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# THE DEVELOPMENT OF DEPRESSIVE SYMPTOMS DURING ADOLESCENCE : THE ROLE OF BEST FRIENDS AND PARENTS

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# LE DÉVELOPPEMENT DE SYMPTÔMES DÉPRESSIFS À L'ADOLESCENCE : LE RÔLE DES MEILLEURS AMIS ET DES PARENTS

ESSAI

PRÉSENTÉ

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# RÉSUMÉ

Le présent essai propose d'étudier les facteurs relationnels potentiellement impliqués en tant que modérateurs du lien entre les déficits socio-comportementaux et les symptômes de dépression à l'adolescence. Nous nous appuyons sur un modèle développemental et interpersonnel de la dépression chez les jeunes (Rudolph, Flynn & Abaied, 2008) et examinons deux modérateurs, soit la qualité de la relation avec un meilleur ami ou une meilleure amie et la chaleur parentale. L'échantillon comporte 328 adolescents (66% de filles) âgés entre 14 et 16 ans et provenant de deux écoles secondaires publiques francophones. Des analyses d'équations structurelles ont permis de révéler que la chaleur parentale n'est pas un modérateur significatif du lien entre les déficits socio-comportementaux et les symptômes de dépression un an plus tard. De plus, nous avons trouvé des résultats contraires à nos attentes en ce qui concerne la qualité de la relation d'amitié. En effet, nous avons observé que, pour les adolescents ayant rapporté une relation d'amitié de faible qualité, les déficits socio-comportementaux sont associés à des symptômes de dépression moins élevés un an plus tard. Cette étude permet d'illustrer la complexité des influences sociales sur la santé mentale des adolescents et la nécessité de mieux outiller les jeunes à comprendre et choisir des relations sociales saines. D'ailleurs, la discussion de cet essai propose des pistes d'intervention pour les psychologues ou psychothérapeutes qui travaillent avec des adolescents qui souffrent de dépression.

Mots clés : Adolescence, symptômes dépressifs, qualité d'amitié, chaleur parentale, problèmes sociaux

ABSTRACT

This doctoral essay proposes to study the relational factors potentially involved as moderators of the link between social-behavioural deficits and symptoms of depression during adolescence. Our study is inspired by Rudolph's developmentally based interpersonal model of youth depression (Rudolph, Flynn & Abaied, 2008). We examine two moderators: the quality of the friendship with a best friend and parental warmth. The sample consists of 328 adolescents (66% girls) aged between 14 and 16 from two francophone public high schools. Structural equation modeling revealed that parental warmth is not a significant moderator of the link between social behavioural deficits and depression symptoms one year later. In addition, we found results contrary to our expectations regarding friendship quality. In fact, we observed that, for adolescents who reported a low-quality friendship, social-behavioural deficits were associated with a decrease in depression symptoms one year later. This study illustrates the complexity of social influences on adolescent mental health and the need to better equip adolescents to understand and choose healthy social relationships. Moreover, the discussion of this essay explores clinical implications for psychotherapists who work with adolescents.

Keywords : Adolescence, depressive symptoms, friendship quality, parental warmth, social problems

# INTRODUCTION

Depression is an incapacitating mental illness with strong developmental patterns from childhood through late adolescence. Rates of depressive symptoms surge during adolescence, as it is a period characterized by many changes and developmental challenges. More specifically, the period between 13 and 18 years of age is documented as critical period for depression onset. A considerable portion of depression diagnoses have their initial roots in adolescence, and the majority (about two thirds) of lifetime cases among adults originate from depressive symptoms during adolescence (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005; Kim-Cohen et al., 2003).

In Quebec, the lifetime prevalence for depression among youth between 15 and 24 years old reaches 12.6% (Biraldi, Joubert, Bordeleau & Plante, 2015). Also, in the past years, the biggest increase in the rate of hospitalisation for attempted suicide is seen in adolescents aged 15 to 19 years old. In fact, for the past 10 years, this rate has been constantly growing. For the year 2018, the rate was 203.2 per 100.000 individuals in this age group, approximately three times the number observed in 2007 (Levesque, Pelletier & Perron, 2020).

Beyond the risk of suicide, depression during adolescence is associated with an array of other negative consequences, such as major depression during adulthood, school dropout, comorbid psychological disorders, psychosocial impairment, and substance use (Aalto-Setala, Marttunen, Tuulio-Henriksson, Poikolainen, & Lonnqvist, 2002; Forbes, Fitzpatrick, Magson, & Rapee, 2019; Fortin, Royer et al., 2004; Pine, Cohen

et al., 1999). A comprehensive study by Fergusson and Woodward (2002) examined mental health, educational, and social outcomes in over 1,200 adolescents. By the time they were 21 years old, adolescents who were depressed between the ages of 14 and 16 years were at increased risk for psychiatric disorders, substance dependence, and suicide. Relative to non depressed adolescents, they were more likely to have dropped out of school, less likely to pursue higher education, and more likely to be unemployed. Therefore, the literature suggests that long-term effects of adolescent depression are quite undesirable, making it imperative to better understand depression during adolescence in order to prevent negative or even fatal outcomes.

In addition, the developmental period of adolescence is characterized by social reorientation, an increased need to gain autonomy from adults and effort deployed towards forming quality friendships with peers (Steinberg & Silverberg, 1986). Theories of development highlight that various vulnerabilities to depression during adolescence emerge from the social context, such as peer stress or negative interpersonal events (Cyranowksi et al., 2000; Hankin & Abramson, 2001; Nelson, Leibenluft, McClure, & Pine, 2005; Oldehinkel & Bouma, 2011). Adolescents who experience social behavioural deficits and who struggle in their interpersonal relationships may experience more negative social interactions and consequently be at higher risk of suffering depressive symptoms.

Knowing the outcomes related to suffering from a depressive disorder at a young age, the study of factors that could promote good mental health in adolescence is a promising area of research. The study of protective factors is particularly relevant for psychotherapists who work with youth who are at risk of depression based on their social behavioural deficits. This doctoral essay will attempt to investigate different mechanisms underlying depressive symptoms during adolescence by examining the role of best friendship quality and parental warmth as moderators of the connection between adolescents' social behavioural deficits and the evolution of their depressive

symptoms during the following year. This essay will contain three chapters, the first chapter being a review of literature, the second being an empirical article and the third being a discussion about clinical implications. The upcoming chapter, the review of literature, will include an overview of depression: its symptoms, its consequences, and its possible roots according to interpersonal theories of depression. This section of the chapter will be followed by a more specific depiction of depression and social behavioural deficits during adolescence. Afterwards, friendships (in particular best friendships) during adolescence will be discussed, and finally, the last section will focus on the moderators of interest to this study: friendship quality and parental warmth.

# CHAPTER 1
# REVIEW OF LITERATURE

## 1.1 Depressive symptoms

The term “depression” is used to describe a complex display of abnormality in feelings, behaviour, and cognitions. It is a psychiatric disorder characterized mainly by mood disturbance and it can vary according to age and gender (Mirabel-Sarron, 2005). The specific signs or symptoms differ in intensity, ranging from mild to severe (Beck & Alford, 2009). Individuals affected by this disorder usually express moods that vary from sadness to melancholy, exhibit low self-esteem and a general disinterest from activities otherwise considered as pleasant. Depressive symptoms can be psychological, emotional, behavioural or physical. It is also an incapacitating condition because it can alter functioning at the interpersonal level (family, relationships, career), as well as on a physical level (nutrition and sleep patterns; Barlow & Durand, 2005). From a psychological perspective, depressed individuals are often submerged with negative thoughts about themselves and about the world they live in, which contributes to the typical lethargic or unhappy mood of depressed individuals (Mirabel-Sarron, 2005). Generally, depression is defined by feelings of being inadequate or useless and by feelings of hopelessness and low self-worth (American Psychiatric Association, 2013). From an emotional standpoint, people who suffer from depression often cease to express interest for hobbies or social activities. They can be overwhelmed by sadness, which can sometimes seem undefeatable (Mirabel-Sarron, 2005). Behaviours are also altered as memory and concentration problems can arise, potentially leading to other negative outcomes such as

communication difficulties and social withdrawal (Delgado & Schillerstrom, 2009). The array of symptoms of this disorder also includes physical signs like exhaustion, inflammation and loss of appetite (Jokela, Virtanen, Batty, & Kivimäki, 2016). Socially, depressed individuals can experience disturbances, such as social withdrawal or social anhedonia (the decreased enjoyment of social experiences), which is also often present in the clinical portrait of depression (Setterfield, Walsh, Frey & McCabe, 2016).

An important element to consider in regards to depression symptoms is the presence of suicidal thoughts in 80% of cases, which demonstrates the gravity of this condition. Suicidal ideations vary, ranging from unclear ideas to elaborate suicide planning (Mirabel-Sarron, 2005). Consequently, depression is considered to be a potentially deadly condition. Although there are multiple causes associated with suicide, it is estimated that depression is responsible for 2% of deaths in the province of Quebec (Ngô, Chaloult, & Goulet, 2014). Studies also indicate that depression is the most frequent diagnosis associated with suicide (Hawton, Comabella, Haw, & Saunders, 2013). For Quebec specifically, statistics show that 80% of individuals of all ages who commit suicide suffered from depression (Lane, Archambault, Collins-Poulette, & Camirand, 2010). In a more global perspective, the World Health Organisation reports that depression is a leading cause of disability worldwide and that suicide is the second leading cause of death in 15-29-year olds (WHO, 2020).

## 1.2 Interpersonal theories of depression

Different theories exist to explain depression and are useful to researchers and practitioners in various ways. Interpersonal models, in particular, have proven their importance by generating extensive research and guiding the comprehension of the

course, effects and treatment of depression (Armsden & Greenberg, 1987; Gotlib & Hammen, 1992; Mufson et al., 2004). Interpersonal theories of depression suggest that characteristics specific to depressed or depression-prone individuals can negatively affect relationships by inducing adverse responses from others and creating interpersonal stress and conflict (Coyne, 1976; Gotlib & Hammen, 1992; Hammen, 1992; Joiner & Timmons, 2009; Rudolph et al., 2000). For example, Coyne's interactional theory of depression (Coyne, 1976b) has been documented as being one of the most influential frameworks for understanding social and relational aspects of depression (Starr & Davila, 2008). According to this model, depressed individuals try to appease feelings of guilt or low self-esteem by seeking reassurance from others or by questioning others about themselves in ways that can be unpleasant. At first, loved ones can provide support and encouragement, but because depressed individuals hold strong beliefs about being flawed, unworthy or useless, they perceive inconsistencies between views of others and their own. They can then doubt the authenticity of the reassurance they receive and continue to further seek encouragement until others grow irritated and worn-out. This behaviour of excessive reassurance seeking leads to interpersonal difficulties and rejection. These social difficulties and rejection will in turn exacerbate feelings of inadequacy and perpetuate depressive symptoms, and the cycle continues, spreading to other social networks. This cycle can be especially problematic for adolescents because they have more limited social landscapes and tend to interact frequently with the same people, such as parents or schoolmates (Rudolph, Flynn, & Abaied, 2008).

Although traditional interpersonal theories provide insightful knowledge on how relational and social factors influence depression, they usually focus on understanding adult depression and neglect to consider the developmental aspects of interpersonal difficulties and depression. To fill this gap, Rudolph and colleagues (Rudolph et al., 2008) proposed a variation of the interpersonal model of depression that is adapted to youth and that integrates developmental particularities of

adolescence. This model will be further discussed in the next section about depression during adolescence.

## 1.3 Interpersonal factors of depression during adolescence

Adolescence is a period during which one develops an identity, and peer approval becomes very important in this process (Harter, 2015). Adolescents are particularly vulnerable to depressive symptoms as hormonal, physical and social changes occur at this age, leading to rapid physical growth and to the emergence of new social and interpersonal motivations (Angold & Costello, 2006; Crone & Dahl, 2012). In addition, the pressures emerging from their interpersonal relationships, such as friendships, contribute to heightening adolescents' vulnerability to depression (Cyranowski, Frank, Young, & Shear, 2000). Poor social support, cognitive distortions when reading social interactions, and low parental engagement have been identified as risk factors that further increase the likelihood of developing depression during adolescence (Kaltiala-Heino, Rimpelä, Rantanen, & Laippala, 2001; Marcotte, 2009; Marcotte, Lévesque, & Fortin, 2006). Problems regarding interpersonal relationships have also long been recognized as a risk factor for depressive symptoms, as they can lead to aversive and non-rewarding experiences in adolescents' social spheres (Coyne, 1976a, 1976b). Numerous studies have indicated that depression can in turn lead to difficulties with peers, including rejection, lack of popularity, lack of support and even negative online interactions through social media (Ehrenreich & Underwood, 2016; Galambos, Leadbeater, Barker, 2004; Harter & Whitesell, 1996; Henrich, Blatt, Kuperminc, Zphar, & Leadbeater, 2001; Nolan, Flynn, & Garber, 2003; Prinstein & Aikins, 2004). In light of these findings, it appears that friendships may play a central role regarding the development of depressive symptoms.

In line with these findings, Rudolph et al. (2008) fittingly present a contemporary theory of depression during adolescence: the developmentally based interpersonal model of youth depression. This model is based on previous interpersonal models of depression that propose that depressed individuals disrupt their social relationships by inducing negative responses from others (Coyne 1976; Gotlib & Hammen 1992; Joiner, 2000 Joiner, Coyne, & Blalock, 1999). In her model, Rudolph suggests a chain of events that start in childhood and that can eventually lead to depression in adolescence. In this chain, first, an early dysfunctional family environment leads to social and behavioural deficits (e.g. social disengagement, aversive behaviour, involuntary responses) and forms an initial risk factor. Second, these social behavioural deficits result in problems with peer relationships, such as rejection and conflict. Last, these relationship difficulties increase the risk of depression during adolescence. The authors suggest that over time, maladaptive interpersonal behaviours lead to problematic relationships with peers involving an escalation of negative consequences (e.g. poor social acceptance, peer victimization, chronic stress in relationships). These negative outcomes related to relationships are the main risk factors for depression during adolescence, even more so than other risk factors including personality styles and genetic predisposition.

In sum, Rudolph's model highlights the evidence that depression needs to be understood in a relational context. The developmental perspective of this model shows that problems in youth's close relationships and social landscape (e.g. family disruption, peer rejection, dysfunctional friendships) are variables of interest when studying development of depressive symptoms during adolescence (Boivin, Hymel, & Bukowski, 1995; Brendgen, Wanner, Morin, & Vitaro, 2005; Ladd & Troop-Gordon, 2003; Parker & Asher, 1993; Pedersen, Vitaro, Barker, & Borge, 2007).

In addition, beyond proposing links between relational variables and depression, the authors suggest that interpersonal challenges particular to adolescence may act as

moderators of the influence of interpersonal dysfunction. As a future direction for research, Rudolph et al. (2008) suggest the identification of developmentally relevant moderators of the association between social behavioural deficits and depression during adolescence.

## 1.4 Social behavioural deficits during adolescence

In Rudolph's developmentally based interpersonal model of youth depression, the concept of social behavioural deficits encompasses aspects such as ineffective interpersonal problem solving, maladaptive responses to interpersonal stress, social disengagement, social helplessness, aversive behaviour, and a lack of facilitative social behaviour (Rudolph et al., 2008). Across the literature, interpersonal dysfunction such as social behavioural deficits is studied under a number of terms such as social skills, interpersonal skills, social competence, interpersonal competence, or communication competence (Segrin, 2000). More specifically, social behavioural deficits can resemble a lack of social skills. In fact, social skills can be described by "the ability to maximize the rate of positive reinforcement and minimize the strength of punishment from others" (Libet & Lewinsohn, 1973) or "the ability to interact with other people in a way that is both appropriate and efficient" (Segrin, 1992; Spitzberg & Cupach, 1985). An appropriate interaction indicates that an individual's behaviour respects socials norms and values and is not viewed negatively by others. Effectiveness means that the individual is able to reach his or her goal in a given social interaction (Segrin, 2000).

Adolescents can suffer from exhibiting social behavioural deficits because across development, from early dyadic relationships in infancy to close friendships during adolescence, social competence is largely perceived as a main component of healthy social functioning (Peer, 2006; Rubin, Bukowski, & Parker, 1998; Volling, MacKinnon-Lewis, Rabiner, & Baradaran, 1993). In fact, the aptitude to use one's

social behavioural skills is an indispensable element of competent social functioning (Spence, 2003). As they mature, adolescents need to call upon their social skills in order to form relationships, especially high-quality ones, which contributes to maintaining psychological health (Franz, McClelland, & Weinberger, 1991; Rhodes, Contreras, & Mangelsdorf, 1994). The various abilities required to initiate and to maintain friendships in adolescence partially overlap with skills needed to play with others during childhood (Buhrmester, 1990). For example, such skills include the capacity to initiate a conversation, to disclose personal information, to provide support, or to express opinions in front of peers (Youniss & Smollar, 1987). For adolescents, the inability to meet social standards can become a vicious cycle. For instance, Buhrmester (1990) suggested that friendships become more complex and demanding during adolescence, and youth who have social behavioural deficits will also have fewer opportunities to be exposed to social interactions and to develop their social competence through practice.

In sum, social behavioural deficits appear to have a key role in the emergence and development of internalizing and emotional disorders. Youth who exhibit social behavioural deficits may not send appropriate social messages and it may also be difficult for them to read and to respond appropriately to their peers. Such youth are likely to be perceived as socially incompetent by their peers and therefore they most likely experience less positive experiences with others in comparison with adolescents who are socially competent. The limited capacity to express oneself and to understand others is a failure in adaptive functioning and can lead to depressive symptoms. The achievement of a successful social network can be criteria by which youth are judged by peers and by themselves, and it is the failure in this task that can lead, in part, to an increase of internalized symptoms over time (Bornstein, Hahn, & Haynes, 2010).

Still in accordance with Rudolph's model of youth depression (Rudolph et al., 2008), several authors have confirmed the link between various aspects of social behavioural deficits and depressive symptoms. Cicchetti and Schneider-Rosen (1986) sustain that the failure to achieve success in social activities creates susceptibilities for depression. Similarly, Cole's (1990, 1991) competency-based model of depression illustrates that reactions from others (e.g., parents or peers) across various areas of functioning (including social functioning) influence one's self-image, and successively depressive symptoms. Links between interpersonal dysfunction and internalizing problems have been demonstrated in both cross-sectional and longitudinal studies among children and adolescents (Masten, Burt, & Coatsworth, 2006; Peer, 2006; Rubin et al., 1998). Social behavioural deficits are also a long-term predictor of depressive symptoms. For example, in one study, social incompetence and isolation in second grade were associated with internalizing problems three years later (Hymel, Rubin, Rowden, & LeMare, 1990) while in another study, the author reported that social skills in childhood predicted fewer internalizing problems in adolescence (Masten, 2005).

Considering these findings, it is clear that adolescents who experience social behavioural deficits may be particularly at risk of developing depressive symptoms. However, for socially inadequate youths, the presence of a healthy close relationship with a friend may act as a buffer against this increased risk.

