ABSTRACT

EXPLORING POSITIVE OUTCOMES FOR YOUTH WITH BIPOLAR SPECTRUM DISORDER

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Bipolar Spectrum Disorder (BSD) in a severe psychiatric disorder and relatively little is known about positive outcomes for youth with this diagnosis. The goal of this dissertation was to gain understanding of how parenting context relates to positive outcomes (e.g., reduced psychopathology, life satisfaction, resiliency, positive schemas) among youth with a diagnosis of BSD. Study 1 revealed that parental characteristics including limit setting, autonomy granting, and egalitarian views of parenting relate to lower levels of psychopathology for youth screened for a diagnosis of BSD at a tertiary care facility. In addition, the relation between parenting context and psychopathology did not significantly differ for youth with a diagnosis of BSD and youth with other mental health difficulties. Study 2 extended these findings and found that parental support and limit setting longitudinally predicted positive outcomes for youth with BSD. Parental acceptance related to all measures of positive functioning (i.e., life satisfaction, resilience, positive schemas) and unexpectedly, so did psychological control, perhaps playing a unique role in this sample. Study 2 results suggest that positive schemas may be one mechanism linking parental acceptance to resiliency for youth with BSD. Finally, qualitative analysis revealed that parents and youth participants reported on many positive aspects of youth with BSD and that on a thematic level, youth responses cohered largely with parent responses. Overall, this dissertation has implications for informing a more complex view of parenting context and BSD and has implications for intervention efforts for these youth and their families.
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Exploring Positive Outcomes for Youth with Bipolar Spectrum Disorder

**Introduction**

Pediatric Bipolar Disorder (PBD) is a severe psychiatric disorder associated with symptoms of mania and depression (American Psychiatric Association, 1994). These symptoms significantly hinder psychosocial functioning and can chronically impede normal childhood development across several domains (e.g., social relationships, family relationships, etc.; Geller et al., 2000). Research from the adult literature highlights the severity of Bipolar Disorder (BD), with approximately 33% to 50% of individuals with BD attempting suicide, and approximately 15% to 20% dying by suicide (see Gonda et al., 2012 for a review). Overall, the suicide rate for bipolar disorder is 20 times higher than the average rate for the general adult population (Keks, Hill, & Sundram, 2009; Pompili, et al., 2006), and depression, including BD, has been identified by the World Health Organization (WHO) as the leading cause of disability worldwide (i.e., total years lost due to disability; Marcus, Yasamy, van Ommeren, Chisholm, & Saxena, 2012; WHO, 2008). Compared to adult onset BD, PBD is associated with higher levels of family BD, greater rates of comorbidity with other mental health disorders, and an overall more deleterious prognosis (e.g., more severity of symptoms, greater likelihood of relapse, etc.; Ernst & Goldberg, 2004; Yatham, Kauer-Sant’Anna, Bond, Lam, & Ivan, 2009). Given the severity of impact and the potential mortality of this disorder, identifying factors associated with optimal functioning among those with BD in its early childhood and adolescent stages is an important research priority. Thus, the goal of this dissertation is to better understand parenting context factors that relate to reduced psychopathology as well as positive indicators of wellbeing (e.g., life satisfaction, resiliency, development of positive self-concept) in PBD.
Overview of Pediatric Bipolar Disorder

PBD is a relatively new concept and has only recently gained increased recognition (Birmaher & Axelson, 2006). In 1996, bipolar disorder was infrequently diagnosed among youth at in-patient facilities, however by 2004, PBD became the most frequent diagnosis for youth within in-patient facilities (Blader & Carlson, 2007). Although some attribute this to an increase in actual rates of PBD, many attribute the increased rate of diagnosis to greater awareness of symptomatology in youth and differences in diagnostic criteria (Blader & Carlson; Van Meter, Moreira, & Youngstrom, 2011). A recent meta-analysis of epidemiological studies of PBD between 1985 and 2007, showed that the overall prevalence rate of PBD was 1.8% and found no evidence suggesting an increase in rates of PBD over time (Van Meter et al.). The variations in reported prevalence rates of PBD in this study were attributed to differences in diagnostic criteria. This is not surprising given the continued debate about the symptom criteria for a diagnosis of PBD (Meyer, Fuhr, Hautzinger, & Schlarb 2011).

Different subtypes of bipolar disorder appear to be on a continuum, with each subtype characterized by a unique combination of manic and/or depressive episodes. These subtypes, as outlined below, are thought to comprise Bipolar Spectrum Disorder (BSD): Bipolar I is characterized by the presence of at least one episode of mania; Bipolar II is characterized by hypomania (a less severe form of mania in duration and presentation) and depressive episodes; Cyclothymic Disorder is characterized by hypomania symptoms and depressive or dysthymic symptoms; and Bipolar Disorder Not Otherwise Specified is characterized by a combination of manic and depressive symptoms that do not meet one of the specific criteria for any of the previously outlined types of BD (American Psychiatric Association, 1994). Consistent with the
literature in this area, and to encompass all subtypes of bipolar disorder, the term Bipolar Spectrum Disorder (BSD) will be used throughout the dissertation.

Based on the Diagnostic and Statistical Manual of Mental Health Disorders- Fourth Edition (DSM-IV; American Psychiatric Association, 1994), a depressive episode is characterized by a period of low mood, or irritability for youth, that may coincide with anhedonia (i.e., a lack of interest in previously rewarding activities/experiences), decreased or increased appetite, decreased energy and fatigue, difficulty sleeping, suicidal ideations, feelings of worthlessness or guilt, psychomotor retardation (i.e., reduced physical movements) or agitation, racing thoughts, and difficulty thinking or concentrating. A manic episode is characterized by a persistently elevated mood that often coincides with decreased need for sleep, pressured speech, distractibility, increased involvement in goal oriented activities, psycho-motor agitation (i.e., unintentional and/or purposeless motion; fidgeting), involvement in pleasurable activities that have a high potential for painful consequences, and grandiosity (i.e., a false belief about having inflated worth, knowledge, or a special identity, which are firmly sustained despite undeniable evidence to the contrary).

For youth, the presentation of BSD changes slightly. Youth diagnosed with BSD may evidence more chronic symptoms, a faster rate of change between manic and depressive states (i.e., rapid cycling), as well as greater dysphoria (i.e., intense feelings of depression) and irritability as compared to adults diagnosed with BSD (Biederman, et al., 2005; Geller & Luby, 1997; Youngstrom, Birmaher, & Findling, 2008). Differential diagnosis is also particularly difficult with this population given the many overlapping symptoms (e.g., irritability, distractibility, hyperactivity, atypical thinking, etc.) with other diagnoses (e.g., major depressive disorder, attention deficit-hyperactivity disorder, conduct disorder, psychosis, obsessive
compulsive disorder, etc.; Luckenbaugh, Findling, Leverich, Pizzarello, & Post, 2009; Donfrancesco, et al., 2010).

Theories of Environmental Influence

It is generally agreed upon that BSD has a strong genetic component and has traditionally been viewed as one of the most heritable and organic or biologically based mental health disorders (Craddock & Jones, 1996). Twin and family studies of individuals with BSD have shown heritability to range between 60% and 93% (Kieseppa, Partonen, Haukka, Kaprio, & Lonnqvist, 2004; McGuffin, et al., 2003; Smoller & Finn, 2003), and children of parents with BSD are four times more likely to develop a mood disorder than those of healthy control parents (LaPalme, Hodgins, & LaRoche, 1997). Although a prominent factor in BSD, genetics cannot fully explain the individual differences in the expression and course of the disorder, nor at present can genetic contribution be modified. For these reasons, researchers have increasingly been considering psychosocial and environmental contributions to the expression of BSD (Alloy, et al., 2005; Alloy, Abramson, Neeren, et al., 2006; Ellicott, Hammen, Gitlin, Brown, & Jamison, 1990; Johnson & Roberts, 1995; Miklowitz, Buickians, & Richards, 2006).

A number of theories from the depression literature have been put forth to aid in the understanding of the psychosocial and environmental influences that may act as mechanisms in the development of BSD. The diathesis-stress model (Ingram & Luxtin, 2005) proposes that individuals have vulnerabilities (e.g., genotypes) that contribute to depressive symptoms and are expressed when life stressors are also present (Abela, Aydin, & Auerbach, 2006; Spangler, Simons, Monroe, & Thase, 1997). This theory suggests that both environmental and biological aspects play a role in the expression of the disorder. According to the stress generation model (Hammen, 1991), individuals are prone to cause stress in their lives, which in turn increases their
vulnerability to depressive symptoms (Auerbach, Eberhart, & Abela, 2010; Eberhart, Auerbach, Bigda-Peyton, & Abela, 2011; Hankin, Kassel, & Abela, 2005; Holahan, Moos, Holahan, Brennan, & Schutte, 2005), addressing the influence individuals can have on the stressors they experience. A third theory linking environmental stressors to psychopathology, the kindling theory (Post, Susan, & Weiss, 1992), posits that the first episode of BSD (manic or depressive) is generally related to a pronounced psychological stressor and later episodes are generally related to stressors that are less extensive (Brown, Harris, & Hepworth, 1994; Horesh & Iancu, 2010; Post et al.; Stroud, Davila, & Moyer, 2008). Thus, as the disorder progresses, the stressors required to trigger an episode become less potent.

Overall, it is difficult to determine the most relevant environmental theory for BSD; a genetic interaction with stressful life events, a predisposition to seek out stressful situations, or the stressful life event itself. However, a commonality among these theories is the importance of life stressors and the environmental influence on the presentation of BSD. Although the manner by which life stressors impact psychopathology continues to be debated, there is general agreement that life stressors play an important role in the etiology and course of mood related disorders, including BSD (Johnson & Roberts, 1995). A cross-sectional study (Tillman et al., 2003) examined the relation between stressful life events and psychopathology among youth and found that youth with BSD experienced more stressful life events than youth diagnosed with ADHD and those with no diagnoses. In another study, researchers found that when following adolescents with BSD over a 12-month period, higher levels of stress in intimate relationships (e.g., family, romantic, and peer) was associated with less improvement in symptomatology (e.g., depression, mania, and combined mood symptoms; Kim, Miklowitz, Biuckians, & Mullen, 2007). Furthermore, the greatest frequency of stressful events and the highest chronic levels of
stress were associated with family relationships, suggesting that of the environmental influences related to BSD, those that seemed particularly prominent involved the family context (Kim et al.).

Much of the work examining relations between environmental stressors and BSD in childhood is retrospective in nature, relying on primarily cross-sectional designs. Such designs involve adults with BSD and their family members, reflecting on environmental factors throughout the target patient’s life as well as the timing of manic/depressive episodes. There are a number of methodological issues with these types of designs. Specifically, the validity of the information reported can be affected by long term recall, additional experiences in life (e.g., relations with others, cognitive development, life events, etc.), and biases can be introduced. For example, one review showed that individuals tend to shift the timing of events to help explain episode onset (see Johnson, 2005a for a review). One aim of the current study is to examine how measures of parenting context for youth with BSD prospectively predict symptoms of psychopathology and their wellbeing several years later.

**Parenting Context**

Some have argued that parenting characteristics are the most important of all environmental factors for understanding the onset and course of BSD (Belardinelli, et al., 2008). Similar to the unipolar depression research, the studies relating parenting context to BSD focus on attributes such as low levels of parental warmth or acceptance (e.g., excessive disapproval, criticism, a lack of contact with the child) and high levels of over-protection or psychological control (e.g., excessive regulation of the child’s activities, promoting the child’s dependence on parent’s, telling the child how to think and feel; Alloy, Abramson, Smith, Gibb, & Neeren, 2006b; Geller et al 2000; 2002; Parker, 1983; Schenkel, West, Harral, Patel, & Pavuluri, 2008).
Drawing from the parenting literature examining childhood unipolar depression, a lack of parental warmth or parental rejection is more strongly related to childhood depression than parental psychological control. Theorists have suggested that the influence of parental rejection may be more salient as it affects a child’s self-esteem, promotes a sense of helplessness, and prompts the development of negative schemas all of which set the stage for the development of psychopathology (Garber & Flynn, 2001; Kaslow, Deering, & Racusin, 1994).

Surprisingly, within the BSD realm, many early studies indicate no difference between the parenting characteristics for families with a child with BSD and typically developing comparison groups, when asking adults to report retrospectively (Cooke, Young, Mohri, Blake, & Joffe, 1999; Joyce, 1984; Parker, 1979; Perris, Arrindell, Van der Ende, & Knorr, 1986). However, a more recent study including an undergraduate sample found that youth with BSD reported less warmth and acceptance and more psychological control for both parents, than did a matched control group (Neeren, Alloy, & Abramson, 2008), suggesting differences between youth with BSD and normal controls.

Research comparing parenting characteristics for youth with a diagnosis of BSD versus youth with other complex mental health difficulties has also provided mixed results. One study comparing adolescents with unipolar and bipolar depression, found that adolescents with BSD reported more difficulties with their parents as compared to the adolescents with unipolar depression (Robertson, Kutcher, Bird, & Glasswick, 2001). In comparison, much research has suggested similar parenting practices (e.g., a lack of warmth and the presence of negative psychological control) are present for the development of unipolar and bipolar depression (Gerlsma, Emmelkamp, Arrindell, 1990; Neeren et al., 2008; Parker, 1983). Another study, found that adults with BSD reported similar levels of affection from and attachment to their
mother, as did adults with unipolar depression, and both differed significantly from normal controls (Rosenfarb, Becker, & Khan, 1994). Yet another study comparing youth with a diagnosis of BSD to youth with a diagnosis of Attention-Deficit Hyperactivity Disorder (ADHD), as well as a community control group, found that youth with BSD reported lower levels of parental warmth and greater levels of parental hostility when compared to the group with ADHD and the community control group (Geller et al., 2000). This suggests a significant difference between youth with BSD and youth with other complex mental health difficulties. Overall, a review of the literature examining the role of parenting in BSD revealed that there is generally a lack of research on the parenting practices of youth with BSD and that much of the research in this area is not consistent (Alloy, Abramson, Smith, et al., 2006). This review also pointed out that many of the studies relating parenting to BSD have a number of methodological concerns (e.g., retrospective reporting, primarily adult populations, etc.; Alloy, Abramson, Smith, et al.), which may limit the conclusions made in some cases. Thus, the current dissertation aimed to further explore the relation between parenting and BSD in a sample of youth with complex mental health difficulties, using contemporaneous reports of parenting.

What has been consistently found is that higher levels of parental psychological control and lower levels of parental acceptance or warmth are related to BSD (Geller et al., 2000; Neeren, et al., 2008). Specifically, youth who experienced lower levels of acceptance/warmth and greater levels of negative psychological control at a young age were more likely to be diagnosed with BSD, even after controlling for a family history of BSD and current mood states (Neeren at al.). In addition, low maternal warmth or acceptance has been associated with increased relapse after a manic episode among early-adolescent youth with BSD (Geller, Tilman, Craney, & Bolhofner, 2004).
Research has also shown that other parenting context variables including parental expression of criticism and emotional over-involvement, otherwise known as expressed emotion (EE; Vaughn & Leff, 1976), can influence the course of BSD. Specifically, high levels of expressed emotion has been related to increased risk of BSD onset and relapse, longer episodes, higher levels of mania and depression, and overall a worse course of BSD (Miklowitz, et al., 2006; Miklowitz, Goldstein, Nuechterlein, Snyder, & Mintz, 1988; Ramana, & Bebbington, 1995; Rosenfarb, et al., 2001). Within families with youth with a BSD diagnosis, poorer family functioning (e.g., poorer communication and problem solving) was related to higher levels of suicidality for these youth (Algorta et al., 2011). Finally, treatment programs targeted at unipolar depression and pediatric BSD have also shown symptom improvement when including a family component (Beardslee et al., 1997; Clarke et al., 2001; Fristad, Gavazzi, & Mackinaw-Koons, 2003; Fristad, Goldberg-Arnold, & Gavazzi, 2003; Pavuluri et al., 2004). In sum, research suggests parental warmth, psychological control, and criticism may be important associates of BSD (Miklowitz et al., 2006; Neeren at al., 2008; Geller et al., 2004). In the current dissertation differences in parenting characteristics and the relations between parenting characteristics and psychopathology between youth diagnosed with BSD and those diagnosed with other mental health difficulties will be examined.

Undoubtedly, the parenting context is highly complex and many parenting characteristics are important to consider when exploring the relations between parenting and youth psychopathology. One focus of the current dissertation was to deepen and broaden the research relating parenting context to BSD. Toward this end, a wider array of parenting characteristics was considered when examining associations between parenting and youth psychopathology.
Based on a recent review of sound measures of parent-child relationships (Mowder, Shamah, & Zeng, 2010), the Parent and Child Relationship Inventory (Gerard, 1994) was used to measure this wider array of parenting characteristics including variables of parental support, parental satisfaction, parental involvement, parental communication, autonomy granting and parental role orientation. Each of these parenting variables is described in more detail below.

Having a child with mental health difficulties is often challenging for parents and is generally associated with higher levels of parental stress (Angold et al., 1998; Floyd & Gallagher, 1997; Hayden & Goldman, 1996; Maes, Broekman, Dosen, & Nauts, 2003; Osborne & Reed, 2010). Considerable research suggests that the amount of support a parent receives (e.g., respite care, someone to talk to, information about their child’s difficulties, counseling for the parent, financial support, kin support) is directly related to positive parenting outcomes such as, lower levels of reported stress, higher levels of parental self-esteem and optimism, and more positive family organization and structure (Douma, Dekker, & Koot, 2006; Taylor, 2011; Turnbull & Ruef, 1996). Parental support is also related to lower levels of youth psychopathology (e.g., anxiety, depression, aggression, delinquency, etc.) and higher levels of youth well-being (e.g., self-esteem, academic success, life satisfaction, lower psychopathology, greater ability to plan and organize, greater levels of inhibition, etc.; Brody et al., 2009; Gaylord-Harden, Campbell, & Kesselring, 2010; Douma et al.; Kogan & Brody, 2010; Schroeder & Kelley, 2010; Taylor, Lopez, Budescu, & McGill, 2012; Wu et al., 1999). These findings suggest that parental support is an important parenting factor to examine when considering how parenting context relates to psychopathology. Most of this research has examined the association between parental support and internalizing symptoms or mood difficulties broadly, and thus,
little is know about the associations between parental support and psychopathology for youth diagnosed with BSD.

Parental satisfaction also seems to play a key role in the parent-child relationship. Parental satisfaction has been defined as “a parent's feeling of contentment or gratification regarding his or her parental responsibilities toward the child” (p. 218; Mounton & Tuma, 1988). Research has established the relation between parental satisfaction and more positive parenting outcomes (e.g., greater parenting self-efficacy, increased happiness as a parent; Coleman & Karraker, 2000) as well as more positive youth outcomes (e.g. reduced levels of maltreatment towards the child, lower levels of behavioural difficulties; Kolko, Kazdin, Thomas, & Day, 1993; Renk, 2011). In relation to mood related disorders, one study examining parenting satisfaction and parenting self-efficacy found that parents of children who were reported to be more emotionally intense (i.e., has a tendency to become emotionally upset easily and intensely) were less likely to be satisfied when compared to mothers of less emotionally intense children (Coleman & Karraker). This suggests that parental satisfaction may be affected when parenting a child with a mood disorder. This dissertation assessed parental satisfaction to further explore these relations within a sample of youth with a BSD diagnosis.

Within the parent-child relationship the level of parent involvement in the child’s life may also influence child psychopathology. Parental involvement is typically viewed on a continuum, ranging from overinvolved to uninvolved or absent in the child’s life (Wells & Albano, 2005). For youth, supportive and involved relationships with parents are thought to protect against many negative outcomes including those associated with family and peer interactions (See Laursen & Collins, 2009, for a review). Specifically, positive parental involvement is thought to promote positive development for adolescents by increasing self-
esteem, a sense of competence, and life satisfaction (Lamborn, Mounts, Steinberg, & Dornbush, 1991; Nielsen & Metha, 1994; Suldo & Huebner, 2004; Steinberg, 2001). Parental involvement has also been linked to lower levels of aggression and delinquency (Van der Graaff, Branje, De Weild, & Meeus, 2012; Walters, 2013) as well as attention and hyperactivity symptoms (Hawes, Dadds, Frost, & Russell, 2013). Mixed results for parental involvement in relation to depression symptoms are evidenced in the literature. One study examining parental involvement and symptoms of depression showed that parental involvement did not precede changes in depressive symptoms (Young, Berenson, Cohen, & Garcia, 2005). Other studies have suggested a relation between parental involvement and depressive symptoms over time, such that symptoms can be reduced with parental involvement and exacerbated by overinvolved or intrusive parent involvement (Branje, Hale, Frijns, & Meenus, 2010; Delay, Hafen, Cunha, Weber, & Laursen, 2013; Needham, 2008; Sheeber, Hops, Alpert, Davis, & Andrews, 1997; Stice, Ragan, & Randall, 2004; Wells & Albano). Given the available literature underscoring the relation between parental support and a wide range of psychopathology (e.g., depression, anxiety, aggression, etc.; Brody et al., 2009; Kogan & Brody, 2010; Schroeder & Kelley, 2010; Taylor, et al., 2012), the current dissertation aimed to examine the relation between parental involvement and psychopathology for youth with BSD.

Parental communication, or the parents’ ability to talk with their child and show empathy and understanding through conversation (Gerard, 1994), is also an important parenting element to consider. Overall, the link between parental communication and positive outcomes from youth with mood disorders has been established (Burge, & Hammen, 1991; Robertson et al., 2001). For example, one study comparing youth at high and low risk for depression illustrated that maternal communication was related to affective symptoms, and the positive quality of the
communication was more predictive of lower levels of affective symptoms than the negative communication was of higher levels of affective symptoms (Burge, & Hammen). When considering BSD specifically, a study comparing adolescents with BSD, unipolar depression and normal controls, found no significant group differences in communication with parents (Robertson et al.). The importance of communication in the parent-child relationship for youth with mood disorders has also been indirectly supported by the inclusion of communication as a key topic in Cognitive Behavioural Therapy (CBT) programs for youth with depression (Lewinsohn, Clarke, Hops & Andrews, 1990; Wells & Albano, 2005). These treatment programs have shown that increased positive parental communication can have a positive effect on depression and other internalizing symptoms (Lewinsohn, et al.; Wells & Albano). This dissertation will further explore the relation between parental communication and psychopathology in a sample of youth with BSD.

Another major task for parents is to allow their child to develop a sense of independence and autonomy. Although sometimes viewed as the opposite of psychological control, autonomy granting has been established as a unique parenting factor (Silk, Morris, Kanaya, & Steinberg, 2003). Parents play an important role in this area and can vary considerably in how much they help to promote the development of autonomy in their child. Some of the ways in which parents promote autonomy is by allowing their children to make independent decisions (e.g., choosing their clothing, using negotiation with their children as opposed to imposing rules arbitrarily, and not engaging in power assertive parenting strategies; Kuczynski & Kochanska, 1990; Van Aken & Riksen-Walraven, 1992). Much research has shown that autonomy is generally related to positive outcomes for youth (e.g., school success, maturity, increased self confidence, positive self-expression, increased self-esteem and life satisfaction; Allen, Hauser, Bell, & O’Connor,
1994; Kurdek, Fine, & Sinclair, 1995; Mattanah, 2001; Neilsen & Metha, 1994; Suldo & Huebner, 2004). When parents do not provide opportunities for youth to develop autonomy, parents may be engaging in autonomy discouragement. Autonomy discouragement has been related to higher levels of internalizing difficulties, particularly anxiety (Barber, 1996; Barber & Olsen, 1997; Garber, Robinson, & Valentiner, 1997; Herman, Dornbusch, Herron, & Herting, 1997; McLeod, Wood, Weisz, 2007; Rapee, 2011), and autonomy granting has been linked to lower levels of anxiety and depression in adolescent samples (Eccles, Early, Frasier, Belansky, & McCarthy, 1997; Herman, et al.). Autonomy granting’s relation to psychopathology for youth with a diagnosis of BSD was examined in the current dissertation.

Parents may find themselves balancing the importance of allowing their children enough autonomy to develop, while also providing limits to guide them through development. Limit setting (i.e., parental control and monitoring) has been related to better adjustment in youth (e.g., social competence, greater self-concept, cognitive maturation, life satisfaction, self-regulation, emotional control, inhibition, shifting tasks, etc.; Houck, & LeCuyer-Maus, 2002; Lecuyer & Houck, 2006; Schroeder & Kelley, 2010; Suldo & Huebner, 2004) and is thought to provide a sense of routine and organization which has been related to outcomes of youth well-being (Koblinsky, Kuvalanka, & Randolf, 2006; Lanza and Taylor 2010; Mattanah, 2001; Roche & Leventhal, 2009). A large body of literature has supported the relation between limit setting and lower levels of problem behavior (e.g., lower violence, externalizing behaviors, delinquency, depression, risk taking, substance use, greater academic competence; Bean, Barber, & Crane, 2009; Roche & Leventhal; Vazsonyi, Pickering, & Bolland, 2006; Wu, Lu, Sterling, & Wiesner, 2004), particularly externalizing behaviour problems (Middleton, Scott, & Renk, 2009). There has been less focus on the relation between limit setting and internalizing behaviours. Given the
mixed presentation for youth with BSD (i.e., depression and mania), limit setting may be an important parenting strategy to provide a sense of consistency (i.e., routine and organization) for these youth. Thus, the current dissertation aimed to further explore the relation between limit setting and psychopathology for youth with a diagnosis of BSD.

