criticism, pressure, exclusion and dominance). Responses were made on a five-point scale ranging from “Never or hardly at all (1)” to “Always or extremely much (5)”. Scores for each subscale were obtained by averaging the three items making up the scale. Overall scores for positive and negative qualities can be

obtained by averaging the five component subscales, giving a score range of between one and five. This scale was used to assess qualities in mother, father, best friend and romantic relationships. A romantic partner was defined as “someone you are physically attracted to, that you consider to be more than just a friend and that you go out on ‘dates’ with”. The validity of composite scores on the NRI has been established (Furman & Buhrmester, 2009) and previous studies have indicated an acceptable level of internal reliability, with Cronbach’s alpha values ranging from .82 to .93 (Hibbard & Buhrmester, 2010). In the present study the Cronbach’s alpha values for the majority of subscales fell above .7 indicating an acceptable level of internal reliability. For the approval, pressure, exclusion and dominance subscales Cronbach’s alpha values ranged between .6 and .7 indicating a slightly lower level of internal reliability.

#### *Depression, Anxiety, & Stress Scales (DASS-21)*

The short version of the Depression, Anxiety, and Stress Scale (Lovibond & Lovibond, 1995) was used to assess overall psychological distress. It is a 21-item self-report questionnaire with three subscales representing each of the three emotional states (depression, anxiety and stress). Responses were made on a four-point Likert scale based on the participants’ experiences of the past week. Responses can range from “Did not apply to me at all (0)” to “Applied to me very much/most of the time (3)”. A total composite score for the DASS-21 (ranging from 0-126) can be computed by summing scores on the three subscales to give an overall measure of distress in young people. The validity of the DASS-21 has been established (Henry & Crawford, 2005) and it has been found to have a high level of internal reliability in an adolescent population (Tully, Zajac & Venning, 2009). In the present study, a Cronbach’s alpha value of .935 was obtained indicating high level of internal reliability.

*Plan for data analysis*

To examine the first two hypotheses, a series of 2\*6 between groups ANOVAs were conducted investigating gender and school year differences in qualities of adolescents' parental, best friend and romantic relationships. Overall levels of psychological distress were also examined. G\*Power (Faul, Erdfelder, Lang & Buchner, 2007) estimated a total sample of 212 was required to detect a moderate effect size ( $d=0.25$ ), setting alpha at .05, power at .8, with a 12 (2\*6) group design and numerator  $df=5$ . Post-hoc analyses (Scheffe and Test of Simple Effects) were employed to further explore the findings. To test the third hypothesis, a number of stepwise multiple regressions were carried out to test the relationship between qualities in interpersonal relationships and psychological distress.

**Results**

*Gender and school year differences in quality of interpersonal relationships*

Table 1 presents means and standard deviations for NRI-RQV and the DASS-21 by gender and school year. Details of 2\*6 ANOVAs testing gender and school year differences across responses on these measures are also summarised. Overall girls reported higher levels of positive qualities in their relationships with mothers and best friends whereas boys reported higher levels of negative qualities in their relationships with romantic partners. Older adolescents reported higher levels of positive qualities in their relationships with both of their parents.

# Interpersonal Relationships and Emotional Distress: Final Draft

**Table 1**

Summary of ANOVAs illustrating gender and school year differences in levels of positive and negative qualities across interpersonal relationships.