## 1.5 Friendships during adolescence

In contrast with children, adolescents generally spend more time with their peers than with their family, which makes friendships particularly important (Berndt, 1992; Brown & Larson, 2009, Wigfield, Byrnes, & Eccles, 2006). Friendship among youth can be defined by their reciprocity and deliberate pairing (the act of choosing one's friends), (Bukowski, Hoza, & Boivin, 1993; Nangle, Erdley, Newman, Mason, &

Carpenter, 2003). They are usually formed on the basis of similarity in regards to behaviours, activities, attitudes or interests (Furman & Rose, 2015; Kandel, 1978). Friendship is also characterized by mutual affection, with both parties of the relationship being interdependent (Rubin, Bukowski, & Parker, 2006). Relationships with friends can possibly surpass the influence of parents in certain areas of youth's lives, making friends one of the main contributors to their well-being (Barry & Wentzel, 2006; Furman & Buhrmester, 1992; Rubin et al., 2006). In addition to relationships with adults, experiences with friends provide added learning opportunities for different social skills such as altruism, cooperation and empathy (Sullivan, 1953), in addition to contributing to higher levels of self-esteem and self-worth (Connell & Wellborn, 1991; Von Soest, Wichstrøm, & Kvalem, 2016). Friendships during adolescence also tend to become more intimate and deeper than friendships during childhood (Rubin et al., 1998). Writings from Sullivan (1953) highlight the importance of intimacy for a healthy social development and define friendships in late childhood and adolescence as key social experiences that contribute to building one's personality and decrease the risk of various psychological disorders, including depression.

Studies show that most adolescents, independently of their social skills, report experiencing at least one significant friendship. In fact, friendships are accessible to the majority of adolescents, even to those who have low levels of social competence or low levels of extraversion (Finkenauer & Righetti, 2011). In one study, 95% of youth reported having at least one reciprocated friendship (Fisher & Bauman, 1988), while another study confirms that most adolescents have at least one friend in their school, which does not exclude that the others have friends outside of school (Rubin, et al., 1998). Consequently, it is very likely that adolescents who experience social behavioural deficits will still be able to benefit from the presence of at least one friend in their lives.

Furthermore, the presence of one healthy friendship can protect adolescents from experiencing depressive symptoms. In fact, empathy and validation of opinions are salient features of friendships during adolescence, and these characteristics promote the development of realistic interpretations of life and an increase in self-worth (Bigelow, 1977; Youniss & Smollar, 1987). There is also evidence of the power of reciprocal friendships in regards to positive adjustment during adolescence (Vitaro, Boivin, & Bukowski, 2009; Wentzel, Barry, & Caldwell, 2004). Early writings of Sullivan (1953) theorize that friendships could counterweight the effects of many negative social experiences, as the protective quality of a friendship could buffer the association between an adverse experience and its negative outcome (e.g., depressive symptoms). Thus, when an individual has no friends, the impact of a negative experience on his or her psychological outcomes is stronger than if there were a friend around. Evidence for this phenomenon is supported across the literature and for different types of negative experiences such as peer victimization, sexual abuse and a harsh family environment (Adams & Bukowski, 2007; Hodges, Boivin, Vitaro, & Bukowski, 1999; Prinstein, Boergers, & Vernberg, 2001; Schwartz, Dodge, Pettit, & Bates, 2000).

## 1.6 Best Friendships

Best friendships represent very intimate relationships among a general network of friends (Lopes, Gabbard, & Rodrigues, 2016). Best friendships are particularly developmentally significant and are generally hypothesized to be long lasting, because they are anchored in a strong attachment bond (Bowker, Rubin, Burgess, Booth-Laforce, & Rose-Krasnor, 2006; Brendgen, Markiewicz, Doyle, & Bukowski, 2001; Bukowski, Hoza, & Boivin, 1994). Friendships in general, but particularly best friendships, are characterized by a wide range of intimate interactions that can enhance psychosocial functioning (Brown, 2004; Finkenauer & Righetti, 2011). Adolescents relate that they can tell their best friend anything, from their most

personal thoughts to their most intimate feelings. This deep self-disclosure is accompanied by strong feelings of loyalty, as adolescents also say that best friends will stick up for one another if needed (Berndt, 2002). These close relationships provide the opportunity to satisfy basic needs such as feelings of belonging, receiving empathy, and being mutually engaged. These positive characteristics of best friendships support interpersonal exchanges that contribute to a healthy development (Jordan, 2013; La Guardia, 2008).

In addition, best friendships are particularly important because they can act as buffers, protecting youth against psychosocial stress (Adams, Santo, & Bukowski, 2011; Berndt, Hawkins, & Jiao, 1999; Laursen, Furman, & Mooney, 2006). Other types of relationships found in broader peer groups might not act as protective factors since they are reputation-based rather than interaction-based (Brown, 1989). Best friendship dyads, on the other hand, offer plenty of opportunity for the two members to interact and support each other. Best friends, in contrast with acquaintances, also seem to have a greater influence on each other's behaviour, suggesting that close relationships are more influential than casual ones (Urberg, 1992). Likewise, best friends are an important source of interpersonal support and of influence regarding emotional regulation and resilience (Graber, Turner, & Madill, 2016; Reindl, Gniewosz, & Reinders, 2016). Adolescents who have a caring, intimate and trusting relationship with their best friend experience improvement in social and emotional adjustment, as well as high self-esteem (Buhrmester, 1990; Keefe & Berndt, 1996; Parker & Asher, 1993), therefore potentially influencing their risk of developing symptoms of depression. A study by Demir, Özen, Doğan, Bilyk, and Tyrell (2011) also showed how feeling like one matters to their best friend increases the feeling of individual happiness. Last but not least, numerous authors suggest that experiencing problems with peers in general does not prevent youth from having satisfactory friendships; rather, they argue that having a one-to-one satisfactory friendship can attenuate the negative impacts of other problems with peers, such as low peer

acceptance, on emotional well being (Blyth, 1983; Bukowski & Hoza, 1989; Furman & Robbins, 1985, Vitaro et al. 2009).

Overall, the presence of a best friend during adolescence seems to be associated with positive outcomes such as a decrease in psychosocial stress, social withdrawal, and depression (Oh et al. 2008; Rubin, Coplan, & Bowker, 2009). Nevertheless, when considering the protective role of best friendships, it is not only the presence of a best friendship that needs to be taken into account, but also the quality of the friendship.

## 1.7 Friendship quality

Studies suggest that it is the quality of a friendship that determines whether it can be a protective factor or not. Friendship quality can be defined both by the presence of positive features and by the low incidence of negative features. Positive features include mutual self-disclosure, support, companionship, loyalty and pro-social behavior (Berndt, 2002; La Greca & Harrison, 2005), while negative features include conflict, pressure and exclusion (Furman & Buhrmester, 1985). Studies show that support in particular can be a major dimension of friendship quality because friends who give it or receive it experience emotional reliance and dyadic adjustment (defined by consensus, cohesion, and satisfaction), which are features present in high quality friendships (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006). Satisfaction within the friendship is another aspect that has been used to measure friendship quality (Burk & Laursen, 2005). Friendships of good quality also have a relatively low occurrence of conflict, which can lead to friendship dissolution (Bowker, 2011). On the other hand, friendships of low quality, or negative friendships, may contribute to social isolation. This happens in part because conflict or rejection by a friend will most likely intensify harmful feelings or distress in regards to peers.

Many studies have established links between friendship quality and positive outcomes. In fact, receiving support within close, high-quality friendships has been linked to healthy self-esteem and to psychosocial adjustment (Buhrmester, 1990; Compas, Slavin, Wagner, & Vannatta, 1986; Graber et al., 2016). In another study, adolescents who experienced high-quality close friendships, characterised by positive features such as intimacy and support, exhibited low levels of social anxiety (La Greca & Lopez, 1998). Friendship quality was also associated with high self-worth and low internalizing problems (Rubin et al., 2004). Conversely, La Greca and Harrison (2005) found that having a best friendship of poor quality (e.g. characterized by exclusion or pressure) was associated with depressive symptoms during adolescence. From a clinical standpoint, their study supported the importance of improving the quality of interpersonal relationships in order to reduce adolescents' risk for depression. Another study corroborated these findings, and revealed that dysfunctional interactions with a best friend predicted an increased level of depressive symptoms (Allen et al., 2006).

Other studies suggest that high-quality close friendships are likely to serve as a protective factor in regards to mental health. For example, a study examined friendship quality as a moderator of the link between parental behaviours and internalizing problems among youth and found that friendship quality buffered this relation (Gaertner, Fite, & Colder 2010). Another longitudinal study found that socially withdrawn children were at risk for depressed affect, but having a mutual friend helped to minimize this risk (Bukowski, Laursen, & Hoza, 2010). One possible explanation for the protective nature of high-quality friendships in regards to psychosocial adjustment is that such relationships might improve youths' view of their other classmates and vice versa, which would in turn foster positive feelings (Berndt, 2002). In addition, friendship quality has been documented as a protective factor against other negative experiences in the peer context, such as bullying (Bollmer, Milich, Harris, & Maras, 2005). However, when high levels of negative

features of the friendship lessen its quality, the relationship could become a catalyst for psychopathological symptoms (Bagwell et al., 2005), highlighting the importance of measuring friendship quality when researching the associations between friendship and psychological health.

However, friendships are not the only influential relationships in youths' lives. Even while they tend to seek independence from their caregivers, a connection of quality with a parent may also contribute positively to adolescents' psychosocial adjustment.

## 1.8 The role of parents and parental warmth during adolescence

Although the literature highlights the existence of a shift away from parents during adolescence, they are still present and significant in youth's lives and development (Steinberg & Morris, 2001). Interactions between adolescents and their parents shape the family climate, and whether or not these interactions are of quality will influence youth's psychosocial development (Schwartz et al., 2012). Even though peers become very important during those years, adolescents still rely on their parents for important decision-making, like decisions related to their future or their values (Raja, McGee, & Stanton, 1992). Relationships with parents are in fact one of the most studied risk factor for adolescent psychosocial maladjustment. Parents of depressed adolescents tend to be less caring, and adolescents who display depressive symptoms report poorer relationships with parents than those who do not score above the clinical cut-off for depression (Field, Miguel, & Sander, 2001; Key, 1995).

Although it has been shown that adolescents rely more heavily on their peers for support, a close relationship with a parent remains an important source of support and emotional regulation for adolescents (Belle, 1989; Collins, 1997; Morris, Criss, Silk, & Houltberg, 2017), thus suggesting that parental influence still contributes to adolescent adjustment. To a certain extent, parents might even be more influential

than peers in regards to adolescent depression. In fact, in one study, deficits in parental support predicted increases in depressive symptoms, but deficits in peer support did not (Stice, Ragan, & Randall, 2004). These findings are consistent with the view that social support decreases the risk for depression, but suggest that this may be relevant especially when considering parental support during adolescence. When considering parent–child interactions, a clear connection has been established between high rates of negative parental behaviours (e.g. aggression, conflict, provocation, disengagement), low rates of positive parental behaviours (e.g. affection, humour, validation, warmth) and adolescent depression (Messer & Gross, 1995; Sheeber, Davis, Leve, Hops, & Tildesley, 2007; Schwartz et al., 2012).

Parental warmth is a particular dimension considered to be central in parenting (Maccoby & Martin, 1983). According to the parental acceptance-rejection theory, parental warmth is a determinant of whether a parent is considered more accepting or rejecting towards their children (Rohner, 2005; Rohner, Khaleque, & Cournoyer, 2005). Warmth is characterized by acceptance and affection, while parents that are low in warmth tend to be hostile, indifferent, cold, and rejecting (Kim & Cain, 2008). Thus, the warmth aspect of parenting refers to the quality of the affectionate bond between parents and their children, and has to do with the verbal, physical, and symbolic behaviours parents use to demonstrate feelings of love (Rohner, 2008).

Parental warmth is also considered an influential factor in regards to depressive symptoms, and a well-established link exists between parental warmth and adolescent mood. Again in line with the parental acceptance-rejection theory, the parental rejection side of the continuum, characterized by low warmth and low affection, is consistently associated with clinical depression across different cultures (Crook, Raskin, & Eliot, 1981; Greenberger & Chen, 1996; Whitbeck, Conger, & Kao, 1993). In one study, low parental warmth predicted an increased risk of depressive episodes during adolescence, even after controlling for initial depressed mood (Van Voorhees

et al., 2008). Research also revealed that low maternal warmth significantly predicted high levels of depressive symptoms for adolescents (Chen, Liu, & Li, 2000; Hipwell et al., 2008).

Parental warmth and closeness could both act as a buffer against stressful events that would normally affect adolescents' mood negatively (Ge, Lorenz, Conger, Elder, & Simons, 1994; Petersen, Sarigiani, & Kennedy, 1991). For example, parental warmth has been found to moderate the relationship between perceived parental pressure and adolescents' depressive symptoms (Quach, Epstein, Riley, Falconier, & Fang, 2015; Riley, 2003). Parental warmth has also been found to be a protective moderator of the link between parental over involvement and youth maladjustment (Nelson, Padilla-Walker, & Nielson, 2015).

Studies have also demonstrated the protective moderating role of parental warmth regarding psychological adjustment and the negative effects of stress (Hanson & Chen, 2010; Stacks, Oshio, Gerard, & Roe, 2009). Authors have pointed out that for adolescents, benefiting from a relationship with a warm, communicative, caring and understanding parent may lower the negative impact of life stressors (Gore & Aseltine, 1995; Wills & Cleary, 1996) and may lower levels of emotional distress (Operario, Tschann, Flores, & Bridges, 2006).

## 1.9 This study

Overall, adolescence is a developmental period during which youth are particularly at risk for experiencing symptoms of depression. Friends take on a growing importance during this period, and most adolescents have at least one friend whom they consider as being their best friend. When considering adolescent mental health, this intimate relationship can be a protective factor against vulnerability to depressive symptoms, especially when the best friendship is of high quality. In fact, youth who have social

behavioural deficits are particularly at risk of experiencing depressive symptoms, and may especially benefit from a positive relationship with their best friend. In addition, above and beyond the importance of friends, parents still play a central role during adolescence and may have a positive influence on adolescent psychosocial adjustment. In particular, parental warmth can act as a protective factor against the development of depressive symptoms. Adolescents who experience social behavioural deficits and who are at risk of depressive symptoms may be protected by a warm relationship with a parent. In addition, many studies on the subject seem to have neglected to consider several protection factors at a time, generally focusing separately on family or peers when examining adolescent mental health. In fact, Rudolph's developmentally based interpersonal model of youth depression points out the importance of identifying moderators relevant to the development of depression in a relational context. Due to the complexity of adolescents' social influences, this study will consider two relational moderators concurrently. This essay will hence attempt to better understand depression during adolescence by examining simultaneously the roles of best friendship quality and parental warmth as moderators of the connection between social behavioural deficits and the development of depressive symptoms over the course of one year. The variables of interest in this study include social behavioural deficits as an independent variable, the quality of the relationship with the best friend and parental warmth as moderators, depressive symptoms as the dependant variable, and age, gender and initial depressive symptoms as control variables. This model will be tested using a longitudinal design, measuring the evolution of depressive symptoms over the course of one year. This research design will allow for a better understanding of how moderators can change the course of depressive symptoms over time for adolescents who are vulnerable to such problems due to their lack of socioemotional skills. Contrary to more limited cross-sectional designs, which present a "snapshot" of the correlations among various variables, longitudinal designs that incorporate repeated measures of the dependent variable help capture the sequence of possible influences of different variables on one

another. Gender was added as a control variable as depressive symptoms can vary depending on gender. It is hypothesized that, for adolescents, having a best friendship of quality as well as having a warm relationship with a parent will act as a buffer of the association between social behavioural deficits in the 3rd or 4th year of secondary school and an increase in depressive symptoms over one year.

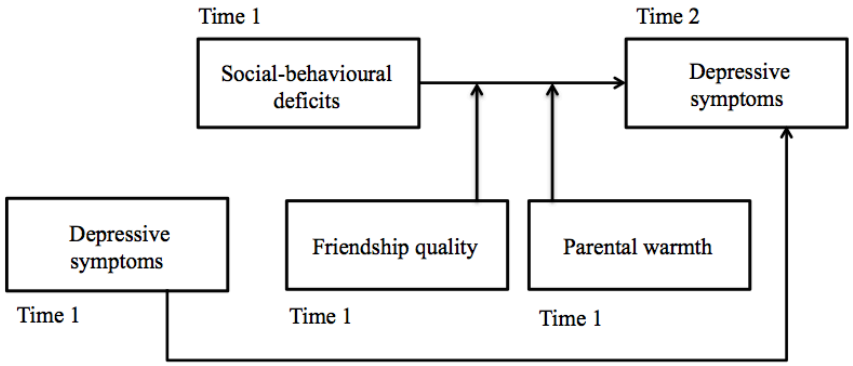


Figure 1.1 Model tested in the present study

Participants of this study are 328 high school students aged between 14 and 16 years old at Time 1 (66% females). Based on the review of literature, our hypotheses are that both friendship quality and parental warmth will act as buffers of the expected increase in depressive symptoms over one year among adolescents who display high levels of social behavioural deficits at Time 1.

CHAPTER II

ARTICLE

# The development of depressive symptoms during adolescence: the role of best friends and parents

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## 2.1 Abstract

Adolescence is a developmental period characterized by many physical, psychological and social changes. These changes can put adolescents at risk for developing depressive symptoms, which are in turn associated with many negative consequences, both concurrently and during adulthood. Rudolph's developmentally based interpersonal model of youth depression suggests that social behavioural deficits are a risk factor for the development of depressive symptoms during adolescence. This study tested the hypothesis that friendship quality and parental warmth act as moderators (or buffers) of the connection between social behavioural deficits and depressive symptoms one year later, in a sample of 328 primarily Caucasian teenagers from two high schools serving students from districts characterized by low socioeconomic status. Contrary to hypotheses, structural equation modeling revealed that for adolescents who reported a low friendship quality, social behavioural deficits are associated with a decrease in depressive symptoms a year later. Results also revealed that parental warmth is not a significant moderator of the link between social behavioural deficits and depressive symptoms one year later. These findings highlight the need to consider social influences when assessing the progression of depressive symptoms during adolescence, especially in youth with social behavioural deficits, and to better define the nature of high-quality friendships.

*Key words*: Adolescence, depressive symptoms, friendship quality, parental warmth, social problems

## 2.2 The development of depressive symptoms during adolescence: The role of best friends and parents

In Quebec, the prevalence of depression among youth aged 15 to 24 years old reaches 12.7% (Biraldi, Joubert, Bordeleau, & Plante, 2015). Adolescence is a critical period regarding the development of depressive symptoms, as rates tend to increase during this period in comparison with childhood (Kessler et al., 2005). Studies that follow adolescents experiencing depressive symptoms report important consequences during adulthood, including mental health issues such as anxiety, depression, substance dependence, and suicidality (Weissman et al., 1999; Fergusson & Woodward, 2002; Dunn & Goodyer, 2006; Tuisku et al., 2014). Adolescent depression also predicts poor parenting, interpersonal struggles, and risky sexual behaviours in adulthood (Nduna, Jewkes, Dunkle, Jama Shai, & Colman, 2010; Hammen, Brennan, & Le Brocque, 2013; Lehrer, Shrier, Gortmaker, & Buka, 2006). This disorder can be especially damaging to youth's development in terms of educational outcomes (such as academic performance or dropout rates) and as a result, it can affect the success of their transition into adulthood (Bhatia & Bhatia, 2007; Prager, 2009; Thapar, Collishaw, Pine, & Thapar, 2012).

Adolescence is also characterized by several social milestones, like the increased influence of friendships and changes in the relationship with parents (Rubin et al., 2006; Veenstra, Dijkstra, & Kraeger, 2017). From a bioecological viewpoint (Bronfenbrenner & Morris, 2006), peers and parents are likely to be the two most important factors of influence in adolescents' lives because they spend a significant amount of time with them during this key period of their development. Thus, the goal of this research is to understand how adolescents' relationships with friends and parents can serve as protective factors in the development of depressive symptoms in middle adolescence.