Recently, in the North American context, the social roles for men and women have altered affecting how mothers and fathers divide responsibility for parenting their child (Auster & Ohm, 2000). Specifically, men have become more involved with parenting and other household tasks (Auster & Ohm). This, parental role orientation, or an individuals’ attitude toward egalitarian values (Gerrard, 1994), is thought to impact the parent-child relationship. Many studies have shown that childrearing disagreement relates to youth behavior problems, lower self-confidence, and lower social skills for youth (Deal, Halverson, & Wampler, 1989; Vaughn, Block, & Block, 1988). When parents have difficulty coordinating the way in which they parent their child (McHale, Lauretti, Talbot, & Pouquette, 2002), this has been associated with greater levels of aggression, externalizing behaviours, anxiety and depression (Feinberg, Kan, & Hetherington, 2007; Katz & Low, 2004; McHale & Rasmussen, 1998; Schoppe, Mangelsdof, & Frosch, 2001). Overall, when parents’ attitudes do not reflect egalitarian values they tend to report negative parental outcomes (e.g., stress, psychopathology, poor parenting practices) and negative youth outcomes (e.g., internalizing symptoms, externalizing symptoms, lower self-esteem, alienation, difficulties with problem solving; See Feinberg 2002, 2003 for reviews), suggesting this is another important factor to consider when examining parent-child relationships. To explore this relation for youth with a diagnosis of BSD, the current dissertation included a measure of parental role orientation.
In sum, to garner a more comprehensive view of associations between parenting, the parent-child relationship and psychopathology in youth with BSD than previous research affords, a broad range of prominent parenting characteristics (e.g., acceptance and warmth, psychological control, criticism, parental support, parental satisfaction, parental involvement, communication, autonomy granting, limit setting, and role orientation) were examined. Furthermore, the current project aimed to explore the relation between parenting characteristics and psychopathology for youth with BSD in comparison to youth with other complex mental health difficulties.

Another important way this dissertation expanded previous research on parenting context for youth with a diagnosis of BSD was to build on the previous methods used to collect research in this area. First, many studies examining the role of parenting within the context of BSD have used retrospective designs, having adults with BSD recall their childhood memories (see Alloy, Abramson, Neeren, et al., 2006, Alloy, Abramson, Smith, et al., 2006 for a review). Retrospective studies may not provide as reliable measure of parenting as current reporting (Alloy, Abramson, Neeren, et al.; Holden & Edwards, 1989) and the present study aimed to improve this by gathering contemporaneous measures of parenting collected at the time of the child’s early diagnosis and to also see how these variables prospectively predicted positive functioning several years later. Secondly, much of the previous research uses only parent reports of parenting or adult retrospective reporting, with few studies utilizing youth report of parenting or multiple perspectives (i.e., both parent and youth reports). Youth and parents tend to characterize family variables quite differently and the level of correspondence between parent and adolescent reports are often low to moderate (Clay, Surgenor, & Frampton, 2008; De Reyes & Kazdin, 2005; Kolko & Kazdin, 1993). Specifically, many family variables are related to report discrepancy (e.g., family conflict, family stress, parental dysfunction, family
communication, parental acceptance, and parental psychopathology; see Boughton & Lumley, 2011, for a review). Thus, it is often recommended that a combination of both parent and youth report be used to gain the best representation of family variables. This dissertation addressed this limitation by using a combination of parent and youth reports of parenting context and an indirect (observer) measure of parenting elicited through a parent speech sample, to capture a more comprehensive and potentially accurate and complex view of the parenting context.

**Positive Psychology Perspectives on Youth Psychopathology**

After years of focusing mainly on understanding and combatting negative outcomes, the mental health field has begun applying positive psychology perspectives to the area of psychopathology (Keyes, 2006; Lampropoulous, 2001; Vaillant, 2000). In general, positive psychology is focused on understanding positive human characteristics or strengths and positive emotional experiences and promoting these positive processes and characteristics to help people flourish in their lives (Aspinwall & Staudinger, 2003; Gillham & Seligman, 1999; Keyes & Haidt, 2003; Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002).

A recent review addressed the importance of not only acknowledging the difficulties and negative aspects of functioning associated with psychopathology (e.g., sadness, anxiety, anger, stress, loneliness, low self-esteem, etc.), but also the positive aspects of functioning (e.g., gratitude, flexibility, positive emotions, well-being, life satisfaction, resilience, etc.) that can aid in predicting disorders, buffering against the negative impact of disorders, and ultimately preventing the development of disorders (Wood & Tarrier, 2010). The positive clinical psychology literature is considered an attempt to integrate aspects of positive psychology within the field of clinical psychology (Wood & Tarrier). This theoretical framework suggests that clinical psychology focus on integrating both positive and negative characteristics of a disorder.
to better and more holistically understand and treat psychopathology. Thus, equally weighing positive and negative aspects of an individual’s life and working towards reducing negative functioning alongside increasing positive functioning as an important focus of intervention (Wood & Tarrier).

To date, much of the positive psychology research has focused on non-clinical samples (Larson, 2000; Taylor & Brown, 1994) with less focus on clinical samples (Adler, Horowitz, Garcia, & Moyer, 1998; Folkman, 1997), and even less specifically on those with BSD (Lee Duckworth, Steen, & Seligman, 2005; Galvez, Thommi, & Ghhaemi, 2011). Based on a review of the available research, BSD has been related to many aspects of positive psychology, such as increased spirituality, empathy, and creativity (Galvez et al.). For example, Lovejoy and Steuerwald (1995) in a sample of young adults, found that young adults diagnosed with bipolar disorder showed greater levels of positive affect than young adults diagnosed with unipolar depression. It has also been suggested that individuals with bipolar versus unipolar depression are more likely to show elevated achievement motivation and ambitious goal setting, even outside of manic episodes, and individuals with a history of mania experience greater mood reactivity in response to success and reward (Johnson, 2005b). Despite such findings, clinicians and researchers generally do not attend to enhancing the positive factors associated with BSD and that treatment of BSD symptoms, without recognizing that the positive aspects of certain symptoms, may result in less benefit for individuals with BSD (Galvez et al.). This dissertation aimed to advance the field by considering positive characteristics and outcomes for youth with a BSD diagnosis. The current project also examines how a variety of broad parenting characteristics might relate to positive outcomes for youth with BSD, specifically life satisfaction, resilience and positive schemas. This focus on relations between parenting context
and positive characteristics and outcomes of youth with a BSD diagnosis is quite novel and may have important contributions for future intervention approaches.

**Life Satisfaction**

A construct commonly discussed within the positive psychology domain is life satisfaction. Cowen (1991; 1994) suggests that to measure positive functioning or well-being, indicators of life satisfaction must be included. Life satisfaction is defined as one’s judgment that his/her life is a “good life” (Diener, 1984). Intervention research suggests that the treatment of negative symptoms does not alone guarantee high levels of life satisfaction (Frisch, Cornell, Villanueva, & Retzlaff, 1992). Life satisfaction also seems to be less influenced by demographic variables, such as age, gender, and parental occupation, yet intrapersonal and interpersonal variables (e.g., parenting context) have been shown to influence life satisfaction (Park, 2004; Suldo & Huebner, 2004). Specifically, authoritative parenting, social support, and the promotion of autonomy have been related to higher levels of life satisfaction in youth samples (see Park for a review; Suldo & Huebner).

Most youth who experience depression have low levels of life satisfaction (Atkinson, Zibin, & Chuang, 1997; Huebner, 1991). Similarly, overall quality of life has been found to be lower in adults with BSD when compared to adults who experience other types of psychopathology (Arnold, Witzeman, Swank, McElroy, & Keck, 2000). It has been speculated that this low level of quality of life may result from multiple depressive episodes (MacQueen, et al. 2000); yet, some research shows that quality of life is low for individuals with BSD even during manic phases (Cooke, Robb, Young, & Joffè, 1996; Robb Cooke, Devins, Young, & Joffè, 1997; Robb, Young, Cooke, & Joffè, 1998). Looking specifically at life satisfaction, a study by Goldberg and Harrow (2005) followed 157 adult patients diagnosed with either unipolar...
depression or BSD for a period of 7 to 8 years and found that life satisfaction across time did not significantly differ among the BSD and unipolar depression patients. This research suggests that individuals with unipolar depression and BSD exhibit similar patterns of life satisfaction. It is important to note that this research focuses on group patterns in adults. Among youth with BSD, life satisfaction is likely to vary by individual and understanding which parenting context factors are most likely to be associated with increased life satisfaction is an important research and clinical goal. This dissertation aimed to further explore life satisfaction for youth with a diagnosis of BSD and to better understand how parenting context relates to youth life satisfaction for this population.

Resiliency

Resiliency is also an important concept within the positive psychology domain, and is particularly relevant to the current project. Different conceptualizations of resiliency have been increasingly discussed in response to studies examining youth who were deemed at risk for a number of difficulties (e.g., psychopathology, family and relationship difficulties, low self-worth or self-worth, academic struggles, etc.) yet showed positive outcomes (e.g. better than expected outcomes, positive adaptation to a situation, good recovery from a negative experience; Luthar, Cicchetti, & Becker, 2000; Masten, 2001, 2007, 2011). These youth are considered resilient in the face of adversity. Overall the study of resiliency is related to understanding the “process of, capacity for, or pathways and patterns of positive adaptation during or following significant threats to disturbance” (pg. 494, Masten, 2011). The concept of resiliency is broad and it has been defined in many different ways and for different purposes. Criteria of resiliency may involve general or specific areas of competence, psychological well-being or life satisfaction, or other measures of mental health functioning (Masten). For this dissertation the Resiliency Scale
developed by Wagnild and Young (1993) was used to measure resilience, and resiliency was viewed as beliefs about being able to adaptively cope when faced with adversity (Wagnild & Young, 1993). This scale focuses on five main characteristics of resilience: **perseverance**—persisting despite adversity, **equanimity**—a balanced view of life and experiences (e.g., taking what comes), **meaningfulness**—life has a purpose and a reason to live, **self-reliance**—recognizing personal strengths and believing in yourself, and **existential aloneness**—recognizing that each person is unique and that some experiences need to be faced alone.

Previous research examining resiliency and difficulties during childhood and adolescence, has focused on refugee situations (Fazel, Reed, Panter-Brick, & Stein, 2012), war or armed conflict (Dimitry, 2012), traumatic events (Yule, Blaustein, & Kinniburgh, 2011; Cicero, Nooner, & Silva, 2011), delinquency (Southwick, Morgan, Vythilingam, & Charney, 2006), family adversity (Fergusson, & Lynskey, 1996), substance use (Orte, Touza, Ballester, & March, 2008), depression (Hjemdal, Aune, Reinfjell, Stiles, & Friborg, 2007; Hjemdal, 2011), and anxiety and obsessive-compulsive disorder (Hjemdal). However, there is little research examining the relation between resiliency and BSD. A review of the literature revealed no relevant articles specifically exploring resiliency in youth with a BSD diagnosis. A measure of resiliency was included in the current dissertation to further explore this concept and to better understand areas of positive functioning for youth with BSD.

Although Wagnild and Young’s (1993) definition of resilience could be viewed as more of an intrapersonal concept, it is well established that resiliency does not happen in isolation. Rather, resiliency is often regarded as being embedded in larger systems, such as the parenting context (Patterson, 2002; Masten, 2007; Masten & Obradovic, 2007). Researchers have highlighted the important role parenting plays in resilient outcomes for youth (Armstrong,
Research has also underscored the important role parents play in the development of prevention and intervention programs to promote resiliency (Draper, Siegel, White, Solis, & Mishna, 2009; Prevatt, 2003; Silk et al., 2007). For understanding the relation between parenting context and resiliency in youth with BSD, Lerner, Almerigi, and Theokas’ (2005) positive youth developmental model (PYD) may be particularly useful. This model adopts a developmental approach to viewing positive psychology and positive life outcomes. Specifically, youth are viewed as having developmental experiences through influential relationships with the self, the family, the community, and the culture, which ultimately influence their emotional development, wellbeing, and positive self-concepts. The main idea of the PYD model is that all youth have strengths and ultimately have the potential to alter their developmental path in adaptive directions. The PYD model incorporates the importance of outside influences (e.g., parenting context) and the overarching premise behind this theory is that if youths’ strengths are aligned with the assets of the outside influences (e.g., parents) then development can be improved (Lerner et al.; Lerner, von Eye, Lerner, & Lewin-Bizan, 2009). Consistent with the positive clinical psychology literature, the focus here is not on the absence of psychopathology, but on the growth of attributes that promote resiliency within the connection between the youth and his or her environment. On a practical note, parents of youth with BSD could benefit from research that examines not only what aspects of parenting might be most problematic for youth, but also how aspects of parenting might help their youth function more positively (Schenkel, et al., 2008).

**Positive Self-Concept and Schemas**

Self acknowledged positive aspects of self or positive self-concept is a multi-faceted and complex construct. For this dissertation, the focus will be on positive schemas as one key aspect
Schemas are defined as mental frameworks that are used to interpret, categorize, and evaluate one’s experiences (James, Reichelt, Freeston, & Barton, 2007; Schmidt, Schmidt, & Young, 1999). Generally most schema and emotional functioning research has focused on negative schemas or maladaptive core beliefs (e.g., Hawke, Provencher, & Arntz, 2011; Nilsson, Jorgensen, Straarup, & Licht, 2010; Young, Klosko, Weishar, 2003) and cognitive models generally position schemas as mediating the relation between a negative event or circumstance and depression outcomes (Cole & Turner, 1993). For example, research has examined cognitions mediating the relation between parenting and maltreatment histories and unipolar and bipolar depression (Alloy, Abramson, Smith, et al., 2006), Cognitive Behavioral Therapy treatment and post-treatment levels of depression (Garratt, Ingram, Rand, & Sawalani, 2007), retrospective reports of parenting during childhood and symptoms of depression in young adulthood (Harris & Curtin, 2002), and childhood adversity (e.g., emotional maltreatment, physical abuse, sexual abuse) and symptoms of psychopathology (e.g., depression symptoms, anxiety symptoms; Lumley & Harkness, 2007). In comparison to moderating models, it has been suggested that mediation models may be a better fit when attempting to explain cognitive risk and the development of depression among youth (Cole & Turner). A study examining both mediation and moderation models when considering the influence of cognitions on the relation between life events and depression outcomes, found that for a sample of youth ranging in age from 9 to 15 years mediation models significantly explained this relation and little support was found for the moderating models tested (Cole & Turner).

Although the majority of research to date has focused on linking negative schemas to psychopathology, some research underscores the need for positive schemas to maintain everyday happiness in normative samples. For example, many individuals from the general population
hold positively biased views of themselves, exaggerated beliefs about themselves, and unrealistic optimism (Cacioppo, Gardner, & Bernston, 1999; Fleming & Darley, 1986; Greenwald, 1980; Langer & Roth, 1975). There is also evidence that positive schemas may be inversely related to psychopathology (Keyfitz, Lumley, Hennig, & Dozois, 2013; Prieto, Cole, & Tageson, 1992; MacLeod & Moore, 2000; Shirk, Boergers, Easton, & Van Horn, 1998). When considering depression specifically, depression is often described by the presence of negative schemas but also the lack of positive schemas (MacLeod & Byrne, 1996; MacLeod & Moore; MacLeod & Salaminiou, 2001). Some even suggest that a lack of positive schemas may be more important than the presence of negative schemas in the development of youth depression (McClain & Abramson, 1995; Whitman & Leitenberg, 1990). Extending this research to explore positive outcomes in a community sample of youth, Keyfitz and colleagues found that negative schemas did not account for a significant amount of the variance in predicting resiliency, yet positive schemas accounted for approximately 50% of the variance in this construct.

To date, positive schemas have not been explored among youth with BSD. As addressed by the positive clinical psychology literature, this may represent an important gap in the literature. Despite evidence from the adult literature suggesting that adults with BSD show signs of wellbeing (e.g., creativity, reward motivation, achievement motivation, goal setting, empathy, etc.; Galvez et al., 2011; Johnson, 2005b; Lovejoy & Steuerwald, 1995), little focus has been given to the positive factors associated with a diagnosis of BSD for youth, particularly positive schemas. Gaining a better understanding of not only the negative factors associated with BSD but also the positive factors (i.e., positive schemas) could ideally help with better identification of youth at risk for developing BSD and could provide information about protective factors that may buffer against the negative impacts of BSD.
Moreover, little is known about the influence of parenting context on the development of positive schemas in this population. It is widely accepted that parenting generally plays an important role in the development of schemas and much research has shown a relation between parenting context and the development of negative schemas (Garber & Flynn, 2001; Hammen, 1992; Harris & Curtin, 2002; Kaslow et al., 1994). However, the impact of parenting on the development of positive schemas has not been widely researched. Based on the strong evidence for the relation between parenting and schema development, the current dissertation aimed to not only better understand the relation between parenting context and resilience while considering positive schemas as a mediating factor, but to do so specifically for youth with BSD. It was predicted that positive parenting strategies (i.e., acceptance) would be related to the development of positive schemas, which would then predict higher levels of youth resilience. At the same time, it was predicted that negative parenting strategies (i.e., high parental psychological control) would be related to the development of fewer positive schemas, which would then predict lower levels of youth resilience. Given the differences in parent and youth report of parenting (Boughton & Lumley, 2011), models including both youth and parent reports of parenting were examined. See Figure 1 for a schematic diagram of the models tested. Ultimately, this research aimed to improve understanding of parenting context factors that may result in more positive outcomes for youth with BSD.
Figure 1. Four mediation models examining the pathway of parenting on resilience with positive schemas as the mediator.
Positive Qualities of Youth with BSD

A limitation of past research on positive functioning among youth with psychopathology is that the focus has mainly been on prescribed concepts of wellbeing established by researchers (i.e., life satisfaction, resilience, positive schemas). This method may miss important aspects of positive functioning from the perspective of the youth and/or the parent. There has been increasing interest in including qualitative approaches to compliment quantitative methods, to gain a more comprehensive understanding of phenomena under study (Armstrong, et al., 2005; Braun & Clarke, 2006; Krahn, Hohn, & Kime, 1995).

Much qualitative research has focused on understanding the negative aspects associated with BSD (Crowe et al., 2012; Fletch, Parker, & Manicavasagar, 2013; Michalak, Yatham, Kolesar, & Lam, 2006). A review of the literature resulted in one qualitative study that examined positive factors associated with having a diagnosis of BSD (Lobban, Taylor, Murray, & Jones, 2012). In this study 10 adults with a diagnosis of BSD (Bipolar I and Bipolar II), ranging in age from 24 to 57 years, were asked about their understanding of what BSD is, what difference a diagnosis of BSD has made in their life, and aspects of BSD they would miss if absent. The results from this study suggested that adults with BSD identified themselves as having amplified internal states, enhanced abilities, and more human connectedness. They also identified feeling lucky to have BSD and often saw it as a “special gift” (Lobban et al.). Although this study provides some qualitative information about positive experiences of living with BSD, it focuses on an adult population.

Given the limited knowledge in the area of positive outcomes for youth with a diagnosis of BSD, qualitative methods were used in the current dissertation to gather more in-depth information about positive factors associated with a diagnosis of BSD for youth diagnosed with
BSD. Specifically both youth and parents were asked, through an open interview format, their subjective thoughts about the most positive aspects of themselves/their youth. This qualitative component was included in this dissertation as an attempt to uncover relevant themes related to positive functioning for youth with a diagnosis of BSD that may not otherwise be captured through quantitative methods.

**Current Project**

The overarching goal of this dissertation was to gain increased understanding of how parenting context relates to positive outcomes (i.e., reduced psychopathology, life satisfaction, resiliency, positive schemas) in youth with a diagnosis of BSD. This dissertation comprised two research studies. Study 1 examined how broad measures of parenting context related to psychopathology for youth being screened for a diagnosis of BSD. This included examination of various parenting characteristics (i.e., parental support, parental satisfaction, parental involvement, communication, autonomy granting, limit setting, and role orientation) and youth psychopathology (i.e., mania, depression, total problems, internalizing difficulties, externalizing difficulties), based on information gathered during an initial screening process for BSD at a tertiary care facility. Study 1 also examined whether parenting context and the relation between parenting context and psychopathology differed depending on diagnosis of BSD stemming from this screening process. Study 2 more thoroughly examined the influence of parenting context for youth with BSD, from parent, youth and observational perspectives, assessing aspects of parenting likely most pertinent to youth functioning (i.e., parental warmth/acceptance, psychological control, criticism). This mixed-method design encompassed longitudinal and cross-sectional parenting context indicators as well as an observational measure. Of particular importance, this study focused on examining not only negative outcomes but also positive
functioning of youth with a diagnosis of BSD and considered positive schemas as a potential mediator of the relation between parenting context and resiliency outcomes. Finally, a qualitative approach was included to obtain better understanding of positive qualities of youth with a diagnosis of BSD, from both the parent and youth perspective.

Study 1: Overview

The purpose of study 1 was to gain increased understanding of how parenting context (i.e., parental support, parental satisfaction, parental involvement, communication, autonomy granting, limit setting, and role orientation) relates to general functioning (i.e., psychopathology) for youth screened for a diagnosis of BSD. Based on the literature suggesting the important influence of the family environment on youth emotional functioning (Alloy, Abramson, Neeren, et al., 2006, Alloy, Abramson, Smith, et al., 2006; Belardinelli, et al., 2008; Neeren, et al., 2008; Robertson, et al., 2001), it was hypothesized that parenting context would relate to overall general functioning for youth being screened for a diagnosis of BSD. In particular, increased levels of positive parenting qualities (i.e., parental support, parental satisfaction, parental involvement, communication, autonomy granting, limit setting, and role orientation) were hypothesized to relate to decreased levels of psychopathology (i.e., mania, depression, total problems, internalizing difficulties, externalizing difficulties), whereas lower levels of parenting characteristics were hypothesized to relate to increased levels of psychopathology. The sample for study 1 consisted of youth who were screened for a diagnosis of BSD at a tertiary care facility, namely The Child and Parent Resources Institute (CPRI) in London, Ontario, over the past eight years. CPRI has a highly specialized outpatient clinic, the Mood Disorder Clinic, designed to provide both prescreening as well as a full comprehensive assessment to determine a diagnosis of BSD for youth between six and eighteen years of age. Based on the diagnostic and
parenting information collected during the BSD screening process, the first step of study 1 was to examine the relations between parenting context and psychopathology for all youth who were considered for a BSD diagnosis through the screening process. The second step of study 1 was to more closely examine the relations between parenting context and psychopathology for youth who received a diagnosis of BSD by comparing them to youth who were experiencing severe mood difficulties but ultimately received other diagnoses based on the screening process. Due to mixed research findings regarding the relation between parenting context and psychopathology when comparing youth with a diagnosis of BSD to youth with other complex mental health difficulties (Geller et al., 2000; Gerlsma et al., 1990; Neeren et al., 2008; Parker, 1983; Robertson, et al., 2001; Rosenfarb et al., 1994), no specific hypotheses were made.

Research suggests that parenting context plays an important role in the course of BSD but many studies have focused mainly on retrospective information about the childhood parenting context in adult populations. This dissertation aimed to advance understanding of the parenting context of BSD in its early child and adolescent stages. Measures of parenting were collected prior to confirmation of a diagnosis of BSD and reflect the parenting context prior to or during early stages of the disorder. Knowledge about parenting context and relations to functioning for youth with BSD may be useful for highlighting particular parenting characteristics that merit assessment and potential prevention/intervention efforts in clinical or public health contexts.

Hypotheses

H1) The central goal of study 1 was to understand the relation between parenting context and psychopathology in youth screened for a diagnosis of BSD at a tertiary care mental health facility, and most particularly those who received a BSD diagnosis. Specifically, it was hypothesized that when a combination of parenting context variables (i.e., parental support,
parental satisfaction, parental involvement, communication, autonomy granting, limit setting, and role orientation) were considered together, they would account for a significant amount of the variance in predicting psychopathology (i.e., mania, depression, total problems, internalizing difficulties, externalizing difficulties).

   a) Based on the available literature underscoring the relation between parental support and a wide range of psychopathology (e.g., depression, anxiety, aggression, etc.; Brody et al., 2009; Kogan & Brody, 2010; Schroeder & Kelley, 2010; Taylor, et al., 2012), it was hypothesized that higher levels of parental support would predict lower levels of psychopathology (i.e., mania, depression, total problems, internalizing difficulties, externalizing difficulties).

   b) Due to the research suggesting a strong relation between parental satisfaction and mood related disorders specifically (Coleman & Karraker, 2000), it was hypothesized that higher parental satisfaction would predict lower depression, mania, and internalizing difficulties.

   c) Given the established relation between parental involvement and externalizing difficulties, it was hypothesized that higher parental involvement would predict lower externalizing difficulties (Van der Graaff et al., 2012; Walters, 2013). Due to the mixed research regarding the relation between parental involvement and mood related symptoms, no specific hypotheses were made.

   d) Based on the strong relation previously established between parental communication and depression and internalizing symptoms (Burge, & Hammen, 1991; Lewinsohn, et al., 1990; Wells & Albano, 2005), it was hypothesized that higher levels of positive communication would predict lower levels of depression and internalizing symptoms.
e) Consistent with previous findings, it was also hypothesized that higher levels of autonomy granting would predict lower levels of depression and anxiety (Eccles, et al., 1997; Herman et al., 1997).

f) It was hypothesized that higher limit setting would predict lower externalizing difficulties as suggested by previous research (Middleton, et al., 2009). There has been less focus on the relation between limit setting and internalizing behaviours and no specific hypothesis about this relation was made.

g) Finally, it was hypothesized that increased egalitarian views of parenting (i.e., role orientation) would be related to lower levels of a broad range of psychopathology (i.e., depression, mania, total problems, internalizing symptoms, externalizing symptoms) as evidence by previous research (Feinberg 2002, 2003; Feinberg, et al., 2007; Katz & Low, 2004; McHale & Rasmussen, 1998; Schoppe, et al., 2001).