	NRI mother: Positive Qualities		NRI mother: Negative Qualities		NRI father: Positive Qualities		NRI father: Negative Qualities		NRI best friend: Positive Qualities		NRI best friend: Negative Qualities		NRI romantic partner: Positive Qualities		NRI romantic partner: Negative Qualities		DASS-21	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Total	3.28	0.76	2.29	0.65	2.96	0.82	2.16	0.63	3.70	0.66	1.92	0.51	3.65	0.73	1.82	0.50	30.13	24.29
Boys	3.10	0.69	2.25	0.64	2.91	0.80	2.22	0.65	3.47	0.59	1.97	0.49	3.63	0.71	1.97	0.48	27.01	21.62
Girls	3.50	0.82	2.34	0.66	3.02	0.85	2.09	0.60	3.97	0.63	1.87	0.52	3.68	0.76	1.62	0.47	33.79	26.72
1 <sup>st</sup> Years	3.76	0.71	2.05	0.47	3.51	0.61	2.01	0.40	3.77	0.66	1.89	0.47	3.88	0.90	1.39	0.30	24.76	21.59
2 <sup>nd</sup> Years	3.32	0.79	2.51	0.73	2.91	0.87	2.26	0.76	3.84	0.69	1.85	0.52	3.24	0.57	1.70	0.44	37.39	30.60
3 <sup>rd</sup> Years	3.36	0.83	2.27	0.59	3.15	0.80	2.08	0.50	3.71	0.69	1.86	0.41	3.41	0.91	1.97	0.60	30.76	23.50
4 <sup>th</sup> Years	2.94	0.78	2.32	0.74	2.67	0.76	2.33	0.80	3.59	0.63	2.11	0.53	3.73	0.51	1.93	0.49	21.85	13.53
5 <sup>th</sup> Years	2.94	0.66	2.36	0.60	2.43	0.65	2.15	0.69	3.64	0.64	1.87	0.48	3.72	0.82	1.77	0.47	28.79	19.47
6 <sup>th</sup> Years	3.29	0.67	2.20	0.64	2.98	0.81	2.15	0.56	3.64	0.64	1.99	0.56	3.90	0.72	1.87	0.54	31.48	25.90
F (gender)	16.93** (girls > boys)		0.48		1.05		2.64		33.86** (girls > boys)		0.78		0.01		6.02* (boys > girls)		4.39* (girls > boys)	
F (school year)	5.98** (1 <sup>st</sup> > 4 <sup>th</sup> , 5 <sup>th</sup> )		2.24		8.10** (1 <sup>st</sup> > 2 <sup>nd</sup> , 4 <sup>th</sup> , 5 <sup>th</sup> 3 <sup>rd</sup> > 5 <sup>th</sup> )		1.16		0.347		1.37		1.32		1.02		1.72	
F (interaction)	1.48		0.50		1.05		0.54		0.44		0.38		0.35		0.28		0.381	

\*significant at the .05 level

\*\*significant at the .001 level

A series of 2\*6 ANOVAs were conducted to investigate gender and school year differences in each of the specific positive qualities (companionship, disclosure, emotional support, approval, satisfaction) and negative qualities (conflict, criticism, pressure, exclusion, dominance) measured across parental, best friend and romantic relationships. Results which are significant are presented in Table 2.

As Tables 2 illustrates, girls reported higher levels of companionship, disclosure and support in their relationships with their mothers and higher levels of disclosure, support and approval in their relationships with best friends than boys. Boys reported significantly higher levels of dominance and pressure in their relationships with romantic partners than girls. Although no gender differences were found in overall levels of negative qualities with father or best friends, boys reported experiencing higher levels of dominance in their relationships with their fathers and higher levels of criticism in their best friend relationship than girls.

Looking to school year, first years reported higher levels of overall positive qualities in their relationships with both of their parents than older year groups, particularly fourth and fifth years. More detailed analysis revealed that this effect was consistent across all positive relationship qualities measured in both mother and father relationships. An interaction occurred between gender and school year in terms of mother's support. Test of Simple Effects showed that sixth year girls reported significantly higher levels of support in their relationships with their mothers than boys. No school year differences emerged in overall levels of negative qualities in either parental relationship, however fourth years reported higher levels of exclusion in their relationships with their fathers than third years. No school year differences emerged in qualities of best friend or romantic relationships.