Depression is a psychological disorder defined by such symptoms as depressed affect, diminished interest or pleasure in activities, slowing down of thought, feelings of worthlessness and fatigue (American Psychiatric Association, 2013). This disorder characterized mainly by mood disturbance, can vary according to age or gender (Mirabel-Sarron, 2005). Because depressive symptoms during adolescence can hinder concurrent and future functioning, it is important to understand its possible causes and try to identify protective factors against its occurrence (Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2003; Hammen et al., 2013; Costello & Maughan, 2015).

### 2.2.1 Social and behavioural deficits during adolescence

Several authors have suggested the existence of a link between social behavioural deficits and youth depression (Ciccheti & Schneider-Rosen, 1986; Cole, 1990; Masten et al., 2006; Peer, 2006; Rubin et al., 1998). In particular, Rudolph's developmentally based interpersonal model of youth depression proposes a chain of events wherein early family disruption fosters social behavioural deficits, which translate into maladaptive social skills, such as social disengagement, social helplessness, aversive behaviour, involuntary social responses, or excessive reassuring seeking, among others. These behaviours in turn lead to a heightened risk of depression during adolescence, as they create disturbances in relationships (Rudolph et al., 2008). Links between social behavioural deficits and internalizing problems have been found in cross-sectional and longitudinal studies among both children and adolescents (Masten, et al., 2006; Peer, 2006; Rubin et al., 1998).

There are different pathways through which social-behavioural deficits can influence depressive symptoms, and particularly in adolescence. First, when considering the biological aspects of this developmental period, the onset of puberty brings about changes in the brain structure and hormones that can make social difficulties more painful and harder to manage (Sebastian, Viding, Williams, & Blakemore, 2010). Second, relationship disturbances that result from these social-behavioural deficits

can also impact youth's beliefs about their own worth or social competence (Caldwell, Rudolph, Troop-Gordon, & Kim, 2004; Egan & Perry, 1998). These negative self-views may precipitate symptoms of depression, especially for adolescents who are in the midst of developing their identity. Finally, youth who experience social-behavioural deficits may lack opportunities to learn emotional regulation strategies through healthy relationships with others. As a result, emotional regulation problems may increase the probability of adolescents feeling overwhelmed with negative emotions, thereby heightening their risk for depression (Garber, Braafladt, & Zeman, 1991). In sum, social-behavioural deficits may increase the risk for depression and this risk may be heightened if adolescents' friendships are suboptimal during this developmental period.

### 2.2.2 Friendships and social withdrawal during adolescence

Adolescents experience interpersonal pressures on a daily basis as they strive for peer acceptance, try to make new friends, or struggle to fit in a desired peer group. These pressures may contribute to developing depressive symptoms, especially when they coincide with normative hormonal and physical changes that happen at this age and that increase their level of stress (Harter, 2015; Angold & Costello, 2006, Crone & Dahl, 2012). Compared with children, adolescents generally spend more time with their friends than with their parent, which makes friendships particularly important (Berndt, 1992; Brown & Larson, 2009; Wigfield et al., 2006). Early writings by Sullivan (1953) highlight the importance of intimacy for healthy social development and define friendships in adolescence as key social experiences that contribute to building one's personality and decrease the risk of psychological disorders. Likewise, several authors have found that difficult peer relations can lead to an array of psychological and developmental difficulties (Engle, McElwain, & Lasky, 2011; Rubin et al., 1998). There is also evidence that having reciprocal friendships is linked to positive adjustment in adolescence (Vitaro et al., 2009; Wentzel et al., 2004), and

studies show that most adolescents report having at least one significant friendship in their life (Fisher & Bauman, 1988; Rubin et al., 1998).

Best friendships represent special and intimate relationships within a broad network of peers, and they are particularly significant during adolescence (Bowker et al., 2006; Bukowski et al., 1994; Lopes et al., 2016). These close relationships provide the opportunity to satisfy basic needs such as experiencing the feeling of belonging, receiving empathy, and being mutually engaged. Best friendships thus support interpersonal interactions that contribute to healthy development (Jordan, 2013; La Guardia, 2008). An important function of best friendships is to provide a buffer against psychosocial stress (Adams et al., 2011; Berndt et al., 1999; Laursen et al., 2006). In fact, the support that best friends provide each other appears to protect against depressive symptoms (Auerbach, Bigda-Peyton, Eberhart, Webb, & Ho, 2011; Colarossi & Eccles, 2003; Rueger, Malecki, & Demaray, 2008, 2010).

### 2.2.3 Friendship quality

Not all friendships are equal, thus the need to define and measure friendship quality. This concept has been assessed in many ways, making it a broad construct. Researchers tend to agree that high-quality friendships are defined by the presence of positive features (such as companionship and support) and by the low incidence of negative features (such as conflict and exclusion) in the relationship (Berndt, 2002; Buote et al., 2007; Furman & Buhrmester, 1985; La Greca & Harrison, 2005). Friendship satisfaction is also commonly used to measure friendship quality in the literature (Deci et al., 2006; Mendelson & Aboud, 1999). Adolescents who have a best friendship of poor quality report high levels of depressive symptoms (La Greca & Harrison, 2005; Allen et al., 2006), whereas those who experience high friendship quality report high self-worth and low levels of internalizing problems (Rubin et al., 2004).

Quality might be a particularly important feature for friendship to play its protective role against stress or other risk factors, as mentioned earlier, and high-quality friendships may contribute to psychological well being even after individual characteristics are taken into account (Berndt, 2002). Friendship quality has also been documented as a protective factor against social or emotional risk factors, like bullying, which is known to increase social isolation, loneliness and psychopathology (Bagwell et al., 2005; Bollmer et al., 2005; Parker & Asher, 1993).

### 2.2.4 The role of parents during adolescence

Friendships are not the only influential relationship in youth's lives. Even though they tend to seek autonomy from parents, a good relationship with a parent also contributes positively to their psychosocial adjustment. In fact, being able to reach autonomy while still maintaining a positive relationship with parents is a critical task during adolescence (Kobak, Sudler, & Gamble, 1991; Steinberg & Morris, 2001). When considering vulnerability to depressive symptoms at that age, parents hold an important role. Many studies have found links between parental dysfunction and adolescent depression (Field et al., 2001; Nelson, Hammen, Brennan, & Ullman, 2003; Kelly & al., 2016). Parents exerting negative behaviours (e.g. aggression, conflict, provocation, disengagement) and few positive behaviours (e.g. affection, humour, validation, warmth) represent a risk factor for youth depressive symptoms (Messer & Gross, 1995; Sheeber et al., 2007; Schwartz et al., 2012).

According to the Parental Acceptance-Rejection theory (Rohner, 2008), parental warmth refers to the quality of the parent–child bond, as measured with verbal, physical, and symbolic demonstrations of love. Warm parents are accepting and affectionate as opposed to hostile, indifferent or rejecting (Kim & Cain, 2008). In line with this theory, low warmth and low affection are consistently associated with clinical depression across different cultures (Chen et al., 2000; Crook et al., 1981; Greenberger & Chen, 1996; Hipwell et al., 2008; Whitbeck et al.1993). Parental

warmth can also act as a buffer against stressful events that would typically affect youth's mood negatively (Ge et al., 1994; Petersen et al., 1991; Van Voorhees et al., 2008). In fact, benefiting from a relationship with a warm, communicative, caring and understanding parent appears to lower the negative impact of life stressors (Gore & Aseltine, 1995; Wills & Cleary, 1996) and to lower the level of emotional distress experienced by teenagers (Operario et al., 2006). These findings suggest that parental warmth is an important aspect to consider when examining protective factors for depressive symptoms during adolescence. However, research has not yet paired the protective role of parental warmth neither with social-behavioural deficits nor with friendship quality, which makes the contribution of this study particularly important.

### 2.2.5 This study

At a time when youth are particularly at risk for experiencing symptoms of depression, friends take on growing importance, and most adolescents have at least one best friendship that can act as a protective factor against depressive symptoms, especially when the relationship is of high quality. Youth who have difficulties with their social interactions are particularly at risk for depressive symptoms, and may especially benefit from a positive friendship. At the same time, parents still play a central role in psychosocial adjustment during adolescence, and may also act as a protective factor against the development of depressive symptoms. However, past studies on the topic have neglected to consider different types of protective factors together, generally focusing separately on family or peers when examining adolescent depressive symptoms. Nevertheless, different protective factors may be interrelated and should be examined together to better understand their relative contribution to youth psychological well-being. This study will support the advancement of the field by examining simultaneously the roles of best friendship quality and parental warmth as moderators of the connection between social-behavioural deficits and depressive symptoms over the course of one year. We hypothesize that having a best friendship

of quality or having a warm relationship with a parent will act as buffers of the negative consequences of social-behavioural deficits on depressive symptoms one year later. The model tested in the present study is presented in Figure 2.1.

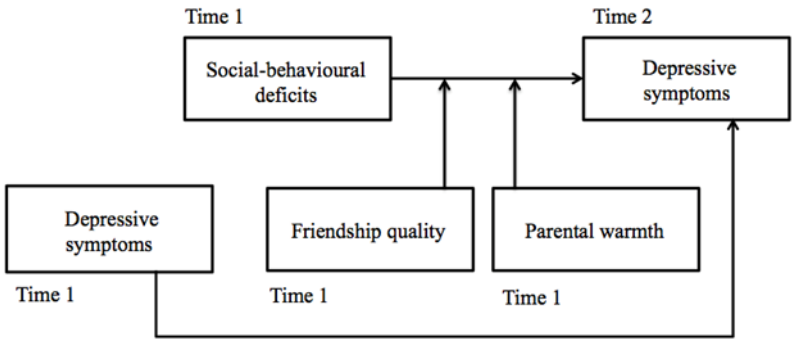


Figure 2.1 Tested model

## 2.3 Method

### 2.3.1 Participants

Data was collected from two public, French-speaking secondary schools in socially and economically disadvantaged suburban areas of a Canadian city. Participants were invited to participate in a longitudinal study on social influences and educational pathways when they were in their 3rd or 4th year of secondary school. The second time of measurement occurred when they were in the 4th or 5th year of secondary school. Adolescents in our sample were aged 14 to 16 years old at Time 1. The sample includes 328 students, with a higher representation of females (66%) than males (34%). Participants are 90% French-speaking and 65% of them are Caucasian, 7.9% are African-American, 7% are Hispanic, 4.1% are Arab, 1.5% are Asian and 0.6% are Native-American, according to self-reports. Our sample is also diverse in terms of academic success and the level of education of parents. At the first wave of

data collection, participants had a mean grade point average of 70.9% (*SD*=11.1, min=18.3%, max=94.0%). Regarding the education level of parents, 39.6% of participants reported that at least one of their parents has a university degree, 21.7% reported that at least one of their parents has a college degree, 17.1% reported that at least one of their parents has a high school diploma, 6.7% reported that neither of their parents had a high school diploma, and 14.9% did not know the level of education of their parents. Among the 328 participants of the sample, 163 participated in both waves of measurement and 165 participated only in the first wave. Participants who participated only at wave two were not included in the analyses.

## Procedures

After obtaining approval from school principals and from our institutional ethics committee, research assistants visited the schools during class hours and distributed consent forms to all students, which had to be signed by themselves and parents. Data were collected through an online survey (75 minutes duration, for both waves of measurement). Research assistants supervised participants while they answered the survey in the computer laboratory of their school. Students were assigned a personalised numeric code that they had to enter into their online questionnaire instead of their name to ensure the confidentiality of their answers. At the second assessment, all participants were provided with the numerical code that had been assigned to them the year before, and they had to enter this code as they started filling out their questionnaire, instead of their name. The researcher team was then able to match the data for both waves of the study using the code. Participants were informed of their right to leave the study at any time. After the completion of the online questionnaire, participants were rewarded with a free movie ticket. One ticket was offered at each wave of measurement.

### 2.3.2 Measures

For all the variables decribed in this section, the corresponding items in the questionnaire are available in Appendix A.

#### 2.3.2.1 Demographics

The age of participants was computed from the date of birth they provided in the demographics section of the questionnaire. Gender was self-reported.

#### 2.3.2.2 Depressive symptoms

Our dependent variable was assessed using Achenbach's Child Behaviour Checklist (CBCL), youth self-report version (YSR) (Achenbach, 2001). This questionnaire is valid for children or adolescents of 4 to 18 years of age. Items from the withdrawn / depressed scale relate to behavioural and emotional problems occurring in the past six months, such as "there is very little I enjoy," "I would rather be alone than with others," "I lack energy," and "I am unhappy, sad or depressed". Items are rated on a three-point Likert-type scale ranging from "never" to "often or always" (8 items, $\alpha = .77$ at Time 1 and $\alpha = .71$ at Time 2). The scale ranges from 0 to 2 and individual global scores represent the mean of all 8 items. This scale's clinical range spans from the 93$^{rd}$ to the 97$^{th}$ percentile of a normative sample. Borderline scores range from 0.75 to 0.88, inclusively. Scores in the borderline range are high enough to be of some concern, but are not clinically worrying. Mean scores of 1 or above indicate that the participant reported clinically significant problems (Achenbach, 2001).

#### 2.3.2.3 Social-behavioral deficits

Our independent variable was also assessed using the CBCL YSR. One of the subscales of this instrument is Social Problems, which originally included 11 items. The scale ranges from 0 to 2 and individual global scores represent the mean of all 11 items. These items refer to problems with social interactions and with peers, such as

"I am easily jealous", "I don't get along with other kids", or "I am not liked by other kids". Due to a data collection problem, we had to remove the item "I feel lonely". This did not affect internal consistency, which is acceptable (α = .64). This scale's clinical range spans from the 93rd to the 97th percentile of a normative sample. Borderline scores range from 0.55 to 0.73. Scores in the borderline range are high enough to be of some concern, but are not clinically worrying. Mean scores of 0.74 or above indicate that the participant reported clinically significant problems (Achenbach, 2001).

#### 2.3.2.4 Quality of relationship with the best friend

The first moderator in our model was assessed using a French version (Baril et al., 2007) of the McGill Friendship Questionnaire-Respondent's Affection (MFQ-RA; Mendelson & Aboud, 1999). The questionnaire contains 15 items. Responses are rated on a four-point Likert-type scale ranging from 1 "very much disagree" to 4 "very much agree" and individual global scores represent the mean. Participants had to name their best friend in a previous question and were subsequently asked to think of their best friend when answering the questions on this scale. They were instructed to imagine that the blank space in each item contained their friend's name (e.g., " I am happy with my friendship with ___", "I prefer ___ over most people I know", or "I am satisfied with my friendship with ___." Just like Baril et al. (2007), we combined all items into a single scale (α = .94).

#### 2.3.2.5 Parental warmth

This variable was assessed using the Parental Acceptance-Rejection Questionnaire (Short Form) (PARQ: Rohner & Khaleque, 2005). This instrument contains statements describing behaviours of the main caregiver towards their child, and is intended to be completed by the child. Participants were instructed to think about each statement and to decide if each one of them fit the way their caregiver (or parent

who takes care of them more often) treats them. The scale is rated with a four-point Likert-type scale ranging from 1 “almost always true” to 4 “almost never true” and and individual global scores represent the mean of all 8 items.. We used the parental warmth/affection subscale (8 items, α = .88). Sample items of this subscale include “my caregiver says nice things about me” or “my caregiver makes me feel wanted and needed”.

### 2.3.3 Analytic strategy

Data were analysed with a linear regression strategy using the statistical software R. By entering our regression in this structural equation software, we were able to handle missing data using the full information maximum likelihood (FIML) procedure, which enables the use of all available information from each participant, even those who have some missing data (Rosseel, 2012). The regression analyses included depressive symptoms at Time 2 as the dependant variable and social-behavioural deficits at Time 1 as the independent variable. Friendship quality and parental warmth at Time 1 were used as moderators. Age and gender were included in the model for control purposes. All independent variables were centered to simplify interpretation.

For significant interactions, we planned post hoc analyses to decompose the interaction and determine the differences between subgroups of participants. We trichotomized moderators as follows: adolescents scoring at least one standard deviation below the mean at Time 1 were labeled “low friendship quality” or “low parental warmth”; those scoring at least one standard deviation above the mean were labeled as “high friendship quality” or “high parental warmth,” and remaining participants were labeled “medium friendship quality” or “medium parental warmth”.

To verify the model’s fit indices, we used the model’s chi-square value, the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI),

the Tucker Lewis Index (TLI) and the Standerdized Root Mean Square Residual (SRMR). According to Kline (2011), a non-significant chi-square value represents a good fit of the model, as well as CFI and TLI values greater than .95, an RMSEA value smaller than .05, and a SRMR value smaller than .08. We also verified the moderation effects using 95% confidence intervals.

## 2.4 Results

### 2.4.1 Descriptive analyses

Table 1.1 shows descriptive statistics for all variables in this study, prior to centering.

Table 1.1 Descriptive statistics of sample

| Variables | *n* | *M* | *SD* | Skewness | Kurtosis | Min | Max |
|---|---|---|---|---|---|---|---|
| Age | 328 | 15.78 | 0.82 | 0.87 | 0.32 | 14.17 | 18.48 |
| Sex[1] | 328 | 1.65 | 0.48 | –0.61 | –1.63 | 1.00 | 2.00 |
| T1 depressive symptoms | 321 | 0.51 | 0.40 | 0.92 | 0.24 | 0.00 | 1.75 |
| T1 social behavioural deficits | 324 | 0.35 | 0.26 | 1.12 | 1.30 | 0.00 | 1.40 |
| T1 parental warmth | 319 | 3.28 | 0.63 | –1.11 | 0.99 | 1.12 | 4.00 |
| T1 friendship quality[2] | 322 | 1.57 | 0.38 | –0.59 | –0.42 | 0.27 | 2.00 |
| T2 depressive symptoms | 168 | 0.46 | 0.34 | 0.93 | 1.25 | 0.00 | 1.88 |

Notes. [1]Gender is coded 1 for males and 2 for females; T1= Time 1; T2= Time 2. [2]T1 friendship untransformed data: $M$ = 3.67, $SD$ = .34, Skewness = -2.10, Kurtosis = 6.01, Min = 1, Max = 4.

Initially, friendship quality at T1 showed scores of –2.10 for skewness and 6.01 for kurtosis. Therefore, a square root transformation was applied based on the recommendations of the test's authors (Mendelson & Aboud, 2012). Skewness and kurtosis scores based on the transformed variables are shown in Table 1.1 under the label of T1 friendship quality.

Percentage of missing data is less than 5% for all variables at T1. The T2 depressive symptoms variable has 49% missing data, which is mainly explained by attrition from T1 to T2. Even this relatively high percentage of missing data can be successfully handled with the Full information maximum likelihood (FIML) procedure, which was used for the main analyses (Rosseel, 2012). In fact, this procedure is recommended in studies where missing data reaches up to 50% (Enders, 2008; Enders, 2010; Schlomer, Bauman & Card, 2010).

Table 2.1 shows correlations between variables. All results were as expected, except for T1 friendship quality not being related to T2 depressive symptoms (r = .01, ns).

Table 2.1 Correlations between variables

| | | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| 1. | Age | | | | | | |
| 2. | Sex | –.07 | | | | | |
| 3. | T1 depression symptoms | .07 | .16** | | | | |
| 4 | T1 social behavioural deficits | .15* | .09 | .55*** | | | |
| 5. | T1 parental warmth | .02 | .06 | –.34*** | –.26*** | | |
| 6. | T1 friendship quality | .06 | .22*** | –.12* | –.04 | .18** | |
| 7. | T2 depression symptoms | .06 | .31*** | .61*** | .30*** | –.20** | –.01 |

* $p < .05$. ** $p < .01$. *** $p < .001$.
*Note.* Gender is coded 1 for males and 2 for females; T1 = Time 1; T2 = Time 2.