H2) Due to the mixed research around the relation between parenting context and psychopathology when comparing youth with a diagnosis of BSD to youth with other complex mental health difficulties (Alloy, Abramson, Smith, et al., 2006), no specific hypotheses were made. The current dissertation aimed to further explore the relation between parenting and psychopathology within a sample of youth with complex mental health difficulties and to determine if individuals diagnosed with BSD differed from youth with other complex mental health difficulties on measures of parenting.

**Study 1: Method**

**Participants**

Participants were 150 families with a female ($n = 51$) or male ($n = 99$) youth aged 5 to 16 years ($M = 9.84$, $SD = 2.78$), who completed screening for a suspected mood disorder through the
Mood Disorder Clinic at the Chid Parent Resource Institute (CPRI) in London, Ontario. Most youth presented with their biological or adoptive mother (86.4%), 7.8% presented with another relative (e.g., aunt, grandparent, etc.), 2.9% presented with their biological or adoptive father, 1% presented with a foster parent, and 1% presented with a group home staff member. Data were not available for the remaining youth (<1%). Following their screening, 39% (*n* = 59) of the youth met criteria for a Bipolar Spectrum Disorder diagnosis. For the overall sample, based on the screening process as well as previous psychiatric assessments on file, 79% of the sample had a diagnosis of a mood disorder, 79% had a diagnosis of an anxiety disorder, 36% had a diagnosis of an externalizing disorder, 56% had a diagnosis of a learning disability, 30% had a reported medical condition, 20% had a diagnosis of obsessive compulsive disorder/tourette’s syndrome/tics, 66% had a diagnosis of attention deficit hyperactivity disorder, and 5% had a diagnosis of a pervasive developmental disorder. As can be seen from these statistics, there was a high level of comorbidity for this sample. This study was approved by the University of Guelph Research Ethics Board, the University of Western Ontario Research Ethics Board, and the Child and Parent Resource Institute Research Ethics Board.

**Measures**

As a part of agency protocol, all participants completed measures assessing: (a) family functioning and (b) mood and emotional functioning. A copy of all questionnaires is included in Appendix A.

**Family Functioning.** The Parent Child Relationship Inventory (PCRI; Gerard, 1994) is designed to determine how parents view the task of parenting and how they feel about their child. The measure is designed to target families with youth between the ages of 3 and 15 years. This measure is comprised of 78 items (e.g., “If I have to say no to my child, I try to explain it.”)
divided into 7 subscales (Parental Support, Satisfaction with Parenting, Parental Involvement, Communication, Limit Setting, Autonomy Granting and Role Orientation). Parents report on a 4-point Likert scale (1 = Strongly Agree, 4 = Strongly Disagree) the degree to which they agree with each statement. A mean score is calculated for each subscale, higher scores represent greater endorsement in that area. The PCRI has shown moderate to high internal consistency and strong convergent validity compared to similar measures (Coffman, Guerin, and Gottfried, 2006). In the current study, internal consistency coefficients ranged from .67 to .84 for the subscales. The Communication subscale showed poor internal consistency even after item analysis, $\alpha = .48$ and thus, was not included in further analyses.

**Mood and Emotional Functioning.** The following questionnaires were used to gather information pertaining to the youth’s mood and emotional functioning: (1) Beck Youth Inventories (BYI), (2) Child Mania Rating Scale (CMRS), and (3) Child Behaviour Checklist (CBCL).

The *Beck Youth Inventories- Second Edition* (BYI-II; Beck, Beck, & Jolly, 2001) is designed for youth between the ages of 7 through 18 years. The measure comprises five self-report inventories measuring: depression, anxiety, anger, disruptive behaviour, and self-concept. For the purpose of the current study, the Beck Depression Inventory for Youth (BDI-Y; 20 items; e.g., “I feel sorry for myself”) was used to measure depression symptoms. Youth indicated the extent to which each statement described them based on a 4-point Likert scale (0 = *Never*, 3 = *Always*). A total score ranging from 0 to 60 was calculated with higher scores indicating increased depression symptoms. High reliability has been shown for the BDI-Y with coefficients over .90 for all age and gender ranges and test-retest reliability coefficients above .75 (Beck et al., 2001). Adequate construct validity has also been established (Steer, Kumar, Beck & Beck,
The BDI-Y showed excellent reliability for the current study with an internal consistency of .92.

The Child Mania Rating Scale (CMRS; Pavuluri, Henry, Devineni, Carbray, & Birmaher, 2006) was used as a measure of youth mania symptoms. The measure is comprised of 21 items designed to reflect the DSM-IV criteria for a manic episode (e.g., “Does your child feel irritable, cranky, or mad for hours or days at a time”). The CMRS is often used as a screening instrument to indicate the likelihood of current mania or hypomania. Guardians rated the items based on their child’s behavior and emotions in the past month using a 4-point Likert scale (0=Never/Rare, 3=Very Often). A total score was calculated by summing all items. Overall, higher scores indicate greater manic symptomatology. Adequate factor structure, as well as reliability, construct validity, and content validity have been established for the CMRS (Pavuluri et al.). The current study found good reliability, $\alpha = .83$.

The Child Behaviour Checklist (CBCL/6-18; Achenbach & Rescorla, 2001) is a parent report screener for emotional and behavioural problems in youth 6 to 18 years of age. Parents are asked to indicate on a three point Likert scale (0=Absent, 2=Often occurs) how often each behaviour occurred in the past six months. The scale is comprised of 113 items (e.g., “complains of loneliness”, “Too fearful or anxious”) providing a measure of Total Problems. The scale can also be divided into two broader domains (Internalizing Difficulties, Externalizing Difficulties) and eight syndrome scales (anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behaviour, aggressive behaviour). A mean score is calculated for each domain or subscale with higher scores indicating greater levels of psychopathology. Excellent reliability and validity has been established for this
measure and extensive normative data is available (Achenbach & Rescorla). For the current study, reliability ranged from .62 to .85 for the eight subscales.

**Procedure**

Parents of youth who were previously assessed through the Mood Disorder Clinic at CPRI \((N = 366)\) were contacted by telephone, by an internal member of the agency, and asked for consent to use the information collected during the screening process, for the purpose of the current research project (See Appendix B). All youth currently over the age of 16 were asked to provide verbal consent as well. Of the 366 participants screened over the past eight years, 178 participants agreed to participate in the current study. See Figure 2 for an illustration of the recruitment process. After consent was obtained, a chart review was preformed and all information pertaining to the measures discussed in the *Study 1: Methods* section was extracted from the files and entered into SPSS for data analysis. Of the 178 consented participants, 150 participants had usable data. The remaining individuals had not completed the questionnaires required for the current study and thus their data was not usable (See Figure 2).
Figure 2. Flow diagram outlining the participant selection process for study 1

**Study 1: Results**

As mentioned in the *Study 1: Overview* section, the first step of study 1 was to examine the relations between parenting context and psychopathology for all youth who were considered for a BSD diagnosis through the screening process at CPRI. The second step of study 1 was to more closely examine the relations between parenting context and psychopathology for youth who received a diagnosis of BSD after the screening process.

**Descriptive Statistics**

The means, standard deviations, and zero-order correlations for the PCRI, BDI-Y, CMRS, and CBCL can be found in Table 1.
Table 1
Descriptive Statistics for Study 1 Variables

<table>
<thead>
<tr>
<th>Measure</th>
<th>M(SD)</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
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</thead>
<tbody>
<tr>
<td><strong>PCRI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Parental Support</td>
<td>20.08 (4.20)</td>
<td>___</td>
<td>.27**</td>
<td>.06</td>
<td>.42**</td>
<td>.34**</td>
<td>.08</td>
<td>-.12</td>
<td>-.09</td>
<td>-.18</td>
<td>-.25*</td>
<td>-.22</td>
</tr>
<tr>
<td>2. Satisfaction</td>
<td>31.75 (5.60)</td>
<td>___</td>
<td>.46**</td>
<td>.18</td>
<td>.07</td>
<td>.08</td>
<td>-.14</td>
<td>-.08</td>
<td>-.18</td>
<td>-.05</td>
<td>-.09</td>
<td></td>
</tr>
<tr>
<td>3. Involvement</td>
<td>44.18 (5.13)</td>
<td>___</td>
<td>.23*</td>
<td>.16</td>
<td>.19</td>
<td>-.14</td>
<td>-.06</td>
<td>-.18</td>
<td>-.02</td>
<td>.01</td>
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<td></td>
</tr>
<tr>
<td>4. Limit Setting</td>
<td>25.56 (4.71)</td>
<td>___</td>
<td>.53**</td>
<td>.13</td>
<td>-.26*</td>
<td>-.33**</td>
<td>-.37**</td>
<td>-.19</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Autonomy Granting</td>
<td>25.98 (3.64)</td>
<td>___</td>
<td>.35**</td>
<td>-.33**</td>
<td>-.16</td>
<td>-.37**</td>
<td>-.31**</td>
<td>-.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Role Orientation</td>
<td>27.07 (4.01)</td>
<td>___</td>
<td>-.21**</td>
<td>-.13</td>
<td>-.21*</td>
<td>-.05</td>
<td>-.07</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Internalizing</td>
<td>23.50 (10.56)</td>
<td>___</td>
<td>.27**</td>
<td>.77**</td>
<td>.26*</td>
<td>38**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8. Externalizing</td>
<td>34.37 (9.55)</td>
<td>___</td>
<td>.70**</td>
<td>.37**</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>9. Total Problems</td>
<td>101.08 (27.29)</td>
<td>___</td>
<td>.48**</td>
<td>.26*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>CMRS</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Mania</td>
<td>28.01 (10.77)</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Depression</td>
<td>16.92 (10.84)</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Note.* **p** < .001, two-tailed.
Univariate Relations: Psychopathology and Parenting Characteristics

**Mania and Depression.** An examination of mania symptoms based on the CMRS revealed that parent report of mania was significantly and negatively related to Parental Support and Autonomy Granting (PCRI). Thus, parents who reported higher levels of Parental Support and Autonomy Granting also reported lower levels of mania symptoms for their children. Depression symptoms (BDI-Y) were not significantly related to any parenting characteristics. However, when examining trends, Depression symptoms were negatively related to Parental Support (PCRI), $r = -.22$, $p = .079$. Hence, parents who reported greater levels of Parental Support also reported lower levels of Depression symptoms for their children. To more broadly examine how parenting characteristics related to various aspects of the youth’s emotional and behavioural functioning, the relations among parenting characteristics and Total Problems, Internalizing Difficulties, and Externalizing Difficulties were explored.

**Total Problems.** Total Problems based on the CBCL, was significantly and negatively related to the parenting characteristics Limit Setting, Autonomy Granting and Role Orientation (PCRI). As parents reported higher levels of Limit Setting, Autonomy Granting and Role Orientation, they also reported lower levels of Total Problems for their children.

**Internalizing Difficulties.** Internalizing symptoms based on the CBCL, was also significantly and negatively related to the parenting characteristics Limit Setting, Autonomy Granting and Role Orientation (PCRI). Again, parents who reported higher levels of Limit Setting, Autonomy Granting and Role Orientation, also reported lower levels of Internalizing Symptoms for their children.

**Externalizing Difficulties.** Externalizing Difficulties based on the CBCL, was significantly and negatively related to the parenting characteristic Limit Setting (PCRI).
Specifically, parents who reported higher levels of Limit Setting also reported lower levels of Externalizing Difficulties for their children.

**Gender and Age Differences.** To determine the effects of gender, independent samples *t*-tests were completed on all parenting and youth functioning variables. Parents reported higher levels of Externalizing Difficulties for male as compared to female youth \([t(64.52) = 2.89, p = .005]\). To determine the effects of age, Younger (5 – 9 years; 47.9%) and Older (10 - 16 years; 52.1%) t-tests were computed on all major variables (PCRI, BDI-Y, CMRS, CBCL). Parents of younger youth reported higher levels of Autonomy Granting \([t(97) = 2.52, p = .047]\) and Limit Setting \([t(97) = 2.01, p = .013]\). As results suggested that some of the central study variables were significantly associated with gender and age, simultaneous regression models examining the relation between parenting characteristics and mental health described below were first conducted including gender and age interaction terms. These analyses yielded no significant age or gender interactions and thus, for the ease of interpretation, a decision was made to control for these variables in the following analyses rather than examine interaction terms.

**Parenting Characteristics and Total Problems**

As reported in Table 1, three specific parenting characteristics were correlated with Total Problems on the CBCL. To further examine these relations, Limit Setting, Autonomy Granting, and Role Orientation were entered into a simultaneous regression model predicting Total problems on the CBCL. A post hoc power analysis, conducted using G*Power 3 (Faul, Erfelder, Lang, & Buchner, 1996), confirmed that there was a 98% chance of detecting a medium sized effect \(f^2 = 0.15\) for the following regressions (i.e., each including 3 predictors) based on the sample size of 150 participants.
The control variables (Gender, Age) as well as Autonomy Granting, Limit Setting, and Role Orientation subscales were simultaneously entered into the regression equation. Regression coefficients can be found in Table 2. The regression model was significant \( F(5, 92) = 4.66, p = .001 \) and the predictor variables accounted for 20% of the variance in Total Problems. Higher levels of Limit Setting related to lower levels of Total Problems \( \left[ t(92) = -2.10, p = .039 \right] \). Autonomy Granting approached significance when predicting lower levels of Total Problems, with higher Autonomy Granting relating to lower Total Problems \( \left[ t(92) = -1.72, p = .089 \right] \). Role Orientation was not a significant unique predictor.

Table 2

Summary of Regression Analyses for Limit Setting, Autonomy Granting and Role Orientation predicting Total Problems

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B )</th>
<th>( SE ) ( B )</th>
<th>( \beta )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-2.65</td>
<td>5.29</td>
<td>-.05</td>
<td>.617</td>
</tr>
<tr>
<td>Age Group</td>
<td>4.62</td>
<td>5.19</td>
<td>.09</td>
<td>.376</td>
</tr>
<tr>
<td>Limit Setting</td>
<td>-1.34</td>
<td>.64</td>
<td>-.24</td>
<td>.039</td>
</tr>
<tr>
<td>Autonomy Granting</td>
<td>-1.47</td>
<td>.86</td>
<td>-.20</td>
<td>.089</td>
</tr>
<tr>
<td>Role Orientation</td>
<td>-.617</td>
<td>.67</td>
<td>-.09</td>
<td>.359</td>
</tr>
</tbody>
</table>

Note. \( R^2 = .20, F(5, 92) = 4.66, p = .001 \).

\(^1\) Gender (0= M, 1= F), Age Group (1= 5-9 years, 2= 10-16 years).

**Parenting Characteristics and Internalizing Difficulties**

Additional analyses were conducted to explore these parenting patterns in relation to Internalizing Difficulties. Regression coefficients can be found in Table 3.
The control variables (Gender, Age) as well as Autonomy Granting, Limit Setting, and Role Orientation subscales were simultaneously entered into the regression equation. Regression coefficients can be found in Table 3. The regression model was significant \[F (5, 92) = 3.65, p = .005\] and the predictor variables accounted for 17% of the variance in Internalizing Difficulties. However, there were no significant unique predictors.

Table 3

Summary of Regression Analyses for Limit Setting, Autonomy Granting and Role Orientation Predicting Internalizing Difficulties

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>(\beta)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>3.03</td>
<td>2.15</td>
<td>.14</td>
<td>.161</td>
</tr>
<tr>
<td>Age Group</td>
<td>2.53</td>
<td>2.11</td>
<td>.12</td>
<td>.231</td>
</tr>
<tr>
<td>Limit Setting</td>
<td>-.25</td>
<td>.26</td>
<td>-.11</td>
<td>.340</td>
</tr>
<tr>
<td>Autonomy Granting</td>
<td>-.56</td>
<td>.35</td>
<td>-.20</td>
<td>.108</td>
</tr>
<tr>
<td>Role Orientation</td>
<td>-.34</td>
<td>.27</td>
<td>-.13</td>
<td>.210</td>
</tr>
</tbody>
</table>

Note. \(R^2 = .17, F(5, 92) = 3.66, p = .005\).

Parenting Characteristics and Externalizing Difficulties

Additional analyses were conducted to explore these parenting patterns in relation to Externalizing Difficulties specifically. Regression coefficients can be found in Table 4.

The control variables (Gender, Age) as well as Autonomy Granting, Limit Setting, and Role Orientation subscales were simultaneously entered into the regression equation. The regression model was significant \[F (5, 92) = 3.88, p = .003\] and the predictor variables accounted for 17% of the variance in Externalizing Difficulties. Higher levels of Limit Setting predicted
lower levels of Externalizing Difficulties \( t(92) = -.67, p = .004 \). Autonomy Granting and Role Orientation were not unique predictors.

Table 4

*Summary of Regression Analyses for Limit Setting, Autonomy Granting and Role Orientation Predicting Externalizing Difficulties*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-5.01</td>
<td>1.87</td>
<td>-.26</td>
<td>.009</td>
</tr>
<tr>
<td>Age Group</td>
<td>-.42</td>
<td>1.84</td>
<td>-.02</td>
<td>.819</td>
</tr>
<tr>
<td>Limit Setting</td>
<td>-.67</td>
<td>.23</td>
<td>-.34</td>
<td>.004</td>
</tr>
<tr>
<td>Autonomy Granting</td>
<td>.06</td>
<td>.30</td>
<td>.02</td>
<td>.845</td>
</tr>
<tr>
<td>Role Orientation</td>
<td>-.16</td>
<td>.24</td>
<td>-.07</td>
<td>.501</td>
</tr>
</tbody>
</table>

Note. \( R^2 = .17, F(5, 92) = 3.88, p = .003 \).
1 Gender (0= M, 1= F), Age Group (1= 5-9 years, 2= 10-16 years).

**Descriptive Statistics: Pediatric Bipolar Sample**

Of the 150 youth seen through the Mood Disorder Clinic at CPRI, 59 youth (39%) were diagnosed with Pediatric Bipolar Disorder. Of these youth, 66% \( n = 39 \) were male and 33% \( n = 20 \) were female. This finding is consistent with previous research suggesting that trends in outpatient visits show that most youth bipolar disorder visits were by males, whereas most adult bipolar disorder visits were by females (Moreno et al., 2007).

To explore differences for the youth diagnosed with BSD compared to those with other diagnoses, independent samples *t*-tests were completed on all parenting and youth functioning variables (drawn from the PCRI, BDI-Y, CMRS, and CBCL; See Table 5). Parents of youth with BSD reported higher levels of mania symptoms (CMRS) compared to parents of youth without
BSD \(t(79) = 2.42, p = .018\). There were no significant differences in reported parenting (i.e.,
parental support, satisfaction, parental involvement, limit setting, autonomy granting, role
orientation), total problems, internalizing difficulties, externalizing difficulties, and depression
for youth with a diagnosis of BSD when compared to youth without a diagnosis of BSD.

Table 5

Summary of \(t\)-tests Comparing Youth Diagnosed with BSD to Youth with
Complex Mental Health Difficulties

<table>
<thead>
<tr>
<th>Variables</th>
<th>(t)</th>
<th>(df)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
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<td>PCRI</td>
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</tr>
<tr>
<td>Parental Support</td>
<td>-.940</td>
<td>86</td>
<td>.341</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.75</td>
<td>87</td>
<td>.084</td>
</tr>
<tr>
<td>Involvement</td>
<td>.31</td>
<td>86</td>
<td>.760</td>
</tr>
<tr>
<td>Limit Setting</td>
<td>-1.31</td>
<td>86</td>
<td>.192</td>
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<tr>
<td>Autonomy Granting</td>
<td>-.36</td>
<td>86</td>
<td>.719</td>
</tr>
<tr>
<td>Role Orientation</td>
<td>-.84</td>
<td>86</td>
<td>.402</td>
</tr>
<tr>
<td>CBCL</td>
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</tr>
<tr>
<td>Internalizing</td>
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<td>92</td>
<td>.317</td>
</tr>
<tr>
<td>Externalizing</td>
<td>.35</td>
<td>92</td>
<td>.730</td>
</tr>
<tr>
<td>Total Problems</td>
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<td>92</td>
<td>.234</td>
</tr>
<tr>
<td>CMRS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mania</td>
<td>2.42</td>
<td>79</td>
<td>.018*</td>
</tr>
<tr>
<td>BDI- Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>-.67</td>
<td>67</td>
<td>.503</td>
</tr>
</tbody>
</table>

Note. * \(p < .05\); PCRI = Parent and Child Relationship Inventory; CBCL = Child Behaviour
Checklist; CMRS = Child Mania Rating Scale; BDI-Y = Beck Depression Inventory- Youth
Version.
To further explore how the relation between parenting characteristics and symptoms might vary by diagnosis, Diagnostic Group was considered as a potential moderator of this relation. Given the comprehensive nature of the CBCL measure (i.e., including both internalizing and externalizing symptoms as well as an overall measure of total problems), it was chosen as the dependent variable for the models tested. Diagnostic Group was a dichotomous variable indicating presence or absence of a Bipolar Spectrum Disorder (BSD) diagnosis. Multiple regression analyses were conducted to determine the impact of parenting characteristics on Total Problems, Internalizing Difficulties, and Externalizing Difficulties while exploring BSD as an interaction term. As recommended by Aiken and West (1991), all predictor variables were centered before being entered into the regression equations of the various models tested below. A post hoc power analysis, conducted using G*Power 3 (Faul et al., 1996), confirmed that there was a 95% chance of detecting a medium sized effect ($f^2 = 0.15$) for the following regressions (i.e., each including 7 predictors) based on the sample size of 150 participants.

**Parenting Characteristics and Complex Mental Health for Youth with BSD**

To explore the relation between parenting characteristics and Total Problems, while examining the interactive effects of BSD diagnosis, a hierarchical regression was conducted. Control variables were entered in Step 1 (Gender, Age), parenting characteristics (Limit Setting, Autonomy Granting, and Role Orientation) and BSD were entered in Step 2, and the interaction between the parenting characteristics and BSD (Limit SettingXBSD, Autonomy GrantingXBSD, and Role OrientationXBSD) were entered in Step 3. Regression coefficients can be found in Table 6.
Step 3 of the regression model was significant \([F(9, 77) = 2.81, p = .007]\) and the predictor variables accounted for 25% of the variance in predicting Total Problems. However, there were no significant interaction effects.

Table 6

*Summary of Regression Analyses for Limit Setting, Autonomy Granting and Role Orientation Predicting Total Problems with BSD as an Interaction Term*

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
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<th>(\beta)</th>
<th>(P)</th>
</tr>
</thead>
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<td>3</td>
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<td>5.99</td>
<td>-.03</td>
<td>.813</td>
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<tr>
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<td>Age Group</td>
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<td>5.53</td>
<td>.009</td>
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<td>Limit Setting</td>
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<td>.70</td>
<td>-.21</td>
<td>.090</td>
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<td>Autonomy Granting</td>
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<td>Role Orientation</td>
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<td>BSD</td>
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<td>.634</td>
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<td>Limit Setting X BSD</td>
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<td>1.34</td>
<td>-.04</td>
<td>.727</td>
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<td>Autonomy GrantingXBSD</td>
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<td>1.80</td>
<td>.16</td>
<td>.238</td>
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<tr>
<td></td>
<td>Role OrientationXBSD</td>
<td>-2.31</td>
<td>1.43</td>
<td>-.18</td>
<td>.110</td>
</tr>
</tbody>
</table>

*Note. Step 3: \(R^2 = .25, F(9, 77) = 2.81, p = .007\)*

1 Gender (0= M, 1= F), Age Group (1= 5-9 years, 2= 10-16 years).

**Parenting Characteristics and Internalizing Difficulties for Youth with BSD**

Additional analyses were conducted to explore these parenting characteristics in relation to Internalizing Difficulties while examining the potential moderating influence of BSD. Control variables were entered in Step 1 (Gender, Age), parenting characteristics (Limit Setting, Autonomy Granting, And Role Orientation) and BSD were entered in Step 2, and the interaction between the parenting characteristics and BSD (Limit SettingXBSD, Autonomy GrantingXBSD, Autonomy GrantingXBSD, Internalizing Difficulties for Youth with BSD...
and Role OrientationXBSD) were entered in Step 3. Regression coefficients can be found in Table 7.

Step 3 of the regression model was significant \[ F(9, 77) = 2.25, p = .027 \] and the predictor variables accounted for 21% of the variance in predicting Internalizing Difficulties. However, there were no significant interaction effects.

