# ADOLESCENT CYBERBULLYING IN NEW ZEALAND AND THE IMPLICATIONS OF PARENTING STYLES

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Rosemary Carson

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**Abstract**

The primary aim of the current study was to examine cyberbullying and risk taking behaviours in adolescents and their relation to parenting styles. Research aims included examining the prevalence of cell phone ownership, and the development of a parenting scale to assess modern parenting patterns, such as Helicopter and Uninvolved. Adolescents (*n* = 85) aged 13-16 years from a range of secondary schools, and their parents (*n* = 58), were assessed on measures of cyberbullying, risk taking behaviour and parenting. Results indicated that the majority of adolescents own or have access to a cell phone and predominantly use it to contact friends. Support was found for the proposed parenting scale, assessing Helicopter and Uninvolved parenting. Further examination of parenting styles within the current sample indicated that Authoritative parenting was the most common parenting style. The current study found that 98% of adolescents engaged in one or more cyberbullying behaviours with an average frequency of 17 times per month. Written-Verbal forms of cyberbullying were found to be the most common type. Cyberbullying was found to be associated with the time per day spent on a cell phone, household annual income, age, parental employment and risk taking behaviours. Results also indicated that 72% of adolescents engaged in one or more risk taking behaviours, with the average frequency of three per month. Authoritative parenting was found to predict lower levels of cyberbullying, while Permissive parenting predicted higher levels of risk taking behaviour. The findings that parenting styles are predictive of cyberbullying and risk taking behaviour may have important implications for the advocacy of appropriate parenting practices through imparting advice, knowledge and support to families and ensuring early intervention, support and monitoring, to safeguard the well-being of adolescents.

## Cyberbullying, Risk Taking Behaviours and the Implications of Parenting styles

Over the past decade, a significant increase in internet access and cell phone ownership has been identified. Between 2004 and 2007 cell phone ownership among adolescents aged 12-17 years old, increased from 45% to 71% (Brown, 2009). Of the adolescents identified to own a cell phone, over 50% used it to speak to their friends via phone call or text every day (Brown, 2009). Moreover, teens are now texting on average at least 60 times per day (Lenhart, 2012). The increase in access and use of online technology, has led to an alternative avenue of cyberbullying for adolescents. To date approximately 9-40% of children and adolescents report being cyberbullied (Cross, 2009; Hinduja & Patchin, 2010; Mesch, 2009; Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010; Patchin & Hinduja, 2010; Popović-Ćitić, Djurić, & Cvetković, 2011; Slonje & Smith, 2008; Smith et al., 2008; Wiederhold & Riva, 2013).

Despite the significant increase in cell phone ownership and use, research into cell phone use and of its relations with sociofamilial characteristics, such as upbringing and parenting styles, is scarce. The literature to date has begun to identify parenting styles as an important contributing factor to bullying, in both traditional and online forms. For example, parenting styles have been associated with bullying victimisation and perpetration (Baldry & Farrington, 1998; Dehue, Bolman, Vollink, & Pouwelse, 2012; Floros et al., 2012). This suggests that parenting styles may have an important influence on cyberbullying and associated outcomes. Furthermore, research addressing the issues surrounding cyberbullying, often combine internet and cell phone modalities. Therefore very little is known about specific cyberbullying behaviours pertaining to cell phone use. This creates difficulties in

identifying areas important for monitoring and providing effective intervention for cyberbullying.

The current thesis aims to examine specific cyberbullying behaviours that occur among cell phone users and the relations with familial characteristics, such as traditional parenting styles. A secondary focus will be to assess modern parenting patterns that are beginning to emerge in the literature, such as Uninvolved parenting and "Helicopter parenting" (Lemoyne & Buchanan, 2011; Maccoby & Martin, 1983; Segrin, Woszidlo, Givertz, Bauer, & Murphy, 2012) and evaluate their relationships with cyberbullying behaviours.

**Adolescent Cell Phone Use**

Over the past five years, adolescent cell phone ownership and use has increased substantially. Research reported that in 2004 approximately half of adolescents had access to or owned a cell phone (Brown, 2009; Lenhart, 2012; Rideout, Foehr, & Roberts, 2010). In contrast, by 2011, adolescent cell phone ownership was reported to range from 71% to 85% (Brown, 2009; Lenhart, 2012; Rideout et al., 2010). Rideout et al. (2010) reported from 2004 to 2009 ownership of cell phones increased from 36% to 69% in 11-14 year olds. A similar increase was seen for 15-18 year olds, rising from 56% to 85%. As technology advances and becomes more accessible, use of smart phones is also increasing with 31% of adolescents aged 14-17 years old owning a smart phone (Lenhart, 2012). Adolescents report texting as the dominant cell phone activity, with an average of 60–118 texts per day (Lenhart, 2012; Rideout et al., 2010). In further support of this trend, the level of phone calls being made is reported to decline as the level of texting increases (Lenhart, 2012). Gender differences have

also been found with females sending and receiving twice as many texts as males (Lenhart, 2012).

With statistics reporting increasing accessibility and use of cell phones it has also been reported that cyberbullying via cell phone may be becoming as prevalent as cyberbullying via social networking sites using a computer (Mark & Ratliffe, 2011). In Australia and the United Kingdom, for instance, cyberbullying via cell phone was the most prevalent modality (Cross, 2009; Kraft, 2006). However, in Canada and America, cyberbullying via internet was the most prevalent modality (Kraft, 2006). Of those being cyberbullied, victims were twice as likely to own their own mobile phone and have wireless internet at home. Cyberbully victims were also highly associated with being a victim of traditional bullying as well (Cross, 2009). Of concern is the fact that over 50% of the victims do not tell anyone they were being bullied (Smith et al., 2008). This may indicate an underestimation of the true prevalence of cyberbullying. Furthermore, victims may continue to endure the harmful effects of cyberbullying, as outlined below, without sufficient support or intervention for long periods of time.

Collectively, this provides evidence of the increasing need to evaluate the effects of cyberbullying via cell phones. Research addressing cyberbullying often combines internet and cell phone technologies (Hinduja & Patchin, 2010; Mesch, 2009; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008). This combined methodology makes it difficult to disentangle cyberbullying behaviours and the associated effects, specific to cell phone use. Consequently, very little is known about cyberbullying behaviours specific to cell phone use. This makes it increasingly difficult for cyberbullying to be monitored, controlled and for effective intervention to be implemented when exactly how

the bullying is occurring is largely unknown. Furthermore, given the relatively new nature of cyberbullying, its definition and relationship to traditional bullying are still largely under debate.