### 2.4.2 Main Analyses

For the regression analysis, T1 depressive symptoms, age and sex are included in the model for statistical control. A robust maximum likelihood estimator (MLR) was used (Rosseel, 2012). Regression coefficients, variances and covariances were estimated in the model. We found evidence that the model presents satisfactory fit to the data according to all indices : $\chi^2(9) = 15.75$, $p = .07$; CFI = 1.00; TLI = .98; RMSEA = .05; SRMR = .04.

Table 2.2 Moderation model predicting T2 depressive symptoms

| Variables | Standardized Estimate | *SE* | *p* | CI Lower | CI Upper |
|---|---|---|---|---|---|
| Age | 0.01 | 0.03 | .91 | –0.05 | 0.06 |
| Sex | 0.18 | 0.13 | .04 | 0.05 | 0.22 |
| T1 depressive symptoms | 0.69 | 0.09 | .00 | 0.42 | 0.78 |
| T1 social behavioural deficits | –1.11 | 0.47 | .00 | –2.38 | –0.55 |
| T1 parental warmth | –0.06 | 0.06 | .55 | –0.15 | 0.08 |
| T1 friendship quality | –0.14 | 0.07 | .09 | –0.27 | 0.02 |
| T1 social behavioural deficits x T1 parental warmth | 0.41 | 0.11 | .11 | –0.04 | 0.39 |
| T1 social behavioural deficits x T1 friendship quality | 0.57 | 0.19 | .01 | 0.09 | 0.83 |

*Note.* T1 = Time 1; T2 = Time 2. CI = 95% confidence interval.

Table 2.2 shows a non-significant moderating effect of parental warmth on the link between social-behavioral deficits and change in depressive symptoms one year later. However, we found a significant effect when testing the interaction between friendship quality and social behavioral deficits. As shown in Figure 2.2, when

adolescents report a high-quality friendship, social-behavioral deficits did not predict a change in depressive symptoms one year later, β = 0.03, SE = 0.13, $p$ = 0.83, 95% CI [–0.23, 0.29]. However, when friendship quality was reported to be low, higher levels of social-behavioral deficits predicted lower levels of depressive symptoms a year later, after controlling for baseline levels, β = –0.27, SE = 0.13, p = 0.04, 95% CI [–0.53, –0.02].

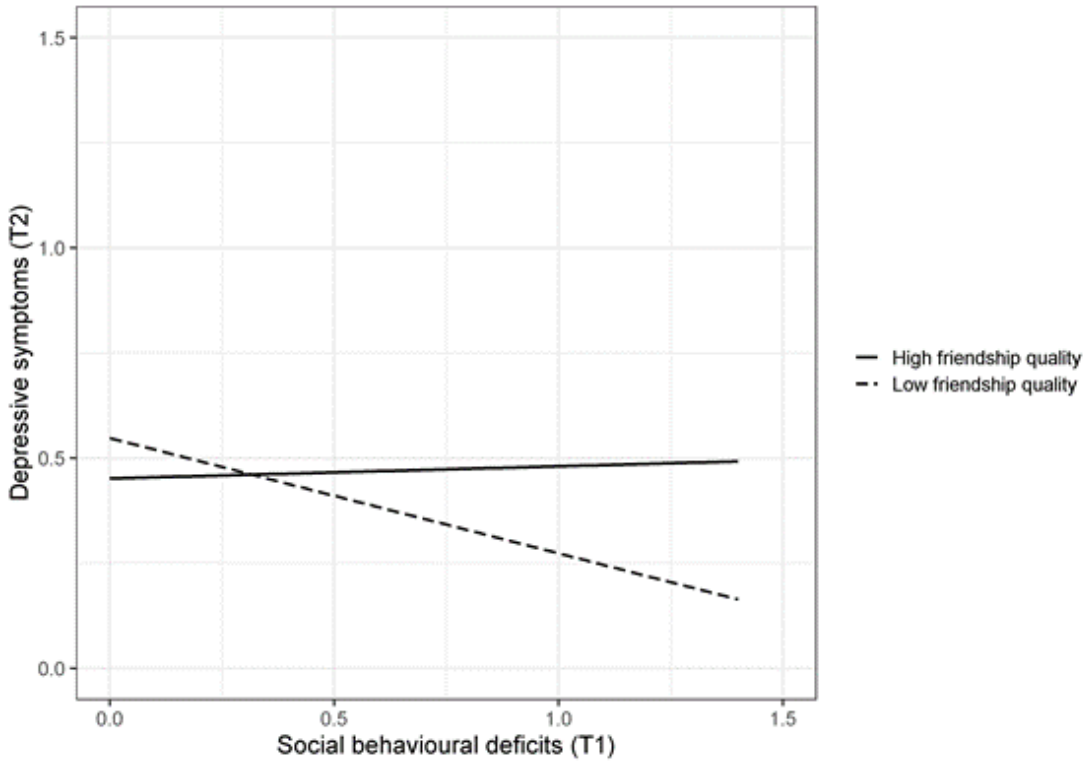


Figure 2.2 Associations between social-behavioral deficits Time 1 and depressive symptoms at Time 2 for adolescents with low and high friendship quality, while controlling for Time 1 depressive symptoms. Data shown are not standardized; thus, the total range goes from 0 to 2 for both axes.

Because of the relatively high percentage of missing data, we tested the model again with adolescents who participated in both waves of the study (excluding participants

with missing data at T2). Using the listwise deletion strategy, were able to confirm the results previously obtained using FIML, as the model presents satisfactory fit indices: $\chi^2(9) = 10.69$, $p = .30$; CFI = 1.00; TLI = 1.00; RMSEA = .03; SRMR = .04. Also, all significant associations between the variables observed in the model obtained with FIML were confirmed here.

To verify whether results would be more consistent with our assumptions when using T1 data only, we decided to run a post hoc analysis of cross-sectional data. We found that the cross-sectional model presents satisfactory fit to the data according to all indices: $\chi^2(7) = 10.82$, $p = .15$; CFI = 1.00; TLI = .99; RMSEA = .04; SRMR = .03. Within a single point in time, neither of the moderation effects was statistically significant. However, direct effects show that social behavioural deficits were positively associated with depressive symptoms, $\beta = 0.82$, SE = 0.37, $p = 0.001$, 95% CI [0.52, 1.96], whereas parental warmth was negatively associated with depressive symptoms, $\beta = -0.18$, SE = 0.05, $p = 0.02$, 95% CI [–0.21, –0.02]. These cross-sectional results suggest that the moderating effect of friendship quality is not immediate and might only be observable over time. The longitudinal aspect of this study therefore leads to a better understanding of this construct, providing valuable information that would not be observed with a cross-sectional design.

## 2.5 Discussion

This study examined the role of friendship quality and parental warmth as moderators of the longitudinal association between social-behavioral deficits and depressive symptoms during adolescence. In fact, using a baseline measure of depressive symptoms at T1 enabled us to study whether socio-behavioral deficits, friendship quality and parental warmth worked together to predict a negative change, or a "decrease", in depression symptoms between T1 and T2 (one year later). Unexpectedly, we found that social-behavioural deficits predicted a decrease in

depressive symptoms one year later. However, because correlations between social-behavioural deficits and depressive symptoms were significant and positive, it is possible that our results reflect an effect of regression to the mean. For example, adolescents who reported high social-behavioural deficits at the first time of measurement are most likely to have high depressive symptoms in comparison with others. Therefore, it might be expected that their depressive symptoms would decrease over time.

### 2.5.1 Parental warmth

Parental warmth was hypothesized to buffer the association between social-behavioural deficits and change in depressive symptoms, but its role as a moderator was non-significant when included in the final model. These findings are contrary to our expectations, which predicted that a warm relationship with a parent would act as a buffer for the negative outcomes associated with social-behavioral deficits, taking the shape of an increase in depressive symptoms one year later. Although some of the above-cited studies suggest that parents still play a key role in adolescents' psychological wellbeing at this age, our results may align with other studies, which highlight that teenagers tend to seek interests and important relationships outside of the family (Brown & Larson, 2009, Wigfield et al., 2006; Kobak et al.,1991; Steinberg & Morris, 2001). In fact, these studies showed that during adolescence, relationships with peers could surpass parents' influence since this developmental period is characterized by the importance of friends and by the need to build one's identity and autonomy through intimate relationships with peers. Also, another recent study failed to demonstrate that parental warmth acted as a moderator in the development of depressive symptoms during adolescence (Manczak, Ordaz, Singh, Goyer, & Gotlib, 2019). Nevertheless, we cannot speculate that parent's influence would remain non significant on other negative outcomes, such as academic disengagement or deviant behaviour.

The fact that this study was conducted over the course of just one year can also partly explain the lack of significance of parental warmth as a moderator of the link between social-behavioural deficits and depressive symptoms. Wang, Peterson and Morphey (2007) found that for adolescents, friends seemed to have a greater influence on short-term developmental outcomes over parents, whereas for long-term developmental consequences, parents tended to have a stronger influence overall. Parents may therefore remain important figures in adolescents' general development, but the draw for individuation from them may result in a lesser immediate influence of parents for outcomes evolving over relatively short periods of times, like in this study.

### 2.5.2 Friendship Quality

As for friendship quality, the reviewed literature suggests that having a best friendship of quality can be a protective factor for youth psychosocial development. We therefore hypothesized that the presence of a high-quality friendship would also act as a buffer for the negative consequences of social-behavioral deficits on depressive symptoms one year later. Although we found a significant moderating effect of friendship quality on this association, the direction of the effect was unexpected. When friendship quality is reported as low, this results in social-behavioral deficits predicting lower depressive symptoms one year later. This is contrary to the reviewed literature, which suggested a protective nature of high-quality friendships during adolescence (Bagwell et al., 2005; Bollmer et al., 2005; Parker & Asher, 1993; Rubin, et al., 2004).

Our finding suggests that for adolescents reporting social-behavioral deficits, having a friendship of low quality can actually be a protective factor regarding depressive symptoms. This may be explained by the possibility that certain dyadic behaviors may inadvertently contribute to an increase in internalizing problems. In fact, studies have demonstrated that certain behaviors, such as co-rumination, negative feedback

seeking (such as soliciting criticism) or excessive reassurance seeking can contribute to depressive symptoms contagion among friendship dyads (Borelli & Prinstein, 2006; Prinstein, Borelli, Cheah, Simon, & Aikins, 2005; Vorndran Hedrick, Geller, Grunberg, & Mudrak, 2019). These behaviors may be implicit and can be overlooked or viewed as positive by adolescents, which could explain why a teenager would report having a high-quality friendship that can still be characterized by these detrimental processes despite other positive interactions. Conversely, teenagers can also report that their friendship is of low quality, perhaps because they are dissatisfied with the level of intimacy experienced in the relationship. Yet, this perceived low-quality friendship might also shield teenagers from detrimental behaviors such as co-rumination, which could explain the decrease in depressive symptoms. This may be especially true if the friend in question is also depressed, as depressive symptoms within the dyad could even further increase depressive symptom contagion. In such a case, perceived low quality of the friendship may be protective.

Our study did not measure the friend's characteristics nor the friend's own perception of friendship quality, two variables that may have led to our unexpected results. Other studies that did control for individual perception and differences between friends failed to demonstrate that friendship quality contributes significantly to the development of internalized problems (Aoyama, Saxon, & Fearon, 2011; Prinstein, 2007; Selfhout, Branje, & Meeus, 2008).

Burk and Larsen (2005) argue that friendship quality is a stronger factor of influence on youth adjustment when it is characterized by a convergence of both friends' perception regarding the quality of their friendship, especially regarding the negative features of their friendship. Our study did not include measures of the convergence of perceived quality and perceived negative aspects of the relationship, which could explain our unexpected results. In truth, our measure of friendship quality only included positive aspects of the relationship (satisfaction and positive feelings

towards the friend). However, some studies suggest that negative characteristics of friendships, such as conflict or peer pressure, are more strongly associated with psychosocial adjustment than positive features of the same friendships (Berndt & Keefe, 1995; Burk & Laursen, 2005; Ladd, Kochenderfer, & Coleman, 1996). Adolescents could therefore have reported a friendship of low quality in terms of positive features, but these relationships may still be characterized by low levels of conflict or by converging perceptions of the friendship. This could partially explain why such friendships perceived as of low quality could still be efficient buffers of an increase in depressive symptoms.

Another possible explanation for the unexpected results regarding friendship quality is the longitudinal aspect of our study. Adolescents, especially those experiencing social-behavioral deficits, may have shifting social systems with close friends changing from one school year to the next. This is especially plausible considering the socially tumultuous context of high school. Studies usually report that over the course of one year, only 35% to 54% of students keep their best friends (Berndt, Hawkins, & Hoyle, 1986; Berndt & Hoyle, 1985; Bowker, 2004). Adolescents with social-behavioural deficits who reported a friendship of low quality at T1 may have lower depressive symptoms one year later because they might be especially motivated to change their social landscape and find a new best friend before we measured T2 depressive symtoms. In support of the idea that participants may have made changes to their social life between T1 ande T2, the cross-sectional analyses failed to reveal any moderating effect of friendship quality. Thus, the inability to determine if adolescents remained in a stable friendship during the period of data collection makes it impossible to conclude that the friendship's influence remained stable. Similarly, other longitudinal studies have also failed to find a protective effect of friendship quality on the development of depressive symptoms or on other positive outcomes such as self-esteem (Berndt & al., 1999; Markovic & Bowker, 2017; Prinstein, 2007).

This highlights the importance of considering friendship stability when considering the longitudinal impacts of friendship quality.

Finally, it is important to consider that statistical artefacts may act as other possible explanations in relation to these unexpected findings. For example, some of the observed correlations between our variables were relatively high, and multicollinearity issues are known to cause, at times, regression coefficients that go in the opposite direction from what would be expected. When looking at Table 2.1, we see a correlation of $r = .61$ between our measures of depressive symptoms at T1 and T2. That in itself should not be problematic because T2 depressive sypmtoms represent the dependent variable, and not one of the predictors. The next highest correlation, $r = .55$, is between depressive symptoms and social deficits at T1. Although there is a chance that this correlation could lead to multicollinearity issues in the regression analyses, this correlation is still well below the usual cutoff of $r = .80$, used to flag usually high associations between predictors (Field, 2012).

### 2.5.3 Strengths and limitations

In sum, this study highlighted the complexity of relationships with parents and friends during adolescence. We determined that best friendships played an unexpected moderating role in the link between social-behavioural deficits and the progress of depressive symptoms, while parental warmth did not moderate this link. One of the strengths of our study is the longitudinal aspect, which allowed us to study the evolution of depressive symptoms over the course of one year. This project consequently contributes to the research on peer influence and adolescents' mental health by uncovering unexpected results that sparked new reflections. Another strength of this study is the use the full information maximum likelihood (FIML) procedure in our analytic strategy. This allowed us to access a maximum of information from our participants to ensure a good sample size and a adequate statistical power. The use of such a procedure is especially important for studies

focused on youth mental health, as adolescents with high levels of depressive symptoms are at higher risk of being excluded or overlooked when using traditional analyses methods. In fact, depressed or socially impaired adolescents might have higher levels of missing data, perhaps because of a difficulty to concentrate, or anxiety regarding certain questions. Our analytic method allowed us to have a more representative sample by including participants who had some missing data.

Nevertheless, several limitations of this study should be noted. First, the sample consisted of adolescents living in socially and economically disadvantaged areas, and future studies need to examine whether results of the present study can be generalized to other samples. Adolescents with a higher social and economic background might differ in the way that they develop depressive symptoms or in the way that they experience peer or parental influence. Second, our sample consisted of adolescents who, on average, scored below the clinical cutoff for depressive symptoms, which limits the clinical implications of our study. Future research should include testing the model among a clinically depressed population. Third, the current study measured the perception of friendship quality by the participant, which may differ from perceptions of the best friends and from objective norms regarding friendship quality. Using measures of friendship quality that include the perception for both members of a friendship dyad could help future research. Stronger assessment of this construct would be needed to better understand the complexity of friendships during adolescence. Nonetheless, we argue that the perception of friendship quality is more significant for mental health outcomes and youth adjustment than an objective measure of friendship quality coming from an independent observer, for example. A fourth limitation of this study is the fact that we focused exclusively on adolescents' relationship with one parent and with one best friend. Although we did document that parental warmth and the quality of best friendships play important roles in adolescents' lives, we must acknowledge that these are not representative of adolescents' full social environment. In future research, it would be essential to

consider other social influences such as the broader peer group, the quality of other friendships, general popularity among peers, relationships with teachers or other potential role models, and family dynamics, among other variables. Especially when examining social-behavioural deficits as a predictor of psychological outcomes, we argue that examining participants' broader social group may be particularly relevant.

In sum, this study contributes to the body of research on adolescents' relationships and the development of depressive symptoms by highlighting the complexity of adolescents' friendships and their contribution to their mental health. The fact that results were unexpected regarding the protective role of high-quality friendship suggests that future research is needed to better understand the mechanisms implicated in our findings. From a practical standpoint, this study highlights the importance for parents, mental health professionals, teachers or other significant adults in adolescents' lives to educate them on what healthy friendships are in order for youth to understand what a friendship of quality truly means. Adolescents may then be able to better recognize and maintain relationships that may protect them from future mental health issues.

# CHAPITRE III
# GENERAL DISCUSSION

Adolescence is characterized by many changes that can increase their risk of developing depressive symptoms, which are associated with many negative consequences. It is therefore imperative to better understand the different variables implicated in the development of depressive symptoms during adolescence, in order to identify protective factors. Social relationships being especially important during adolescence, it is pertinent to take into account how the different social factors, such as relationships with parents or friends, are involved. This information could subsequently be used to better guide clinical interventions aimed at depressed adolescents.

This study tested the hypothesis that friendship quality and parental warmth act as moderators (or buffers) of the connection between social behavioural deficits and depressive symptoms one year later. One of our hypotheses was that high friendship quality would be a protective factor, acting as a significant moderator of the link between social behavioural deficits and depressive symptoms. Surprisingly, our results revealed that for adolescents who reported low friendship quality, social behavioural deficits are associated with relatively less severe depressive symptoms as compared to those with high friendhship quality. We also hypothesized that high parental warmth would also be a protective factor, acting as a moderator of the link between social behavioural deficits and depressive symptoms one year later. Also contrary to our hypotheses, results revealed that parental warmth is not a significant moderator of this link.

These results are unexpected but can offer insight into the complexity of adolescents' social influences and how they impact their mental health. However, it is important to note that our sample consisted of adolescents who, on average, scored below the clinical cutoff for depression. Still, we believe that our findings can contribute to clinical implications for the treatment of depressive symptoms in young patients. In fact, clinical practice guidelines recommend psychotherapy as the first treatment for mild or moderate depression in children and adolescents (Lewandowski et al., 2013; National Collaborating Centre for Mental Health, 2005; American Academy of Child and Adolescent Psychiatry, 2007). There is a general consensus that different psychotherapies are beneficial for young patients suffering from depression, but it is always important for psychotherapists to be up to date with the latest evidence-based treatment methods or studies regarding adolescents and their functioning. Therefore, our findings can be especially useful for psychotherapists who treat adolescents suffering from depressive symptoms.