Table 7

*Summary of Regression Analyses for Limit Setting, Autonomy Granting and Role Orientation Predicting Internalizing Difficulties with BSD as an Interaction Term*

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Gender</td>
<td>3.87</td>
<td>2.42</td>
<td>.17</td>
<td>.113</td>
</tr>
<tr>
<td></td>
<td>Age Group</td>
<td>2.64</td>
<td>2.23</td>
<td>.13</td>
<td>.240</td>
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<tr>
<td></td>
<td>Limit Setting</td>
<td>-.20</td>
<td>.28</td>
<td>-.09</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Autonomy Granting</td>
<td>-.67</td>
<td>.38</td>
<td>-.24</td>
<td>.079</td>
</tr>
<tr>
<td></td>
<td>Role Orientation</td>
<td>-.33</td>
<td>.29</td>
<td>-.13</td>
<td>.248</td>
</tr>
<tr>
<td></td>
<td>BSD</td>
<td>.23</td>
<td>2.22</td>
<td>.01</td>
<td>.917</td>
</tr>
<tr>
<td></td>
<td>Limit Setting X BSD</td>
<td>-.74</td>
<td>.54</td>
<td>-.17</td>
<td>.176</td>
</tr>
<tr>
<td></td>
<td>Autonomy GrantingXBSD</td>
<td>.93</td>
<td>.73</td>
<td>.18</td>
<td>.204</td>
</tr>
<tr>
<td></td>
<td>Role OrientationXBSD</td>
<td>-.71</td>
<td>.58</td>
<td>-.14</td>
<td>.221</td>
</tr>
</tbody>
</table>

*Note.* Step 3: \( R^2 = .21, F(9, 77) = 2.25, p = .027 \)

*1* Gender (0= M, 1=F), Age Group (1= 5-9 years, 2= 10-16 years).

**Parenting Characteristics and Externalizing Difficulties for Youth with BSD**

Additional analyses were conducted to explore these parenting characteristics in relation to Externalizing Difficulties while examining the interactive effects of BSD. Control variables were entered in Step 1 (Gender, Age), parenting characteristics (Limit setting, Autonomy Granting. And Role Orientation) and BSD were entered in Step 2, and the interaction between
the parenting characteristics and BSD (Limit Setting×BSD, Autonomy Granting×BSD, and Role Orientation×BSD) were entered in Step 3. Regression coefficients can be found in Table 8.

Step 3 of the regression model was not significant \[ F(9, 77) = 1.89, p = .067 \] and there were no significant interaction effects.

### Table 8

Summary of Regression Analyses for Limit Setting, Autonomy Granting and Role Orientation Predicting Externalizing Difficulties with BSD as an Interaction Term

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>P</th>
</tr>
</thead>
<tbody>
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<td>Gender</td>
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<td>-.21</td>
<td>.059</td>
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<td>Age Group</td>
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<td>-.03</td>
<td>.772</td>
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<td>Limit Setting</td>
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<td>.26</td>
<td>-.31</td>
<td>.019</td>
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<tr>
<td></td>
<td>Autonomy Granting</td>
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<td>.35</td>
<td>-.04</td>
<td>.749</td>
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<tr>
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<td>Role Orientation</td>
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<td>.26</td>
<td>-.07</td>
<td>.576</td>
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<tr>
<td></td>
<td>BSD</td>
<td>.38</td>
<td>2.05</td>
<td>.02</td>
<td>.853</td>
</tr>
<tr>
<td></td>
<td>Limit Setting X BSD</td>
<td>-.10</td>
<td>.50</td>
<td>-.03</td>
<td>.843</td>
</tr>
<tr>
<td></td>
<td>Autonomy Granting×BSD</td>
<td>.87</td>
<td>.67</td>
<td>.18</td>
<td>.197</td>
</tr>
<tr>
<td></td>
<td>Role Orientation×BSD</td>
<td>-.52</td>
<td>.53</td>
<td>-.11</td>
<td>.335</td>
</tr>
</tbody>
</table>

*Note. Step 3: \( R^2 = .18, F(9, 77) = 1.89, p = .067 \)*

*\(^1\) Gender (0= M, 1= F), Age Group (1= 5-9 years, 2= 10-16 years).*

### Study 1: Discussion

Research suggests that parenting context plays an important role in the course of BSD but many studies have focused on only a handful of parenting characteristics, mainly parental acceptance and warmth, psychological control, and criticism. Also, most of this research includes information about the childhood parenting context retrospectively in adult populations. Study 1 aimed to expand knowledge about the parenting context of youth being screened for BSD at a
tertiary care mental health facility, by providing evidence for the relation between various broad aspects of the parenting context and psychopathology. Consistent with hypotheses, study 1 provided evidence supporting three parenting characteristics’ relations to psychopathology. Namely, higher levels of limit setting, autonomy granting, and egalitarian views of parenting in differing combinations were generally associated with lower levels of internalizing, externalizing, and total problems for the overall sample. When looking at youth diagnosed with BSD specifically, based on parenting measures gathered during the early stages of a diagnosis of BSD, the results from Study 1 suggest that there are few differences between parenting characteristics for youth with a diagnosis of BSD and parenting characteristics for youth with other complex mental health difficulties.

**Mania and Depression**

Given the limited research on the relation between parenting characteristics and mania symptoms the current dissertation explored this relation. Overall, higher levels of parental support and autonomy granting were significantly related to lower levels of reported mania. Although consistent with previous research suggesting that an increased level of parental support is related to lower levels of general psychopathology (Brody et al., 2009; Douma et al., 2006; Kogan & Brody, 2010; Taylor et al., 2012; Wu et al., 1999), this is the first research to examine these parenting variables and how they covary with mania symptoms. The mechanisms by which parental support relates to lower levels of mania symptoms were not explored in this study. It is speculated based on literature in this area that parents who report higher levels of parental support may be better adjusted and likely have more resources (e.g., financial, mental, emotional) to manage their child (Douma et al.; Taylor, 2011; Turnbull & Ruef, 1996), creating a stable, secure context which may result in lower levels of mania symptoms. Alternatively, it may
be that child characteristics represent mechanisms by which parental support relates to lower levels of mania symptoms. For example, parental support has been shown to relate to higher levels of youth well-being (e.g., self-esteem, academic success, life satisfaction, greater ability to plan and organize, greater levels of inhibition, etc.; Gaylord-Harden, et al., 2010; Douma et al.; Kogan & Brody; Schroeder & Kelley, 2010; Taylor, et al.), which in turn could result in lower levels of mania symptoms. This is a potential area for future research to explore.

Autonomy granting has been associated with lower levels of depression and anxiety (Eccles, et al., 1997; Herman et al., 1997) and higher levels of wellbeing for youth (Allen et al., 1994; Nielsen & Metha, 1994; Suldo & Huebner, 2004), yet this is the first research examining the relation between autonomy granting and mania symptoms. Results suggest that autonomy granting may be important to consider when parenting a youth with mania symptoms. Considerable research suggests that autonomy granting is related to positive outcomes for youth (e.g., school success, maturity, increased self confidence, positive self-expression, increased self-esteem and life satisfaction; Allen, et al.; Kurdek et al., 1995; Mattanah, 2001; Neilsen & Metha; Suldo & Huebner). Factors such as life satisfaction may act as one mechanism linking autonomy granting and mania. For example, increased levels of autonomy granting may lead to increased life satisfaction, which in turn results in lower levels of mania symptoms. The ways by which increased autonomy granting relates to lower levels of mania symptoms will be important to explore in future research.

Consistent with hypotheses, the current study supported previous research (Young et al., 2005) suggesting that there is no significant relation between parental involvement and depression symptoms. Greater parental support was related to lower reported levels of depression symptoms in youth with complex mental health difficulties. This trend suggests that parents who
perceived themselves as having more support (e.g., respite care, someone to talk to, financial support, kin support, etc.) had children who also reported lower levels of perceived depression symptoms. This finding is consistent with the relation found between parental support and mania. Similar mechanisms speculated to explain the relation between parental support and mania (e.g., lower parental stress, greater parental resources, child wellbeing and positive functioning characteristics, etc.) could be used to also explain the relation between parental support and depression symptoms. Future research should aim to further explore this trend.

Contrary to previous research (Coleman & Karraker, 2000; Feinberg, et al., 2007; Herman et al., 1997; Wells & Albano, 2005), depression symptoms were not significantly related to parental satisfaction, autonomy granting, limit setting, and egalitarian views of parenting.

**General Psychopathology**

When psychopathology was examined more broadly (i.e., total problems, internalizing difficulties, externalizing difficulties) three main parenting variables emerged as being consistently related. When considering total problems based on the Child Behaviour Checklist (CBCL), higher levels of limit setting, autonomy granting, and egalitarian views of parenting were all significantly related to lower levels of total problems. Higher levels of limit setting, autonomy granting, and egalitarian views of parenting were also all significantly related to lower levels of internalizing difficulties. Supporting previous research (Eccles, et al., 1997; Herman et al., 1997), suggesting that youth show lower levels of internalizing difficulties when they have parents who implement consistent rules and allow their child latitude for making independent decisions. Also consistent with previous research (Feinberg, 2002, 2003), youth in this sample reported lower levels of internalizing difficulties when they also had parents who reported having more egalitarian views of parenting.
Regarding externalizing symptoms, limit setting appeared to be a significant parenting characteristic. Specifically, higher levels of reported limit setting were related to lower levels of reported externalizing difficulties. This finding is also consistent with a large body of research (Roche & Leventhal, 2009; Middleton et al., 2009; Vazsonyi, et al., 2006; Wu et al., 2004) suggesting that consistent rules for youth, tends to relate to lower levels of externalizing difficulties.

To further explore the relations between parenting characteristics and psychopathology, three regression models were tested. Each model included predictors of limit setting, autonomy granting, and egalitarian views of parenting, as these were the three parenting characteristics that emerged in the univariate analysis as being related to psychopathology. The overall model predicting total problems was significant, suggesting that the three parenting characteristics accounted for a significant amount of the variance in predicting total problems. More specifically, limit setting emerged as a significant unique predictor when considered simultaneously with the other two parenting variables. Suggesting that limit setting is an important parenting characteristic when considering general psychopathology in youth with complex mental health difficulties. This finding is consistent with a large body of literature supporting the relation between limit setting and lower levels of problem behavior (e.g., lower violence, externalizing behaviors, delinquency, depression, risk taking, substance use, greater academic competence; Bean, et al., 2009; Roche & Leventhal, 2009; Vazsonyi, et al., 2006; Wu, et al., 2004), and may suggest that youth with complex mental health difficulties benefit from increased structure and guidance (i.e., limit setting) in their lives.

The model predicting internalizing difficulties was also significant suggesting that the three parenting characteristics accounted for a significant amount of the variance in predicting
internalizing symptoms. When these parenting characteristics were considered together, no significant unique predictors emerged. Despite strong evidence that autonomy granting is a key parenting characteristic when considering anxiety in youth (Barber, 1996; Barber & Olsen, 1997; Garber et al., 1997; Herman et al., 1997; McLeod et al., 2007; Rapee, 2011), it did not emerge as a unique independent predictor for these youth. This finding may have been the result of the high level of comorbidity in this sample and the fact that many youth with internalizing difficulties also had externalizing symptoms as well. In this sample, a combination of parenting strategies may have been more effective to reduce internalizing symptoms than one single strategy.

Finally, the three parenting characteristics accounted for a significant amount of the variance in predicting externalizing symptoms and limit setting emerged as a significant unique predictor. Again, this finding is consistent with much research suggesting that limit setting is a key parenting characteristic when considering externalizing difficulties, even among youth whose primary presenting clinical issue may be in the internalizing realm (Roche & Leventhal, 2009; Middleton et al., 2009; Vazsonyi, et al., 2006; Wu et al., 2004).

**Parenting, Psychopathology and BSD**

After exploring links between parenting and psychopathology for all youth screened for BSD, a number of analyses were done to examine whether parenting characteristics and the relation between parenting characteristics and psychopathology varied depending on whether youth were diagnosed with BSD or other complex mental health difficulties. Due to the mixed findings in this area, no specific hypotheses were made. Overall, there were no significant differences in reported parenting (i.e., parental support, satisfaction, parental involvement, limit setting, autonomy granting, role orientation), when comparing youth who received a diagnosis of BSD with youth who did not. This finding is consistent with retrospective studies suggesting that
the parenting practices for families with a youth with a diagnosis of BSD are similar to other youth (e.g., healthy control comparison groups, youth with unipolar depression; Cooke, et al., 1999; Gerlsma et al., 1990; Neeren et al., 2008; Joyce, 1984; Parker, 1979, 1983 Perris et al., 1986; Rosenfarb et al., 1994). Initial research in this area has focused mainly on comparing youth with BSD to normal controls or youth with unipolar depression and this study furthers this research by comparing youth with a BSD diagnosis to youth with a broad range of mental health diagnoses. In addition, this finding helps to clarify some of the mixed findings in this area and suggests that the parenting practices for youth with a diagnosis of BSD may indeed be similar to that of other youth. This study also addresses methodological issues outlined in this area (Alloy, Abramson, Neeren, et al., 2006), by utilizing contemporaneous measures of parenting for youth who were in the initial or early stages of a BSD diagnosis, as opposed to using adult retrospective reporting.

Not surprisingly, parents of youth with BSD reported higher levels of mania symptoms compared to parents of youth without BSD. By contrast, there were no significant differences found for internalizing difficulties, externalizing difficulties, total problems, and depression for youth with BSD when compared to youth without BSD. These findings suggest that in many ways, the BSD sample in this study was quite similar to the general sample of youth with mental health difficulties. It is important to note that this sample was collected from a tertiary care facility that services youth with complex mental health difficulties and that many youth with and with out BSD had high levels of comorbid diagnoses. The similarities between the BSD group and the other youth with mental health difficulties may be due to a high level of overlap in terms of secondary, or comorbid, diagnoses.
To further explore the findings relating parenting characteristics to broad psychopathology in relation to BSD, the three significant models used to examine all children screened for BSD were tested again including diagnostic group (i.e., BSD diagnosis) as a potential moderator between parenting characteristics (limit setting, autonomy granting, role orientation) and psychopathology (total problems, internalizing, externalizing). The models including total problems and internalizing difficulties as outcome variables were significant, however, the model including externalizing difficulties as the outcome variable was not significant. Across the three models, no significant interaction effects were found.

Overall, it does not appear as though there is a significant difference in how limit setting, autonomy granting, and egalitarian views of parenting relate to psychopathology when comparing children with a diagnosis of BSD to children with other complex mental health difficulties screened at the same clinic. This outcome further supports the finding that within this sample, youth with bipolar disorder did not report significantly different styles of parenting compared to other children with complex mental health difficulties. This is an important addition to the current literature due to the limited information available about broad parenting characteristics for youth with BSD and due to the mixed information about whether parenting context differs for youth with BSD when compared to youth with other mental health difficulties. This study ultimately sheds light on parenting characteristics (i.e., limit setting, autonomy granting, role orientation) for youth with BSD that may be useful to consider during assessment and potential prevention/intervention efforts for this population. For example, attempting to increases these parenting characteristics may result in more positive outcomes (i.e., reduced psychopathology) for youth with BSD. The results of this study also suggest that parents of
youth with BSD may benefit from general parenting programs offered for parents of youth with complex mental health difficulties, given the similarities observed between these two groups.

**Study 2: Overview**

The purpose of study 2 was to more thoroughly examine how parenting context variables relate to positive functioning in youth who received a BSD diagnosis at a tertiary care facility. Following-up from study 1, the central aim of study 2 was to further explore parenting context, gather information on positive functioning (i.e., life satisfaction, resiliency, positive schemas), and determine the relation between parenting and positive functioning for youth with a BSD diagnosis. Youth with BSD comprise a unique subset of youth experiencing psychopathology (i.e., they generally exhibit a mix of depressive and manic symptomatology) and by contrast to other mood psychopathology, little research has focused on this specific population. In addition, little is known about positive functioning and the parenting context variables that relate to positive functioning in youth with this diagnosis. Study 1, explored positive functioning for this population in the sense that the focus was on understanding which aspects of the parenting context related to reduced risk for psychopathology. Although an important focus, many researchers have argued for the inclusion of positive aspects when attempting to better understand psychopathology.

To date no empirical study has examined the relation between parenting context and positive outcomes for youth with BSD. Working from a positive psychology framework, the current study was designed to enrich understanding of how parenting context relates to BSD, shedding light on key parenting characteristics (i.e., acceptance and warmth, psychological control, criticism) that are associated with positive functioning for youth with BSD. Such information may be relevant for informing environmental targets of intervention for this
population. A strength of this study is that, in addition to cross-sectional measures, and contrary to much of the parenting and psychopathology literature, a longitudinal perspective (i.e. a measure of parent’s perception of the parenting context from study 1) was included. Also, a multi-method approach including parent and youth self-reports of parenting context and an observational measure of parenting (i.e., the Five Minute Speech Sample) was taken. This allowed various perspectives to be considered when examining parenting context and its relation to positive functioning (i.e., life satisfaction, resiliency, positive schemas). In addition, study 2 examined positive schemas as one potential positive psychological mechanism that may link aspects of the parenting context to resiliency in this sample. Finally, a qualitative component was included to further explore positive aspects of youth with a BSD diagnosis from both the youth and parent perspective.

**Hypotheses**

H1) The first goal of study 2 was to determine how the parenting context assessed at time 1 related to positive functioning in youth with BSD at time 2. Specifically, it was hypothesized that increased levels of positive parenting at time 1 (i.e., parental support, parental satisfaction, parental involvement, autonomy granting, limit setting, and egalitarian parenting) would be related to increased levels of positive functioning (i.e., life satisfaction, resiliency, positive schemas) at time 2.

H2) The second goal of study 2 was to determine the relation between parenting variables (i.e., youth report, parent report, and observed parenting) and positive functioning (i.e., life satisfaction, resiliency, and positive schemas) in youth with a BSD diagnosis, to determine if specific parenting characteristics more strongly relate to increased positive functioning. Specifically, it was hypothesized that parent, youth and observational measures of parenting
would be related to measures of positive functioning. Furthermore, it was hypothesized that higher levels of acceptance and lower levels of psychological control would be related to increased levels of positive functioning (i.e., life satisfaction, resiliency, and positive schemas). Similarly, it was hypothesized that increased levels of observed parental warmth and decreased levels of observed parental criticism would be related to increased levels of positive functioning (i.e., life satisfaction, resiliency, and positive schemas).

H3) The third goal of study 2 was to determine if positive schemas mediated the relation between parenting context and resiliency for youth with BSD. Specifically, it was hypothesized that when positive schemas were entered into a meditation model the relation between parenting characteristics (i.e., acceptance and psychological control) and resiliency would be significantly reduced (see Figure 1 for a schematic representation of the meditational models).

H4) The final goal of study 2 was to qualitatively explore verbal responses pertaining to the positive qualities of youth with a diagnosis of BSD. Specifically, consistent themes reported by parents of youth with BSD, as well as youth themselves, were abstracted from the data and explored. Notable differences between parent and youth reports were examined. Due to the dearth of qualitative information in the area of youth with BSD, there were no specific hypotheses made about potential themes that may arise.

**Study 2: Method**

**Participants**

Participants were 18 guardians of female \((n = 11)\) and male \((n = 7)\) youth aged 8 to 18 years \((M = 13.00, SD = 3.01)\). Of these families, 9 female and 4 male youth, aged 11 to 18 years \((M = 13.86, SD = 2.48)\) participated in the study, resulting in 13 parent-child dyads. All participants had received a diagnosis of Bipolar Spectrum Disorder from the Mood Disorder...
Clinic at the Chid Parent Resource Institute in London, Ontario. Many youth had previously received multiple diagnoses; 33% had a diagnosis of a mood disorder, 56% had a diagnosis of an anxiety disorder, 28% had a diagnosis of an externalizing disorder, 50% had been diagnosed with a learning disability, 44% had a diagnoses of obsessive compulsive disorder/Tourette’s syndrome/tics, 72% had a diagnosis of attention deficit hyperactivity disorder, 28% had a diagnosis of a pervasive developmental disorder, and 22% had a reported medical condition. For this sample, the average number of visits to a mental health professional in the past six months was 21.83 (SD =32.79) and in the past year was 41.39 (SD = 57.32). Of the 18 youth, 16 guardians reported their child was taking psychotropic medications at the time of the interview. This included a variety of combinations of the following medications: Epival, Seroquel, Melatonin, Zyprexa, Citalopram, Trazidone, Abilify, Lamotrigine, Invega, Risperidone, Celexa, Ritalin, Strattera, Clonidine, Fluoxetine, Concerta, Lithium, Zoloft, Adderall, Wellbutrin, Biphenton, and Tegretol.

The guardians that participated were 13 biological mothers, 1 stepfather, 3 adoptive mothers, and 1 grandmother. It was reported that 94.4 % of the youth (n = 17) were currently living with the guardian in the family home, and 5.6% (n = 1) of the youth were living in a foster home. All participants (100%; n =18) reported a biological family history of mental health difficulties and 61.1% (n = 11) had a biological relative with a diagnosis of BSD, including: mother, father, sister, grandmother, grandfather, great grandmother, great uncle, great aunt, first cousin, and second cousin. Regarding maternal education, 11.8 % of mothers had some or had completed high school, 55.9% had some or had completed a college degree, 17.7% had some or had completed a university degree, and the remaining 14.6 % of mothers had graduate and/or post-graduate training. For paternal education, 11.8 % of fathers had some or had completed high
school, 82.3% had some or had completed a college degree, and the remaining 5.9 % of fathers had graduate and/or post-graduate training. Reported family income was: 16.7% earned below $20,000, 33.3% earned between $20,000 and $39,999, 5.6% earned between $40,000 and $59,999, 11.1% earned between $60,000 and $79,999, and the remaining 33.3% earned $80,000 or above. This study was approved by the University of Guelph Research Ethics Board.

Measures

All participants completed measures assessing: (a) participant demographics, (b) parenting variables, (c) resiliency, (d) positive schemas, (e) life satisfaction, (f) mood and emotional functioning, (g) qualitative information, and (h) data accuracy. A copy of all questionnaires is included in Appendix A.

Participant Descriptives. General information was gathered from the guardian about the youth’s age and gender, the reporter’s relationship to the youth, the youth’s current living arrangements, parental education, parental income, the youth’s medical history and mental health diagnoses, current medication use, family history of mental health disorders, and information pertaining to the frequency of visits to a mental health professional in the past 6 and 12 months.

Parenting Variables. The following questionnaires were used to gather information pertaining to parenting: (1) The Five Minute Speech Sample (FMSS) and (2) The Child Report of Parent Behavior Inventory- Short Form (CRPBI).

The Five Minute Speech Sample (FMSS; Magana, Goldstein, Karno, & Miklowitz, 1986) was used to measure parental warmth and criticism. This task comprised a five-minute parent monologue that was later coded. The parent was asked to describe “what kind of person” their child is and “how they get along together”. They were asked to speak about their feelings and thoughts for five minutes without interruption. The FMSS was audio-recorded and later coded
using the Family Affective Attitude Rating Scale (FAARS) that accompanies this measure. This measure has previously been used in a telephone interview method (Gar & Hudson, 2008). The audio recording was coded for both content and emotional tone, giving ratings for emotional warmth and criticism. Reliability and validity data have been established for the use of this measure and coding scheme (Calm & Peters, 2006; Magana et al., 1986; Moore & Kuipers, 1999). For the current study, based on inter class correlation methods, the inter-rater reliability was adequate \[r = .70\].

The Child Report of Parenting Behavior Inventory- Short form (CRPBI; Schludermann & Schludermann, 1988) was used to provide a measure of both parent and youth reported parenting attributes. Specifically, two subscales were used from the shortened version of the CRPBI: Acceptance (10 items; e.g., my mother/father is/I am a person who enjoys doing things with me or I am a person who enjoys doing things with my child), and Psychological Control (10 items; e.g., my mother/father is/ I am a person who is always trying to change me or I am a person who is always trying to change my child.). Youth and parents were asked to complete this measure by rating characteristics about their parent/self on a 5-point Likert scale (1 = Disagree to 5 = Agree). The CRPBI has shown good reliability (\( \alpha = .77 \) to \( \alpha = .92 \); Boughton & Lumley, 2011), as well as good convergent and discriminant validity (Seja Kaugers, et al., 2011). For the current study, the parent report measure yielded moderate reliability for the two subscales (\( \alpha = .73 \) and \( \alpha = .69 \), respectively) and the youth report measure yielded high reliability for the two subscales (\( \alpha = .82 \) and \( \alpha = .90 \), respectively).

**Resiliency Variable.** The Resiliency Scale, 14 item version (RS-14; Wagnild & Young, 1993) was used to measure beliefs about one’s ability to cope with adversity. Youth and parents completed the measure rating the youth’s ability to cope. The scale comprises a global resilience
factor (e.g., I am friends with myself or My child is friends with him/herself). Respondents indicated their rate of agreement with each statement using a 7-point Likert scale (1 = *Strongly Disagree*, 7 = *Strongly Agree*). Extensive research has shown that the original Resiliency Scale is a reliable and valid measure (Wagnild & Young), more recently research has been conducted to support the 14-item measure (Damasio, Borsa, & de Silva, 2011; Neill & Dias, 2001; Wagnild, 2009). For the current study the RS-14 showed high reliability when used with both parent (\( \alpha = .93 \)) and youth (\( \alpha = .87 \)) samples.