## Bullying among Children and Adolescents

**Traditional versus Cyberbullying**. Traditional bullying is typically considered behaviour that happens in the school playground, with physical and verbal confrontation, and is often considered one of the most prevalent problems in schools (Mark & Ratliffe, 2011). Bullying is typically defined as an act undertaken with the intent to repeatedly hurt or harm another person (Monks & Smith, 2006; Sullivan, 2010). It is an act that is deliberately negative and performed by individuals considered to have a "higher status" than the victim, and often committed to determine hierarchy (Brixval, Rayce, Rasmussen, Holstein, & Due, 2012). Traditionally, this "higher status" was thought to be defined in terms of the societal physical ideal, with those who differ from the societal physical ideal more likely to be victimised. Brixval et al. (2012) reported that the societal physical ideal in the Western culture is a muscular physique for males, and a thin physique for females. However, this may vary according to cultural stereotypes. Demonstrating this, overweight adolescents were shown to be at higher risk of victimisation than normal weight peers (Brixval et al., 2012).

Cyberbullying appears to have evolved from traditional bullying with the increase in access to online technologies. Since 2000, increases in technology, are providing online environments for bullying behaviours to occur and have been subsequently attracting attention (Mark & Ratliffe, 2011; Patchin & Hinduja, 2010). Online bullying or cyberbullying is reported to be a significant problem with prevalence rates ranging from 9 – 40% in adolescents (Cross, 2009; Hinduja & Patchin, 2010; Mesch, 2009; Mishna et al.,

2010; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008; Wiederhold & Riva, 2013). Mischna et al. (2010) reported that more than half of a sample of 2,186 adolescents identified they had been being bullied online, and one in three admitted to bullying others.

The definition of cyberbullying has been long debated due to its differences with traditional bullying. In general, cyberbullying has been defined as the *"intentional act of online/digital intimidation, embarrassment, or harassment"* (Lauren & Ratliffe, 2011). Traditional bullying has always been defined along a physical continuum, with those who bully others typically having a greater physical status (Menesini & Nocentini, 2009). Alternatively, cyberbullying has power in anonymity and access (Lauren & Ratliffe, 2011). There is no need for an increased physical size, or group of people to intimidate or harass others, as perpetrators can remain completely anonymous and untraceable. Over half of those that reported being cyberbullied, reported not knowing the identity of their bullies (Mark & Ratliffe, 2011). Moreover, technology allows perpetrators to infiltrate a range of environments at any time they wish (Lauren & Ratliffe, 2011). In the UK, the most frequent method of cyberbullying was reported to be via cell phone, and occurring outside of school hours (Smith et al., 2008). Therefore, not only do perpetrators have the power of anonymity, they have pervasive access across contexts, 24 hours a day. Whereas traditional face-to-face bullying has been contained, for the most part, around school contexts, cyberbullying allows perpetrators to victimise others in additional contexts, such as their home. While the over-arching definition of cyberbullying has been recognised, there are also distinct types or categories of cyberbullying behaviour that have been identified thus far.

***Types of Cyberbullying*.** There are many different forms that cyberbullying can take due to the complexity of technology (Nocentini et al., 2010).The overall consensus is that there are four main types of cyberbullying, with specific behaviours within each (Nocentini et al., 2010). The first of these is Written-Verbal behaviours. Bullying by this form includes abuse by phone calls, text messages, emails and social networking sites. Second, Visual Behaviours constitute posting and sharing compromising pictures. Third, bullying by Exclusion is where someone is purposefully excluded from online groups and fourth, Impersonation, where an individual steals another's personal information and reveals it via the victim's name, phone number or account (Nocentini et al., 2010).

Respectively, these four main types have also been categorised on parenting websites as the "more power/revenge of the nerds, the vengeful angel, the mean girls, and the inadvertent" (Shankel, 3 August 2011). These types of cyberbullying are discussed in terms of the motivation for the behaviour. The "more power/revenge of the nerds" cyberbully perpetrators are thought to represent the closest resemblance to a traditional playground bully, using acts of intimidation and coercion to obtain power or respect from their victims. The "vengeful angel" commits acts of cyberbullying behaviour to "right a wrong". Their intention is to target someone who is bullying another individual or themselves as a way of defending them. The "mean girls", in general, work or plan their behaviour in a group and intend to humiliate or embarrass their victim publicly. Finally, the "inadvertent" cyberbully are thought to misunderstand their actions, lacking awareness of the harm they are causing and view their behaviour as "protecting" themselves from others– inadvertently engaging in cyberbullying behaviour (Chisholm, 2006; Shankel, 3 August 2011; Star-W).

***Specific Cyberbullying Behaviours***. While the types described above encompass general types of cyberbullying, these can be further broken down into specific cyberbullying behaviours (Beran, 2007; Nocentini et al., 2010): Flaming, Harassment, Cyberstalking, Denigration, Masquerade, Outing and Exclusion. Flaming is characterised by the sending of aggressive or vulgar messages about a person to an online group or to that person. Online harassment is the repeated sending of offensive messages. Cyberstalking is online harassment that includes threats of harm or is excessive intimidation. Denigration is when there are harmful, untrue, or cruel statements about a person sent to other people, or posted online. Masquerade is where individuals pretend to be someone else and send or post material that makes that person look bad. Outing includes sending or posting material about a person that contains sensitive, private, or embarrassing information. Finally, Exclusion is the cruel exclusion of someone from an online group (Beran, 2007).

Cyberbullying, offending and victimisation have been associated with a number of central characteristics. Higher levels of online activity are considered a risk factor for cyberbullying as they have been associated with greater rates of cyberbullying victimisation (Mesch, 2009; Perren et al., 2012; Smith et al., 2008). Demonstrating this, Mesch (2009) found adolescents who reported higher levels of online activity, particularly on social networking sites, reported increased rates of cyberbullying victimisation. Furthermore, rates of cyberbullying have also been positively associated with the age of adolescents (Cross, 2009; Sbarbaro & Smith, 2011; Smith et al., 2008). Smith et al. (2008) reported the rate of cyberbullying increased from 8 to 23% between adolescents aged 11 years to 17 years. Adolescents from higher socio-economic status' are reported more likely to intervene or stand up for cyberbully victims, compared to those from low socio-economic status (Tweens & Graeff, 2012).