More specifically, developmental approaches to psychotherapy can be particularly effective when treating depressed children or adolescents. Developmental approaches define psychopathology by assessing the normality of patients' developmental trajectory and their capacity to meet developmental challenges. These approaches consider the patient's developmental stage and how it can moderate treatment response. Developmental models also take into account children's or adolescents' social contexts (family, school, neighbourhood, friendships) and how they affect cognition and behaviour. Therefore, to be effective with adolescents, developmental psychotherapists must understand the different dynamics, pressures and particularities of adolescence (Graham & Reynolds, 2013). Building a strong alliance with the patient and key members of the family is thus beneficial for proper assessment and effective treatment. In order to better assess the factors maintaining or precipitating teenagers' depressive symptoms, psychotherapists need to comprehend what

relationships or experiences are meaningful to them and how they affect their interpretations of themselves and their internal world (Craske & Stevens, 2002).

For example, regarding parental warmth, we expected that a warm relationship with a parent would act as a buffer for the negative consequences associated with social behavioural deficits. This would make parents important actors to involve in psychotherapy when considering treatment for adolescents struggling with such behavioural deficits. However, our study did not confirm parental warmth as a significant protective factor. This aligns with other studies that emphasize that teenagers seem to seek important relationships and influences outside of the family, potentially adding to the parents' role (Brown & Larson, 2009, Wigfield et al., 2006; Kobak et al., 1991; Steinberg & Morris, 2001). In fact, considering that adolescents tend to perceive social relationships with friends as increasingly important (Rubin et al., 2006), it is possible that young patients struggling with depression disregard their parent's influence or guidance, making it difficult to integrate them into the therapeutic process. However, this study did not examine other aspects of the parent-adolescent relationship.

Therefore, our findings do not mean that psychotherapists who work with adolescents should exclude parents. In fact, several studies suggest that the development of depression or suicide risk during adolescence can be linked to factors pertaining to the home environment, such as adverse family functioning, including high conflict, low cohesion, and ineffective parenting (Ehnvall, Parker, Hadzi-Pavlovic, & Malhi, 2008; Hardt et al., 2008; Salzinger, Rosario, Feldman, & Ng-Mak, 2007; Wagner, Silverman, & Martin, 2003). This study did not measure these factors and it is possible that these different aspects would have been associated to poor mental health among our participants if included in our model. Clinically, when possible and appropriate, family-based therapies that include the main family members are highly regarded and can lead to positive results for depressed adolescents (Diamond,

Diamond, Levy, & Siqueland, 2014; Robinson, Dolhanty, & Greenberg, 2015; Ewing, Diamond, & Levy, 2015). Psychotherapists can therefore benefit from including parents into the therapeutic process with the consent and understanding of the patient. For one thing, this allows psychotherapists to educate parents about adolescents' need for autonomy and desire to build influential relationships outside of the family and about other particularities of adolescence as a developmental period. By doing so, psychotherapists may then strengthen the bond and the quality of interactions between a patient and their parents, therefore increasing the likelihood of this relationship being a significant contributor to adolescents' wellbeing in the long term. Our findings stress the importance for psychotherapists to be cautious about making assumptions regarding the role of parental warmth in young patients' recovery from depression. More generally, before involving parents into the therapeutic process, psychotherapists who work with teenagers need to assess a variey of family-related factors, such as how patients view their parents, how they understand their role or how much they value their relationship or input.

Regarding friendship quality, we hypothesized that the presence of a high-quality friendship would act as a protective factor for the negative consequences of social behavioural deficits on depressive symptoms. Unexpectedly, we found that adolescents with high levels of social behavioural deficits who reported low friendship quality had less severe depressive symptoms one year later than adolescents who reported a high friendship quality, after controlling for their symptoms at baseline. This suggests that having a friendship of low quality could be a protective factor against depressive symptoms, which is counterintuitive. One possible explanation is that adolescents might incorrectly judge their friendship quality as being high or low, by misreading the nature of certain behaviours. For example, adolescents can judge behaviours like reassurance seeking or co-rumination as being indicators of high quality friendships, when these behaviours can unknowingly contribute to the development of depressive symptoms (Borelli &

Prinstein, 2006; Prinstein et al., 2005; Rose, 2002). Conversely, teenagers can rate their friendship as being of low in quality because of other factors that do not influence the development of depressive symptoms, such as lack of common interests. Adolescents also tend to select friends with whom they share some characteristics (Berndt, 1982; Cohen, 1977; Kandel, 1978 ; Kupersmidt, DeRosier, & Patterson, 1995). This can be especially damaging if two depressed adolescents become close friends, increasing depressive symptoms contagion. In this case, perceived low friendship quality could be protective as it might diminish time spent or frequency of contact with a depressed friend and therefore diminish co-rumination or negative feedback seeking.

The potential difficulties for adolescents to judge the quality of their friendships speaks to the importance of considering social, cognitive, developmental and affective characteristics of adolescence in order to translate findings into clinical implications. It is important for clinicians to plan their interventions with adolescents while considering their dynamic and tumultuous developmental stage. Adolescents are in the midst of building their identity, exploring separation from parents, developing abstract thinking and critical judgment, and navigating the evolution of intimacy in their relationships (Christie & Viner, 2005). This can influence the way they understand and judge their friendships as being of high or low quality. For example, as adolescents redefine themselves in relation to others or redefine others in relation to themselves, it can be difficult for them to fully understand the impact of certain behaviours on others or themselves. For example, teenagers might interpret the act of discussing extensively about their depressed mood with a friend as a sign of closeness and of high friendship quality. They might not realize that if they spend a great amount of time discussing their negative affect with a friend in a ruminative or circular way, this can increase depressive symptoms and feelings of helplessness. Adolescents simply do not have adult cognitive skills, which can cause judgment impairment in complex situations such as navigating intimate relationships.

Consequently, psychotherapists who work with adolescents are faced with the challenge of collaborating with an individual whose personality is undergoing rapid changes and who does not always share adults' reasoning and cognitive abilities to adopt new behaviours or work on social changes that will support their mental health. Concrete, here-and-now, and experiential therapeutic tasks that are developmentally sensitive will most likely successfully engage adolescents in a successful therapeutic process (Friedberg & McClure, 2015). Psychotherapists can help adolescents better understand the effect of their relationships on their wellbeing. One goal of psychotherapy can be to educate them on what characteristics make for a healthy friendship (e.g., support, intimacy, trust) or an unhealthy relationship (co-rumination, conflict, manipulation). Adolescents can then learn how to recognise behaviours or relationship patterns that can be detrimental to their mental health and how to choose and make friends judiciously. They can also learn in psychotherapy how to recognise specific damaging behaviours (e.g. co-rumination) within their relationship dynamics in order to change them and replace them with more adaptive behaviours (e.g. support seeking, assertiveness).

Through the therapeutic alliance, psychotherapists can also model healthy relationships and reinforce pro-social behaviour that will in turn encourage more positive and protective friendships. Psychotherapists can strengthen the therapeutic relationship by eliciting feedback, showing genuine interest, encouraging collaboration, using appropriate self-disclosure, and favouring gentle guided discovery. The session structure can also benefit from flexibility, as adolescents tend to respond particularly poorly if feeling controlled or coerced (Friedberg & McClure, 2015). Although some depressed teenagers may welcome the opportunity to disclose freely their thoughts and feelings to an adult, for others, the experience of psychotherapy can elicit anxiety or discomfort. Sitting in a chair facing an adult to talk about psychological and intimate issues can potentially feel disconcerting and unusual for younger patients. Psychotherapists should be aware of this risk and

reassure adolescents on what therapy is and what they can expect, while also encouraging them to speak up about any concerns. Therapy should strive to be a safe, non-authoritative space to allow adolescents suffering from depressive symptoms to ease into the process with as much comfort and trust as possible. By checking in regularly with young patients on their comfort regarding the therapeutic process, psychotherapists can then model important relationship skills such as assertiveness or open communication and provide positive, non contrived social reinforcement in a interpersonal context (Cattivelli, Tirelli, Berardo & Perini, 2012).

In sum, psychotherapists can play an important role in helping adolescents perceive themselves and their relationships with others more accurately. By considering the complexity and particularities of adolescents' relationships and their influence on mental health, psychotherapists can be better prepared to help their patients achieve high levels of psychological well-being. In turn, the different skills and knowledge acquired through psychotherapy can help adolescents navigate their present and future relationships with parents or friends in a healthier way.

# CONCLUSION

In conclusion, this project made an original contribution to research on depressive symptoms during adolescence by looking into the moderating effects of parental warmth and friendship quality. Our study showed that friendship quality with the best friend is an important but complex variable to consider when studying depressive symptoms in adolescents. This research was inspired by Rudolph's developmentally based interpersonal model of youth depression, which highlights the interpersonal variables involved in the development of depressive symptoms during adolescence (Rudolph et al., 2008). We contributed to this area of research by investigating a question suggested by the authors of this theory, that is, what are some of the relevant moderators of the link between social behavioural deficits and depression during adolescence?

We hope that our study results will inspire future research avenues. For example, it would be relevant to study the course of our variables of interest over a longer period of time, to get a better understanding of the long-term dynamics underlying social influences of the psychological well being of adolescents and young adults. It would also be pertinent to reconsider the measure of friendship quality and of parental warmth in order to make them more precise by incorporating other features of these relationships, such as both friends' perception of the friendship, or negative characteristics of the relationship. Finally, our results inspired a reflection on the importance for psychotherapists to consider developmental and social factors when treating depression in adolescents. Lines of interventions and reflections were proposed to better guide psychotherapists who work with depressed adolescents.

APPENDIX A

QUESTIONNAIRE

Note: only sections of the questionnaire that are relevant to this essay are presented below; thus, some questions have been removed.

UQÀM | Faculté des sciences humaines
Département de psychologie

L'univers social des adolescent(e)s : le rôle des pairs, des parents et des enseignant(e)s durant les études secondaires

Questionnaire pour l'adolescent(e)

**Instructions générales**

Nous te demandons de répondre au plus grand nombre de questions possible et au mieux de ta connaissance. Tu es libre de sauter toute question à laquelle tu ne souhaites pas répondre ou de cesser ta participation à tout moment; dans ce cas, il suffit d'en avertir l'un(e) des assistant(e)s présent(e)s en classe.

Les renseignements recueillis ici sont confidentiels. Seuls les membres de l'équipe de recherche auront accès à ton questionnaire; celui-ci ne sera aucunement accessible à tes parents, aux enseignant(e)s, aux directeurs(trices), ou à tout autre membre du personnel de l'école.

Ta collaboration est essentielle à la réalisation de cette étude et nous t'en sommes profondément reconnaissants. Merci !
Certaines questions sont assorties d'un espace Commentaires, n'hésite pas à utiliser cet espace pour compléter ta réponse ou nous faire part de remarques personnelles.

N'oublie pas de cliquer sur le bouton Acheminer, situé à la fin du questionnaire, quand tu auras terminé.

Données sociodémographiques

**1- Quel est ton sexe ?**

- Fille
- Garçon

2- Quelle est ta date de naissance :

Jour : Mois : Année :

**14- Quel est le niveau d'éducation de ton père ?**

- Il a un diplôme universitaire
- Il a un diplôme d'études collégiales
- Il a un diplôme d'études secondaires
- Il n'a pas de diplôme d'études secondaires
- Je ne sais pas

**15- Quel est le niveau d'éducation de ta mère ?**

- Elle a un diplôme universitaire
- Elle a un diplôme d'études collégiales
- Elle a un diplôme d'études secondaires
- Elle n'a pas de diplôme d'études secondaires
- Je ne sais pas

Risque de décrochage scolaire[1]

**17- Au cours de cette année scolaire, au meilleur de ta connaissance, quelles sont tes notes moyennes en...**

| | 0 à 35% | 36 à 40% | 41 à 45% | 51 à 55% | 56 à 60% | 61 à 65% | 66 à 70% | 71 à 75% | 76 à 80% | 81 à 85% | 86 à 90% | 91 à 95% | 96 à 100% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Français | | | | | | | | | | | | | |
| Mathématique | | | | | | | | | | | | | |
| Anglais | | | | | | | | | | | | | |

**18- As-tu déjà doublé une année scolaire ?**

- Non
- Oui, une année
- Oui, deux années
- Oui, trois années ou plus

**21- Aimes-tu l'école ?**

- Je n'aime pas du tout l'école
- Je n'aime pas l'école
- J'aime l'école
- J'aime beaucoup l'école

**22- À quel point est-ce important pour toi d'avoir des bonnes notes ?**

- Pas du tout important
- Assez important
- Important
- Très important

---

[1] This heading was added to help guide the readers; it was not included in the questionnaire filled out by participants.

**23- Si cela ne dépendait que de toi, jusqu'où aimerais-tu continuer d'aller à l'école plus tard ?**

- Cela ne me fait rien, ça ne me dérange pas
- Je ne veux pas terminer le secondaire
- Je veux terminer le secondaire
- Je veux terminer le CÉGEP
- Je veux terminer l'université

**24- As-tu déjà sérieusement pensé à abandonner l'école ?**

- Non, jamais
- Au moins une fois depuis le début de mes études
- D'ici les 6 prochains mois
- D'ici les 3 prochains mois
- D'ici 30 jours

Adaptation Psychosociale[2]

**26- Voici une liste de caractéristiques qui s'appliquent à des jeunes.**

À chaque énoncé qui s'applique à toi, maintenant ou depuis six mois, sélectionne le chiffre 2 si le comportement décrit s'applique toujours ou souvent. Sélectionne le chiffre 1 s'il s'applique à toi plus ou moins ou parfois. S'il ne s'applique pas à toi, sélectionne le 0.

- 0 = ne s'applique pas
- 1 = plus ou moins ou parfois
- 2 = toujours ou souvent

[2] This section includes items used to create the depressive symptoms and the social-behavioral scales used in the analyses. Other items from this scale have been removed from the appendix.

Pour certaines questions, tu peux préciser au besoin ta réponse en écrivant un commentaire dans l'espace de droite. Attention, il est nécessaire d'utiliser l'ascenseur pour voir tous les énoncés.

| 5.1.1.1 **8 items de la sous échelle "withdrawn/depressed"** | |
|---|---|
| | 5.1.1.3 |
| 5- Très peu de choses me font plaisir. | 0 1 2 |
| 42- Je préfère être seul(e) qu'avec d'autres personnes. | 0 1 2 |
| 65- Je refuse de parler | 0 1 2 |
| 69- Je suis une personne cachotière ou renfermée | 0 1 2 |
| 75- Je suis trop timide | 0 1 2 |
| 102- Je manque d'énergie | 0 1 2 |
| 103- Je suis une personne malheureuse, triste ou déprimée | 0 1 2 |
| | 0 1 2 |
| *5.1.1.2* 111- Je ne me mêle pas aux autres | 0 1 2 |
| **11 items de le sous échelle "social problems"** | |
| 11- Je dépends trop des adultes. | 0 1 2 |
| 12- Je me sens nul(le). | 0 1 2 |
| 25- Je ne m'entends pas bien avec les autres jeunes. | 0 1 2 |
| 27- J'éprouve de la jalousie envers les autres. | 0 1 2 |
| 34- J'ai l'impression que les autres « veulent ma peau ». | 0 1 2 |
| 36- Je me blesse souvent, j'ai souvent des accidents. | 0 1 2 |

| | |
|---|---|
| 38- Les autres m'embêtent souvent ou me taquinent de façon excessive. | 0 1 2 |
| 48- Les autres jeunes ne m'aiment pas. | 0 1 2 |
| 62- J'ai des gestes mal coordonnés ou je suis maladroit(e). | 0 1 2 |
| 64- J'aime mieux être avec des jeunes moins âgés qu'avec des jeunes de mon âge | 5.1.1.4 0 |
| 79- Je souffre d'un trouble de la parole. | 1<br>2 |
| | 0 1 2 |

Motivation scolaire

**27- Pourquoi vas-tu à l'école ?**

Indique dans quelle mesure chacun des énoncés suivants correspond actuellement à l'une des raisons pour lesquelles tu vas à l'école en sélectionnant le chiffre de ton choix. Il n'y a pas de bonnes ou de mauvaises réponses ; sélectionne celle qui te vient le plus spontanément en tête pour chaque énoncé. Tu peux choisir un nombre de 1 à 4.

- 1 indique que tu es *fortement en désaccord* avec l'énoncé
- 2 indique que tu es *plutôt en désaccord*
- 3 indique que tu es *plutôt en accord*
- 4 indique que tu es *tout à fait d'accord*

| | |
|---|---|
| 1. Parce que ça me prend au moins un diplôme d'études secondaires si je veux me trouver un emploi assez payant plus tard. | Désaccord... 1 2 3 4 ...Accord |
| 2. Parce que j'éprouve du plaisir et de la satisfaction à apprendre de nouvelles choses. | Désaccord... 1 2 3 4 ...Accord |
| 3. Parce que selon moi des études secondaires vont m'aider à mieux me préparer à la carrière que j'ai choisie. | Désaccord... 1 2 3 4 ...Accord |

| | |
|---|---|
| 4. Parce que j'aime vraiment ça aller à l'école. | Désaccord... 1 2 3 4 ...Accord |
| 5. Honnêtement je ne le sais pas; j'ai vraiment l'impression de perdre mon temps à l'école. | Désaccord... 1 2 3 4 ...Accord |
| 6. Pour le plaisir que je ressens à me surpasser dans mes études. | Désaccord... 1 2 3 4 ...Accord |
| 7. Pour me prouver à moi-même que je suis capable de faire mon cours secondaire. | Désaccord... 1 2 3 4 ...Accord |
| 8. Pour pouvoir décrocher un emploi plus important plus tard. | Désaccord... 1 2 3 4 ...Accord |
| 9. Pour le plaisir que j'ai à découvrir de nouvelles choses jamais vues auparavant. | Désaccord... 1 2 3 4 ...Accord |
| 10. Parce que cela va me permettre de travailler plus tard dans un domaine que j'aime. | Désaccord... 1 2 3 4 ...Accord |
| 11. Parce que pour moi l'école c'est le "fun". | Désaccord... 1 2 3 4 ...Accord |
| 12. J'ai déjà eu de bonnes raisons pour aller à l'école, mais maintenant je me demande si je devrais continuer à y aller. | Désaccord... 1 2 3 4 ...Accord |
| 13. Pour le plaisir que je ressens lorsque je suis en train de me surpasser dans une de mes réalisations personnelles. | Désaccord... 1 2 3 4 ...Accord |
| 14. Parce que le fait de réussir à l'école me permet de me sentir important à mes propres yeux. | Désaccord... 1 2 3 4 ...Accord |
| 15. Parce que je veux pouvoir faire "la belle vie" plus tard. | Désaccord... 1 2 3 4 ...Accord |
| 16. Pour le plaisir d'en savoir plus long sur les matières qui m'attirent. | Désaccord... 1 2 3 4 ...Accord |
| 17. Parce que cela va m'aider à mieux choisir le métier ou la carrière que je ferai plus tard. | Désaccord... 1 2 3 4 ...Accord |
| 18. Parce que j'aime me sentir "emporté(e)" par les discussions avec des professeurs(e)s intéressant(e)s. | Désaccord... 1 2 3 4 ...Accord |
| 19. Je ne parviens pas à voir pourquoi je vais à l'école et franchement je m'en fous pas mal. | Désaccord... 1 2 3 4 ...Accord |
| 20. Pour la satisfaction que je vis lorsque je suis en train de réussir des activités scolaires difficiles. | Désaccord... 1 2 3 4 ...Accord |
| 21. Pour me prouver que je suis une personne intelligente. | Désaccord... 1 2 3 4 ...Accord |
| 22. Pour avoir un meilleur salaire plus tard. | Désaccord... 1 2 3 4 ...Accord |

| | |
|---|---|
| 23. Parce que mes études me permettent de continuer à en apprendre sur une foule de choses qui m'intéressent. | Désaccord... 1 2 3 4 ...Accord |
| 24. Parce que je crois que mes études de niveau secondaire vont augmenter ma compétence comme travailleur(euse). | Désaccord... 1 2 3 4 ...Accord |
| 25. Parce que j'aime "tripper" en lisant sur différents sujets intéressants. | Désaccord... 1 2 3 4 ...Accord |
| 26. Je ne le sais pas; je ne parviens pas à comprendre ce que je fais à l'école. | Désaccord... 1 2 3 4 ...Accord |
| 27. Parce que l'école me permet de vivre de la satisfaction personnelle dans ma recherche de l'excellence dans mes études. | Désaccord... 1 2 3 4 ...Accord |
| 28. Parce que je veux me prouver à moi-même que je suis capable de réussir dans les études. | Désaccord... 1 2 3 4 ...Accord |

Relation parent-adolescent

**31- Voici quelques énoncés qui décrivent le comportement que les parents ont parfois envers leurs enfants. Indique dans quelle mesure chaque énoncé correspond, en général, à ta situation, en pensant au parent qui s'occupe le plus souvent de toi.**

À la suite de chaque énoncé il y a quatre choix. Si l'énoncé décrit, en principe, la manière dont ton parent agit envers toi, alors demande-toi : « Est-ce toujours vrai ? » ou « Est-ce seulement parfois vrai ? ». Si tu penses que ton parent agit presque toujours ainsi, coche la case 4 « toujours vrai », si l'énoncé correspond parfois à la manière dont ton parent te traite, alors coche la case 3 « plutôt vrai ». Si tu penses que l'énoncé n'est simplement pas juste, car ce n'est pas ainsi que ton parent te traite, alors demande-toi : « est-ce plutôt faux ? (case 2) » ou « est-ce toujours faux ? (case 1) ».