**Table 2**

Summary of ANOVAs indicating gender and school year differences in interpersonal relationship qualities

	<b>Gender</b>		<b>School Year</b>		<b>Gender x School Year</b>
	F	Source of Difference	F	Source of Difference	F
<b>Mother</b>					
Companionship	18.63***	girls > boys	4.69***	1 <sup>st</sup> > 4 <sup>th</sup> , 5 <sup>th</sup>	-
Disclosure	29.14***	girls > boys	2.99*	1 <sup>st</sup> > 4 <sup>th</sup>	-
Emotional Support	20.39***	girls > boys	6.9***	1 <sup>st</sup> > 4 <sup>th</sup> & 5 <sup>th</sup> , 2 <sup>nd</sup> & 3 <sup>rd</sup> > 4 <sup>th</sup>	2.41*
Approval	-	-	2.65*	1 <sup>st</sup> > 5 <sup>th</sup>	-
Satisfaction	-	-	3.13**	1 <sup>st</sup> > 5 <sup>th</sup>	-
<b>Father</b>					
Companionship	-	-	6.01***	1 <sup>st</sup> > 4 <sup>th</sup> /5 <sup>th</sup>	-
Disclosure	-	-	4.63***	1 <sup>st</sup> > 5 <sup>th</sup>	-
Emotional Support	-	-	8.13***	1 <sup>st</sup> > 4 <sup>th</sup> & 5 <sup>th</sup> , 3 <sup>rd</sup> > 5 <sup>th</sup>	-
Approval	-	-	4.5**	1 <sup>st</sup> > 5 <sup>th</sup>	-
Satisfaction	-	-	5.19***	1 <sup>st</sup> > 4 <sup>th</sup> , 5 <sup>th</sup>	-
Exclusion	-	-	4.2***	4 <sup>th</sup> > 3 <sup>rd</sup>	-
Dominance	5.2*	boys > girls	-	-	-
<b>Best Friend</b>					
Disclosure	39.27***	girls > boys	-	-	-
Emotional Support	59.19***	girls > boys	-	-	-
Approval	8.44**	girls > boys	-	-	-
Criticism	5.09*	boys > girls	-	-	-
<b>Romantic Partner</b>					
Pressure	6.14*	boys > girls	-	-	-
Dominance	4.57*	boys > girls	-	-	-

\*significant at the .05 level

\*\*significant at the .01 level

\*\*\*significant at the .001 level



*Qualities in interpersonal relationships and psychological distress*

Four stepwise multiple regressions were carried out to examine which relationship qualities were most salient in predicting psychological distress across parent, best friend and romantic relationships. The ten relationship qualities measured by the NRI-RQV (companionship, disclosure, emotional support, approval, satisfaction, conflict, criticism, pressure, exclusion and dominance) were included as predictor variables. Results are presented in Table 3 which details the predictor variables that were included in the final model, the order in which they were included and the amount of variance explained.

In the mother-adolescent relationship, in order of steps entered into the model, high levels of criticism, exclusion and disclosure emerged as predictors of psychological distress. In the father-adolescent relationship, high levels of criticism, exclusion and disclosure and low levels of satisfaction emerged as predictors of distress. In best-friend relationships high levels of exclusion and disclosure and low levels of satisfaction were found to be predictive of distress and in romantic relationships low levels of satisfaction and high levels of support were predictive of psychological distress.

**Table 3**

Stepwise regression of relationship quality variables on psychological distress in adolescents

<b>Relationship</b>	<b>Predictor variables</b>	<b>Step</b>	<b>Final beta</b>	<b><math>R^2</math></b>	<b><math>R^2</math> change</b>
<b>Mother relationship</b>	Criticism	1	.253***	.149	.149
	Exclusion	2	.241***	.181	.032
	Disclosure	3	.150*	.203	.022
<b>Father relationship</b>	Criticism	1	.177*	.109	.109
	Satisfaction	2	-.256***	.159	.05
	Exclusion	3	.162*	.174	.015
	Disclosure	4	.150*	.192	.017
<b>Best friend relationship</b>	Exclusion	1	.192*	.075	.075
	Disclosure	2	.220***	.102	.026
	Satisfaction	3	-.203*	.126	.025
<b>Romantic relationship</b>	Satisfaction	1	-.461***	.106	.106
	Support	2	.344**	.206	.100

\*significant at the .05 level

\*\*significant at the .01 level

\*\*\*significant at the .001 level

## Discussion

This study aimed to explore gender and school year differences in qualities of interpersonal relationships in adolescence and to examine whether these qualities were linked to psychological distress in young people. Girls reported the highest levels of positive qualities in their best-friend relationships, whereas boys reported the highest levels in their romantic relationships. Both boys and girls reported the highest levels of

negative qualities in their relationships with their mothers, consistent with previous findings which suggest high levels of conflict in the mother-adolescent relationship (Laursen, 1995; Montemayor et al., 1983).