Gender differences in cyberbullying have also been identified. For example, in a sample of 387 adolescents, males were more likely to engage in cyberbullying behaviour compared to females (Popović-Ćitić et al., 2011). This difference was reported to be significant across all examined types of cyberbullying (Harassment, Denigration, and Outing), suggesting significant gender differences in cyberbullying offending (Popović-Ćitić et al., 2011; Slonje & Smith, 2008).

## Psychological Effects of Bullying

**Effects of Traditional Bullying**. It has long been recognised that traditional forms of bullying may have a severe psychological impact on those victimised. These effects are pervasive and widespread, varying from mental health difficulties to forensic outcomes (Hay & Meldrum, 2010; Hay, Meldrum, & Mann, 2010; Kaltiala-Heino, Rimpelä, Marttunen, Rimpelä, & Rantanen, 1999). Victimisation has been associated with general peer problems, including significant difficulties creating and maintaining friendships, poorer relationships with classmates and having noteworthy arguments (McMahon, Reulbach, Keeley, Perry, & Arensman, 2012; Nansel et al., 2001).Victimisation has also been associated with poor social and emotional adjustment and greater loneliness (Nansel et al., 2001).

Gender differences have also been noted in response to traditional bullying with adolescent males more likely to develop internalising difficulties. Difficulties include anxiety, low self-esteem and depression (McMahon et al., 2012). Lower self-esteem in victims of bullying is believed to be exerted by two mechanisms; antecedent and consequence. Those who are victimised are often perceived by peers as being “weak”. This perception is thought to be an antecedent, preceding the bullying, and contributing to individuals being targeted. Furthermore, the consequence of this is that those who are victimised are viewed as “weak”

by their peers, a consequence of being bullied. Males also often perceive victimisation as a feeling of failure in the "stronger sex" role (McMahon et al., 2012).

With regard to mental health factors, traditional bullying victimisation has been strongly associated with depression, deliberate self-harm and suicidal ideation (Hay & Meldrum, 2010; Kaltiala-Heino et al., 1999). Victims are four times more likely to commit acts of intentional self-harm and have suicidal ideation (Hay et al., 2010). However, of more concern is that those that report being bullied under the age of 16 are not only likely to engage in self-harm behaviour at the time, but are twice as likely to have significant suicide attempts as adults (Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011). Collectively, these findings portray the potentially serious psychological effects, both short and long term, on those experiencing victimisation. This also highlights the importance of examining the outcomes of cyberbullying, both short and long term, to understand the potentially harmful effects, as shown with traditional bullying.

**Effects of Cyberbullying**. In a study of 351 students, more than half of students reported being cyberbullied (Hoff & Mitchell, 2009). Despite these figures, research investigating cyberbullying has not yet examined cyberbullying frequency and type in relation to its effects. The literature to date reports that children and adolescents who experience cyberbullying typically do not report this to either teachers or parents but keep the problem to themselves (Lauren & Ratliffe, 2011; Smith et al., 2008). This happens for two main reasons; 1) Victims believe that because parents and teachers are of the generation before advanced communicative technologies, they are therefore not equipped to deal with cyberbullying and 2) due to the pervasive nature of this type of bullying; victims believe that there is nothing that their teacher and/or parents could do to intervene. These beliefs, often

lead victims of cyberbullying to allow the behaviour to escalate to often dangerous levels before seeking help (Hoff & Mitchell, 2009).

Similar to traditional bullying, cyberbullying also impacts on the psychological well-being of child and adolescent victims (Hoff & Mitchell, 2009). Two psychological effects often reported are withdrawal and aggression. Withdrawal is consistently identified in studies of cyberbullying. Specifically, students experiencing cyberbullying report strong feelings of powerlessness, sadness and fear, leading them to becoming withdrawn (Hoff & Mitchell, 2009; Šléglová & Černá, 2011). These feelings may relate to the anonymity of cyberbully perpetrators (Hoff & Mitchell, 2009).

Hoff & Mitchell (2009) reported that aggressive, retaliative reactions to cyberbullying victimisation were predominantly associated with male victims, identifying gender differences associated with the effects of cyberbullying. Males were reported more likely to communicate through physical aggression towards the bully, whereas females were more likely to change their own behaviour (e.g., change their number) (Hoff & Mitchell, 2009). This suggests that gender may act as a moderator of aggressive reactions to cyberbullying.

Cyberbullying has also been associated with low self-esteem as a possible outcome (Patchin & Hinduja, 2010). This result was present with both cyberbully victims and perpetrators. Low self-esteem has been shown to have a flow-on effect with academic difficulties and behavioural problems often eventuating. Low self-esteem has therefore been drawn to researchers attention as an important precursor to potential later difficulties (Patchin & Hinduja, 2010).

Relationships have also been identified between cyberbullying, depression, suicidal ideation, self-harm, problematic internet use, and substance use (Bauman, Toomey, & Walker, 2013; Gámez-Guadix, Orue, Smith, & Calvete, 2013; Hay et al., 2010; Hinduja & Patchin, 2010; Hoff & Mitchell, 2009). For example, Gámez-Guadix et al. (2013) identified a reciprocal relationship, in a sample of 835 adolescents aged 13 to 17 years old, between depression and cyberbullying victimisation whereby victimisation led to increased depressive symptoms. However depressive symptoms may also lead to an increase in victimisation, thereby creating a vicious feedback loop. Furthermore, experiencing symptoms of depression may decrease an individual's social support through isolation and withdrawal from peers (Gámez-Guadix et al., 2013). Further to this, depression has been identified to mediate relations between cyberbullying experiences and suicidal behaviour depending on gender (Bauman et al., 2013). In a study of 1,491 adolescents, cyberbullying victimisation was found to be strongly related to depression for females, with this also associated with suicidal behaviour (Bauman et al., 2013). However, this relationship was not found with males. It has been hypothesised that females are more inclined to internalise negative experiences, while males are more likely to externalise negative experiences, often resulting in aggressive reactions (Bauman et al., 2013; Hoff & Mitchell, 2009). In contrast to these findings, traditional bullying victimisation is associated with internalising difficulties, such as depression and suicidal ideation in males (Bauman et al., 2013; Kaltiala-Heino et al., 1999). This may emphasise not only gender differences in the effects of bullying, but significant differences in the effects of bullying modalities, i.e. traditional bullying vs. cyberbullying.