**Positive Schemas.** The *Positive Schema Questionnaire* (PSQ; Keyfitz et al., 2013) was used to measure the youth’s positive schemas (e.g., I can adapt to new situations). The scale comprises 20 items measuring: Worthiness, Self-Efficacy, Optimism, Success, and Interpersonal Trust. Youth participants indicated the extent to which they agreed with each statement using a 6-point Likert scale (1 = *Completely untrue of me*, 6 = *Describes me perfectly*). An overall PSQ score is calculated by summing all items. Higher scores indicate higher levels of positive schemas. This scale has shown high internal consistency (\( \alpha = .93 \)), as well as a psychometrically sound factor structure (Keyfitz et al.). Consistent with previous research, the PSQ demonstrated high internal consistency (\( \alpha = .96 \)) for the current study.

**Life Satisfaction.** The *Brief Multidimensional Students’ Life Satisfaction Scale* (BMSLSS; Huebner, 1994) was used to measure youth reported life satisfaction. It is a 6-item instrument that assesses overall life satisfaction in domains such as friends, family, school, living environment, and self (e.g., I would describe my satisfaction with my school life as). All questions are responded to on a 7-point Likert scale (1 = *Terrible*, 5 = *Mixed (about equally satisfied and dissatisfied)*, 7 = *Delighted*). A review of two studies investigating the psychometric properties of the BMSLSS revealed that the scale has acceptable internal
consistency, criterion-related validity, and construct validity as well as convergent and
discriminant validity (Seligson, Huebner, & Valois, 2003). For the current study the BMSLSS
showed good internal consistency ($\alpha = .72$).

**Mood and Emotional Functioning.** The following questionnaires were used to gather
information pertaining to the youth’s mood and emotional functioning: (1) Beck Youth
Inventories (BYI) and (2) Child Mania Rating Scale (CMRS).

Please see *Study 1-Measures* for a full description of the *Beck Youth Inventories-Second
Edition (BYI-II)*, which was used as a measure of depression symptomatology. For study 2, the
depression subscale was administered to both the parent and the youth. Consistent with the
findings for study 1, the current study also showed high internal consistency for the depression
subscale (BDI-Y), for both parent ($\alpha = .93$) and youth reporting ($\alpha = .89$).

Please see *Study 1-Measures* for a full description of the *Child Mania Rating Scale
(CMRS)*, which was used as a parent measure of manic symptoms. Similar to study 1, the CMRS
showed good internal consistency with an alpha of .92.

**Positive Qualities of Youth with BSD.** A single question was provided at the end of the
parent interview to gather qualitative information. In an open interview format, the parent was
asked to tell the researcher “the best things about their child”. The parent’s response was audio
recorded and later transcribed. A single question was also given near the end of the youth
interview to gather qualitative information. In an open interview format, the youth was asked to
tell the researcher “the best things about him/herself”. The youth’s response was audio recorded
and later transcribed.

To explore the qualitative information an adaptation of the guidelines for examining
qualitative data suggested by Braun and Clarke (2006) was used. The nature of the single
qualitative question focused on positive aspects of youth and thus was the main foci in analyzing the parent and youth qualitative responses. However, the researcher did not begin the analysis with a focus on any specific themes due to the limited research in this area.

In the first step of data analysis, the data gathered from the specific qualitative questions (adult and child) were transcribed so the researcher could become more familiarized with the data. The data were then checked again for accuracy by a secondary researcher. Next, the researcher generated a list of potential codes and unique features of the data set by reviewing an inclusive and comprehensive portion of the transcripts (>75%). Codes were developed until saturation (i.e., no new codes were found). Following this, the researcher collated the codes and features to develop themes. A theme was considered as any pattern of results that represented a unique meaning or idea within the data. Themes were developed based on their relevance to the question at hand (i.e., introducing a new idea related to the “best things” about the youth), not based on the prevalence of the specific meaning or idea. For example, if a particular idea arose the frequency with which it was reported did not affect whether it was classified as a theme. Next, the created themes were checked against the full data set for further review and to verify that they provided an adequate fit for the data. Finally, the themes were refined and the final coding scheme was developed (See Figure 3 and 4 for the thematic maps showing the main themes for the parent and youth questions). The coding scheme was then used to examine the data to determine the frequency of the established themes.
Figure 3. Thematic map outlining the main qualitative themes and subcategories for the parent’s perspective of the “best things” about their youth.

Figure 4. Thematic map outlining the main qualitative themes and subcategories for the youth’s perspective of the “best things” about themselve.
Table 9

*Coding Scheme for Parental and Youth Responses to the “best things” Question*

<table>
<thead>
<tr>
<th>Main Theories</th>
<th>Subcategories</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Interpersonal Relationships</td>
<td>Flexibility</td>
<td>“amenable to suggestions”</td>
</tr>
<tr>
<td></td>
<td>Assisting Others</td>
<td>“passion for helping others”</td>
</tr>
<tr>
<td></td>
<td>Positive Relationship Qualities</td>
<td>“loving”</td>
</tr>
<tr>
<td>2. Internal Characteristics</td>
<td>Energy</td>
<td>“energetic”</td>
</tr>
<tr>
<td></td>
<td>Humour</td>
<td>“sense of humour”</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>“thinks outside the box”</td>
</tr>
<tr>
<td></td>
<td>Intelligence</td>
<td>“smart”</td>
</tr>
<tr>
<td>3. External Characteristics</td>
<td>Interests/Hobbies</td>
<td>“good hockey player”</td>
</tr>
<tr>
<td></td>
<td>World View</td>
<td>“unique way of looking at the world”</td>
</tr>
<tr>
<td>4. Agency</td>
<td>Self Advocates</td>
<td>“defends himself”</td>
</tr>
<tr>
<td></td>
<td>Determination/Commitment</td>
<td>“her drive”</td>
</tr>
<tr>
<td><strong>Youth Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Interpersonal Relationships</td>
<td>Assisting Others</td>
<td>“determined to help others”</td>
</tr>
<tr>
<td></td>
<td>Positive Relationship Qualities</td>
<td>“good friend”</td>
</tr>
<tr>
<td>2. Internal Characteristics</td>
<td>Humour</td>
<td>“humour- my ability to make light of situations”</td>
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<tr>
<td></td>
<td>Creativity</td>
<td>“creative”</td>
</tr>
<tr>
<td></td>
<td>Intelligence</td>
<td>“fast learner”</td>
</tr>
<tr>
<td>3. Interests/Hobbies</td>
<td></td>
<td>“ability to work with engines”</td>
</tr>
<tr>
<td>4. Determination/Commitment</td>
<td></td>
<td>“hard worker”</td>
</tr>
</tbody>
</table>

In all there were four main themes for both parent and youth data with multiple subcategories (*n* = 11, and *n* = 5, respectively). Table 9 provides an outline of the themes and corresponding subcategories, with examples provided. In total, 76 parent comments and 26 youth comments were provided in response to the single qualitative questions. Overall, 92.1% of the parent data and 100% of the youth data were allocated to a theme. After the completion of the
themetic scheme all transcripts were coded. With regards to examining the qualitative
information, prevalence of a theme, as outlined by the coding scheme, was counted as the
number of participants who articulated the theme across the entire data set. The replicability of
the coding scheme and specific themes was established by having a second researcher, also a
Ph.D. clinical psychology student, code the two questions based on the established coding
scheme. A high level of inter-rater reliability was observed [100% agreement].

**Understanding.** A single item was added to the end of the youth interview to gather a
sense of the youth’s understanding of the questionnaires provided. Each youth was asked on a 6-
point Likert scale ranging from 0 (*Did not understand at all*) to 5 (*Fully understood*) “how much
they understood the questions they were asked today”. Higher scores indicate a greater
understanding.

**Procedure**

All participants being contacted by telephone for study 1 were given information about
study 2. They were provided with the toll-free number for Dr. Lumley’s research lab at the
University of Guelph and were told they could call this number to obtain more information about
participating in study 2. The option to have the telephone number e-mailed to the participant was
also given (See Appendix C). Additional recruitment efforts were made in an attempt to gather
more families with youth diagnosed with a BSD between the ages of 8 and 19 years. First,
information packages (including a letter to the director of the division/group and brochures to
distribute to potential participants; See Appendix D) were mailed to all listed divisions of the
Mood Disorders Association of Ontario. After each package was mailed a follow-up telephone
call was placed to make sure the package was received and to answer any questions the director
of the division may have. Next, packages were sent to all major hospitals and university
counseling centers in Ontario. The same package and follow-up telephone call procedure was used. Unfortunately, the extra recruiting efforts did not result in any additional participants. All participants we recruited through participation in study 1. See Figure 5 for a flow diagram outlining the recruitment process.

All participants who contacted the research lab at the University of Guelph received a call back from a member of the research lab. The primary caregiver was read the adult consent form (Appendix E) outlining the details of the study, all requirements, risks, and their right to withdraw at any time. The participants were also e-mailed a copy of the consent form. If consent was orally provided, the caregiver was asked to move to an area of the house in which they could speak in confidence, not being heard by their child. Next, the guardian completed the set of questionnaires over the telephone, including the Demographic Information Questionnaire, Five Minute Speech Sample (FMSS), Resiliency Scale (RS), Child Report of Parent Behaviour-parent version (CRPBI), Child Mania Rating Scale (CMRS), and Beck Depression Inventory for Youth – parent version (BDI-Y), and the qualitative question (See Appendix A). To gather general information, the first questionnaire was always the Demographic Information Questionnaire. The next three questionnaires (FMSS, RS and CRPBI-parent version) were randomized. The last two questionnaires were always the CMRS and the BDI-Y, to prevent the symptom measures from biasing the parent’s reporting on the other measures. Finally, the parent was asked the single qualitative question regarding the best things about their child.

Next, the youth interview took place. If the youth was in the home at the time of the parent interview they were asked to complete the interview after the parent had finished their portion of the interview. If the youth was not in the home at the time of the parent interview then a different time was arranged to contact the youth. In either case, the youth was first asked to
move to a location in the house where they felt comfortable talking and could not be heard by their parent. The youth was then read the youth consent form (Appendix F) outlining the details of the study, all requirements, risks, and their right to withdraw at any time. After consent was orally provided the youth was asked to complete the questionnaires over the telephone, including the Child Report of Parental Behaviour Inventory (CRPBI), the Positive Schema Questionnaire (PSQ), the Resiliency Scale (RS), the Brief Multidimensional Students’ Life Satisfaction Scale (BMSLSS), the Beck Depression Inventory for Youth (BDI-Y), the qualitative question, and the data accuracy check (See Appendix A). The first four measures were randomly assigned (CRPBI, PSQ, BMSLSS, RS). The last measure was always the BDI-Y, as the researchers did not want the youth’s report of their depression symptoms to bias their reporting on other measures. The youth was then asked the qualitative question pertaining to the best things about them. Finally, the youth was asked the single question about their overall level of understanding with regards to the questionnaires administered.

It took approximately 40 minutes for both the caregiver (20 minutes) and the youth (20 minutes) to complete the survey. After the completion of the telephone interview, each family’s address was collected and a $20 Tim Horton’s gift card was mailed to the family, as well as a thank you letter including the contact information for the research lab.
Figure 5. Flow diagram outlining the participant selection process for study 2

- Participants invited through telephone calling for Study 1 (n=178)
- Packages sent to Divisions of the Mood Disorders Association of Ontario (n=35; 350 brochures sent)
- Packages sent to Hospitals and University Counseling Centers in Ontario (n=16; 160 brochures sent)

- Participants who contacted the lab regarding Study 2 (n=22)
- Participants who contacted the lab regarding Study 2 (n=0)
- Participants who contacted the lab regarding Study 2 (n=0)

- Participants who contacted the lab regarding Study 2 (n=22)

- Excluded with Reason (n=4):
  - Youth did not have BSD (n=1)
  - No consenting guardian (n=1)
  - Could not reach/Did not answer (n=2)

- Participants included in data analysis for Study 2 (n=18)
Study 2: Results

Descriptive Statistics

To assess the validity of the answers provided by the youth participants, the single item measuring understanding of the questionnaire was examined. Overall, youth reported that they understood the questions they were asked ($M = 4.29$, $SD = .61$) and scores ranged from 3 to 5 on the 6-point Likert scale ($0 = not at all$, $5 = very well$).

The means and standard deviations for the CRPBI- Parent and Youth version, RS- Parent and Youth version, PSQ, BMSLSS, FMSS, CMRS, and BDI-Y- Parent and Youth version, can be found in Table 10. The zero-order correlations can be found in Table 11. Given the small sample size trends are also reported below and indicated as such.

Table 10

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<th>Variables</th>
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<th>$SD$</th>
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<td>Criticism</td>
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<td>BDI-Y- Parent Version</td>
<td>Depression Total (P)</td>
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</table>

Note. $^1$CRPBI = Child Report of Parenting Behaviour; RS= Resilience Scale; PSQ = Positive Schema Questionnaire; BMSLSS= Brief Multidimensional Student Life Satisfaction Scale; FMSS= Five Minute Speech Sample; CMRS = Child Mania Rating Scale; BDI-Y = Beck Depression Inventory – Youth; (Y) = Youth version; (P) = Parent Version
Table 11

Zero-order Correlations for Study 2 Variables

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<thead>
<tr>
<th>Measure</th>
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<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
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<th>10.</th>
<th>11.</th>
<th>12.</th>
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*Note. *p<.05, **p<.001, one-tailed.

¹CRPBI = Child Report of Parenting Behaviour; RS = Resilience Scale; PSQ = Positive Schema Questionnaire; BMSLSS = Brief Multidimensional Student Life Satisfaction Scale; FMSS = Five Minute Speech Sample; CMRS = Child Mania Rating Scale; BDI-Y = Beck Depression Inventory – Youth.
### Table 12
Zero-order Correlations for Parenting at Time 1 and all Study 2 Variables

<table>
<thead>
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<tr>
<td>Depression Total</td>
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<td>-.04</td>
<td>.13</td>
<td>-.50*</td>
<td>-.20</td>
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**Note.** *p < .05, **p < .001, one-tailed.

\(^1\)CRPBI = Child Report of Parenting Behaviour; RS = Resilience Scale; PSQ = Positive Schema Questionnaire; BMSLSS = Brief Multidimensional Student Life Satisfaction Scale; FMSS = Five Minute Speech Sample; CMRS = Child Mania Rating Scale; BDI-Y = Beck Depression Inventory – Youth.
Longitudinal Analyses

The amount of time between the collection of time 1 and time 2 data ranged from 1 to 8 years with an average of 3.65 years (SD = 2.15). To investigate the relations between study 1 parenting variables measured at T1 and study 2 parenting and youth functioning variables, zero-order correlations were examined (See Table 12).

Parental Support. Regarding parenting characteristics at time 1 based on the PCRI, Parental Support was significantly and positively related to youth reported Acceptance (CRPBI) and Life Satisfaction (BMSLSS). Specifically, parents who reported higher levels of parental support had youth who reported higher levels of parental acceptance and higher levels of life satisfaction. Parental Support was also significantly and negatively related to observed parental Warmth (FMSS), and parent report of youth Depression (BDI-Y). Parents who reported higher levels of parental support had lower scores on observed parental warmth and reported lower levels of youth depression for their children. At the trend level, Parental Support was positively related to youth reported Psychological Control (CRPBI) \( [r = .48, p = .067] \), youth reported Resilience (RS) \( [r = .47, p = .071] \), and youth reported Positive Schemas (PSQ) \( [r = .51, p = .053] \). Thus, parents who reported higher levels of parental support tended to have youth who also reported higher levels of psychological control, resilience, and positive schemas.

Satisfaction with Parenting. Satisfaction with parenting was not significantly related to any study 2 variables and no notable trends were found.

Parental Involvement. Parental Involvement was significantly and positively related to parent reported Psychological Control (CRPBI). Specifically, parents who reported engaging in higher levels of parental involvement also reported using higher levels of psychological control. At a trend level, Parental Involvement was positively related to youth reported Psychological Control (CRPBI) \( [r = .47, p = .071] \). Thus, parents who reported engaging in higher levels of
parent involvement tended to have youth who reported having parents who use higher levels of psychological control as a parenting strategy.

**Limit Setting.** Limit Setting was significantly and positively related to youth reported Psychological Control (CRPBI) as well as youth reported life satisfaction (BMSLSS). Hence, higher levels of parent reported limit setting was related to higher levels of youth reported psychological control and also youth reported life satisfaction. Limit Setting was significantly and negatively correlated with parent reported youth Depression (BDI-Y). Specifically, as parent reported limit setting increased, parent reported youth depression decreased.

**Autonomy Granting.** Autonomy Granting was significantly and negatively correlated with observed parental Warmth (FMSS). Thus, parents who reported higher levels of autonomy granting also scored lower of observed parental warmth.

**Role Orientation.** Role orientation was significantly and negatively related to parent reported youth Mania (CMRS). Specifically, parents who reported higher levels of egalitarian views of parenting also reported that their children had lower levels of mania symptoms.

**Youth Report of Parenting**

Regarding youth reported parenting at time 2, based on the CRPBI, youth reported Acceptance was significantly and positively related to parent reported Acceptance (CRPBI), youth and parent reported Resilience (RS), Positive Schemas (PSQ), and Life Satisfaction (BMSLSS). In this study, youth who reported that their parents used higher levels of acceptance as a parenting strategy also reported higher levels of resilience, positive schemas, and life satisfaction. In addition, these youth also had parents who reported using higher levels of acceptance as a parenting strategy and reported higher levels of youth resilience. Youth reported Psychological Control (CRPBI) was significantly and positively related to parent reported
Psychological Control (CRPBI). Thus, youth who reported that their parents use greater levels of psychological control had parents who also reported that they used greater levels of psychological control. A number of trends were found in addition to the significant findings. Youth reported Acceptance (CRPBI) was negatively related to youth reported Depression (BDI-Y) \[ r = -.45, p = .061 \]. Indicating that youth who reported higher levels of parental acceptance also reported lower levels of depression symptoms. Youth reported Psychological Control (CRPBI) was positively related to parent reported Resilience (RS) \[ r = .45, p = .063 \] and youth reported Life Satisfaction (BMSLSS) \[ r = .45, p = .060 \]. Specifically, as youth reported higher levels of parental psychological control they also reported higher levels of life satisfaction and their parents reported higher levels of youth resilience.

**Parent Report of Parenting**

Parent reported Acceptance (CRPBI) was significantly and positively related to youth and parent reported Resilience (RS), Positive Schemas (PSQ), Life Satisfaction (BMSLSS), and observed parental Warmth (FMSS). Parent reported Acceptance (CRPBI) was also significantly and negatively related to youth reported Depression (BDI-Y). Thus, as parent reported acceptance increased, parent reported resilience, youth reported positive schemas and life satisfaction, and observed parental warmth also increased. Conversely, as parent reported acceptance increased, youth reported depression symptoms decreased. Parent reported Psychological Control (CRPBI) was significantly and positively related to parent reported Resilience (RS). As parent reported psychological control increased parent report of youth resilience also increased. At the trend level, parent reported Acceptance (CRPBI) was negatively related to observed Criticism (FMSS), \( r = -.39, p = .063 \). Specifically, as parent reported acceptance increased observed criticism tended to decrease.
Observed Parenting

Regarding observed parenting based on the FMSS, observed Criticism was significantly and positively related to youth reported Depression (BDI-Y). As observed criticism increased, youth reported depression also increased. At the trend level, observed Criticism was negatively related to parent reported Resilience (RS) \( r = -.40, p = .057 \) and was positively related to parent reported youth Mania (CMRS) \( r = .41, p = .051 \). Thus, as observed criticism increased, parent reported resilience tended to decreases, and parent reported youth mania tended to increase.

Mediation Analyses

In the current study, Positive Schemas were proposed as possible mediators in the relation between Parenting Characteristics and Resilience in youth with a Bipolar Spectrum Disorder. To explore Positive Schemas as a mediator between Parenting Characteristics and Resilience, a series of univariate mediation analyses were conducted. Separate mediation models were fitted for youth and parent reported Acceptance and Psychological Control predicting youth reported Resilience, resulting in four models (See Figure 1).

For the univariate mediation models tested, the youth and parent report of Parenting Characteristics (i.e., Acceptance and Psychological Control; CRPBI) were the independent variables \( (X) \), youth reported Resilience (RS) was the dependent variable \( (Y) \), and the youth reported Positive Schema total score (PSQ) was used as the mediator in each analysis \( (M) \). Path \( a \) is considered the direct path predicting \( M \) from \( X \), path \( b \) is considered the direct path predicting \( Y \) from \( M \), path \( c \) is considered the total effect of \( X \) on \( Y \), and path \( c' \) is considered the direct effect of \( X \) on \( Y \), controlling for \( M \). The indirect effect is considered the product of \( a \) and \( b \) paths (See Figure 1). The total effect can be expressed as the sum of the direct effect and indirect effect, such that \( c = c' + ab \).
For all models tested, the indirect effect was estimated using the non-parametric bootstrapping procedure described by Preacher and Hayes (2004). This bootstrapping process is an extension of the Sobel Test (Sobel, 1982). This approach is widely regarded as an improvement to Baron and Kenny’s (1986) causal steps mediation method and is a suitable choice when sample size is small (Hayes, 2009). The bootstrapping procedure yields more accurate estimates of confidence intervals for the indirect effect than the Sobel test, and was carried out using the SOBEL macro for SPSS (Preacher & Hayes, 2008). The indirect effect was bootstrapped with 5000 sample indirect effects (with replacement) using the current sample as the population of possible indirect effects. This yielded a point estimate of the population value of the indirect effect (unstandardized regression coefficient), its standard error, and 95% confidence interval (CI). The indirect effect is considered significant at $p < .05$, two-tailed, if zero does not lie within the upper and lower limit of the confidence interval. This essentially means that we are 95% confident that the “true” indirect effect does not equal zero (i.e., no mediation).

A post hoc power analysis, conducted using G*Power 3 (Faul et al., 1996), showed that there was a 14% chance of detecting a medium sized effect ($f^2 = 0.15$) and a 28% chance of detecting a large effect ($f^2 = 0.35$) for a regression model including 3 predictor variables (i.e., parenting, positive schemas, and the interaction term) based on the sample size of 13 participants. With regard to this small sample size and low level of power, Preacher and Hayes (2004) outline that the bootstrapping process is not based on “large-sample” theory and thus can be applied to small samples with more confidence. They do not outline a minimum sample size required to perform mediation analyses and suggest that bootstrapping can be used with small samples while keeping in mind that bootstrapping does not prima facie solve power problems.
Consequently, this method was used acknowledging the limitations inherent to the small the sample.

Table 13

*Bootstrapped Point Estimates (B), Standard Error (SE) and Confidence Intervals (CIs) for the Indirect Effect of Parenting on Resilience with Positive Schemas as a Mediator*

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>B</th>
<th>SE</th>
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<th>95% CI Upper</th>
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<tr>
<td>Model 1</td>
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<td>Youth reported Acceptance on youth reported Resilience</td>
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<td>Model 4</td>
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*Note. * indicates significant at p < .05. 95% CI Estimates based on 5000 bootstrapped samples.

Positive Schema Mediation

**Acceptance.** As outlined in Figure 1, four mediation models were tested. The first model examined Positive Schemas (PSQ) as a mediator between youth reported Acceptance (CRPBI) and youth reported Resilience (RS; See Figure 1A). The overall model was significant \([F(2,10) = 13.54, p = .001]\) and accounted for 73% of the variance in predicting youth reported Resilience. The indirect effect of Positive Schemas was significant at \(p = .013\). Bootstrapping results confirmed that the direct effect (\(c’\) path) of youth reported Acceptance on youth reported
Resilience was much smaller and not significant when the mediation path was included, consistent with the model in which Positive Schemas completely mediated the effect of youth reported Acceptance on youth reported Resilience. Table 13 outlines the confidence intervals for the indirect effect. Path estimates for each pathway (see Figure 6) suggested that increased youth reported Acceptance lead to increased Positive Schemas, which in turn lead to increased youth reported Resilience.

**Figure 6.** Mediation model of youth reported acceptance predicting (a) path estimates for the direct effect of youth reported acceptance on youth reported resilience and (b) path estimates for the indirect effect of youth reported acceptance on youth reported resilience

*p <.05, **p <.001
Next, Positive Schemas (PSQ) was examined as a potential mediator between parent reported Acceptance (CRPBI) and youth reported Resilience (RS; See Figure 1B). The overall model was significant \( F(2,10) = 13.54, p = .001 \) and accounted for 73% of the variance in predicting youth reported Resilience. The indirect effect of Positive Schemas was significant, \( p = .033 \). However, the bootstrapped results showed that the direct effect (\( c' \) path) of youth reported Acceptance on parent reported Resilience did not significantly differ when the mediation path was included, implying that Positive Schemas did not mediate the effect of parent reported Acceptance on youth reported Resilience. Table 13 outlines the confidence intervals for the indirect effect.