In line with previous research (e.g. Branje et al., 2010; Smetana et al., 2006), girls reported higher levels of companionship, disclosure and support in their relationship with their mothers than boys, suggesting that girls are more inclined to use their mothers as their primary source of parental support. This provides partial support for previous research suggesting that young people generally identify with their same-sex parent more than their opposite-sex parent (Starrels, 1994). However, no gender differences in levels of positive qualities in the father-adolescent relationship emerged, implying this may only be true for girls. While no gender differences emerged in overall levels of negative qualities in the father-adolescent relationship, boys reported experiencing higher levels of dominance in their relationships with their fathers. This may be linked to the tendency of fathers to use harsher forms of discipline with male children than with female children (Bender, Allen, McElhaney, Antonishak, Moore, O'Beirne Kelly & Davis, 2007; McKee et al., 2007).

In terms of school year, first years reported higher levels of companionship, disclosure, support, approval and satisfaction in their parental relationships than fourth and fifth years, implying that positive qualities in parental relationships decline over the course of secondary school, hitting their lowest point around fourth or fifth year. There was an increase in emotional support in the mother-adolescent relationship in sixth year girls, however this increase did not occur for boys. Further research including a post-second level sample would be useful to examine whether increases in emotional support in parent-adolescent relationships occur after this period or whether support remains

stable, in line with Helsen et al.'s, (2000) findings. Fourth years reported higher levels of exclusion in the relationships with their fathers, however the reason for this is unclear and further research should explore this.

High levels of criticism in both father and mother relationships were found to be significant predictors of distress in adolescents, which is in line with Wedig and Nock's (2007) findings that high levels of parental criticism were linked to self-harm in young people. High levels of exclusion in parent-adolescent relationships were also predictive of distress suggesting the continuing importance of parents' efforts to involve themselves in what is going on in their teenagers' lives. High levels of satisfaction in adolescents' relationships with their fathers emerged as an important predictor of lower levels of emotional distress indicating the salience of the father-adolescent relationship as well as the mother-adolescent relationship for young people's well-being. Thus, although adolescence is a time when individuals typically move away from their parents, the parent-child relationship may still be integral to young peoples' psychological health (Hair, Moore, Garrett, Ling & Cleveland, 2008).

The hypothesis that girls would report more positive qualities in best friend relationships than boys was supported. Consistent with previous research (e.g. Jenkins et al., 2002; Johnson, 2004; Pagano & Hirsch, 2007), girls reported higher levels of disclosure, support and approval in best friend relationships than boys. This provides support for Furman & Burhmester's (1985) postulation that girls may rely more heavily on their best friend relationships than boys. In contrast, boys perceived their best friend relationships as more negative, reporting higher levels of criticism in these relationships. Consistent with La Greca and Harrison's (2005) findings, no significant

differences emerged in quality of best friend relationships across school year group implying that the qualities of close peer relationships remain stable across adolescence.

Satisfaction in best friend relationships emerged as a significant predictor of mental health outcomes, with higher levels of satisfaction linked to lower levels of distress, suggesting the salience of close friendships for mental health outcomes in adolescence. In line with previous research linking peer exclusion to negative mental health outcomes (La Greca & Harrison, 2005), higher levels of exclusion in best friend relationships emerged as a predictor of distress in young people. It may be that the lack of social support resulting from being excluded increases distress levels in young people. However it is important not to assume causation; it may be that adolescents with mental health difficulties overburden friends with problems and drive them away or else may lack the interpersonal competence to maintain close friendship (Branje et al., 2010; Buhrmester, 1990). Indeed, research has shown depressive symptoms in adolescents to be predictive of increases in negative perceptions of friendship quality (Prinstein, Borelli, Cheah, Simon, & Aikins, 2005; Rose, Carlson, Luebbe, Schwartz-Mette, Smith & Swenson, 2011).