Alongside psychological effects of cyberbullying victimisation, high risk behaviours, such as substance use, have also been associated with cyberbullying. Substance use has been

identified as one of the factors argued to increase the likelihood of cyberbullying victimisation (Gámez-Guadix et al., 2013). For example, in a study of 845 adolescents, substance use was found to predict increased cyberbullying victimisation (Gámez-Guadix et al., 2013). However, cyberbullying victimisation does not appear to increase the risk of further substance use. This is debated in the literature with other research indicating that cyberbullying victimisation may increase the risk of binge drinking and marijuana use (Gámez-Guadix et al., 2013; Goebert, Else, Matsu, Chung-Do, & Chang, 2011).

While there is a multitude of literature on the effects of cyberbullying via internet and cell phone, as cited above, the effects of cyberbullying via cell phones exclusively are largely unknown. This discrepancy may be partially due to the common research methodology that combines both internet and cell phone cyberbullying together (Hinduja & Patchin, 2010; Mesch, 2009; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008). Of the literature that is available, there is evidence to suggest that victims of cyberbullying via cell phone report emotional difficulties such as sadness, embarrassment, frustration and fear (Kraft, 2006; Mark & Ratliffe, 2011). Of further concern are findings that severe cyberbullying has been shown to pre-empt adolescent suicide and/or psychiatric hospitalisation in some individuals (Brunstein, Sourander, & Gould, 2010; Goebert et al., 2011; Kraft, 2006).

**Risk Taking Behaviour**

Of increasing concern is the escalation of risk taking behaviours among adolescents. Risk taking cyber behaviours may include disclosing personal information online, meeting people in person who have only been previously met online, and taking and/or sending compromising pictures (Eastin, Greenberg, & Hofschire, 2006; Hampton, 2012). Adolescents

are considered to be more vulnerable to risk taking behaviour due to an imbalance between the maturity of the socioemotional network in the limbic system, and the cognitive-control network in the prefrontal cortex (Steinberg, 2007). The socioemotional network appears to develop quickly during adolescence and is thought to be sensitive to social stimuli, emotional stimuli, and reward seeking (Steinberg, 2004, 2007). In comparison, the cognitive-control network develops slowly over longer periods of time, however, is involved in important executive functions such as planning and self-regulation (Steinberg, 2004, 2007). Consequently adolescents are more likely to engage in high risk and reward seeking behaviours. This brings to the fore concerns of adolescents engaging in risk taking behaviours, particularly with increased access to online technologies, and the potential negative outcomes.

Currently there is little research examining the relation between cell phone use and risk taking behaviours, despite increasing research to suggest relations between risk taking behaviour and internet use. In a study of 1,500 adolescents, who used the internet at least once a month in the previous six months, 75% reported engaging in at least one risky cyber behaviour in the past 12 months, including disclosure of personal information, sending rude or nasty comments and talking about sex with someone only known online (Ybarra, Mitchell, Finkelhor, & Wolak, 2007). Furthermore, one in four adolescents using the internet reported engaging in four or more risky cyber behaviours, including disclosing personal or identifying information, posting photos online, and talking about sex with strangers. Other research has reported prevalence rates ranging from 5.4% to 17%, with 5.4% posting pictures of themselves in swimwear/underwear online (Hinduja & Patchin, 2008), 12-16% meeting someone in person they had only met online (Liau, Khoo, & Hwaang, 2005; Rosen, Cheever,

& Carrier, 2008), and 17% engaging in high risk cyber behaviours such as posting personal information online, sending personal information to unknown people, and talking about sex to persons met online (Wolak, Finkelhor, & Mitchell, 2008).

Online risk taking behaviour is also reported to be associated with cyberbullying. In a sample of 845 adolescents, problematic internet use was reported to increase when individuals reported being cyberbullied (Gámez-Guadix et al., 2013). This is further confirmed by research indicating a positive relationship between cyberbullying and online risks, such as viewing inappropriate content online (Livingstone, Haddon, Gorzig, & Olafasson, 2011). In an examination of a sample of adolescent MySpace pages, Hinduja and Patchin (2008) reported that 40% of youth maintained privacy settings on MySpace to limit accessibility of personal information by strangers. This suggests that there is a proportion of youth that take precautionary measures to maintain their safety online.

**Outcomes of Risk Taking Behaviour**. Of further concern are the negative outcomes of online risk taking behaviour that have been identified. Wolak et al. (2008) reported that those who engaged in risk taking behaviours, such as disclosing personal information, reported higher rates of unwanted online solicitation. In a sample of 1,500 adolescents, aged 10 to 17 years old, 17% were found to engage in five or more risk taking behaviours, such as sending personal information to an unknown person online (Wolak et al., 2008). Moreover, 15% of these adolescents had received aggressive solicitations, such as requests to talk about sex, give sexual information or requests for offline contact, compared to 6% of those who engaged in fewer risk taking behaviours (Wolak et al., 2008). Other studies have reported physical and verbal assault by the individual the adolescent tried to meet in person, that they previously had no offline relationship with, and interpersonal victimisation associated with

risk taking behaviours (Liau et al., 2005; Ybarra et al., 2007). These outcomes emphasise the risks associated with cyber technologies and the importance of understanding the potential risks.

The identified outcomes of cyberbullying and risk taking behaviour have increased parental concerns around adolescent access to cell phone and online technologies, and their relations to parental behaviour. There are a variety of factors that contribute to the effect of parental communication via cell phone. These factors are only beginning to be understood in the research literature in terms of their influence on relationships and later outcomes. For example, relations with individual parenting styles have not been studied.