Souviens-toi qu'il n'y a pas de bonne ou de mauvaise réponse pour aucun des énoncés alors, sois honnête avec toi-même ! Réponds à chaque énoncé en pensant aux vrais agissements de ton parent et non pas aux comportements que tu voudrais qu'il ait envers toi.

Tu peux choisir un nombre de 1 à 4.

- 1 indique que l'énoncé est *toujours faux*
- 2 indique que l'énoncé est *plutôt faux*
- 3 indique que l'énoncé est *plutôt vrai*
- 4 indique que l'énoncé est *toujours vrai*

Mon parent...

| | |
|---|---|
| 1- Dit des choses gentilles sur moi. | Faux... 1 2 3 4 ...Vrai |
| 2- M'ignore complètement. | Faux... 1 2 3 4 ...Vrai |
| 3- M'aide à dire ce qui me tient à coeur. | Faux... 1 2 3 4 ...Vrai |
| 4- Me frappe même quand je ne le mérite pas. | Faux... 1 2 3 4 ...Vrai |
| 5- Me perçoit comme un fardeau. | Faux... 1 2 3 4 ...Vrai |
| 6- Me punit sévèrement lorsqu'il (elle) est en colère. | Faux... 1 2 3 4 ...Vrai |
| 7- Est trop occupé(e) pour répondre à mes questions. | Faux... 1 2 3 4 ...Vrai |
| 8- À l'air de ne pas m'aimer. | Faux... 1 2 3 4 ...Vrai |
| 9- S'intéresse vraiment à ce que je fais. | Faux... 1 2 3 4 ...Vrai |
| 10- Me dit beaucoup de choses désagréables. | Faux... 1 2 3 4 ...Vrai |
| 11- M'ignore lorsque je lui demande de l'aide. | Faux... 1 2 3 4 ...Vrai |
| 12- Fait en sorte que je me sente désiré et utile. | Faux... 1 2 3 4 ...Vrai |
| 13- Me donne beaucoup d'attention. | Faux... 1 2 3 4 ...Vrai |
| 14- Me fait de la peine. | Faux... 1 2 3 4 ...Vrai |
| 15- Oublie des choses importantes dont il (elle) devrait se souvenir. | Faux... 1 2 3 4 ...Vrai |
| 16- Me fait sentir qu'il (elle) ne m'aime plus lorsque je suis méchant(e). | Faux... 1 2 3 4 ...Vrai |
| 17- Accorde de l'importance à ce que je fais. | Faux... 1 2 3 4 ...Vrai |

| | |
|---|---|
| 18- Me fait peur ou me menace lorsque je fais quelque chose de mal. | Faux... 1 2 3 4 ...Vrai |
| 19- Trouve que mes idées sont importantes et aime les entendre. | Faux... 1 2 3 4 ...Vrai |
| 20- Trouve que les autres enfants font tout mieux que moi. | Faux... 1 2 3 4 ...Vrai |
| 21- Me fait savoir que je ne suis pas désiré(e). | Faux... 1 2 3 4 ...Vrai |
| 22- Me fait savoir qu'il (elle) m'aime. | Faux... 1 2 3 4 ...Vrai |
| 23- Ne prête aucune attention à moi, tant que je ne fais rien qui le (la) dérange. | Faux... 1 2 3 4 ...Vrai |
| 24- Est doux (douce) et gentil(le) avec moi. | Faux... 1 2 3 4 ...Vrai |
| 25- Mes parents me donnent de bonnes idées sur la façon de faire les choses. | Faux... 1 2 3 4 ...Vrai |
| 26- J'ai l'impression de rendre mes parents mal à l'aise lorsque je me confie à eux. | Faux... 1 2 3 4 ...Vrai |
| 27- Mes parents savent comment m'aider à résoudre des problèmes. | Faux... 1 2 3 4 ...Vrai |
| 28- Je n'ai pas de relation aussi intime que les autres en ont avec leurs parents. | Faux... 1 2 3 4 ...Vrai |

Qualité de la relation d'amitié

**32- Parmi la liste des élèves de 3e secondaire à ton école, sélectionne le nom de ton ou ta meilleur(e) ami(e) :**

_____

**34- Indique jusqu'à quel point les énoncés suivants se produisent jamais ou souvent.**

Ces énoncés décrivent ce que tu vis avec ton ou ta meilleur(e) ami(e). Imagine que l'espace vide __ est remplacé par le nom de cet(te) ami(e). Il n'y a pas de bonnes et de mauvaises réponses puisque l'amitié varie d'une personne à l'autre.

Tu peux choisir un nombre de 1 à 4.

- 1 indique que l'énoncé ne se produit *jamais*
- 2 indique que l'énoncé se produit *parfois*

- 3 indique que l'énoncé se produit *régulièrement*
- 4 indique que l'énoncé se produit *souvent*

| | |
|---|---|
| 1. C'est plaisant de faire des activités avec __. | Jamais… 1 2 3 4 …Souvent |
| 2. __ me fait me sentir important(e). | Jamais... 1 2 3 4 ...Souvent |
| 3. __ m'aide quand j'en ai besoin. | Jamais... 1 2 3 4 ...Souvent |
| 4 __ est quelqu'un avec qui je peux partager des choses intimes. | Jamais... 1 2 3 4 ...Souvent |
| 5. __ pourrait me faire sentir bien face à une nouvelle situation. | Jamais... 1 2 3 4 ...Souvent |
| 6. __ voudrait rester mon ami(e) même si j'étais fâché(e) contre lui (elle). | Jamais... 1 2 3 4 ...Souvent |
| 7. Ça serait bien d'avoir __ à mes côtés si j'étais effrayé(e). | Jamais... 1 2 3 4 ...Souvent |
| 8. ___ me parle de choses intéressantes. | Jamais... 1 2 3 4 ...Souvent |
| 9. ___ me fait me sentir bien même lorsque je fais une gaffe. | Jamais... 1 2 3 4 ...Souvent |
| 10. __ voudrait rester mon ami(e) durant les périodes difficiles que je vis. | Jamais... 1 2 3 4 ...Souvent |
| 11. __ sait quand je suis bouleversé(e). | Jamais... 1 2 3 4 ...Souvent |
| 12. __ m'aide quand j'ai besoin de l'opinion de quelqu'un. | Jamais… 1 2 3 4 …Souvent |
| 13. __ me fait me sentir sûr(e) de moi-même. | Jamais... 1 2 3 4 ...Souvent |
| 14. __ a de bonnes idées concernant les idées de choses à faire. | Jamais... 1 2 3 4 ...Souvent |
| 15. __ est quelqu'un à qui je peux dire des secrets. | Jamais... 1 2 3 4 ...Souvent |
| 16. __ me donne des informations utiles quand j'en ai besoin. | Jamais... 1 2 3 4 ...Souvent |
| 17. __ me ferait sentir mieux si j'étais préoccupé(e). | Jamais... 1 2 3 4 ...Souvent |
| 18. __ voudrait rester mon ami(e) même si nous ne nous voyons plus. | Jamais... 1 2 3 4 ...Souvent |
| 19. __ m'aiderait à me calmer si j'étais nerveux (se). | Jamais... 1 2 3 4 ...Souvent |

| | |
|---|---|
| 20. __ voudrait rester mon ami(e) même si nous avions une chicane. | Jamais... 1 2 3 4 ...Souvent |
| 21. __ me fait sentir intelligent(e). | Jamais... 1 2 3 4 ...Souvent |
| 22. __ me fait rire. | Jamais... 1 2 3 4 ...Souvent |
| 23. __ m'aide à réaliser des choses. | Jamais... 1 2 3 4 ...Souvent |
| 24. __ sait quand quelque chose me dérange. | Jamais... 1 2 3 4 ...Souvent |
| 25. __ me prête des choses quand j'en ai besoin. | Jamais... 1 2 3 4 ...Souvent |
| 26. C'est stimulant de parler avec __. | Jamais... 1 2 3 4 ...Souvent |
| 27. __me fait sentir spécial(e). | Jamais... 1 2 3 4 ...Souvent |
| 28. __ voudrait m'écouter si je parlais de mes problèmes. | Jamais... 1 2 3 4 ...Souvent |
| 29. __ me ferait sentir mieux si je vivais des problèmes. | Jamais... 1 2 3 4 ...Souvent |
| 30. __ voudrait rester mon ami(e) même si d'autres personnes me critiquaient. | Jamais... 1 2 3 4 ...Souvent |
| 31. __ me comprendrait si je lui parlais de mes problèmes. | Jamais... 1 2 3 4 ...Souvent |
| 32. __ resterait mon ami(e) même si d'autres personnes ne m'aiment pas. | Jamais... 1 2 3 4 ...Souvent |
| 33. __ me fait me sentir mieux quand j'ai des problèmes. | Jamais... 1 2 3 4 ...Souvent |
| 34. __ est disposé(e) à m'accorder des privilèges. | Jamais... 1 2 3 4 ...Souvent |
| 35. __ me complimente quand je fais quelque chose de bien. | Jamais... 1 2 3 4 ...Souvent |
| 36. C'est plaisant d'être avec ___. | Jamais... 1 2 3 4 ...Souvent |
| 37. C'est facile de parler avec __de choses intimes. | Jamais... 1 2 3 4 ...Souvent |
| 38. C'est stimulant d'être avec ___. | Jamais... 1 2 3 4 ...Souvent |
| 39. __ souligne des choses que je réussis bien. | Jamais... 1 2 3 4 ...Souvent |
| 40. __m'aide quand j'essaie fortement de terminer | Jamais... 1 2 3 4 |

| | |
|---|---|
| quelque chose. | ...Souvent |
| 41. __me ferait me sentir mieux si j'étais anxieux(se). | Jamais... 1 2 3 4 ...Souvent |
| 42. __ voudrait rester mon ami(e) même si nous argumentons. | Jamais... 1 2 3 4 ...Souvent |
| 43. __ me fait sentir que je peux bien faire les choses. | Jamais... 1 2 3 4 ...Souvent |
| 44. __ voudrait rester mon ami(e) même si je n'avais pas beaucoup de temps pour le (la) voir. | Jamais... 1 2 3 4 ...Souvent |
| 45. ___ comprend mes sentiments. | Jamais... 1 2 3 4 ...Souvent |
| 46. __me montre comment mieux faire les choses. | Jamais... 1 2 3 4 ...Souvent |
| 47. __s'empresse de s'asseoir et de me parler. | Jamais... 1 2 3 4 ...Souvent |
| 48. __me fait sentir mieux lorsque je suis nerveux(se). | Jamais... 1 2 3 4 ...Souvent |

# REFERENCES

Achenbach, T. M. (2001). *Achenbach System of Empirically Based Assessment: School Age Forms and Profiles, Child Behavior Checklist for Ages 6-18*. Aseba.

Adams, R. E., & Bukowski, W. M. (2007). Relationships with mothers and peers moderate the association between childhood sexual abuse and anxiety disorders. *Child Abuse and Neglect, 31*(6), 645–656. doi: 10.1016/j.chiabu.2006.12.011

Adams, R. E., Santo, J. B., & Bukowski, W. M. (2011). The presence of a best friend buffers the effects of negative experiences. *Developmental Psychology, 47*, 1786–1791. doi: 10.1037/a0025401

Allen, J. P., Insabella, G., Porter, M. R., Smith, F. D., Land, D., & Phillips, N. (2006). A social-interactional model of the development of depressive symptoms in adolescence. *Journal of Consulting and Clinical Psychology, 74*(1), 55–65. doi: 10.1037/0022-006X.74.1.55

American Academy of Child and Adolescent Psychiatry. (2007). Practice parameters for the assessment and treatment of children and adolescents with depressive disorders. Journal of American Academy of Child and Adolescent Psychiatry, *46*, 1503–26. doi: 10.1097/chi.0b013e318145ae1c

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

Angold, A., & Costello, E. J. (2006). Puberty and depression. *Child and Adolescent Psychiatric Clinics of North America, 15*(4), 919–937. doi: 10.1016/j.chc.2006.05.013

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psycho-logical well-being in adolescence. *Journal of Youth and Adolescence, 16,* 427–454. doi: 10.1007/BF02202939

Aoyama, I., Saxon, T. F., & Fearon, D. D. (2011). Internalizing problems among cyberbullying victims and moderator effects of friendship quality. *Multicultural Education and Technology Journal, 5*(2), 92–105.

Auerbach, R. P., Bigda-Peyton, J. S., Eberhart, N. K., Webb, C. A., & Ho, M.-H. R. (2011). Conceptualizing the prospective relationship between social support, stress, and depressive symptoms among adolescents. *Journal of Abnormal Child Psychology*, *39*(4), 475–487. doi: 10.1007/s10802-010-9479-x

Bagwell, C. L., Bender, S. E., Andreassi, C. L., Kinoshita, T. L., Montarello, S. A., & Muller, J. G. (2005). Friendship quality and perceived relationship changes predict psychosocial adjustment in early adulthood. *Journal of Social and Personal Relationships, 22*(2), 235–254. doi: 10.1177/0265407505050945

Baril, H., Julien, D., Chartrand, É., Dubé, M., Pelland, M.-È. et D'Amico, É. (2007). Lien entre la qualité des relations familiales et sociales à l'adolescence et à l'âge adulte. *Revue Canadienne des Sciences du Comportement, 39*(1), 32–45. doi:10.1037/cjbs2007003

Barlow, D. H., & Durand, V. M. (2005). Abnormal Psychology: An Integrative Approach. *Pacific Grove, CA: Brooks/Cole.*

Barry, C. M., & Wentzel, K. R. (2006). Friend influence on prosocial behavior: The role of motivational factors and friendship characteristics. *Developmental Psychology, 42*, 153–163. doi: 10.1037/0012-1649.42.1.153

Beck, A. T., & Alford, B. A. (2009). *Depression: Causes and treatment*. University of Pennsylvania Press.

Belle, D. (1989). *Children's social networks and social supports* (Vol. 136). John Wiley.

Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development, 53*(6), 1447–1460. doi: 10.2307/1130071

Berndt, T. J. (1992). Friendship and friends' influence in adolescence. *Current Directions in Psychological Science, 1*(5), 156–159. doi: 10.1111/1467-8721.ep11510326

Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science, 11*(1), 7–10. doi: 10.1111/1467-8721.00157

Berndt, T. J., Hawkins, J. A., & Hoyle, S. G. (1986). Changes in friendship during a school year: Effects on children's and adolescents' impressions of friendship and sharing with friends. *Child Development, 57*(5), 1284–1297. doi: 10.2307/1130451

Berndt, T. J., Hawkins, J. A., & Jiao, Z. (1999). Influences of friends and friendships on adjustment to junior high school. *Merrill-Palmer Quarterly, 45*, 13–41.

Berndt, T. J., & Hoyle, S. G. (1985). Stability and change in childhood and adolescent friendships. *Developmental Psychology, 21*(6), 1007–1015. doi: 10.1037/0012-1649.21.6.1007

Berndt, T. J., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development, 66*(5), 1312–1329. doi: 10.2307/1131649

Bhatia, S. K., & Bhatia, S. C. (2007). Childhood and adolescent depression. *American Family Physician, 75*, 73–80.

Bigelow, B. J. (1977). Children's friendship expectations: A cognitive-developmental study. *Child Development, 48,* 246–253. doi: 10.2307/1128905

Biraldi, R., Joubert, K., Bordeleau, M., & Plante, N. (2015). *Portrait statistique de la santé mentale des Québécois. Résultats de l'Enquête sur la santé dans les collectivités canadiennes, santé mentale 2012 : portrait chiffré*. Institut de la statistique du Québec.

Blyth, D. A. (1983). Surviving and thriving in the social world: A commentary on six new studies of popular, rejected, and neglected children. *Merrill-Palmer Quarterly (1982-*), 449–458.

Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology*, 7(4), 765–785. doi: 10.1017/S0954579400006830

Bollmer, J. M., Milich, R., Harris, M. J., & Maras, M. A. (2005). A friend in need: The role of friendship quality as a protective factor in peer victimization and bullying. *Journal of Interpersonal Violence, 20*(6), 701–712. doi: 10.1177/0886260504272897

Borelli, J. L., & Prinstein, M. J. (2006). Reciprocal, longitudinal associations among adolescents' negative feedback-seeking, depressive symptoms, and peer

relations. *Journal of Abnormal Child Psychology, 34(*2), 159–169. doi: 10.1007/s10802-005-9010-y

Bornstein, M. H., Hahn, C. S., & Haynes, O. M. (2010). Social competence, externalizing, and internalizing behavioral adjustment from early childhood through early adolescence: Developmental cascades. *Development and Psychopathology, 22*(4), 717–735. doi: 10.1017/S0954579410000416

Bowker, A. (2004). Predicting friendship stability during early adolescence. *Journal of Early Adolescence, 24*(2), 85–112. doi: 10.1177/0272431603262666

Bowker, J. C. W., Rubin, K. H., Burgess, K. B., Booth-LaForce, C., & Rose-Krasnor, L. (2006). Behavioral characteristics associated with stable and fluid best friendship patterns in middle childhood. *Merrill-Palmer Quarterly (1982–)*, 671–693.

Brendgen, M., Markiewicz, D., Doyle, A. B., & Bukowski, W. M. (2001). The relations between friendship quality, ranked-friendship preference, and adolescents' behavior with their friends. *Merrill-Palmer Quarterly, 47*(3), 395–415.

Brendgen, M., Wanner, B., Morin, A. J., & Vitaro, F. (2005). Relations with parents and with peers, temperament, and trajectories of depressed mood during early adolescence. *Journal of Abnormal Child Psychology, 33*(5), 579–594. doi: 10.1007/s10802-005-6739-2

Bronfenbrenner, U., & Morris, P.A. (2006). The bioecological model of human development. In R. M. Lerner, & W. Damon (Eds.), *Handbook of child psychology: Vol 1. Theoretical models of human development. 6th edition.* (pp. 793–828). New York: Wiley.