As hypothesised, boys reported higher levels of negative qualities in their romantic relationships than girls. Specifically, they reported experiencing higher levels of dominance and pressure in these relationships. Contrary to previous research, no differences emerged between younger and older adolescents in the quality of romantic relationships during adolescence (Furman & Buhrmester, 1992; Vujeva & Furman, 2011). However, it should be noted that this study only sampled students from single-sex school environments. Previous research has suggested that having larger other-sex friendship networks in early adolescence is linked to the development of affiliative

qualities (such as disclosure and emotional support) in romantic relationships in later adolescence (Feiring, 1999), thus it is possible findings may vary in adolescents from a co-educational environment who are likely to have more frequent interaction with other-sex peers. In terms of the association between romantic relationships and mental health, higher levels of satisfaction in romantic relationships were predictive of lower levels of distress. This is in line with previous research suggesting the importance of romantic relationships in adolescents' day to day lives and the significant impact they may have on their current mental health (Scanlan, Bailey & Parker, 2012).

Interestingly, high levels of emotional support in romantic relationships emerged as predictors of distress in young people. An explanation for this might be that young people with higher levels of emotional problems are more likely to seek out emotional support in romantic relationships. Similarly, high levels of disclosure in parental and best friend relationships emerged as predictors of distress. It is possible that young people who are experiencing high levels of distress may be more inclined to use their interpersonal relationships as sources of disclosure, however parents and peers may not have the adequate knowledge or resources to respond appropriately. Consequently, as La Greca and Harrison (2005) postulate, high levels of disclosure in these relationships may allow adolescents to repeatedly discuss and re-visit problems in a negative manner and focus on negative feelings. This process has been termed 'co-rumination' (Rose, 2002) and has been found to correlate with higher levels of mental health difficulties in adolescents (Starr & Davila, 2009).

### *Strengths and Limitations*

A key strength of this study was the wide range of positive and negative qualities examined and the assessment of the relative salience of these qualities in predicting mental health difficulties across different interpersonal relationships. The use of school year group as an independent variable as opposed to age was another strength, as it allowed an evaluation of relationships and mental health across a more socially homogenous grouping. However, a number of weaknesses should be acknowledged. Firstly, the cross sectional nature of the study means that cause and effect cannot be confidently determined. Secondly, the use of self-report measures means that findings may have been influenced by negative interpretation bias i.e. the tendency of individuals with higher levels of mental health difficulties to perceive situations and social interactions as more negative than they really are (Huppert, Foa, Furr, Filip & Mathews, 2003; Voncken, Bogels & Peeters, 2007). Socially desirable answering may also have played a role as adolescents may want to portray their relationships with peers and romantic partners as more positive than their parental relationships and thus may have adjusted their responses to reflect this. Finally, variations in outcomes were not assessed across socio-economic status, race or ethnicity and thus caution should be exerted in interpreting the generalisability of these findings.

Overall, the results suggest a clear link between qualities in interpersonal relationships and mental health difficulties. Given the move towards a strengths-based approach in the treatment of mental health (Carr, 2011), it is important to focus on the finding that it is not just negative qualities in interpersonal relationships that are predictive of mental health outcomes, but also positive qualities such as satisfaction in social relationships. These findings imply the potential of interventions fostering positive interpersonal relationships in promoting positive mental health, such as Harrell,

Mercer & DeRosier's (2009) social skills programme for adolescents and their parents which saw significant reductions in young peoples' internalising problems. Finally, the finding that disclosure in interpersonal relationships is linked to mental health difficulties is of concern and warrants further investigation. These findings highlight the importance of developing programmes to improve parents and peers mental health literacy and to equip them with the necessary resources to respond correctly to disclosure and provide appropriate and effective support to young people who are experiencing mental health problems.



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