**Parental Concerns around Cell Phone Use**

Increased access to online technology has affected the way we develop, interact and learn. Technological advances have inadvertently supported the development of behaviours like bullying, with cell phones in particular, allowing for instant access to victims at any one point in time. Not only has this altered our interactions with peers, but such technology is also likely to affect parent-child relationships in terms of communication, support, self-esteem, and parenting (Weisskirch, 2011). Communication via cell phone has different meanings for adolescents and parents. While they both view cell phones as communication tools, adolescents report cell phone use in terms of promoting interpersonal connectedness and autonomy (Blair & Fletcher, 2011). Cell phones are an avenue for adolescents to keep in contact with friends, with 80% of adolescents reporting that they primarily use their cell phone to talk to friends. Cell phones also allow adolescents independence from their parents and increase autonomy. For example, they can talk to their friends without having to use the home phone (Blair & Fletcher, 2011). Conversely, parents describe cell phones in terms of

the negative psychological components, such as bullying and peer pressure, the down falls of cell phone ownership (Blair & Fletcher, 2011). Parental concerns stem around problematic behaviours that may arise such as cyberbullying and risk taking behaviour.

Parents were also concerned that their child or adolescent has the ability to have unsupervised communication with the opposite sex. Anxiety surrounding these concerns included online risk taking behaviour such as adolescents releasing personal information, sexual predators, and adolescents taking and/or sending sexual pictures (Rosen et al., 2008). In addition, because adolescents are able to be increasingly secretive and not disclose information when using a cell phone, parents report feeling unable to monitor their adolescent's behaviour (Blair & Fletcher, 2011; Devitt & Roker, 2009).

Parental authority has been raised as an issue surrounding cell phone use (Blair & Fletcher, 2011). While parents report that they recognise cell phones provide the opportunity for their adolescent to develop independence, many parents are concerned their adolescents are gaining too much independence too quickly. Monitoring adolescent's behaviour via cell phone was reported as a way to limit autonomy. However, lack of technological knowledge has proven to be a hindrance to this with parents more likely to call rather than text, demonstrating a generational difference (Blair & Fletcher, 2011; Devitt & Roker, 2009). This is consistent with findings that adolescents are less likely to report cyberbullying due to parents lack of technological knowledge (Hoff & Mitchell, 2009). Cell phone technology is new to today's parenting generation. They did not grow up with today's technology and therefore lack a working model from their own parents to base their parenting decisions on. Therefore there are two conflicts present; 1) parents are not familiar with the technology and therefore cannot monitor effectively; 2) parents unfamiliarity surrounding the role cell phone

technology may hold in their parenting behaviours (Blair & Fletcher, 2011). Furthermore, parental concerns regarding cyber behaviours are not unsubstantiated as cyberbullying and risk taking behaviour have been found to be associated with different parenting styles (Dehue et al., 2012; Rosen et al., 2008). For example, Uninvolved parenting has been associated with increased risk taking behaviours, including meeting online "friends" in person (Rosen et al., 2008).

## Parenting Styles

**Baumrind's Parenting Styles**. In the first instance it was proposed that two variables explain stable differences in parenting ability; warmth/hostility and restrictive/permissive (Becker, 1964). Although these dimensions accounted for a reasonable amount of variance, there were other factors identified through individual studies, including child-rearing orientation and attachment behaviours (Maccoby & Martin, 1983). These dimensions were found to only be weakly related to the theories used for the study, with restrictive/permissive repeatedly emerging during research without theoretical rationale (Maccoby & Martin, 1983). Since this early work, parenting dimensions have changed considerably. Research has developed responsiveness, a dimension related to warmth/hostility, while restrictive/permissive has been broken down into parental demandingness (Baumrind, 1971; Maccoby & Martin, 1983). Baumrind (1971) went on to expand this into parental control/demand and parental responsiveness, with traditional parenting styles placed into 3 categories; Authoritarian, Authoritative and Permissive**.**

Authoritative parenting is characterised by high control and high responsiveness. Authoritative parents tend to use rewards rather than punishment in interactions with their children. Alongside this parents encourage dialogue with their children and openness with

communication. These children tend to rate higher on self-esteem and happiness (Eastin et al., 2006; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Maccoby & Martin, 1983). Research on these traditional parenting styles reported higher levels of Authoritative parenting compared to other parenting styles, as assessed by the Parenting Practices Questionnaire (Robinson, Mandleco, Olsen, & Hart, 1995).

Authoritarian parenting is characterised by a high level of demand and low level of responsiveness. Within this parenting type, parents place high value on authority and strict obedience (Bukatko, 2008). Research has shown that children exposed to Authoritarian parenting typically lack social competence with peers and withdraw from initiative. This style has also been associated with low self-esteem, and self-confidence (Lamborn et al., 1991; Maccoby & Martin, 1983).

Permissive parents were defined by Baumrind (1971) as those who use little punishment and avoid asserting authority where at all possible. These parents take a tolerant approach to their child's behaviour, allowing them to regulate their own behaviour. Therefore these parents are low in control and high in responsiveness. Children associated with Permissive parenting styles have been associated with impulsivity, aggression and a lack of responsibility (Eastin et al., 2006; Lamborn et al., 1991; Maccoby & Martin, 1983).

**Maccoby and Martin Parenting Styles**. Maccoby and Martin (1983) extended the research on parenting styles by Baumrind to further develop the Permissive subtype. Maccoby and Martin (1983) believed that Permissive parenting styles do not all display "warmth" or "responsiveness" in comparison to the Authoritarian group. They found that some Permissive parents are cool and uninvolved (low in responsiveness as well as control). They clarified a fourth style within the Permissive type, characterised by parents who are low

in control and low in responsiveness. This Uninvolved parenting subtype was differentiated from Permissive as its own entity. Uninvolved parenting, has been included in the Parenting Dimensions Inventory (PDI) as an individual construct examining responsiveness and involvement of parents (Hennessy, Hughes, Goldberg, Hyatt, & Economos, 2010; Kelley, Power, & Wimbush, 1992; Maccoby & Martin, 1983; Olvera & Power, 2010). With regard to prevalence of Uninvolved parenting, a study of 99 parent-child dyads reported Uninvolved parenting to be the most common parenting style (Hennessy et al., 2010). Uninvolved parenting has been associated with the most negative child and adolescent outcomes such as impulsivity, antisocial behaviour and strained peer relationships from a young age (Kawabata, Alink, Tseng, van Ijzendoorn, & Crick, 2011; Maccoby & Martin, 1983).