**Psychological Control.** The third model examined Positive Schemas (PSQ) as a potential mediator between youth reported Psychological Control and youth reported Resilience (RS; See Figure 1C). The indirect effect of Positive Schemas was not significant, \( p = .754 \). The direct effect (\( c' \) path) of youth reported Psychological Control on youth reported Resilience did not significantly differ when the mediation path was included, implying that Positive Schemas did not mediate the effect of youth reported Psychological Control on youth reported Resilience. Table 13 outlines the confidence intervals for the indirect effect.

Finally, Positive Schemas (PSQ) was examined as a potential mediator between parent reported Psychological Control (CRPBI) and youth reported Resilience (RS; See Figure 1D). The indirect effect of Positive Schemas was not significant, \( p = .915 \). The direct effect (\( c' \) path) of youth reported Psychological Control on parent reported Resilience was not significantly smaller when the mediation path was included, implying that Positive Schemas did not mediate the effect of youth reported Psychological Control on parent reported Resilience. See Table 13 for a description of the confidence intervals for the indirect effect.
Positive Qualities of Youth with BSD

Given the limited information about positive development of youth with BSD, a single qualitative question was included at the end of the parent and youth questionnaires to explore positive qualities of youth with a BSD diagnosis from both the parent and youth perspective. The parents were asked what they thought were the best things about their child and youth were asked what they thought were the best things about themselves. Analysis of the parent and youth responses revealed 4 key themes (See Figure 3 and 4, and Table 9): (1) Interpersonal Relationships, (2) Internal Characteristics, (3) External Characteristics, and (4) Agency.

Parent Perspective

The themes present when parents were asked, “what are the best things about your child”, varied greatly (Figure 7). All parent comments were coded for the presence of the identified themes not the frequency with which they appeared within any one transcript. All percentages reported below are based on the occurrence of the thematic response in relation to the total number of responses. Only a few comments were not coded due to a lack of fit with any specific category (n = 5; e.g., “has an innocence about him”). Based on the four main themes, the most frequent comments were made in the Interpersonal Relationships and Internal Characteristics domains (35.85% each), followed by External Characteristics (15.09%), and Agency (13.21%).
Interpersonal Relationships. Parents emphasized the qualities important to fostering positive interpersonal relationships when describing the best things about their child. They discussed positive relationship qualities about their child (22.64%); describing them as “friendly”, “loving”, “kind spirited”, “likable”, “loyal”, etc. Parents also commented that one of
the best things about their child was that they were often assisting others (9.43%): “He has a passion for helping others”. Parents described their child as “very giving”, “generous to others”, “caring about others”, “helping others who are in need”, etc. Although less prevalent, a few parents also commented on their child’s flexibility (3.77%): “she is amenable to suggestions”, “always willing to try things”.

**Internal Characteristics.** Parents also seemed to emphasize the internal characteristics of their child. Parents spoke most about their child’s sense of humour (11.32%), as well as creativity (9.43%). They described their child as “thinking outside the box”, “being very creative”, “doing things differently or going against the grains”, etc. Other comments were made about their child’s intelligence (7.55%), “he is so smart”, “she is bright and wise”, and their child’s energy levels (7.55%), “he has a lot of energy”, “she is energetic”.

**External Characteristics.** To a lesser degree, parents spoke about external characteristic of their child. They on occasion commented on their child’s interests or hobbies (9.43%): “he is an excellent athlete”, “her love of music”, “he is a good hockey player”, “he loves animals”. Although uncommon, a few parents mentioned their child’s unique world view (5.66%) as being one of the best things about them. For example, a few parents described their child as having a “unique way of looking at things in the world” and an “interesting way of viewing things”.

**Agency.** Other comments made by parents related to the theme of agency. Parents sometimes described their child as being very determined and committed (11.32%). Youth were described as “dedicated to things [she] wants to do”, “[his] focus on achieving and accomplishing [his] goals”. They were also described as “determined”, “committed”, “motivated”, and “driven”. Yet, only on one occasion did a parent describe their child as self advocating (1.89%).
Youth Perspective

The themes present when youth were asked, “what are the best things about you”, also varied greatly (Figure 8). All youth comments were coded for the presence of the identified themes not the frequency with which they appeared within any one transcript. Based on the four main themes, the most frequent comments were made in the Interpersonal Relationships domain (55%), followed by External Characteristics (25%), Internal Characteristics (15%), and Agency (5%).

Figure 8. Themes and subcategories for youth comments regarding the “best things” about themselves (n = 20), presented in percentages
**Interpersonal Relationships.** Similar to parent responses, the comments made by the youth also emphasized the qualities important to fostering positive interpersonal relationships. The youth most commonly described positive relationship qualities (40%) when asked “what are the best things about you”. They described themselves as “caring”, “sociable”, “good friend”, “empathetic”, etc. To a lesser extent they also discussed their desire to assist others (15%) as a positive quality: “Determined to help people”, “helpful to others”, among others.

**Interests/Hobbies.** Differing slightly from the parent reported themes, youth were more likely to list interest/hobbies as one of the “best things” about themselves (25%): “What I can do-play sports, do art”, “I play the flute and sing”, “I like reading and T.V.”, “ability to work with engines”, among others.

**Internal Characteristics.** Although not frequently, a few youth mentioned internal characteristics as one of the “best things” about themselves. The youth who did make these comments spoke equally about their humour (6%), creativity (6%), and intelligence (6%). Discussing their “humour and ability to make light of situations”, “creative ways” and being a “fast learner”.

**Determination/Commitment.** When describing themselves, youth did not often make comments consistent with the theme of determination/commitment. Only one youth commented about his determination and commitment (5%): “I am a hard worker”.

**Study 2: Discussion**

Study 2 provided some evidence for the relation between parenting context and positive functioning for youth with a diagnosis of BSD. Extending the findings from study 1, study 2 further explored parenting context in youth with BSD by gathering parent and youth report of
parenting, an observational measure of parenting, and incorporating a longitudinal approach to examining associations between parenting context and positive youth functioning. In addition, study 2 expanded from study 1 by gathering information about positive outcomes for youth with a diagnosis of BSD, specifically, information pertaining to life satisfaction, resiliency and positive schemas. Study 2 also incorporated a qualitative approach to gathering information about positive qualities of youth with a diagnosis of BSD in an attempt to better understand positive aspects of this unique sample.

**Longitudinal Aspects of Parenting and Positive Youth Development**

Given the lack of research examining positive development for youth with a diagnosis of BSD based on early parenting characteristics, it was hypothesized that increased levels of positive parenting at time 1 (i.e., parental support, parental satisfaction, parental involvement, autonomy granting, limit setting, and role orientation) would be related to increased levels of positive functioning (i.e., life satisfaction, resiliency, positive schemas) at time 2. When exploring the longitudinal aspects of parenting in study 2, the most prominent parenting strategies at time 1 (study 1) for predicting positive functioning (i.e., life satisfaction, resiliency, and positive schemas) at time 2 (study 2), were parental support and limit setting.

**Parental Support.** Higher levels of parental support at time 1 was significantly related to higher levels of youth reported life satisfaction and lower levels of parent reported depression symptoms for youth with BSD several years later. Noticeable trends were also found for the relation between parental support at time 1 and youth reported resilience and positive schemas at time 2. These findings suggest that increased levels of perceived parental support (e.g., respite, kin relationships, financial support, etc.) may lead to increased levels of perceived life satisfaction, resilience, and positive schemas, as well as lower levels of reported depression
symptoms for youth with BSD. These findings are consistent with previous research suggesting that increased levels of parental support relates to more positive functioning for youth with psychopathology (Brody et al., 2009; Gaylord-Harden et al., 2010; Douma et al., 2006; Kogan & Brody, 2010; Schroeder & Kelley, 2010; Taylor et al., 2012; Wu et al., 1999), while also expanding this literature with a longitudinal method and to encompass youth with a BSD diagnosis in particular. These findings suggest that increasing parental support may help to promote positive outcomes (i.e., lower psychopathology) for youth with psychopathology over time and also suggest that youth with BSD may benefit from the positive aspects of parental support, similar to other youth with psychopathology.

These findings are similar to the relation between parental support and lower levels of psychopathology (i.e., mania) found in study 1, suggesting that parents who received more support had youth who showed more positive functioning (i.e., lower mania symptoms). Similar to study 1, the mechanisms by which parental support relates to positive functioning (i.e., life satisfaction, resiliency, positive schemas, lower levels of depression symptoms) were not explored in this study. Again, based on literature in this area, it is thought that parents who report higher levels of parental support may be better adjusted and likely have more resources (e.g., financial, mental, emotional) to manage their child (Douma et al., 2006; Taylor, 2011; Turnbull & Ruef, 1996), which may lead to more positive experiences or healthier parent-child relationships for youth with a diagnosis of BSD and over time may result in more positive outcomes. Future research should aim to better understand the mechanisms that explain the relation between parental support and positive functioning for youth with BSD.

**Limit Setting.** An increased level of reported limit setting at time 1 was related to lower levels of depression symptoms several years later. This finding builds on study 1 by suggesting
that limit setting is not only an important parenting characteristics to consider when focusing on externalizing difficulties but may also play a significant role when considering internalizing symptoms in youth with BSD. Consistent with previous research suggesting that limit setting is generally related to better adjustment in youth (e.g., social competence, greater self-concept, life satisfaction, self-regulation, etc.; Lecuyer & Houck, 2006; Schroeder & Kelley, 2010; Suldo & Huebner, 2004), higher levels of reported limit setting at time 1 was also related to higher levels of youth reported life satisfaction at time 2. Again, there are a number of mechanisms that may be considered to explain this relation, however this was outside of the scope of the current study. Based on previous research it has been suggested that limit setting provides youth with psychopathology with a sense of routine and organization, which is thought to be related to outcomes of youth well-being (Koblinsky et al., 2006; Lanza and Taylor 2010; Mattanah, 2001; Roche & Leventhal, 2009). For youth with a diagnosis of BSD, limit setting is an important parenting characteristic that may lead to increased levels of positive functioning and possible mechanism for this relation should be further investigated.

**Other Parenting Variables.** Satisfaction with parenting, parental involvement, autonomy granting, and egalitarian views of parenting at time 1 were not significantly related to any measure of positive functioning (i.e., life satisfaction, resilience, positive schemas) at time 2. Previous research has suggested that increased parental involvement as well as increased autonomy granting is related to positive developmental outcomes (e.g., increased self-esteem, social competence, greater self-concept, cognitive maturation, life satisfaction, self-regulation, emotional control, inhibition, shifting tasks, etc.; Houck, & LeCuyer-Maus, 2002; Lamborn et al., 1991; Lecuyer & Houck, 2006; Nielsen & Metha, 1994; Schroeder & Kelley, 2010; Steinberg, 2001; Suldo & Huebner, 2004), however this was not observed when examining these
relations in a sample of youth diagnosed with BSD. This finding may suggest that youth diagnosed with BSD differ from other youth in that parental characteristics that generally relate to positive functioning (i.e., parental involvement, autonomy granting, and egalitarian views) do not in this case.

Higher levels of egalitarian views at time 1 were significantly related to lower levels of mania at time 2, and thus more positive functioning. This finding is consistent with previous research (Feinberg et al., 2007; Katz & Low, 2004; McHale & Rasmusssen, 1998; Schoppe, et al., 2001) as well as the findings from study 1, suggesting that egalitarian views of parenting related to lower levels of psychopathology (i.e., internalizing difficulties, total problems). However, previous research has not established this relation for symptoms of mania. The current study sheds light on this relation for youth with BSD. The way in which egalitarian views of parenting relates to mania is unknown. It is suspected that parents who report more egalitarian views may also experience fewer parenting struggles (e.g., stress, psychopathology, poor parenting practices, etc.; Feinberg 2002, 2003) and thus provide youth with a more consistent and secure parent-child relationship, resulting in more positive outcomes for youth (i.e., lower mania symptoms). This finding suggests that egalitarian views of parenting may be an important parenting characteristic to consider when examining the parent-child relationship for youth with BSD and should be further explored in larger samples.

**Parenting Characteristics and Positive Functioning**

Another focus of study 2 was to determine the relation between time 2 parenting variables (i.e., youth report, parent report, and observed parenting) and positive functioning (i.e., life satisfaction, resiliency, and positive schemas) in youth with a diagnosis of BSD. It was hypothesized that higher levels of acceptance and lower levels of psychological control would be
related to increased levels of positive functioning (i.e., life satisfaction, resiliency, and positive schemas). Similarly, it was hypothesized that increased levels of observed parental warmth and decreased levels of observed parental criticism would be related to increased levels of positive functioning (i.e., life satisfaction, resiliency, and positive schemas).

**Youth Report of Parenting.** Overall the youth report of parenting aligned well with the parent report of parenting. Both youth report of acceptance and psychological control were significantly related to parent report of acceptance and psychological control, respectively; suggesting that both youth and parents had similar views of parenting. This finding was somewhat unexpected due to previous research suggesting that parent reports of parenting often differ from youth reports of parenting (Boughton & Lumley, 2011; Clay et al., 2008; De Reyes & Kazdin, 2005; Kolko & Kazdin, 1993). However, including both parent and youth reports of parenting in the current study added to the inclusive nature of the methodological design, by incorporating both parent and youths’ unique perspective. Although reporting was similar, both parent and youth bring unique perspectives to understanding the parenting context.

Consistent with a large body of work highlighting the relation between parental acceptance and psychopathology (Geller et al. 2000, 2002, 2004; Parker, 1983; Schenkel et al., 2008), higher levels of perceived parental acceptance was related to lower levels of reported depression in this sample. The primary focus of this dissertation was to go beyond the link between parenting and psychopathology and consider how parenting characteristics related to positive outcomes for youth with BSD. Consistent with hypotheses, youth reported parental acceptance was significantly related to *all* aspects of positive functioning in this sample, including life satisfaction, resiliency, and positive schemas. These results provide corroborating evidence underscoring the importance of acceptance in the parent-child relationship for youth
with BSD (Geller, et al., 2000, 2004; Neeren, et al., 2008; Rosenfarb et al., 1994) and add to this literature by considering how these important parenting characteristics relate to positive outcomes for youth with BSD. Overall, youth who perceived their parents to be more accepting also reported having higher levels of positive functioning. This finding may suggest that youth who see their parents as being warm and accepting may receive positive messages from their parents, and/or experience a positive parent-child relationship, which, in turn, leads youth to experience more positive outcomes (i.e., life satisfaction, resiliency, positive schemas). Further research is needed to clarify the factors underlying the relation between parental acceptance and positive functioning for youth with a diagnosis of BSD.

Interestingly, youth reported psychological control was not significantly related to any positive functioning outcomes (i.e., life satisfaction, resiliency, positive schemas). Previous research has suggested a relation between psychological control and greater levels of psychopathology for youth with BSD (Geller et al. 2000; 2002; Parker, 1983; Schenkel et al., 2008), thus it was expected that lower levels of psychological control would be significantly related to positive outcomes for youth with BSD. When further examining the data a few trends were found. Higher levels of youth reported psychological control was related to higher levels of parent reported resilience and youth reported life satisfaction. These trends suggest that psychological control in this sample may be more protective than typically evidenced in other research with youth with BSD (Geller, et al., 2000; Neeren, et al., 2008; Rosenfarb et al., 1994). Much of the previous research examining psychological control has focused on the presence of psychological control prior to a diagnosis of BSD and has implied that psychological control is a negative factor present prior to episodes of depression and/or mania (Neeren et al., 2008), yet
research has not examined the relation between psychological control and positive outcomes for youth with BSD.

**Parent Report of Parenting.** Consistent with the youth results reported above, parent reported acceptance was significantly related to lower levels of youth reported depression. Gathering further support for hypotheses and consistent with youth report of parenting, parent reported acceptance was also significantly related to all aspects of positive functioning (i.e., life satisfaction, resiliency, positive schemas) measured in study 2. These finding are consistent with the previous literature outlining a relation between parent acceptance and BSD severity (Geller, et al., 2000, 2004; Neeren, et al., 2008; Rosenfarb et al., 1994), and extends these findings by looking at how parental acceptance relates to positive functioning for youth with a diagnosis of BSD.

Contrary to initial hypotheses, parent reported psychological control was significantly and positively related to parent reported youth resilience. This pattern suggests that higher levels of perceived use of psychological control as a parenting technique, was related to higher levels of parents’ perceptions of their child’s resilience. This finding is surprising given the research indicating that psychological control is generally related to more negative outcomes for youth with BSD (Geller et al 2000; 2002; Parker, 1983; Schenkel et al., 2008). However, this finding is consistent with trends evidenced in the youth reporting, in which youth report of psychological control was also related to parent report of resilience and youth report of life satisfaction. Taken together, these findings begin to depict a picture of psychological control as a potentially positive aspect of parenting for youth with BSD. It may be that, at least in some cases, psychological control represents a method of guidance for youth with a diagnosis of BSD. It is common for youth with this diagnosis to have a mix of emotional states (i.e., depression, mania) making
parenting youth with BSD a difficult task – one that often requires extra parental support (Pavuluri et al., 2004; Pavuluri, 2008). In this case, the mechanism that may explain why psychological control is related to positive functioning for youth with BSD in this sample is the structure or guidance psychological control provides for these youth. Consistent with this theory, when considering the longitudinal data, it was found that a higher level of parental involvement at time 1 was significantly related to a greater level of parent reported psychological control at time 2. Thus, parents who reported high levels of parental involvement in their child’s life at time 1 also reported using high levels of psychological control at time 2. When reviewing trends, increased parent involvement at time 1 was also related to increased levels of youth reported psychological control at time 2.

**Observed Parenting.** The observational measure of parenting was included in this study as an attempt to provide another perspective of parenting not as influenced by self-report. The Five Minute Speech Sample (FMSS) has been shown to be an excellent method for capturing parenting characteristics indirectly in many different samples (Calam & Peters, 2006; Magana et al., 1986; Moore & Kuipers, 1999). For study 2, observed parental warmth based on the FMSS, was significantly related to parent reported acceptance. Suggesting that parents’ reports of positive parenting techniques (i.e., acceptance) is consistent with observed positive parenting (i.e., warmth) measured through a speech sample. However, contrary to hypotheses, observed warmth was not significantly related to any of the positive functioning outcomes including life satisfaction, resiliency, and positive schemas. Again, consistent with other findings this result may suggest that youth with BSD show more positive functioning when they have parents who provide greater levels of structure and control (i.e., psychological control, limit setting) where as general warmth may play a lesser role.
Consistent with hypotheses, when considering observed criticism based on the FMSS it was significantly related to higher levels of youth reported depression symptomatology and trends were found for the relation between observed criticism and parent reported youth mania symptomatology. These findings are consistent with previous research suggesting that high levels of criticism are related to increased risk of BSD onset and relapse and higher levels of mania and depression (Miklowitz, et al., 1988, 2006; Ramana, & Bebbington, 1995; Rosenfarb, et al., 2001). Also consistent with initial hypotheses, a trend was found for the relation between observed criticism and parent reported resilience, such that higher levels of observed criticism was related to lower levels of parent reported resilience. Overall, criticism is viewed as a negative parenting characteristic and may be related to more problematic outcomes for youth with BSD, such as increased depression and mania symptomatology and lower levels of resilience.

**Positive Schema Mediation**

After exploring the relations between parenting and positive outcomes for youth with BSD, the third goal of study 2 was to determine if positive schemas act as a mediator for the relation between parenting context and resiliency. It was hypothesized that positive schemas would mediate the relation between parental acceptance and resiliency as well as between psychological control and resiliency. Overall, four models were tested including parent and youth reported acceptance and psychological control as the main parenting characteristics, predicting child reported resiliency, while considering positive schemas as a mediator.

Consistent with hypotheses, positive schemas acted as a significant mediator between youth reported acceptance and youth reported resilience. Although cross-sectional in nature, this analysis is consistent with a model suggesting that increased levels of youth perceived parental
acceptance may lead to increased development of positive schemas, which in turn result in higher levels of youth perceived resilience. This significant mediational model accounted for a large amount of the variance in predicting youth reported resilience and seems to be a robust finding given the small sample size for this study. Consistent with previous findings (Keyfitz et al., 2013) the development of positive schemas seems to play an important role when predicting resiliency outcomes. The current study also added novel information to the field of positive psychology by examining not only relations between parenting characteristics and resiliency, but also considering the influence parenting characteristics play on the development of positive schemas which in turn may promote resiliency. Finally, and of particular importance within the dissertation, this model sheds light on this relation specifically for youth with BSD, suggesting that despite the difficulties associated with a diagnosis of BSD, positive trajectories from positive parenting characteristic through positive core schemas to resiliency may also be unfolding.

The second mediation model tested in the current study examined positive schemas as a potential mediator between parent reported acceptance and youth reported resilience. However contrary to hypotheses, although this overall model was significant, suggesting that these variables combined significantly predict resiliency outcomes for this sample of youth with BSD, positive schemas did not emerge as a significant mediator. Given the small sample size, non-significant findings are difficult to interpret. Given the power analysis conducted, it is likely that this mediation analyses, even with bootstrapping, was underpowered to detect smaller mediation effects and such analyses will need to be replicated in larger samples. Alternatively, the lack of significant mediation in this model may suggest that the youths’ perceptions of parenting (youth reported acceptance) may be more influential on the development of positive schemas, which in
turn promotes resilience, than actual parenting practices or the parents’ perception of their parenting (parent reported acceptance).

The remaining models tested positive schemas as a mediator between youth or parent reported psychological control and youth reported resilience. Contrary to hypotheses, neither overall model was significant, suggesting that psychological control and positive schemas together do not explain significant variance in resilience, regardless of who reports on the psychological control. Not surprisingly, positive schemas did not significantly mediate the relations between the psychological control variables and the resiliency outcomes. Similar caveats regarding sample size, power and possibility of Type II error apply here as well.

Research examining the relation between negative parenting strategies and the development of positive schemas is lacking, nonetheless it was suspected that negative parenting would be associated with the development of fewer positive schemas, which in turn would be associated with lower levels of resilience, but this relation was not observed in the present study. Theorists have suggested that the influence of negative parenting characteristics (e.g., parental rejection) may be more salient than parental warmth and acceptance in the development of negative schemas (Garber & Flynn, 2001; Kaslow, et al., 1994). Based on the findings from the current study it is possible that parental acceptance, in turn, may be more salient in the development of positive schemas, than negative parenting characteristics (e.g., criticism, psychological control) are in the lack of development of positive schemas. It is also important to consider that psychological control in this sample may represent a unique parenting strategy as it was shown to be related to a number of positive outcomes for these youth with BSD and thus may not have interacted with positive schemas and resiliency in a predictable way.
Positive Qualities of Youth With BSD

To conclude, the final goal of study 2 was to qualitatively explore verbal responses pertaining to the positive qualities of the youth with a diagnosis of BSD. To date, no previous study has explored this topic for youth with BSD and thus no specific hypotheses were made. Qualitative methods were used to foster an open approach aimed to gather a more comprehensive understanding of concepts of interest rather than providing parents and youth with measures including positive qualities that they were asked to rate on a predetermined descriptive scale (Armstrong, et al., 2005; Braun & Clarke, 2006; Krahn et al., 1995). The qualitative analysis revealed that most parents described the “best thing” about their child, as being related to interpersonal relationship qualities (e.g., being particularly friendly, loving, likeable, etc.) or aspects of their child’s internal characteristics (e.g., humour, being smart, creative, etc.). This finding is consistent with a previous qualitative study with adults who have a diagnosis of BSD, in which they often described themselves as possessing amplified internal states and more human connectedness (Lobban et al., 2012). To a lesser degree, parents spoke about their child’s external characteristics (e.g., interests and hobbies) and their child’s sense of agency (e.g., dedication, commitment, determination, etc.). These findings are also consistent with the previously discussed qualitative study in which adults with BSD spoke often about their enhanced talents or aptitudes and the ease with which they were able to perform tasks (e.g., hobbies, work, etc.; Lobban et al.). In addition, the adults with BSD often commented on the overall general abilities they possessed (e.g., singing talents, artistic talents, hard working, etc.).

On a thematic level, the youth responses about the “best things” about themselves cohered largely with the parent responses. Again, this is an interesting finding given that much research has focused on the differences between parent and youth reporting (Boughton &
Lumley, 2011; Clay et al., 2008; De Reyes & Kazdin, 2005; Kolko & Kazdin, 1993). However, much of the research outlining differences between parent and youth reporting has focused mainly on negative outcomes (e.g., family conflict, family stress, parental dysfunction, parental psychopathology; see Boughton & Lumley, for a review), and the current study focused on measuring parent and youth perspectives of positive outcomes. This is a difference worth exploring in future research to determine if this finding is unique to this sample (i.e., youth with a diagnosis of BSD) or is specific to reports of positive functioning as compared to negative outcomes.

Consistent with parent reporting, youth also spoke most often about their own interpersonal relationship qualities (e.g., caring sociable, a good friend, etc.). The qualitative analysis suggests that in this study youth with BSD tended to emphasize interests/hobbies (i.e., external characteristics) more often as positive qualities about themself than they did internal characteristics or determination/commitment. Although the frequency of reporting these themes differed slightly from the parent reports, the themes described by youth were consistent with the previous qualitative study in which adults with BSD described positive aspects of having a diagnosis of BSD and included more human connectedness and enhanced abilities (i.e., interests/hobbies) in their personal descriptions (Lobban, et al., 2012).