Brown, B. B. (1989). The role of peer groups in adolescents' adjustment to secondary school. In T. J. Berndt & G. W. Ladd (Eds.) *Peer relationships in child development* (pp. 188–216). New York: Wiley.

Brown, B. B. (2004). Adolescents' relationships with peers. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 363–394). John Wiley & Sons Inc.

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 74–103). New York: NY: Wiley.

Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development, 61*(4), 1101–1111. doi: 10.1111/j.1467-8624.1990.tb02844.x

Bukowski, W. M., & Hoza, B. (1989). Popularity and friendship: Issues in theory, measurement, and outcome. In T. J. Berndt & G. W. Ladd (Eds.) *Peer relationships in child development* (pp. 15–45). New York: Wiley

Bukowski, W. M., Hoza, B., & Boivin, M. (1993). Popularity, friendship, and emotional adjustment during early adolescence. *New Directions for Child and Adolescent Development, 1993*(60), 23–37. doi: 10.1002/cd.23219936004

Bukowski, W. M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre-and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. *Journal of Social and Personal Relationships, 11*(3), 471–484. doi: 10.1177/0265407594113011

Bukowski, W. M., Laursen, B., & Hoza, B. (2010). The snowball effect: Friendship moderates escalations in depressed affect among avoidant and excluded children. *Development and Psychopathology*, *22*(04), 749–757. doi: 10.1017/S095457941000043X

Buote, V. M., Pancer, S. M., Pratt, M. W., Adams, G., Birnie-Lefcovitch, S., Polivy, J., & Wintre, M. G. (2007). The Importance of Friends. *Journal of Adolescent Research, 22*(6), 665–689. doi:10.1177/0743558407306344

Burk, W., & Laursen, B. (2005). Adolescent perceptions of friendship and their associations with individual adjustment. *International Journal of Behavioral Development, 29*(2), 156–164. doi: 10.1080/01650250444000342

Caldwell, M. S., Rudolph, K. D., Troop-Gordon, W., & Kim, D.-Y. (2004). Reciprocal influences among relational self-views, social disengagement, and peer stress during early adolescence. *Child Development, 75*(4), 1140–1154. doi: 10.1111/j.1467-8624.2004.00730.x

Cattivelli, R., Tirelli, V., Berardo, F., & Perini, S. (2012). Promoting appropriate behavior in daily life contexts using Functional Analytic Psychotherapy in early-adolescent children. International Journal of Behavioral Consultation and Therapy, 7(2–3), 25–32. doi: 10.1037/h0100933

Chen, X., Liu, M., & Li, D. (2000). Parental warmth, control, and indulgence and their relations to adjustment in Chinese children: A longitudinal study.

*Journal of Family Psychology, 14*(3), 401–419. doi: 10.1037/0893-3200.14.3.401

Christie, D., & Viner, R. (2005). Adolescent development. Bmj, 330(7486), 301–304. doi: 10.1136/bmj.330.7486.301

Cicchetti, D., & Schneider-Rosen, K. (1986). An organizational approach to childhood depression. In M. Rutter, C. Izard, & P. Read (Eds.), *Depression in young people, clinical and developmental perspectives* (pp. 71–134). Guilford.

Colarossi, L. G., & Eccles, J. S. (2003). Differential effects of support providers on adolescents' mental health. *Social Work Research*, *27*(1), 19–30. doi: 10.1093/swr/27.1.19

Cole, D. A. (1990). Relation of social and academic competence to depressive symptoms in childhood. *Journal of Abnormal Psychology, 99*(4), 422–429. doi: 10.1037/0021-843X.99.4.422

Cole, D. A. (1991). Preliminary support for a competency-based model of depression in children. *Journal of abnormal psychology, 100*(2), 181–190. doi: 10.1037/0021-843X.100.2.181

Collins, W. A. (1997). Relationships and development during adolescence: Interpersonal adaptation to individual change. *Personal Relationships,* 4(1), 1–14. doi: 10.1111/j.1475-6811.1997.tb00126.x

Compas, B. E., Slavin, L. A., Wagner, B. M., & Vannatta, K. (1986). Relationship of life events and social support with psychological dysfunction among adolescents. *Journal of Youth and Adolescence*, 15(3), 205–221. doi: 10.1007/BF02139123

Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. R. Gunnar & L. A Stroufe (Eds.), *Minnesota Symposium on Child Psychology* (Vol. 22, pp. 43–77). Hillsdale, NJ: Erlbaum.

Costello, E. J., & Maughan, B. (2015). Annual research review: Optimal outcomes of child and adolescent mental illness. *Journal of Child Psychology and Psychiatry, 56*, 324–341. doi: 10.1111/jcpp.12371

Coyne, J. C. (1976a). Depression and the response of others. *Journal of Abnormal Psychology, 85*(2), 186. doi: 10.1037//0021-843x.85.2.186

Coyne, J. C. (1976b). Toward an interactional description of depression. *Psychiatry, 39*(1), 28–40. doi: 10.1080/00332747.1976.11023874

Craske, M. G., & Stevens, H. H. (2002). Handbook of Brief Cognitive Behavioral Therapy. Edited By Fank W. Bond and Windy Dryden. London, John Wiley and Sons Ltd.

Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience, 13*(9), 636-650. doi: 10.1038/nrn3313

Crook, T., Raskin, A., & Eliot, J. (1981). Parent-child relationships and adult depression. *Child Development*, 950–957. doi: 10.2307/1129099

Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression: a theoretical model. *Archives of General Psychiatry, 57*(1), 21–27. doi: 10.1001/archpsyc.57.1.21

Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin, 32*(3), 313–327. doi: 10.1177/0146167205282148

Delgado, P. L., & Schillerstrom, J. (2009). Cognitive difficulties associated with depression: what are the implications for treatment6 *Psychiatric Times, 26*(3), 26–26.

Demir, M., Özen, A., Doğan, A., Bilyk, N. A., & Tyrell, F. A. (2011). I matter to my friend, therefore I am happy: Friendship, mattering, and happiness. *Journal of Happiness Studies*, *12*(6), 983–1005. doi: 10.1007/s10902-010-9240-8

Diamond, G. S., Diamond, G. M., Levy, S. A., & Siqueland, L. (2014). *Attachment-based family therapy for depressed adolescents*. Washington DC.

Dunn, V., & Goodyer, I. M. (2006). Longitudinal investigation into childhood and adolescence-onset depression: Psychiatric outcome in early adulthood. *British Journal of Psychiatry, 188,* 216–222. doi: 10.1192/bjp.188.3.216

Egan, S. K., & Perry, D. G. (1998). Does low self-regard invite victimization? *Developmental Psychology, 34*(2), 299–309. doi: 10.1037/0012-1649.34.2.299

Ehnvall, A., Parker, G., Hadzi-Pavlovic, D., & Malhi, G. (2008). Perception of rejecting and neglectful parenting in childhood relates to lifetime suicide attempts for females–but not for males. Acta Psychiatrica Scandinavica, 117(1), 50–56. doi: 10.1111/j.1600-0447.2007.01124.x

Ehrenreich, S. E., & Underwood, M. K. (2016). Adolescents' internalizing symptoms as predictors of the content of their Facebook communication and responses received from peers. *Translational Issues in PsychologicalSscience*, *2*(3), 227–237. doi: 10.1037/tps0000077

Enders, C. K. (2008). A note on the use of missing auxiliary variables in full information maximum likelihood-based structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *15*(3), 434–448.

Enders, C. K. (2010). *Applied missing data analysis*. Guilford press.

Engle, J. M., McElwain, N. L., & Lasky, N. (2011). Presence and quality of kindergarten children's friendships: Concurrent and longitudinal associations with child adjustment in the early school years. *Infant and Child Development, 20*, 365-386. doi: 10.1002/icd.706

Ewing, E. S. K., Diamond, G., & Levy, S. (2015). Attachment-based family therapy for depressed and suicidal adolescents: Theory, clinical model and empirical support. Attachment and Human Development, 17(2), 136–156. doi: 10.1080/14616734.2015.1006384

Fergusson, D. M., & Woodward, L. J. (2002). Mental health, educational and social role outcomes of adolescents with depression. *Archives of General Psychiatry, 59,* 225–231. doi: 10.1001/archpsyc.59.3.225

Field, A., Miles, J., & Field, Z. (2012). *Discovering statistics using R*. Sage publications.

Field, T., Miguel, D., & Sanders, C. (2001). Adolescent depression and risk factors. *Adolescence, 36*(143), 491–498.

Finkenauer, C., & Righetti, F. (2011). Understanding in close relationships: An interpersonal approach. *European review of social psychology, 22*(1), 316–363. doi: 10.1080/10463283.2011.633384

Fisher, L. A., & Bauman, K. E. (1988). Influence and selection in the friend-adolescent relationship: Findings from studies of adolescent smoking and drinking. *Journal of Applied Social Psychology, 18*(4), 289–314. doi: 10.1111/j.1559-1816.1988.tb00018.x

Franz, C. E., McClelland, D. C., & Weinberger, J. (1991). Childhood antecedents of conventional social accomplishment in midlife adults: A 36-year prospective study. *Journal of Personality and Social Psychology, 60*(4), 586–595. doi: 10.1037/0022-3514.60.4.586

Friedberg, R. D., & McClure, J. M. (2015). Clinical practice of cognitive therapy with children and adolescents: The nuts and bolts. Guilford Publications.

Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*(6), 1016–1024. doi: 10.1037/0012-1649.21.6.1016

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*(1), 103–115. doi: 10.2307/1130905

Furman, W., & Robbins, P. (1985). What's the point? Issues in the selection of treatment objectives. In *Children's peer relations: Issues in assessment and intervention* (pp. 41–54). Springer US.

Furman, W. & Rose, A. J. Friendships, romantic relationships, and peer relationships. (2015). Socioemotional processes. In M.E. Lamb, & R.M. Learner (Eds.), *Handbook of child psychology developmental science* (pp. 932–974) Hoboken: Wiley & Sons.

Gaertner, A. E., Fite, P. J., & Colder, C. R. (2010). Parenting and friendship quality as predictors of internalizing and externalizing symptoms in early adolescence. *Journal of Child and Family Studies*, *19*(1), 101–108. doi: 10.1007/s10826-009-9289-3

Galambos, N., Leadbeater, B., & Barker, E. (2004). Gender differences in and risk factors for depression in adolescence: A 4-year longitudinal study. *International Journal of Behavioral Development, 28*(1), 16–25. doi: 10.1080/01650250344000235

Garber, J., Braafladt, N., & Zeman, J. (1991). The regulation of sad affect: An information-processing perspective. In J. Garber & K. A. Dodge (Eds.), *Cambridge studies in social and emotional development. The development of*

*emotion regulation and dysregulation* (p. 208–240). Cambridge University Press. doi: 10.1017/CBO9780511663963.011

Ge, X., Lorenz, F. O., Conger, R. D., Elder, G. H., & Simons, R. L. (1994). Trajectories of stressful life events and depressive symptoms during adolescence. *Developmental Psychology, 30*(4), 467–483. doi: 10.1037/0012-1649.30.4.467

Gore, S., & Aseltine, H. (1995). Protective processes in adolescence: Matching stressors with social resources. *American Journal of Community Psychology*, *23*(3), 301–327. doi: 10.1007/BF02506947

Gotlib, I. H., & Hammen, C. L. (1992). *Psychological aspects of depression: Toward a cognitive-interpersonal integration*. Hoboken, NJ: Wiley & Sons.

Graber, R., Turner, R., & Madill, A. (2016). Best friends and better coping: Facilitating psychological resilience through boys' and girls' closest friendships. *British Journal of Psychology*, *107*(2), 338–358. doi: 10.1111/bjop.12135

Graham, P., & Reynolds, S. (Eds.). (2013). Cognitive behaviour therapy for children and families. Cambridge University Press.

Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian Americans. *Developmental Psychology, 32*(4), 707–716. doi: 10.1037/0012-1649.32.4.707

Hammen, C. (1992). Cognitive, life stress, and interpersonal approaches to a developmental psychopathology model of depression. *Development and Psychopathology, 4*(1), 189–206. doi: 10.1017/S0954579400005630

Hammen, C., Brennan, P. A., & Le Brocque, R. (2013). Youth depression and early childrearing: stress generation and intergenerational transmission of depression. *Journal of Consulting and Clinical Psychology, 79*, 353–363. doi: 10.1037/a0023536

Hanson, M. D., & Chen, E. (2010). Daily stress, cortisol, and sleep: The moderating role of childhood psychosocial environments. *Health Psychology*, *29*(4), 394–402. doi: 10.1037/a0019879

Hardt, J., Sidor, A., Nickel, R., Kappis, B., Petrak, P., & Egle, U. T. (2008). Childhood adversities and suicide attempts: A retrospective study. Journal of Family Violence, 23(8), 713–718. doi:10.1007/s10896-008-9196-1

Harter, S. (2015). *The construction of the self: Developmental and sociocultural foundations*. Guilford Publications.

Harter, S., & Whitesell, N. R. (1996). Multiple pathways to self-reported depression and psychological adjustment among adolescents. *Development and Psychopathology, 8*(04), 761–777. doi: 10.1017/S0954579400007410

Hawton, K., Comabella, C. C., Haw, C., & Saunders, K. (2013). Risk factors for suicide in individuals with depression: A systematic review. *Journal of Affective Disorders*, *147*(1), 17–28. doi: 10.1016/j.jad.2013.01.004

Henrich, C. C., Blatt, S. J., Kuperminc, G. P., Zohar, A., & Leadbeater, B. J. (2001). Levels of interpersonal concerns and social functioning in early adolescent boys and girls. *Journal of Personality Assessment, 76*(1), 48–67. doi: 10.1207/S15327752JPA7601_3

Hipwell, A., Keenan, K., Kasza, K., Loeber, R., Stouthamer-Loeber, M., & Bean, T. (2008). Reciprocal influences between girls' conduct problems and depression, and parental punishment and warmth: A six year prospective analysis. *Journal of* A*bnormal Child Psychology, 36*(5), 663–677. doi: 10.1007/s10802-007-9206-4

Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*(1), 94–101. doi: 10.1037//0012-1649.35.1.94

Hymel, S., Rubin, K. H., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing problems from middle to late childhood. *Child Development, 61*(6), 2004–2021.

Joiner, T. E. (2000). Depression's vicious scree: Self-propagating and erosive processes in depression chronicity. *Clinical Psychology: Science and Practice, 7*(2), 203–218. doi: 10.1093/clipsy.7.2.203

Joiner, T., Coyne, J. C., & Blalock, J. (1999*).* On the interpersonal nature of depression: Overview and synthesis. In T. Joiner & J. C. Coyne (Eds.), *The interactional nature of depression: Advances in interpersonal approaches* (pp. 3–19). American Psychological Association. doi: 10.1037/10311-013

Joiner Jr., T. E., & Timmons, K. A. (2009). Depression in its interpersonal context. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 322–339). The Guilford Press.

Jokela, M., Virtanen, M., Batty, G. D., & Kivimäki, M. (2016). Inflammation and specific symptoms of depression. *JAMA Psychiatry*, *73*(1), 87–88. doi: 10.1001/jamapsychiatry.2015.1977

Jordan, J. V. (2013). *Relational resilience in girls*. In Handbook of resilience in children (pp. 73–86). Springer US.

Kaltiala-Heino, R., Rimpelä, M., Rantanen, P., & Laippala, P. (2001). Adolescent depression: The role of discontinuities in life course and social support. *Journal of Affective Disorders, 64*(2), 155–166. doi: 10.1016/S0165-0327(00)00233-0

Kandel, D. B. (1978). Homophily, selection, and socialization in adolescent friendships. *American Journal of Sociology, 84*(2), 427–436. doi: 10.1086/226792

Keefe, K., & Berndt, T. J. (1996). Relations of friendship quality to self-esteem in early adolescence. *The Journal of Early Adolescence, 16*(1), 110–129. doi: 10.1177/0272431696016001007

Kelly, A. B., Mason, W. A., Chmelka, M. B., Herrenkohl, T. I., Kim, M. J., Patton, G. C., ... & Catalano, R. F. (2016). Depressed mood during early to middle adolescence: A bi-national longitudinal study of the unique impact of family conflict. *Journal of Youth and Adolescence*, *45*(8), 1604–1613. doi: 10.1007/s10964-016-0433-2

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of GeneralPpsychiatry*, *62*(6), 593-602. doi: 10.1001/archpsyc.62.6.593

Key, J. M. (1995). Perceptions of poor maternal care are associated with adolescent depression. *Journal of Affective Disorders, 34*(2), 95–100. doi: 10.1016/0165-0327(95)00005-8

Kim, E., & Cain, K. C. (2008). Korean American adolescent depression and parenting. *Journal of Child and Adolescent Psychiatric Nursing, 21*(2), 105–115. doi: 10.1111/j.1744-6171.2008.00137.x

Kline, R. B. (2011). *Methodology in the Social Sciences. Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.

Kobak, R. R., Sudler, N., & Gamble, W. (1991). Attachment and depressive symptoms during adolescence: A developmental pathways analysis. *Development and Psychopathology, 3* 461–474. doi: 10.1017/S095457940000763X

Kupersmidt, J. B., DeRosier, M. E., & Patterson, C. P. (1995). Similarity as the basis for children's friendships: The roles of sociometric status, aggressive and withdrawn behavior, academic achievement and demographic characteristics. *Journal of Social and Personal Relationships, 12*(3), 439–452. doi : 10.1177/0265407595123007

Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development, 67*, 1103–1118. doi: 10.2307/1131882

Ladd, G. W., & Troop-Gordon, W. (2003). The role of chronic peer difficulties in the development of children's psychological adjustment problems. *Child Development, 74*(5), 1344–1367. doi : 10.1111/1467-8624.00611

La Greca, A. M., & Harrison, H. M. (2005). Adolescent peer relations, friendships, and romantic relationships: Do they predict social anxiety and depression? *Journal of Clinical Child and Adolescent Psychology, 34*(1), 49–61. doi: 10.1207/s15374424jccp3401_5

La Greca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology, 26*(2), 83–94. doi: 10.1023/A:1022684520514

La Guardia, J. G. (2008). On the role of psychological needs in healthy functioning: Integrating a self-determination theory perspective with traditional relationship theories. In J. V. Wood, A. Tesser, & J. G. Holmes (Eds.), *The self and social relationships* (pp. 27–48). Psychology Press.

Lane, J., Archambault, J., Collins-Poulette, M., & Camirand, R. (2010). Prévention du suicide: guide des bonnes pratiques à l'intention des intervenants des centres de santé et de services sociaux. *Québec (QC): Direction des communications, Ministere de la santé et des services sociaux*.