**Helicopter Parenting**. Recently, research has continued to develop styles of parenting to accommodate increasing technology and differing ways of living. The term "Helicopter parenting" involves the newest parenting pattern recognised (Lemoyne & Buchanan, 2011). Helicopter parenting refers to a form of over-parenting. Such parents are considered to demonstrate an excessive involvement in their child's lives, and fail to allow independent development by using developmentally inappropriate tactics (Segrin et al., 2012). While Authoritarian parenting suggests high levels of control and low levels of responsiveness, Helicopter parenting is high on both control and responsiveness. Helicopter parents have been recognised to intervene excessively in solving their child's problems, essentially stunting independence rather than nurturing this ability (Lemoyne & Buchanan, 2011; Segrin et al., 2012). This differs from Authoritative parenting where both independence and problem solving are promoted.

Helicopter parenting has been sub-categorized into 5 groups; Blackhawk, Toxic, Consumer Advocate, Safety Expert and Traffic and Rescue Helicopters (Shellenbarger, 2007, September 27; Stephens, 2009). The *Blackhawk* Helicopter parents take immediate action, often going straight to the head authority when there is a problem (e.g. principle), regardless of the issue. The *Toxic* parent monitors their child's actions and often impersonates or masquerades their child to ensure their child gets the "best". The *Consumer Advocate* assumes an attitude of entitlement with regard to resource access within their child's education. This includes frequently involving themselves in their child's education, attempting to bully teachers to ensure the best outcome for their child. The *Safety Expert* parent wants to ensure that their child is safe, often attempting to obtain safety information including emergency plans. Finally, the *Traffic and Rescue* parent is thought to be harmless in comparison to the other types. These parents often give their children advice and guidance while providing autonomy, but are ready and waiting to jump in during time of crisis.

It is estimated that 60 - 70% of parents engage in some form of Helicopter parenting with mothers demonstrating over involvement, and fathers using "strong-arm" tactics (Jayson, 2007, April 3; Stephens, 2009). This gives rise to the concern that children exposed to the Helicopter parenting style lack the opportunity to develop problem-solving skills and independence, given that their parents, more often than not, 'swoop' in to fix whatever the current issue is.

The literature to date reports predominantly assessing Helicopter parenting with short research specific scales, typically from the perspective of the adolescent (Lemoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). Examples of items to assess Helicopter parenting include "My parents often stepped in to solve life problems for me" and "My

parents have always been very involved in my activities", with adolescents asked to report their level of agreement with the statement (Lemoyne & Buchanan, 2011). Scales to assess the construct of Helicopter parenting focus on high parental involvement and problem solving in their child's lives.

Although there has been little empirical research identifying this parenting type and associated outcomes, the existing research suggests that those exposed to Helicopter parenting may be at higher risk of negative outcomes. It has been identified that individuals exposed to Helicopter parenting may not have their basic psychological needs met including autonomy and a sense of competence (Schiffrin et al., 2013). It is thought that parental over-control is perceived by the child as the child themselves being incompetent. Research indicates that children who have experienced Helicopter parenting feel more negative about themselves and are more prone to anxiety, depression and decreased life satisfaction (Lemoyne & Buchanan, 2011; Schiffrin et al., 2013). Alongside this, low quality parent-child communication has also been reported and a sense of entitlement by the children (Segrin et al., 2012).

The literature to date identifies developmental outcomes that have been associated with parenting behaviours, as discussed above. However, as far as is known, there is no single scale that has been developed to assess new parenting constructs such as Helicopter and Uninvolved parenting. Furthermore, given the consistent connection established between parenting and adolescent outcomes, it may be important to examine the relations between parenting and cyberbullying as well as establishing a valid construct for measuring modern parenting patterns.

**Parenting styles, Cyberbullying, and Risk Taking Behaviour**

As outlined, studies on parenting indicate that there are potentially five current parenting styles; Authoritarian, Authoritative, Permissive, Uninvolved and Helicopter. While research is relatively scarce on the two latter types, the significant effect that parenting behaviours have on a child's development are well documented. Parental behaviour has been strongly associated with a child's ability to develop adaptive strategies to achieve on different tasks and problem solve. Authoritative parenting has been associated with the most adaptive achievement strategies and the least problematic behaviours (Aunola, Stattin, & Nurmi, 2000; Dehue et al., 2012).

Although there is a paucity of research on specific types of cyberbullying and risk taking behaviour via cell phones, and their relations with parenting styles, there is some evidence to indicate associations. For example, Authoritative parenting has been associated with lower levels of both traditional bullying (Baldry & Farrington, 1998, 2005; Georgiou, 2008) and cyberbullying (Dehue et al., 2012; Hay et al., 2010). This trend was supported in the cyberbullying literature, for example, in a study of 1200 adolescents aged 10 to 14 years, Authoritative parenting was associated with lower rates of adolescent cyberbullying in comparison with other parenting styles (Dehue et al., 2012). Rule setting and monitoring of cyber behaviour was also associated with Authoritative parenting and was reported to decrease the exposure to cyberbullying. This indicates the importance of parents engaging in dialogue with adolescents regarding online risks as well as monitoring behaviour as a prevention measure for cyberbullying (Eastin et al., 2006; Mesch, 2009; Perren et al., 2012; Rosen et al., 2008). Moreover, Authoritative parenting is also implicated with managing the effects of bullying. As discussed above, bullying has significant negative effects on

adolescents, including self-harm and suicidal ideation. The presence of Authoritative parenting has been shown to reduce these harmful effects, indicating that Authoritative parenting practices may help children cope with the experience of being bullied (Hay et al., 2010).

Authoritarian parenting has been associated with victimisation and perpetration for both traditional bullying and cyberbullying (Baldry & Farrington, 1998; Dehue et al., 2012; Floros et al., 2012). In a sample of 2,684 adolescents, Floros et al. (2012) described "affectionless control" parenting, similar to that of Authoritarian, associated with higher rates of cyberbullying.

Permissive parenting has also been associated with higher rates of victimisation among adolescents (Dehue et al., 2012; Georgiou, 2008) and higher rates of cyberbully perpetration compared to Authoritative parenting (Dehue et al., 2012). Finally, of concern is the fact that Uninvolved parenting has been specifically related to antisocial behaviour (Maccoby & Martin, 1983). Uninvolved parenting has been associated with the highest rates of traditional bullying as well as cyberbullying (Dehue et al., 2012). However, Uninvolved parenting was also associated with high rates of cyberbullying victimisation (Dehue et al., 2012), demonstrating negative behavioural outcomes associated with Uninvolved parenting.