The qualitative results of this study are interesting because they shed light on a topic not previously explored in youth with this diagnosis. Based on the qualitative analysis, positive aspects of youth from both parent and child perspective emerge. Despite the very real mental health and larger life struggles associated with a diagnosis of BSD, these parents and youth were still able to consider and report on positive aspects of the youth. These findings are consistent with previous work on adults with a diagnosis of BSD suggesting that individuals with BSD
show many positive qualities (e.g., achievement motivation, creativity, positive affect, etc.; Galvez et al., 2011; Johnson, 2004; Lovejoy & Steuerwald, 1995). This is also in line with the positive clinical psychology literature (e.g, Wood & Tarrier, 2010) suggesting that youth who do struggle with psychopathology also have many positive qualities that should be more fully considered, particularly when considering how to promote positive functioning for these youth in intervention programming.

**General Discussion**

Overall, the central purpose of this dissertation was to improve understanding of broad parenting characteristics associated with positive outcomes for youth with a diagnosis of BSD. Considering both mental health and positive psychology outcomes, results suggest that parenting characteristics relate to lower levels of psychopathology, and higher levels of life satisfaction, resiliency and positive schemas. Moreover, the results highlight positive schemas as one mechanism that may relate youth perceived parental acceptance to youth reported resiliency in a sample of youth diagnosed with BSD.

**Summary of Findings**

Both study 1 and study 2 provide evidence for the relation between parenting characteristics and positive outcomes for youth with a diagnosis of BSD. Study 1 examined broad measures of parenting in relation to lower levels of psychopathology, one way to consider improved or more positive functioning. Study 1 also expands previous research on parenting context and youth with a diagnosis of BSD, by focusing on consideration of these relations contemporaneously during childhood. Utilizing these contemporaneous measures of parenting, the results from study 1 support previous findings (e.g., Cooke, et al., 1999; Gerlsma et al., 1990; Neeren et al., 2008; Joyce, 1984; Parker, 1979, 1983; Perris et al., 1986; Rosenfarb et al., 1994)
and suggest that the reported parenting practices for youth with a diagnosis of BSD do not significantly differ from the parenting practices reported for youth without a diagnosis of BSD. Given that many studies examining the role of parenting within the context of BSD have used retrospective designs (see Alloy, Abramson, Neeren, et al., 2006, Alloy, Abramson, Smith, et al., 2006 for a review), the present study improved on this method of data collection by using parenting measures for study 1 as prospective predictors of positive functioning among the youth with BSD several years later in study 2.

The current dissertation also expanded previous research by not only acknowledging the negative aspects associated with psychopathology (i.e., depression, mania, total problems, internalizing difficulties, externalizing difficulties), but by also considering the positive aspects of functioning (i.e., life satisfaction, resiliency, positive schemas) for youth with a diagnosis of BSD. Consistent with the positive clinical psychology literature (Wood & Tarrier, 2010), this dissertation focused on integrating both positive and negative characteristics to better understand youth diagnosed with BSD.

Limit setting, autonomy granting, and egalitarian views of parenting all emerged as important parenting characteristics when considering psychopathology for youth who were being considered for a diagnosis of BSD as well as youth who received a diagnosis of BSD. When attempting to better understand why these specific parenting strategies may be relevant to youth with BSD it was speculated that all of these variables seem to be methods of parenting that involve setting boundaries for youth. It may be that youth with BSD find more security in relationships that provide clear boundaries and aid in supporting the youth with permission, limitation, and roles. These parenting strategies may create a greater sense of security for these youth which in turn may enable them to more securely explore and experience their
environment. This may then result in lower general stress and thus, lower levels of psychopathology and more positive functioning. Future research should aim to further explore this hypothesized relation among parenting variables and functioning for youth with a diagnosis of BSD.

Study 2 more thoroughly examined the influence of parenting characteristics on positive functioning in youth through parent, youth, observational, and longitudinal measures of parenting. As mentioned above, much of the previous research uses only parent reports of parenting or adult retrospective reporting, with few studies utilizing youth report of parenting or multiple perspectives (i.e., both parent and youth reports). Given the literature suggesting that youth and parents tend to characterize family variables differently and show low correspondence on reports of family functioning (Boughton & Lumley, 2011; Clay et al., 2008; De Reyes & Kazdin, 2005; Kolko & Kazdin, 1993), the current dissertation addressed this limitation by using a mixed-method design with multiple reporters. However, study 2 results suggest that parent and youth report of parenting was similar in nature and that observed and longitudinal measures of parenting only partially related to current parent and youth reports.

Study 2 in particular focused on expanding the findings from study 1 and included measures of positive functioning (i.e., life satisfaction, resiliency, positive schemas). Limited research had previously examined life satisfaction in a sample of adults with BSD (Goldberg & Harrow, 2005), but no research had examined life satisfaction in a sample of youth with BSD. Furthermore, based on a review of the literature, resiliency and positive schemas were not identified as being explored among youth with BSD. The current dissertation addressed these important gaps in the literature by examining life satisfaction, resiliency, and positive schemas for youth with BSD. Study 2 results suggested that parental acceptance was related to all
measures of positive functioning and that parental support and limit setting were the most prominent parenting characteristics from study 1 prospectively predicting positive functioning among these youth several years later.

In study 2, psychological control and positive outcomes (i.e., life satisfaction, resiliency, positive schemas) were consistently related. Based on these results, and contrary to hypotheses, increased psychological control in this sample related to more positive functioning for youth with BSD. Given the small sample size for study 2, these results must be interpreted cautiously, nonetheless, it is suspected that psychological control may act as a protective factor for these youth, as youth with BSD are often severely affected by BSD symptoms (i.e., more chronic symptoms, a faster rate of change between manic and depressive states, greater dysphoria, and greater irritability; Biederman et al., 2005; Geller & Luby, 1997; Youngstrom et al., 2008). For example, a parent who provides more psychological control may help a youth who has difficulty with manic and depressive states by providing a firm structure for how the child should be thinking about themselves, the world, and the future. When a child’s mood and thought patterns are continuously changing, having parents who try to control or influence the way their child thinks may in fact be helpful or protective for youth with a diagnosis of BSD. This explanation is speculative and future research should aim to replicate these relations within a larger sample.

To further explore the relation between parenting characteristics and positive outcomes, mediational models were tested in study 2 to examine positive schemas as a potential mediator between parenting characteristics and resiliency. Most cognitive models of psychopathology focus on negative schema mediators linking parenting context to psychopathology (Alloy, Abramson, Smith, et al., 2006; Cole & Turner, 1993; Harris & Curtin, 2002; Lumley & Harkness, 2007) and this dissertation is the first to look at positive schemas as the mechanism
underlying the relation between parenting and resiliency outcomes for youth with BSD in particular. Although sample size hindered the power for these analyses, the model with positive schemas linking youth reported parental acceptance to youth reported resiliency was robust enough to emerge even in this small sample. Greater levels of youth perceived parental acceptance was associated with higher levels of positive schemas, which in turn, was associated with greater levels of youth perceived resilience. Although replication with a larger sample is a top research priority, this finding has a number of implications for future research and suggests that the development of positive schemas may play an important role in resiliency outcomes for youth with BSD. In addition, this finding supports the idea that parenting characteristics can have an impact on positive outcomes (i.e., positive schemas and resiliency) for youth with BSD. Potential directions for future research include exploring this model in samples of youth with other forms of psychopathology and also examining positive schemas as a potential mechanism underlying the relation between other parenting characteristics (e.g., limit setting, autonomy granting, role orientation, etc.) and positive outcomes (e.g., life satisfaction, resiliency, etc.).

Finally, given the limited research knowledge about positive qualities of youth with a diagnosis of BSD, qualitative methods were used in study 2 to address this matter from both the parent and youth perspective. The qualitative component was included in this dissertation as an attempt to examine how youth and their parents described positive aspects or “best things” about themselves/the youth. Parents of youth and youth with BSD both primarily valued interpersonal relationship characteristics of the youth with BSD (e.g., being kind, loving, etc.). Parents of youth with BSD also highly valued their child’s internal characteristics and to a lesser degree their external characteristics and sense of agency. Youth with a diagnosis of BSD also highly valued their own external characteristics and tended to focus less on internal characteristics and
agency. This qualitative analysis helps to shed light on important aspects of positive self-reflection that may not be entirely addressed in the quantitative measures of positive functioning. This information may be useful when considering the design of future measures of positive functioning for youth with BSD, as well as in the development of treatment and intervention programs for youth with BSD (i.e., focusing on increasing aspects of the self that youth with BSD tend to view positively). Future research ought to consider examining similar questions with more diverse samples to potentially discern unique and overlapping positive characteristic profiles among typically developing youth, youth with BSD and youth with other forms of psychopathology. Highlighting positive aspects of self and positive functioning more generally for youth with BSD may also be an effective clinical focus; this is elaborated upon below.

**Limitations and Future Directions**

The results from the current studies should be interpreted in the context of the following limitations. For study 1, it is important to consider the heterogeneity of the sample and the level of comorbidity reported. It is difficult to make concrete conclusions about youth with BSD when the sample used involved youth with many overlapping disorders. This may have impacted the results of study 1 and minimized any differences and obfuscated possible differences in links between parenting characteristics and psychopathology between youth with a diagnosis of BSD and youth without. Future research should aim to screen participants for comorbid diagnoses and attempt to control for additional diagnoses or understand particular comorbid profiles in study analyses.

In addition, study 1 was archival in nature and included a review of previous clients’ files. This ultimately limited the information that was collected and could be used for the current dissertation. Many questionnaires were administered for a brief period of time and later changed
to a new measure, making it difficult to find consistent measures across individual files and limiting potential analyses. In addition, measures utilized at time 1 may not have been sensitive enough to fully capture all aspects of parenting and positive outcomes for youth with BSD. However, the study 1 sample provided important information about a clinic sample of youth screened for a diagnosis of BSD, and youth who received a diagnosis of BSD, a population that is often understudied. Moreover, the information collected from the clients’ files in study 1 allowed for longitudinal analysis when compared to the data collected in study 2.

With regard to the small sample size for study 2, the results from this study must be interpreted with caution. This study would benefit from replication with a larger sample of male and female youth with a diagnosis of BSD, keeping in mind that it is difficult to recruit this specialized clinical sample. Although study 2 included a small sample of youth with a diagnosis of BSD, it does help to shed light on some important relations and informs next steps for future research. The replication of these findings would help to provide more support for the significant findings and may help to clarify some of the trends that were found throughout.

Both study 1 and study 2 generally involved predominately mothers. It would be important in future research to determine the influence fathers and other caregivers have on positive outcomes for youth with BSD. As well, measures of parenting can be influenced by a number of factors. For example, cultural or religious values, parental psychopathology, parents’ attitudes toward parenting, knowledge of development, and expectations for certain age categories, may influence how a parent will perceive their child and may have influenced the findings for the current studies. Future research should aim to explore these different facets of parenting or attempt to control for them when considering the influence of parenting characteristics on positive outcomes for youth with BSD. Despite these limitations, the method
used in the current dissertation does provide ecological validity by having the parent who
generally participates in the youths’ care also reporting on the youths’ functioning.

As well, the nature of the telephone interview for study 2 does not guarantee that the
youth or parent had full privacy while completing the questionnaires. Despite the examiner’s
request that the parent and youth find a place within the home they would find private and
comfortable, it is difficult to determine the influence other individuals in the home may have had
on the parents’ or youths’ reporting, which may have affected the findings. Future studies that
include an in-lab component or an at-home visit, could clarify the potential impact other
observers may have had on the participants reporting for study 2.

Both study 1 and study 2 used subjective reporting for a number of the central variables
measured. Subject reporting may have resulted in reporting bias (e.g., social desirability,
defensiveness, etc.). The multi-method design of study 2 incorporating an observational measure
of parenting and multiple informants were used to address some of these concerns, however
additional studies including, for example, more in-depth interviews, physiological research,
and/or home observations would provide further validation of these constructs. As well,
subjective reporting of positive functioning (e.g., resiliency), does not necessarily mean that a
youth is actually resilient. One can hold or report a belief that they are resilient or satisfied with
life when in reality they are not. Both parent and youth report was used in study 2 as an attempt
to buffer against these biases to some extent. Future studies should examine whether
observational measures of positive functioning yield similar results.

A single qualitative question was used to explore positive aspects of youth with BSD and
thus limited the qualitative information gathered in the current study. By providing a single
directive question (i.e., asking about the best things of the youth) the participants were guided to
respond in a particular way and this may have limited the content of the qualitative responses. Providing multiple or broader questions (e.g., please describe your child/self, how would you describe your child/self to a friend, how does your child/you manage with everyday struggles, etc.) may shed light on additional themes relevant to youth with BSD and their families. It would be interesting to explore whether positive qualities are discussed when an open format question (i.e., not directing towards positive qualities) is provided to youth with BSD and their parents. Furthermore, the positive qualities discussed by the participants in this study, may be similar to the responses that would be provided by parents and youth without psychopathology. It is difficult to conclude from the current study that the positive qualities outlined in this study differ from normative samples. Future research comparing youth with BSD to youth with other forms of psychopathology, as well as normative samples, would help to address this limitation. It is also important to note that the qualitative question only addressed positive qualities of youth in a sample of youth with BSD and did not ask specifically about positive qualities associated with BSD. Future research should aim to explore the positive aspects associated specifically with having a diagnosis of BSD for youth. Despite this limitation, the findings from the current dissertation were similar to previous qualitative research exploring the positive qualities associated with a diagnosis of BSD for adults (Lobban, et al., 2012). In addition, the qualitative question included in the current study provided additional information about positive aspects of youth in an understudied population (i.e., youth with BSD).

Both study 1 and study 2 utilized mostly cross-sectional data limiting the interpretation of findings. When utilizing cross-sectional designs it is difficult to determine cause and effect. Thus, it is difficult to concretely state the direction of many of the relations observed in this dissertation. Past research and theory helps to provided guidance for the direction of many
findings but longitudinal data is needed to clarify clear directions. In particular, the significant mediation analysis suggesting that positive schemas mediate the relation between parental acceptance and resiliency is based on cross sectional data and would be strengthened if explored using longitudinal methods. Other interpretations for the relation between acceptance and resiliency are possible and future research should aim to explore additional mechanisms of change. However, the mediational model tested in the current dissertation is consistent with theory and previous research suggesting that parenting relates to schema development, which influences youth functioning.

Finally, another avenue for future research would be to explore the significant findings from study 2 beyond a small sample of youth with BSD. Replicating these findings with youth with differing diagnoses would provide information about parental influence on the development of positive schemas and resiliency outcomes more broadly.

**Clinical Implications**

A number of clinical implications can be derived from the current dissertation. First, study 1 suggests that there may be similarity in parenting context and links between parenting context and psychopathology between youth with a diagnosis of BSD and youth with other complex mental health difficulties. With an emphasis on treating the biological underpinnings of BSD, parenting may not be as often considered as an important target for intervention in BSD compared to other forms of psychopathology (e.g., conduct problems, anxiety). Results suggest that parenting does relate to psychopathology for youth with a diagnosis of BSD, with relations highly similar to youth with other mental health difficulties, and that parenting may be one aspect of intervention to consider for these youth. Longitudinal data suggested that aspects of the parenting context relate to positive outcomes for youth with BSD several years later, further
underscoring their importance. Parenting groups used to broadly target parents of youth with complex mental health difficulties could benefit parents of youth diagnosed with BSD as well. Upon further research, parents may also benefit from knowledge about parenting approaches that might facilitate the most positive functioning in their child with a BSD diagnosis.

It has been suggested that clinicians generally do not attend to enhancing the positive aspects associated with a diagnosis of BSD, and that treatment of BSD symptoms may result in less benefit for individuals with BSD when positive aspects of certain symptoms of BSD are not recognized (Galvez et al., 2011). Overall, gaining a better understanding of not only the negative aspects associated with BSD but also the positive aspects could ideally help with better identification of youth at risk for developing BSD and could provide information about protective factors that may buffer against the negative impact of BSD. Thus, therapeutic approaches and treatment programs may need to spend more time focusing on the positive aspects associated with having a diagnosis of BSD for youth. It was clear from both qualitative and quantitative information from the current dissertation that youth with BSD report positive aspects of themselves. It may be important to increasingly consider how to build these aspects into treatment and intervention programs to foster positive functioning and to try to promote positive outcomes for youth with BSD. For example, during the assessment and formulation phases, the clinician could have youth report not only on negative aspects of BSD (e.g., low mood, cycling, irritation, etc.) but also on positive aspects (e.g., creativity, determination, hobbies, interests, etc.). This information can then later be used and incorporated in treatment planning.

Knowing that youth with BSD and their parents view interpersonal relationship qualities as a positive aspect, it may be important to include this in programs targeting BSD youth as a
way of increasing positive functioning. Similarly, knowing that youth with BSD value themselves based on their external characteristics, this may be another area of focus for treatment programs and interventions with youth who have a diagnosis of BSD. Increasing their involvement in hobbies, sports, and extracurricular activities may also have a positive effect on their overall positive functioning and self-view.

Summary

Despite having a severe mental health diagnosis, youth with BSD view themselves as having many positive qualities and the parenting context, in particular limit setting, autonomy granting, egalitarian views of parenting, acceptance, and psychological control all seem to play a role in the expression of positive outcomes for youth with BSD. Positive schemas may be one mechanism linking positive parenting characteristics to positive functioning for these youth and additional prospective studies are needed to clarify these and further mechanisms that might be promoted to help translate positive parenting context into best possible outcomes for youth with this diagnosis.
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Appendices
Appendix A: Questionnaires (Study 1 and Study 2)

Study 1

Parent Child Relationship Inventory

Using the following rating scale, please indicate how much you agree with each statement.

1  2  3  4
Strongly Agree  Agree  Disagree  Strongly Disagree

1. My child gernally tells me when something is bothering him or her
2. I have trouble discipling my child.
3. I get as much satisfaction from having children as other parents do.
4. I have a hard time getting through to my child.
5. I spend a great deal of time with my child.
6. When it comes to raising my child, I feel alone most of the time
7. My feelings about being a parent change from day to day.
8. Parents should protect their children from things that might make them unhappy.
9. If I have to say no to my child, I try to explain why.
10. My child is more difficult to care for than most children are.
11. I can tell by my child’s face how he or she is feeling
12. I worry a lot about money.
13. I sometimes wonder if I am making the right decisions about how I raise my child.
14. Being a parent comes naturally to me.
15. I sometimes give in to my child to avoid a tantrum.
16. I love my child just the way he or she is.
17. I get a great deal of enjoyment from all aspects of my life.
18. My child is never jealous of others.
19. I often wonder what the rewards are in raising children.
20. My child tells me all about his or her friends.
21. I whish I could set firmer limits with my child.
22. I get a great deal of satisfaction from having children.
23. I sometimes feel if I don’t have more time away from my child I’ll go crazy.
24. I regret having children.
25. Children should be given most of the things they want.
26. My child is out of control much of the time.
27. Being a parent isn’t as satisfying as I thought it would be.
28. I feel that I can talk to my child on his or her level.
29. My life is very stressful right now.
30. I never worry about my child.
31. I wish my child would not interrupt when I’m talking to someone else.
32. Parents should give their children all those things the parents never had.
33. I generally feel good about myself as a parent.
34. I sometimes feel overburdened by my responsibilities as a parent.
35. I feel very close to my child.
36. I'm generally satisfied with the way my life is going right now.
37. I have never had any problems with my child.
38. I can't stand the thought of my child growing up.
39. My child would say that I am a good listener
40. I often lose my temper with my child.
41. I am very involved with my child's sports and other activities.
42. My spouse and I work as a team in doing the chores around the house.
43. I have never been embarrassed by anything my child has said or done.
44. My child really knows how to make me angry.
45. Parents should be careful about whom they allow their children to have as friends.
46. When my child has a problem, he or she usually comes to me to talk things over.
47. My child never puts off doing things that should be done right away.
48. Being a parent is one of the most important things in my life.
49. Women should stay home and take care of the children.
50. Teenagers are not old enough to decide most things for themselves
51. My child keeps many secrets from me.
52. Mothers who work are harming their children.
53. I feel I don't really know my child.
54. I sometimes find it hard to say no to my child.
55. I wonder if I did the right thing having children.
56. I would really rather do a lot of other things than spend time with my child.
57. It's a parent's responsibility to protect his or her child from harm.
58. Sometimes I wonder how I would survive if anything were to happen to my child.
59. I miss the close relationship I had with my child when he or she was younger.
60. My child rarely talks to me unless he or she wants something.
61. A father's major responsibility is to provide financially for his children.
62. It's better to reason with children than just to tell them what to do.
63. I spend very little time talking with my child.
64. I feel there is a great distance between me and my child.
65. For a woman, having a challenging career is just as important as being a good mother.
66. I often threaten to punish my child but never do.
67. If I had it to do over, I would probably not have children.
68. Partners should help with child care.
69. Mothers should work only if necessary.
70. Some people would say that my child is a bit spoiled.
71. I worry a lot about my child getting hurt.
72. I seldom have time to spend with my child.
73. Below age four, most children are too young to be in a regular preschool or day-care.
74. A woman can have a satisfying career and be a good mother too.
75. I carry a photograph of my child in my wallet or purse.
76. I have a hard time letting go of my child.
77. I feel I don't know how to talk with my child in the way that he/she understands.
78. Having a full-time mother is best for a child.

**Beck Youth Inventories-Depression Subscale**

Here is a list of things that happen to people and that people think or feel. I will read each sentence and I would like you to tell be which answer best describes you, especially in the last two weeks. THERE ARE NO RIGHT OR WRONG ANSWERS.

Never=0  Sometimes=1  Often=2  Always=3

1. I think that my life is bad
2. I have trouble doing things
3. I feel that I am a bad person
4. I wish I were dead
5. I have trouble sleeping
6. I feel no one loves me
7. I think bad things happen because of me
8. I feel lonely
9. My stomach hurts
10. I feel bad things happen to me
11. I feel like I am stupid
12. I feel sorry for myself
13. I think I do things badly
14. I feel bad about what I do
15. I hate myself
16. I want to be alone
17. I feel like crying
18. I feel sad
19. I feel empty inside
20. I think my life will be bad

**Child Mania Rating Scale**

**Instructions**
The following questions concern your child’s mood and behavior in the past month. Please consider it a problem if it is causing trouble and is beyond what is normal for your child's age. Otherwise, indicate 'rare or never' if the behavior is not causing trouble.

0 Never/Rarely  1 Sometimes  2 Often  3 Very Often

1. Have periods of feeling super happy for hours or days at a time, extremely wound up and excited, such as feeling "on top of the world"
2. Feel irritable, cranky, or mad for hours or days at a time
3. Think that he or she can be anything or do anything (e.g., leader, best basket ball player, rap singer, millionaire, princess) beyond what is usual for that age
4. Believe that he or she has unrealistic abilities or powers that are unusual, and may try to act upon them, which causes trouble
5. Need less sleep than usual; yet does not feel tired the next day
6. Have periods of too much energy
7. Have periods when she or he talks too much or too loud or talks a mile-a-minute
8. Have periods of racing thoughts that his or her mind cannot slow down, and it seems that your child’s mouth cannot keep up with his or her mind
9. Talk so fast that he or she jumps from topic to topic
10. Rush around doing things nonstop
11. Have trouble staying on track and is easily drawn to what is happening around him or her
12. Do many more things than usual, or is unusually productive or highly creative
13. Behave in a sexually inappropriate way (e.g., talks dirty, exposing, playing with private parts, masturbating, making sex phone calls, humping on dogs, playing sex games, touches others sexually)
14. Go and talk to strangers inappropriately, is more socially outgoing than usual
15. Do things that are unusual for him or her that are foolish or risky (e.g., jumping off heights, ordering CDs with your credit cards, giving things away)
16. Have rage attacks, intense and prolonged temper tantrums
17. Crack jokes or pun more than usual, laugh loud, or act silly in a way that is out of the ordinary
18. Experience rapid mood swings
19. Have any suspicious or strange thoughts
20. Hear voices that nobody else can hear
21. See things that nobody else can see

Child Behaviour Checklist

Below is a list of items that describe children and youths. For each item that describes your child now or within the past 6 months, please circle the 2 if the item is very true or often true of your child. Circle the 1 if the item is somewhat or sometimes true of your child. If the item is not true of your child, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to your child.