Laursen, B. P., Furman, W., & Mooney, K. S. (2006). Predicting interpersonal competence and self-worth from adolescent relationships and relationship networks: Variable-centered and person-centered perspectives. *Merrill-Palmer Quarterly, 52*(3), 572–600. doi: 10.1353/mpq.2006.0030

Lehrer, J. A., Shrier, L. A., Gortmaker, S., & Buka, S. (2006). Depressive symptoms as a longitudinal predictor of sexual risk behaviors among US middle and high school students. *Pediatrics, 118*, 189–200. doi: 10.1542/peds.2005-1320

Lewandowski, R. E., Acri, M. C., Hoagwood, K. E., Olfson, M., Clarke, G., Gardner, W., ... & Frank, S. (2013). Evidence for the management of adolescent depression. Pediatrics, 132(4), e996-e1009. doi: 10.1542/peds.2013–0600

Lewinsohn, P. M., Rohde, P., Seeley, J. R., Klein, D. N., & Gotlib, I. H. (2003). Psychosocial functioning of young adults who have experienced and recovered from major depressive disorder during adolescence. *Journal of Abnormal Psychology, 112*, 353–363. doi: 10.1037/0021-843x.112.3.353

Libet, J. M., & Lewinsohn, P. M. (1973). Concept of social skill with special reference to the behavior of depressed persons. *Journal of Consulting and clinical psychology, 40*(2), 304–312. doi: 10.1037/h0034530

Lopes, V. P., Gabbard, C., & Rodrigues, L. P. (2016). Effects of psychosocial variables in the similarity and interdependence of physical activity levels among adolescent best friend dyads. *Journal of Sports Sciences, 34*(9), 821–828. doi: 10.1080/02640414.2015.1075054

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. *Handbook of child psychology: formerly Carmichael's Manual of child psychology/Paul H. Mussen, editor*.

Manczak, E. M., Ordaz, S. J., Singh, M. K., Goyer, M. S., & Gotlib, I. H. (2019). Time spent with parents predicts change in depressive symptoms in adolescents with major depressive disorder. *Journal of Abnormal Child Psychology*, *47*(8), 1401–1408. doi: 10.1007/s10802-019-00526-5

Marcotte, D., Lévesque, N., & Fortin, L. (2006). Variations of cognitive distortions and school performance in depressed and non-depressed high school adolescents: A two-year longitudinal study. *Cognitive Therapy and Research, 30*(2), 211–225. doi: 10.1007/s10608-006-9020-2

Marcotte, D. (2009). Les facteurs prédicteurs de l'émergence du trouble dépressif pendant la transition primaire-secondaire. *Revue québécoise de psychologie, 30*(1), 37–56.

Markovic, A., & Bowker, J. C. (2017). Friends also matter: Examining friendship adjustment indices as moderators of anxious-withdrawal and trajectories of change in psychological maladjustment. *Developmental Psychology*, *53*(8), 1462–1473. doi: 10.1037/dev0000343

Masten, A. S. (2005). Peer relationships and psychopathology in developmental perspective: Reflections on progress and promise. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 87–92. doi: 10.1207/s15374424jccp3401_8

Masten, A. S., Burt, K. B., & Coatsworth, J. D. (2006). Competence and psychopathology in development. In D. Cicchietti & D. Cohen (Eds.), *Developmental Psychopathology. Vol. 3: Risk, disorder and psychopathology, 2nd ed* (pp. 696–738). J. Wiley & Sons: New York.

Mirabel-Sarron, C. (2005). *Soigner les dépressions avec les thérapies cognitives: Démarche pratique et prévention des rechutes*. Paris : Dunod.

Mendelson, M. J., & Aboud, F. E. (1999). Measuring friendship quality in late adolescents and young adults: McGill Friendship Questionnaires. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 31*(2), 130–132. doi : 10.1037/h0087080

Mendelson, M. J., & Aboud, F. E. (2012). McGill Friendship Questionnaire â€ “Respondent's affection (MFQ-RA). Measurement Instrument Database for the Social Science. Retrieved from www.midss.ie

Messer, S. C., & Gross, A. M. (1995). Childhood depression and family interaction: A naturalistic observation study. *Journal of Clinical Child Psychology, 24*(1), 77–88. doi: 10.1207/s15374424jccp2401_10

Morris, A. S., Criss, M. M., Silk, J. S., & Houltberg, B. J. (2017). The impact of parenting on emotion regulation during childhood and adolescence. *Child Development Perspectives*, *11*(4), 233–238. doi : 10.1111/cdep.12238

Nangle, D. W., Erdley, C. A., Newman, J. E., Mason, C. A., & Carpenter, E. M. (2003). Popularity, friendship quantity, and friendship quality: Interactive influences on children's loneliness and depression. *Journal of Clinical Child*

*and Adolescent Psychology, 32*(4), 546–555. doi: 10.1207/S15374424JCCP3204_7

National Collaborating Centre for Mental Health. Depression in children and young people: identification and management in primary, community and secondary care. Leicester and London: British Psychological Society and Royal College of Psychiatrists, 2005.

Nduna, M., Jewkes, R. K., Dunkle, K. L., Jama Shai, N. P., & Colman, I. (2010). Associations between depressive symptoms, sexual behaviour and relationship characteristics: A prospective cohort study of young women and men in the Eastern Cape, South Africa. *Journal of the International AIDS Society, 13*, 44. doi: 10.1186/1758–2652–13-44

Nelson, D. R., Hammen, C., Brennan, P. A., & Ullman, J. B. (2003). The impact of maternal depression on adolescent adjustment: The role of expressed emotion. *Journal of Consulting and Clinical Psychology, 71*, 935–944. doi: 10.1037/0022-006X.71.5.935

Nelson, L. J., Padilla-Walker, L. M., & Nielson, M. G. (2015). Is hovering smothering or loving? An examination of parental warmth as a moderator of relations between helicopter parenting and emerging adults' indices of adjustment. *Emerging Adulthood*, *3*(4), 282–285. doi : 10.1177/2167696815576458

Ngô, T. L., Chaloult, L., & Goulet, J. (2014). Guide de pratique pour l'évaluation et le traitement cognitivo-comportemental du trouble dépressif majeur, 1ère édition. TCC Montréal.

Nolan, S. A., Flynn, C., & Garber, J. (2003). Prospective relations between rejection and depression in young adolescents. *Journal of Personality and Social Psychology, 85*(4), 745–755. doi: 10.1037/0022-3514.85.4.745

Oh, W., Rubin, K. H., Bowker, J. C., Booth-LaForce, C., Rose-Krasnor, L., & Laursen, B. (2008). Trajectories of social withdrawal from middle childhood to early adolescence. *Journal of Abnormal Child Psychology, 36*(4), 553–566. doi: 10.1007/s10802-007-9199-z

Operario, D., Tschann, J., Flores, E., & Bridges, M. (2006). Brief report: Associations of parental warmth, peer support, and gender with adolescent emotional distress. *Journal of Adolescence, 29*(2), 299–305. doi: 10.1016/j.adolescence.2005.07.001

Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*(4), 611–621. doi: 10.1037/0012-1649.29.4.611

Pedersen, S., Vitaro, F., Barker, E. D., & Borge, A. I. (2007). The timing of Middle‐Childhood peer rejection and friendship: Linking early behavior to Early-Adolescent adjustment. *Child Development, 78*(4), 1037–1051. doi: 10.1111/j.1467-8624.2007.01051.x

Peer, S. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. *Developmental Psychopathology, Theory and Method, 1*, 419. doi: 10.1002/9780470939383.ch12

Petersen, A. C., Sarigiani, P. A., & Kennedy, R. E. (1991). Adolescent depression: Why more girls? *Journal of Youth and Adolescence, 20*(2), 247–271. doi: 10.1007/BF01537611

Prager, L. M. (2009). Depression and suicide in children and adolescents. *Pediatrics in Review, 30*, 199–206. doi: 10.1542/pir.30-6-199

Prinstein, M. J. (2007). Moderators of peer contagion: A longitudinal examination of depression socialization between adolescents and their best friends. *Journal of Clinical Child and Adolescent Psychology, 36*(2), 159–170. doi: 10.1080/15374410701274934

Prinstein, M. J., & Aikins, J. (2004). Cognitive moderators of the longitudinal association between peer rejection and adolescent depressive symptoms. *Journal of Abnormal Child Psychology, 32*(2), 147–158. doi: 10.1023/b:jacp.0000019767.55592.63

Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology, 30*(4), 479–491. doi: 10.1207/S15374424JCCP3004_05

Prinstein, M. J., Borelli, J. L., Cheah, C. S. L., Simon, V. A., & Aikins, J. W. (2005). Adolescent girls' interpersonal vulnerability to depressive symptoms: A longitudinal examination of reassurance-seeking and peer relationships. *Journal of Abnormal Psychology, 114*(4), 676–688. doi: 10.1037/0021-843X.114.4.676

Quach, A. S., Epstein, N. B., Riley, P. J., Falconier, M. K., & Fang, X. (2015). Effects of parental warmth and academic pressure on anxiety and depression symptoms in Chinese adolescents. *Journal of Child and Family Studies*, *24*(1), 106–116. doi: 10.1007/s10826-013-9818-y

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. doi: 10.1007/BF01537898

Reindl, M., Gniewosz, B., & Reinders, H. (2016). Socialization of emotion regulation strategies through friends. *Journal of Adolescence*, *49*, 146–157. doi: 10.1016/j.adolescence.2016.03.008

Rhodes, J. E., Contreras, J. M., & Mangelsdorf, S. C. (1994). Natural mentor relationships among Latina adolescent mothers: Psychological adjustment, moderating processes, and the role of early parental acceptance. *American Journal of Community Psychology, 22*(2), 211–227. doi: 10.1007/BF02506863

Riley, P. J. (2003). *The relationship between parental warmth and parental pressure to achieve with adolescent depression and anxiety in China* (Doctoral dissertation).

Robinson, A. L., Dolhanty, J., & Greenberg, L. (2015). Emotion‐focused family therapy for eating disorders in children and adolescents. Clinical Psychology and Psychotherapy, 22(1), 75–82. doi: 10.1002/cpp.1861

Rohner, R. P. (2005). Glossary of significant concepts in parental acceptance-rejection theory. In R. P. Rohner & A. Khaleque (Eds.) *Handbook for the study of parental acceptance and rejection,* 4th ed. (pp. 379–397). Storrs, CT: Rohner Research Publications.

Rohner, R. P. (2008). Introduction: Parental acceptance-rejection theory studies of intimate adult relationships. *Cross-Cultural Research, 42*(1), 5–12. doi: 10.1177/1069397107309749

Rohner, R. P., & Khaleque, A. (2005). Parental acceptance-rejection questionnaire (PARQ): Test manual. *Handbook for the study of parental acceptance and rejection*, 4, 43–106.

Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2005). Parental acceptance-rejection theory, methods, evidence, and implications. *Ethos, 33*(3), 299-334. doi: 10.1525/eth.2005.33.3.299

Rose, A. (2002). Co–Rumination in the friendships of girls and boys. *Child Development, 73*(6), 1830–1943. doi: 10.1111/1467-8624.00509

Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1–36. doi: 10.18637/jss.v048.i02

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (1998). Peer interactions, relationships, and groups. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 619–700). New York: John Wiley & Sons Inc.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 571–645). New York: John Wiley & Sons Inc.

Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual Review of Psychology, 60,* 141–171. doi: 10.1146/annurev.psych.60.110707.163642.

Rubin, K. H., Dwyer, K. M., Booth-LaForce, C., Kim, A. H., Burgess, K. B., & Rose-Krasnor, L. (2004). Attachment, friendship, and psychosocial functioning in early adolescence. *The Journal of Early Adolescence, 24*(4), 326–356. doi: 10.1177/0272431604268530

Rudolph, K. D., Flynn, M., & Abaied, J. L. (2008). A developmental perspective on interpersonal theories of youth depression. In J. R. Z. Abela & B. L. Hankin (Eds.), *Handbook of depression in children and adolescents* (pp. 79–102). The Guilford Press.

Rudolph, K. D., Hammen, C., Burge, D., Lindberg, N., Herzberg, D. S., & Daley, S. E. (2000). Toward an interpersonal life-stress model of depression: The developmental context of stress generation. *Development and Psychopathology 12*(2), 215–234. doi: 10.1017/s0954579400002066

Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2008). Gender differences in the relationship between perceived social support and student adjustment during early adolescence. *School Psychology Quarterly*, *23*(4), 496–514. doi: 10.1037/1045-3830.23.4.496

Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2010). Relationship between multiple sources of perceived social support and psychological and academic adjustment in early adolescence: Comparisons across gender. *Journal of Youth and Adolescence*, *39*(1), 47–61. doi: 10.1007/s10964-008-9368-6

Salzinger, S., Rosario, M., Feldman, R. S., & Ng-Mak, D. S. (2007). Adolescent suicidal behavior: Associations with preadolescent physical abuse and selected risk and protective factors. Journal of the American Academy of Child and Adolescent Psychiatry, 46(7), 859–866. doi: 10.1097/chi.0b013e318054e702

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling psychology*, *57*(1), 1.

Schwartz, D., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2000). Friendship as a moderating factor in the pathway between early harsh home environment and later victimization in the peer group. *Developmental Psychology, 36*(5), 646. doi: 10.1037/0012-1649.36.5.646

Schwartz, O. S., Dudgeon, P., Sheeber, L. B., Yap, M. B., Simmons, J. G., & Allen, N. B. (2012). Parental behaviors during family interactions predict changes in depression and anxiety symptoms during adolescence. *Journal of Abnormal Child Psychology, 40*(1), 59–71. doi: 10.1007/s10802-011-9542-2

Sebastian, C., Viding, E., Williams, K. D., & Blakemore, S.-J. (2010). Social brain development and the affective consequences of ostracism in adolescence. *Brain and Cognition, 72,* 134–145. doi: 10.1016/j.bandc.2009.06.008

Segrin, C. (1992). Specifying the nature of social skill deficits associated with depression. *Human Communication Research, 19*(1), 89–123. doi: 10.1111/j.1468-2958.1992.tb00296.x

Segrin, C. (2000). Social skills deficits associated with depression. *Clinical psychology review, 20*(3), 379–403. doi: 10.1016/s0272-7358(98)00104-4

Selfhout, M. V., Branje, S., & Meeus, W. H. J. (2008). Developmental trajectories of perceived friendship intimacy, constructive problem solving, and depression from early to late adolescence. *Journal of Abnormal Child Psychology, 37*(2), 251–264. doi: 10.1007/s10802-008-9273-1

Sheeber, L. B., Davis, B., Leve, C., Hops, H., & Tildesley, E. (2007). Adolescents' relationships with their mothers and fathers: Associations with depressive

disorder and subdiagnostic symptomatology. *Journal of Abnormal Psychology, 116*(1), 144–154. doi: 10.1037/0021-843X.116.1.144

Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Journal of Cognitive Education and Psychology, 2*(1), 55–87. doi: 0.1891/194589501787383444

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: W W Norton & Co.

Setterfield, M., Walsh, M., Frey, A. L., & McCabe, C. (2016). Increased social anhedonia and reduced helping behaviour in young people with high depressive symptomatology. *Journal of Affective Disorders*, *205*, 372–377. doi: 10.1016/j.jad.2016.08.020

Spence, S. H. (2003). Social skills training with children and young people: Theory, evidence and practice. *Child and Adolescent Mental Health, 8*(2), 84–96. doi: 10.1111/1475-3588.00051

Spitzberg, B. H., & Cupach, W. R. (1985). Conversational skill and locus of perception. *Journal of Psychopathology and Behavioral Assessment,* 7(3), 207–220.

Stacks, A. M., Oshio, T., Gerard, J., & Roe, J. (2009). The moderating effect of parental warmth on the association between spanking and child aggression: A longitudinal approach. *Infant and Child Development: An International Journal of Research and Practice*, *18*(2), 178–194. doi: 10.1002/icd.596

Starr, L. R., & Davila, J. (2008). Excessive reassurance seeking, depression, and interpersonal rejection: A meta-analytic review. *Journal of Abnormal Psychology*, *117*(4), 762–775. doi: 10.1037/a0013866

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. doi: 10.1037/0021-843X.113.1.155

Thapar, A., Collishaw, S., Pine, D. S., & Thapar, A. K. (2012). Depression in adolescence. *Lancet, 379*, 1056–1067. doi: 10.1016/S0140-6736(11)60871-4

Tuisku, V., Kiviruusu, O., Pelkonen, M., Karlsson, L., Strandholm, T., & Marttunen, M. (2014). Depressed adolescents as young adults – Predictors of suicide attempt and non- suicidal self-injury during an 8-year follow-up. *Journal of Affective Disorders, 152–154*, 313-319. doi: 10.1016/j.jad.2013.09.031

Urberg, K. A. (1992). Locus of peer influence: Social crowd and best friend. *Journal of Youth and Adolescence, 21*(4), 439–450. doi: 10.1007/BF01537896

Van Voorhees, B. W., Paunesku, D., Kuwabara, S. A., Basu, A., Gollan, J., Hankin, B. L., ... & Reinecke, M. (2008). Protective and vulnerability factors predicting new onset depressive episode in a representative of US adolescents. *Journal of Adolescent Health, 42*(6), 605–616. doi: 10.1016/j.jadohealth.2007.11.135

Veenstra, R., Dijkstra, J. K., & Kreager, D. A. (2017). Pathways, networks, and norms. A sociological perspective on peer research. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups*. New York, NY: Guilford.

Vitaro, F., Boivin, M., & Bukowski, W. M. (2009). The role of friendship in child and adolescent psychosocial development. In K. H. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 568–585). The Guilford Press.

Volling, B. L., Mackinnon-Lewis, C., Rabiner, D., & Baradaran, L. P. (1993). Children's social competence and sociometric status: Further exploration of aggression, social withdrawal, and peer rejection. *Development and Psychopathology, 5*(03), 459–483. doi:10.1017/S0954579400006830

Von Soest, T., Wichstrøm, L., & Kvalem, I. L. (2016). The development of global and domain-specific self-esteem from age 13 to 31. *Journal of Personality and Social Psychology*, *110*(4), 592–608. doi: 10.1037/pspp0000060

Vorndran Hedrick, A. K., Geller, P. A., Grunberg, V. A., & Mudrak, P. L. (2019). Female high-reassurance seekers are at risk for adolescent depression. *Advances in Mental Health*, 1–10. doi: 10.1080/18387357.2019.1568836

Wagner, B. M., Silverman, M. A. C., & Martin, C. E. (2003). Family factors in youth suicidal behaviors. American Behavioral Scientist, 46(9), 1171–1191. doi: 10.1177/0002764202250661

Wang, A., Peterson, G. W., & Morphey, L. K. (2007). Who is more important for early adolescents' developmental choices? Peers or parents? *Marriage and Family Review*, *42*(2), 95–122. doi: 10.1300/J002v42n02_06

Weissman, M. M., Wolk S., Goldstein, R. B., Moreau, D., Adams, P., Greenwald, S., … Wickramaratne P. (1999). Depressed adolescents grown up. *Journal of the*

*American Medical Association, 281*, 1707–1713. doi: 10.1001/jama.281.18.1707

Wentzel, K. R., Barry, C. M., & Caldwell, K. A. (2004). Friendships in middle school: influences on motivation and school adjustment. *Journal of Educational Psychology*, *96*(2), 195–203. doi: 10.1037/0022-0663.96.2.195

Whitbeck, L. B., Conger, R. D., & Kao, M. Y. (1993). The influence of parental support, depressed affect, and peers on the sexual behaviors of adolescent girls. *Journal of Family Issues, 14*(2), 261–278. doi: 10.1177/019251393014002006

Wigfield, A., Byrnes, J. P., & Eccles, J. S. (2006). Development during early and middle adolescence. In P. A. Alexander, & P. H. Winne (Eds.), *Handbook of Educational Psychology (2nd ed.)* (pp. 87–113). New York, NY: Erlbaum.

Wills, T. A., & Cleary, S. D. (1996). How are social support effects mediated? A test with parental support and adolescent substance use. *Journal of Personality and Social Psychology, 71*(5), 937–952. doi: 10.1037//0022-3514.71.5.937

Youniss, J., & Smollar, J (1987). *Adolescent relations with mothers, fathers and friends,* University of Chicago Press.