With regard to bullying outcomes of Helicopter parenting, the literature to date is scarce. Broader outcomes that have been identified, as discussed above, include lower levels of well-being, with adolescents reporting a pessimistic thinking style about themselves (Lemoyne & Buchanan, 2011). Furthermore, adolescents who perceive their parents to be Helicopter parents are more likely to be prescribed medication for anxiety and/or depression (Lemoyne & Buchanan, 2011).

Risky cyber behaviours are found to vary as a function of parenting styles (Rosen et al., 2008). Authoritative parenting was associated with the least risky and negative behaviours and fewest incidences of risky cyber behaviour (Rosen et al., 2008). Compared to Authoritarian, Permissive and Uninvolved parents, Authoritative parents were more likely to have the greatest knowledge about their child's cyber behaviour by viewing online behaviour and having their own social networking page. Authoritative parents are most likely to put limits in place (i.e., time limits for internet use), and engage in monitoring behaviours (Eastin et al., 2006; Rosen et al., 2008). These parental monitoring behaviours are identified as protective mechanisms against online victimisation (Mesch, 2009).

Authoritative and Authoritarian style parents are more likely to have adolescents who do not post regularly on social networking sites, do not have a computer in their room and do not disclose personal information online. Furthermore, Authoritative and Authoritarian styles were associated with higher monitoring behaviours from parents (Rosen et al., 2008). Permissive and Uninvolved parenting have been strongly associated with risky internet behaviours, such as disclosing personal information and meeting online "friends" in person (Rosen et al., 2008). Permissive parents are most likely to have their own social networking page, however they do not report setting limits or monitoring their adolescents behaviour (Rosen et al., 2008). Permissive parenting was also associated with adolescents having unmonitored access to the internet with no restrictions or rules to regulate their behaviour. Regardless of parenting style, those who have access to the internet in their room spend substantially more time online than others, increasing the opportunity for risky behaviours (Eastin et al., 2006).

The existing research on parenting and cyberbullying behaviours is largely limited to internet-based cyberbullying (Hinduja & Patchin, 2010; Mesch, 2009; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008). Furthermore, studies only include segments of cyberbullying, such as Denigration, Harassment and Outing (Popović-Ćitić et al., 2011). There is little, if any research concerning the implication of parenting styles to adolescent's cyberbullying behaviour exclusively via cell phone, particularly with respect to the new parenting styles that are emerging, such as Helicopter and Uninvolved parenting. The current thesis intends to address these gaps in the literature and provide a comprehensive account of possible relationships between parenting styles and cyberbullying behaviours specific to cell phones. Information obtained from participants gave a clear indication of baseline demographics regarding age of access and cell phone use. It also provided descriptive information of cyberbullying and risk taking behaviour exclusively with cell phones. Information gathered was specific to cyberbullying behaviours via cell phone, addressing types of cyberbullying, and frequency of cyberbullying behaviour. Data was also gathered regarding parenting style behaviours, particularly the newer parenting patterns. This allows analysis regarding the relationship between parenting styles and cyberbullying behaviours. The specific research aims were as follows:

1. To describe the age of first access, prevalence of cell phones in adolescents, and demographics associated with cell phone use at ages 13-17 years of age.

2. To develop a parenting scale to evaluate modern parenting practices and assess both traditional and modern parenting within the current sample. Psychometric properties of the developed scale will also be examined to validate its characteristics.

3. To describe the type and frequency of cyberbullying and risk taking behaviours in adolescents.

4. To examine relations of cyberbullying and risk taking behaviours with parenting styles.

## Method

### Participants

Participants were 88 adolescents and their parent/caregivers recruited through secondary schools for the study titled "Cyberbullying and Parenting Styles". Refer to Appendix A for the adolescent information and assent form, and Appendix B for the parent information and consent form. Of this sample, 85 adolescents and 58 parents' data were available for final inclusion, due to incomplete questionnaire returns.

Of the adolescent participants, 69.4% (*n* = 59) were female and 30.6% (*n* = 26) were male. The ages of adolescent participants ranged from 13 to 16 years, with a mean age of 15 years. Of the parent/caregiver participants, 86% (*n* = 50) were female and 14% (*n* = 8) were male. Parent/caregiver participant's ages ranged from 30 to 59 years with a mean age bracket of 45 to 50 years. In terms of relationship to the child, 82.8% (*n* = 48) reported being the biological mother of the adolescent, 13.8% (*n* = 8) the biological father, 1.7% (*n* = 1) the step mother, and 1.7% (*n* = 1) family relative.

The distribution of ethnicities in this sample was New Zealand European 84.5%, Maori 6.9%, Chinese 3.4%, and Other 5.2%. Of parent/caregiver participants, 86.2% (*n* = 50) were employed and 81% (*n* = 47) reported their partner was also in current employment. The following distribution of household annual income was reported; under $15,000 1.7%,

$15,000 - $25,000 3.4%, $25,000 - $40,000 8.6%, $40,000 - $50,000 12.1%, $50,000 - $70,000 25.9% and over $70,000 48.3%.

**Missing Data**. Complete data sets were unavailable for 30 adolescent-parent/caregiver pairs. Incomplete data sets included; three adolescent questionnaires that were incomplete, 28 parent questionnaires that were not returned to the researcher and two parent questionnaires that were incomplete. Adolescent-parent/caregiver data pairs that contained complete adolescent data but incomplete parent/caregiver data were not excluded from the study to maximise sample retention. However, these data pairs were removed from analysis involving paired adolescent-parent/caregiver analysis.