0 = Not True (as far as you know)  1 = Somewhat or Sometimes True  2 = Very True or Often True

1. Acts too young for his/her age
2. Drinks alcohol without parents’ approval
3. Argues a lot
4. Fails to finish things he/she starts
5. There is very little he/she enjoys
6. Bowel movements outside the toilet
7. Bragging, Boasting
8. Can't concentrate, can't pay attention long
9. Can't get his/her mind off certain thoughts
10. Can't sit still, restless, hyperactive
11. Clings to adults or too dependent
12. Complains of loneliness
13. Confused or seems to be in a fog
14. Cries a lot
15. Cruel to animals
16. Cruelty, bullying, or meanness to others
17. Daydreams or gets lost in his/her thoughts
18. Deliberately harms self or attempts suicide
19. Demands a lot of attention
20. Destroys his/her own things
21. Destroys things belonging to his/her family or others
22. Disobedient at home
23. Disobedient at school
24. Doesn't eat well
25. Doesn't get along with other kids
26. Doesn't seem to feel guilty after misbehaving
27. Easily jealous
28. Breaks rules at home, school, or elsewhere
29. Fears certain animals, situations, or places, other than school
30. Fears going to school
31. Fears he/she might think or do something bad
32. Feels he/she has to be perfect
33. Feels or complains that no one loves him/her
34. Feels others are out to get him/her
35. Feels worthless or inferior
36. Gets hurt a lot, accident-prone
37. Gets in many fights
38. Gets teased a lot
39. Hangs around with others who get in trouble
40. Hears sounds or voices that aren't there
41. Impulsive or acts without thinking
42. Would rather be alone than with others
43. Lying or cheating
44. Bites Fingernails
45. Nervous, highstrung, or tense
46. Nervous movements or twitching
47. Nightmares
48. Not liked by other kids
49. Constipated, doesn't move bowels
50. Too fearful or anxious
51. Feels dizzy or lightheaded
52. Feels too guilty
53. Overeating
54. Overtired without good reason
55. Overweight
56. Physical Problems: Aches or pains
57. Physical Problems: Headaches
58. Physical Problems: Nausea, feels sick
59. Physical Problems: Problems with eyes
60. Physical Problems: Rashes or other skin problems
61. Physical Problems: Stomachaches
62. Physical Problems: Vomiting, throwing up
63. Physically attacks people
64. Picks nose, skin or other parts of body
65. Plays with own sex parts in public
66. Plays with own sex parts too much
67. Poor school work
68. Poorly coordinated or clumsy
69. Prefers being with older kids
70. Prefers being with younger kids
71. Refuses to talk
72. Repeats certain acts over and over
73. Runs away from home
74. Screams a lot
75. Secretive, keeps things to self
76. Sees things that aren't there
77. Self-conscious or easily embarrassed
78. Sets fires
79. Sexual Problems
80. Showing off or clowning
81. Too shy or timid
82. Sleeps less than most kids
83. Sleeps more than most kids during day and/or night
84. Inattentive or easily distracted
85. Speech Problems
86. Stares blankly
87. Steals at home
88. Steals outside the home
89. Stores up many things he/she doesn't need
90. Strange behaviour
91. Strange ideas
92. Stubborn, sullen, or irritable
93. Sudden changes in mood or feelings
94. Sulks a lot
95. Suspicious
96. Swearing or obscene language
97. Talks about killing self
98. Talks or walks in sleep
99. Talks too much
100. Teases a lot
101. Temper tantrums or hot temper
102. Thinks about sex too much
103. Threatens people
104. Thumb-sucking
105. Smokes, chews, or sniffs tobacco
106. Trouble sleeping
107. Truancy, skips school
108. Underactive, slow moving, or lacks energy
109. Unhappy, sad or depressed
110. Unusually loud
111. Uses drugs for nonmedical purposes
112. Vandalism
113. Wets self during the day
114. Wets the bed
115. Whining
116. Wishes to be of opposite sex
117. Withdrawn, doesn't get involved with others
118. Worries

**Study 2**

**Demographic Information**

Child’s Gender: Male/ Female

Child Date of Birth (MM/DD/YYYY):

Parental Education
Please check the HIGHEST level of education that applies.

<table>
<thead>
<tr>
<th>MOTHER</th>
<th>FATHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____  Some High-school</td>
<td>_____</td>
</tr>
<tr>
<td>_____  High-school Diploma</td>
<td>_____</td>
</tr>
<tr>
<td>_____  Some College</td>
<td>_____</td>
</tr>
<tr>
<td>_____  College Degree</td>
<td>_____</td>
</tr>
<tr>
<td>_____  Some University</td>
<td>_____</td>
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<tr>
<td>_____  University Degree</td>
<td>_____</td>
</tr>
<tr>
<td>_____  Some Graduate Training</td>
<td>_____</td>
</tr>
<tr>
<td>_____  Graduate Training (MA, PhD)</td>
<td>_____</td>
</tr>
<tr>
<td>_____  Post-graduate Training</td>
<td>_____</td>
</tr>
</tbody>
</table>

Parental Income
Please check your family's annual take-home income.

| ______ | Below $20,000   |
|________ | $20,000 - $39,999|
|________ | $40,000 - $59,999|
|________ | $60,000 - $79,999|
|________ | Above $80,000   |

Child’s previous diagnoses:

______________________________________________________________

Family History of Mental Health Disorders
Please indicate all members (e.g., siblings, aunts, cousins, grandparents, etc.) of your child’s maternal (mother) and paternal (father) family who have received a mental health diagnosis (e.g., depression, ADHD, schizophrenia, etc.). If they have multiple diagnoses please list them all.

<table>
<thead>
<tr>
<th>Member</th>
<th>Diagnoses</th>
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<tbody>
<tr>
<td></td>
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</table>

Questions about Visits to Medical Professional
1) How many visits have you made to see a mental health professional, this could be a Psychiatrist, Psychologist, counsellor, therapist, etc. in the past 6 months _______
2) How many in the past 1 year _____

Five Minute Speech Sample (FMSS)

VERBATIM INSTRUCTIONS TO PARENTS:

“I’d like to hear your thoughts and feelings about (Child name), in your own words and without my interrupting with any questions or comments. When I ask you to begin I’d like you to speak for 5 minutes, telling me what kind of a person (Child name) is and how the two of you get along together. After you begin to speak, I prefer not to answer any questions until after the 5 minutes. Do you have any questions?”

Child Report of Parent Behaviour Questionnaire

Now I would like to ask you a few questions about your mother. For each question I will ask you to tell me how true each statement is on a scale from 1 to 5, where 1 is not true at all and 5 is very true.

MY MOTHER (cargiver) IS A PERSON WHO...
1. makes me feel better after talking over my worries with her.
2. tells me of all the things he had done for me.
3. believes in having a lot of rules and sticking with them.
4. smiles at me very often.
5. says, if I really cared for her, I would not do things that cause her to worry.
6. insists that I must do exactly as I am told.
7. is able to make me feel better when I am upset.
8. is always telling me how I should behave.
9. is very strict with me.
10. enjoys doing things with me.
11. would like to be able to tell me what to do all the time.
12. gives hard punishment.
13. cheers me up when I am sad.
14. wants to control whatever I do.
15. is easy with me.
16. gives me a lot of care and attention.
17. is always trying to change me.
18. lets me off easy when I do something wrong.
19. makes me feel like the most important person in his life.
20. only keeps rules when it suits her.
21. gives me as much freedom as I want.
22. believes in showing his love for me.
23. is less friendly with me, if I do not see things his way.
24. lets me go any place I please without asking.
25. often praises me.
26. will avoid looking at me when I have disappointed her.
27. lets me go out any evening I want.
28. is easy to talk to.
29. if I have hurt her feelings, stops talking to me until I please her again.

The 14-Item Resilience Scale

Please listen to the following statements and tell me how much you agree that the statement is like your child; "1" meaning Strongly Disagree and 7 meaning Strongly Agree

1. My child usually manages one way or another.
2. My child feels proud that he/she has accomplished things in life.
3. My child usually take things in stride.
4. My child is friends with themself.
5. My child feels that they can handle many things at a time.
6. My child is determined.
7. My child can get through difficult times because they have experienced difficulty before.
8. My child has self-discipline.
10. My child can usually find something to laugh about.
11. My child’s belief in themself gets them through hard times.
12. In an emergency, my child is someone people can generally rely on.
13. My child’s life has meaning.
14. When my child is in a difficult situation, they can usually find my way out of it.

Positive Schema Questionnaire

Now I would like to ask you a few questions about yourself. For each question I will ask you how true the statement is of you based on a scale from 1 to 6, where 1 is completely untrue of me and 6 means describes me perfectly.

1. I believe in myself
2. I feel I can depend on people to keep my secrets
3. I believe things will turn out well
4. I feel comfortable depending on other people
5. I have the ability to be successful
6. I can deal well with difficult situations
7. I know how to find something good in every situation
8. I think I have many good qualities
9. I trust other people
10. I can adapt to new situations
11. I usually see the positive side of things
12. If I try hard I can usually do well
13. I can respond well to challenges
14. I value many things about myself
15. I do well when I try my best
16. When things are bad I can still think of something good
17. I value myself
18. I feel comfortable telling people important things about myself
19. If I try I will succeed
20. I can deal with tough things

**Brief Multidimensional Students' Life Satisfaction Scale**

These six questions ask about your satisfaction with different areas of your life. Circle the best answer for each.

1. I would describe my satisfaction with my family life as:
   a) Terrible
e) Mostly satisfied
   b) Unhappy
f) Pleased
c) Mostly dissatisfied
   g) Delighted
d) Mixed (about equally satisfied and dissatisfied)

2. I would describe my satisfaction with my friendships as:
   a) Terrible
e) Mostly satisfied
   b) Unhappy
f) Pleased
c) Mostly dissatisfied
   g) Delighted
d) Mixed (about equally satisfied and dissatisfied)

3. I would describe my satisfaction with my school experience as:
   a) Terrible
e) Mostly satisfied
   b) Unhappy
f) Pleased
c) Mostly dissatisfied
   g) Delighted
d) Mixed (about equally satisfied and dissatisfied)

4. I would describe my satisfaction with myself as:
   a) Terrible
e) Mostly satisfied
   b) Unhappy
f) Pleased
c) Mostly dissatisfied
   g) Delighted
d) Mixed (about equally satisfied and dissatisfied)

5. I would describe my satisfaction with where I live as:
   a) Terrible
e) Mostly satisfied
   b) Unhappy
f) Pleased
c) Mostly dissatisfied
   g) Delighted
d) Mixed (about equally satisfied and dissatisfied)

6. I would describe my satisfaction with my overall life as:
   a) Terrible
e) Mostly satisfied
   b) Unhappy
f) Pleased
c) Mostly dissatisfied   g) Delighted  
d) Mixed (about equally satisfied and dissatisfied)

“Best Things” Qualitative Question

Now the final thing I would like to ask you before I let you go is: Can you please tell me what 
the best things about your child are?/ What do you think are the best things about you?

_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

Understanding/Comprehension Question

Ok. So I have asked you a lot of questions today and some were really difficult. On a scale from 0 to 5, 
where 0 is Not at All and 5 is Very Much, how well did you understand the questions I asked you today?

<table>
<thead>
<tr>
<th>Not at All</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix B: Telephone Script – Consent Form (Study 1)

**Phone Script for Bipolar Study-Adult Version**

Hi, I'm calling from the Mood Disorders Clinic at CPRI, how are you today?

As you may know, the mood disorder clinic at CPRI services a number of families. Specifically, they screen children and youth for many different types of mood disorders. We now want to evaluate information about the children and their families we provide service to. We have done over 300 assessments and now we want to use the information we've collected to evaluate how we can better identify mood disorders and how we can develop more positive outcomes for children with mood disorders and their families.

I'm calling today to ask your permission for the information you provided to us during your involvement with the Mood Disorders Screening Clinic. This would include the questionnaires you would have completed during your involvement with the Mood Disorder Clinic, other information collected that was used to make a diagnosis, and any diagnosis your child received. Your information would become part of a large dataset. Neither you nor your child’s name would appear in the dataset. If the results of this study are published, neither your name nor your child/youth’s name will ever be used, and no identifiable information will be released or published. The information gathered will be analysed on a group-wide basis, not individually.

Just to let you know, there are no known risks associated with allowing the information collected to be used for the purpose of this study. And there are no direct benefits to you or your child/youth from participating in this study. However, this Study could lead to improvement in our ability to identify mood disorders and also shed light on important factors for positive experiences for families who have a child with a mood disorder.

Do you have any questions so far about what I have told you?

Can I have your permission to use your information in our study?

If you have any questions about this study, please contact Dr. Shannon Stewart, 519-858-2774 ext. 2064 or Gani Braimoh, 519-858-2774 ext.5501. If you have any questions about your rights as a research participant, you may contact the Office of Research Ethics at the University of Western Ontario, 519-661-3036.

*** If the child is 16 years of age or older- make sure you mention to the parent that you will now be reviewing the same information with their adolescent and that you will be asking the child if they are also willing to allow the data collected to be used for the current study (Proceed to the Consent Form Below).
Phone Script for Bipolar Study-Adolescent Version (16+years)

Hi, I’m calling from the Mood Disorders Clinic at CPRI, how are you today?

I just spoke with your (mom/dad/guardian) about a study that we are completing at CPRI. You may remember coming to CPRI to the Mood Disorders Screening Clinic. You would have completed a bunch of questionnaires and talked to someone about any difficulties you were having at that time.

We have had over 300 kids come to see us and we would now like to better understand the difficulties kids and their families have, and also the things that make their life better. What this means is that we would like to use the information you provided during the screening process and combine it with other information from other kids to make a large pile of information. Your name or anyone in your families name would not appear with your information and we would never look at just you or your family. We would be looking at everyone together.

Just to let you know, there are no known risks if you chose to share your information and there are no direct benefits to you or your family from participating in this study. However, this Study could help us better understand more about kids like you.

Do you have any questions so far about what I have told you?

Can I have your permission to use all of the information that was collected when you came through the Mood Disorder Clinic at CPRI in our study?

I have also told your (mom/da/guardian) about this study so you are welcome to ask them any questions or you can ask them for the number to call CPRI if you have questions that they can not answer.
Appendix C: Telephone Calling Script (Study 2)

Script for members at Child and Parent Resource Institute to introduce study 2:

Hello, My name is ____ and I am calling from the Child and Parent Resource Institute in London, On. CPRI clients are being invited to take part in a research study conducted by Dr. Margaret Lumley from the University of Guelph.

She wants to learn more about children with Bipolar Disorder and their families. Specifically she is interested in knowing the type of family variables that promote positive outcomes for children with Bipolar Disorder and their families. In this research study, children with Bipolar Disorder and their mothers will complete measures of family relationships and measures of parental and child thinking and emotional functioning.

The decision to take part in the research study will have no affect on the services received from CPRI. Participating in this research will not help your child receive faster clinical services. A $20 gift card to Tim Hortons will be offered as compensation for you and your child if you choose to participate.

If this sounds like something you would like to participate in, you can call Dr. Lumley’s lab toll free. There will be no charge for you to call. After receiving more information about the study, you can then decide if you would like to participate. Do you have a pen to write the number down? (Wait for them to get the pen and make sure they write it down). I can also send you a reminder e-mail with the phone number, if you would like? What is your e-mail address?

If YES: Collect contact information and send e-mail with telephone number.

If NO: No problem. Thank you for your time!
Appendix D: Recruitment Letter and Brochure (Study 2)

DATE

Dr. Margaret Lumley
Resilient Youth Research Group
University of Guelph
Guelph, ON
N1G 2W1

Mood Disorders Association of Ontario
To whom it may concern,

I am writing regarding a current study that I hope may be of interest to you and your facility. Along with my doctoral student Brae Anne McArthur, I am examining how parenting context relates to positive emotional and cognitive functioning in youth who have received a Bipolar Spectrum Disorder (BSD) diagnosis.

Children with BSD comprise a unique subset of youth experiencing psychopathology and little research has focused on this population. It has been well established that parenting context plays a key role in many negative outcomes for youth with BSD (e.g., worse course, higher rates of relapse, increased severity of symptoms, etc.); yet to date we do not know much about how parenting context relates to positive outcomes for youth with BSD.

Working from a positive psychology framework, this project aims to highlight key parenting characteristics that may best be targeted to promote positive outcomes for youth with BSD and their families. To learn more about this research and how to get involved please look at our one page summary enclosed. We also enclose our brochures for distribution to potential participants. In a busy work life with many pressing issues we understand that research is challenging and we appreciate any support you are able to offer.

Sincerely,

Margaret Lumley, Ph.D., C.Psych
RESILIENT YOUTH RESEARCH GROUP:

Toll Free:
1-855-689-9714

Let us together help to promote positive life experiences for the many children who suffer from a Bipolar Spectrum Disorder and their families.

Promoting Positive Lives for Youth with Bipolar Study

Dr. Margaret Lumley's Resilient Youth Research Group
519-824-4120 x 53486

Resilient Youth Research Group
Promoting Positive lives for Youth with a Bipolar Spectrum Disorder

Study Information
Is your child between the ages of 8 and 19?
And
Has a Bipolar Spectrum Disorder Diagnosis
(Bipolar I, Bipolar II, Cyclothymia, Bipolar NOS)

What is involved for you?
A brief telephone interview for you and your child (approx. 20 minutes each)
At the completion of the study your family will receive a $20 Tim Horton’s gift card.

Many Adolescents Suffer with a Bipolar Spectrum Disorder

You can make a difference! Help us understand what factors promote positive lives for children with a Bipolar Spectrum Disorder and their families.

FOR MORE INFORMATION PLEASE CONTACT:
Dr. Margaret Lumley
Resilient Youth Research Group
University of Guelph
Toll Free: 1-855-689-9714
Appendix E: Telephone Script – Adult Consent Form (Study 2)

**Parent Script and Consent Form**

TO BE READ TO THE PARTICIPANT BY PHONE

Hello my name is ____________. I am a member of the Resilient Youth Research Group run by Dr. Margaret Lumley at the University of Guelph. I received your contact information from the message you left on our answering machine.

Do you have a few minutes for me to tell you a little bit more about the research study and you can then decide if it sounds like something you would like to take part in?

**If NO:** Is there a better time for me to call you back?

**If YES:** Great, I am going to go through some important information about the study and it would be easier if you could also following along. Could I get your e-mail address so I can send you a copy of the study description and consent form that I will be reading over with you? Your e-mail address will only be used for the current study and it will not be used to contact you for future studies or shared with anyone else. (Get e-mail and Send both parent and child copies. If the participant does not have an e-mail address or does not want to share their e-mail address you can get their mailing address and we will send a copy of both consent forms. You will have to call them back if they choose to have it mailed).

Now that you have a copy we can go over the script together. This project is aimed at better understanding **Family Context and Positive Outcomes for Children with Paediatric Bipolar Disorder**. This study is a Ph.D. dissertation project for Brae Anne McArthur, it has been approved by the Research Ethics Board at the University of Guelph and it is being sponsored by the Ontario Mental Health Foundation. The purpose of this study is to talk to parents of children with Bipolar Disorder, as well as the youth themselves, to get a better sense of the type of family variables that promote more positive outcomes for children with Bipolar Disorder and their families. Specifically, we are interested in better understanding what type of family variables are important in making these children more resilient to negative outcomes.

If you volunteer to participate in this study, we would ask you to answer a few questionnaires over the phone, at a time that is convenient for you, and it should take approximately 20 minutes to complete. We would also ask to speak with your child to ask them if they would also help us out by answering a few questionnaires, again this would take them approximately 20 minutes. We would ask you to record your answers on an audio recorder so that we can refer to them later. If you choose not to have
yourself recorded we could proceed by writing down your answers. The information you both provide would be kept confidential and we would not share your responses with each other. Your information would become part of a large dataset. Neither you nor your child’s name would appear in the dataset. If the results of this study are published, neither your name nor your child/youth’s name will ever be used, and no identifiable information will be released or published. The information gathered will be analyzed on a group-wide basis, not individually. At the completion of the study your family will receive a $20.00 gift card to Tim Horton’s in the mail.

Does this sound like something you would be interested in participating in? Let me remind you that your choice to participate will not affect the services you receive from CPRI in London. CPRI will have no record of who chooses to participate and who does not. So, does this sound like something you would like to do?

If NO: No problem. Thank you for your time.

If YES: Great, I just have a few more things to go over with you before we decide on a time for you to complete the questionnaires. First, it is important that we let you know that there are no therapeutic benefits for participating in this study. Also, due to the nature of the topics being discussed (e.g., your child’s mental health, family relationships, etc.) you may feel some discomfort when reporting on these topics. Please be assured that your information will be kept confidential and will not be shared with anyone. There are a few exceptions to this. If you tell us that either you, or your child, are in danger of hurting yourselves or somebody else or that a child is in danger, we must report that. Any information that is used from this study will include group data and you will never be singled out. Results for this study will be made available by e-mail. If you agree to participate and provide your e-mail address, information for how to access study results will be provided to you at the completion of the study.

Participating in this study would be helping out with research about children with Bipolar Disorder and the information collected in this study may potentially be used to help improve our knowledge about these children and their families and how we can help families so they have more positive outcomes.

We would also like to let you know that you may withdraw from this study at any time without consequences of any kind. You may also exercise the option of removing your data from the study. You may also choose not to answer any questions you don’t want to and still remain in the study. Responses to the questions will be kept strictly confidential and only group summaries will be reported. Personal information (e.g., your name, e-mail address, etc.) will not be given to anyone or appear on any of the questionnaire data that is collected. Your data, including your audio file, will be identified with a unique number code, not your names. The completed questionnaires and audio files will be stored on an encrypted and secure computer for 5 years, as specified by the Canadian Psychological Association research and ethics guidelines.
Do you have any questions about the study?

If Yes: Answer questions or provide contact information for primary researchers (see below).

If No: Now that I have read you all of the terms and information about the study I need to ask you for your verbal consent to participate. Is it ok with you that I record our conversation? (Wait for response). As I mentioned before your audio file will be identified with a unique number code, not your name and it will be stored on an encrypted secure computer.

If you are choosing to consent, please repeat after me.

The purpose of this study has been explained to me, and I have been given the opportunity to ask any questions I may have about this research. I understand the procedures and that I can withdraw from the study at any time without penalty, even after participation has begun. Now please state your full name ______________ and today’s date __________.

SIGNATURE OF WITNESS (Sign as a witness to verbal consent)

__________________________
Name of Witness (please print)

__________________________
Signature of Witness Date

This study also builds on the study that you were initially contacted about from CPRI. I would like to ask your permission to use for the current study the information you provided during your involvement with the Mood Disorders Screening Clinic at CPRI. This would include the questionnaires you would have completed during your involvement with the Mood Disorder Clinic, other information collected that was used to make a diagnosis, and any diagnosis your child received. You are still able to participate in the current study regardless of whether or not you choose to include you information from CPRI.

Do you consent to the use of your original information from CPRI for the purpose of the current study?

____ YES ________ NO

SIGNATURE OF WITNESS (Sign as a witness to verbal consent)

__________________________
Name of Witness (please print)
Great! You are now officially ready to participate. If you have any questions or concerns about the research, please feel free to contact Brae Anne McArthur or Dr. Margaret Lumley. Do you have a pen so I can give you their contact information? *(Wait for them to get a pen and make sure they write down the information)*

bmcarthu@uoguelph.ca or 519-824-4120 x 52601  
mlumley@uoguelph.ca or 519-824-4120 x 56798

So now we can set up a time for you and your child to complete the questionnaires. Do you have 15 minutes to complete them right now?

**If Yes:** Continue to questionnaires.

**If No:** Set up a time to call back, preferably when both parent and child will be home.
Appendix F: Telephone Script – Youth Consent Form (Study 2)

Youth Script and Consent/Assent Form
TO BE READ TO THE PARTICIPANT BY PHONE

Hello my name is ____________. I am a researcher from the University of Guelph. I was hoping I could ask you a few questions today. I just spoke with your mom (guardian) and she said it was ok if I talked to you to see if you would like to participate in our study. We are trying to better understand **what it is like to be a child with Bipolar Disorder and how your family works.** I sent your mom (guardian) a copy of what I would like to talk to you about. Do you have it in front of you? *(Make sure child has copy)*

If you volunteer to participate in this study, we would ask you to answer a few questionnaires over the phone and it should take approximately 20 minutes to complete. The information you provide will not be shared with your parents or anyone else who is not involved with our research team. At the completion of the study your mother will receive a $20.00 gift card to Tim Horton’s in the mail, for the both of you to share.

**Does this sound like something you would be interested in?**

**If NO:** No problem. Thank you for your time.

**If YES:** Great, I just have a few more things to go over with you before we can get started. First, it is important that we let you know that we will be asking you about your health and your family and you may feel uncomfortable when talking about these topics. I also want you to know that this is not like therapy, taking part in this study will not help you with any of the difficulties you might have.

I am asking your permission to audiotape my conversation with you. This digital recording will be kept on a computer in our locked research office. We are interested in looking at a group of youth and will not be looking at individual results. All your information, including your audio recording will be identified by a number, not your name and will not be shared with anyone other than our research team. There are a few exceptions to this. If you tell us that you are in danger of hurting yourself or somebody else or that a child is in danger, we must report that.

By participating in this study, you would be helping out with research about children with Bipolar Disorder and the information collected in this study may be used to help other youth like you and their families.

We would also like to let you know that you can choose to stop participating in the study at any time and you don’t have to answer any questions you don’t want to.

**Do you have any questions about the study before we get started?**
If Yes: Answer questions.

If No: Now that I have read you all of the information about the study I need to ask you for your verbal consent to participate. First, is it ok if I record our conversation so we have a record of your responses? (Wait for response). If you are choosing to complete this study, please repeat after me.

The purpose of this study has been explained to me, and I have been given the opportunity to ask any questions I may have about this research. I understand that I can stop participating at any time, even after I have already started the study. Now please state your full name ________________ and today’s date __________.

SIGNATURE OF WITNESS (Sign as a witness to verbal consent)

______________________________________
Name of Witness (please print)

______________________________________
Signature of Witness __________________ Date

Great! Now we can get started! Are you somewhere private where you will not be heard by anyone in your family, or somewhere you feel comfortable answering the questions? (If yes, Start Questionnaires. If no, help child find somewhere private to answer the questions)