## Measures

### Adolescent Measures

**Adolescent Questionnaire**. The current study developed a custom, multi-component questionnaire, to assess cyberbullying and risk taking behaviours in adolescents. This allowed a comprehensive assessment of types of cyberbullying and specific cyberbullying behaviour, creating specificity in the measurement of cyberbullying behaviours. This specificity allowed analysis to accurately identify problematic behaviours. In total, it included 116 self-report items. In addition to eight basic demographic questions (Unique Code Identifier (UCI), gender, current date, cell phone ownership, access to personal cell phone or family cell phone, age of access, time per day, maximum activity for use), four components were included in the questionnaire. Components targeted (a) types of cyberbullying, (b) frequency of cyberbullying, (c) risk taking behaviours, and (d) frequency of risk taking behaviours. All questions had multi-choice response options and were prefaced with instructions on how to

respond. Components of the questionnaires were collated and presented in paper format. A detailed description of all components is provided below. A copy of the questionnaire is provided in Appendix C.

***Cyberbullying Component of Adolescent Questionnaire*.** As outlined, the overall consensus in the literature is that there are four main types or categories of cyberbullying, with specific behaviours within each (Nocentini et al., 2010). The types are Written-Verbal behaviours, Visual behaviours, Exclusion and Impersonation. These can be further broken down into specific behaviours (Beran, 2007; Nocentini et al., 2010). These behaviours are Flaming, Cyberstalking, Denigration, Masquerade, Outing, Exclusion and Harassment. The adolescent questionnaire addressed each type of cyberbullying and specific behaviours. It included 40-items pertaining to cyberbullying behaviour. Questions used dichotomous response options (yes/no). If participants answered "yes" to a question, there was a follow up question of the frequency of behaviour, as outlined below. If participants answered "no", skip rules instructed them to move to the next question. Questions relating to types of cyberbullying included, for example, "Do you ever send mean and/or spiteful text messages to other people?" which relates to the Written-Verbal type of cyberbullying. Questions relating to specific cyberbullying behaviours included, for example, "Have you ever made phone calls to others that intentionally make someone else look bad?" which relates to Masquerade cyberbullying, a specific cyberbullying behaviour. Refer to Table 1 for a description of all variables.

***Frequency of Cyberbullying Component of Adolescent Questionnaire***. Frequency of cyberbullying behaviours was assessed with regard to how often an individual engages in cyberbullying behaviours per month. This was asked for all behaviours. To assess frequency,

a multi-choice response option ranged from “never” to “daily” for each cyberbullying question.

***Risk Taking Behaviour Component of Adolescent Questionnaire.*** The risk taking behaviour component of the adolescent questionnaire was developed to assess risk taking behaviours associated with cell phone use, and addressed three areas of risk taking behaviour (risk taking behaviour, disclosure of information, and meeting in risky situations). It included 11-items relating to disclosing personal information, sending personal pictures, sending sexual pictures, meeting people only known by text and giving out cell phone contact details to strangers. As with the cyberbullying questions, risk taking behaviour questions used dichotomous response options (yes/no). If participants answered “yes” to a question, there was a follow up question regarding the frequency of behaviour. If participants answered “no”, skip rules instructed them to move to the next question. Questions relating to risk taking behaviours included, for example, “Have you ever disclosed personal information about yourself via cell phone to strangers or people not well known to you?”, which relates to disclosure of information risk taking behaviours Risky behaviours via internet have been well established including the association with differing parenting styles (Eastin et al., 2006; Rosen et al., 2008).

***Frequency of Risk Taking Behaviour Component of Adolescent Questionnaire***. Frequency of risk taking behaviours was assessed with regard to how often an individual engages in risk taking behaviours per month. This was asked in regard to all behaviours. To assess frequency, a multi-choice response option ranged from “never” to “daily” for each risk taking behaviour question.

### Parent Measures

**Parent Questionnaire**. In addition to seven basic demographic questions (Unique Code Identifier (UCI), age, employment, relationship to adolescent and ethnicity), two relevant questionnaires were used. These questionnaires measured (a) traditional parenting styles (Authoritative, Authoritarian, and Permissive) through the *Parenting Practices Questionnaire* and (b) modern parenting styles (Helicopter and Uninvolved). All questionnaires were collated, with questions randomised, and presented in a paper format (see Appendix D). All questions were prefaced with instructions on how to respond to each item.

***Parenting Practices Questionnaire.*** The Parenting Practices Questionnaire (PPQ) was designed to be an empirical means of assessing meaningful parenting dimensions (Authoritarian, Authoritative, and Permissive) and identifying parenting subscales within each dimension. Refer to Appendix E for the full Parenting Practices Questionnaire. The PPQ was based on Block's (1965) Child-rearing Practices Report, which consisted of 91-items (Block, 1965; Robinson et al., 1995). The PPQ was initially developed with 80-items from the Child-Rearing Practices Report, and 53 new items based on parenting conceptualisations that appeared to have face validity (Robinson et al., 1995). In the development of the PPQ, reliability was assessed through factor analyses to ensure an appropriate and accurate scale. Robinson et al. (1995) conducted a series of principal axes factor analyses and varimax rotations, only retaining items if they loaded over .30 for both fathers and mothers, pre-school and school-age children. This ensured items included in the scale contributed a significant proportion in the measurement of constructs. Subsequently, 19-items from Block's *Child-Rearing Practices Report* scale and 43 new items were retained (Robinson et al., 1995). Thus, the PPQ consists of 62 - items of self-reported parenting practices for parents of pre-school or

school-age children. Items use a 5-point Likert scale ranging from (1) *never* to (5) *always*. Responses were summed to obtain a total score for each parenting style with higher scores indicating the dominant parenting style/s.

The three parenting dimensions of the PPQ, Authoritative, Authoritarian, and Permissive, are based on Baumrind's typologies. Authoritative parenting is considered an in-between of parenting styles, characterised by high control and high responsiveness. For example, items include "I encourage my adolescent to talk about their troubles". Parents encourage dialogue with their children and openness with communication, while maintaining clear and firm direction (Baumrind, 1971; Buri, 1991). Authoritarian parenting is characterised by a high level of demand and low level of responsiveness (Bukatko, 2008). For example, items include, "I punish by taking privileges away from my adolescent with little if any explanation". Authoritarian parents are highly directive and discourage verbal negotiation, often using punitive measures to control behaviour (Buri, 1991). Permissive parents are defined by Baumrind as those who use little punishment and avoid asserting authority where possible (Baumrind, 1971). For example, items include "I state punishments to my child and do not actually do them". These parents take a tolerant approach to their child's behaviour and are considered to be low in control and high in responsiveness, allowing their children to regulate their own behaviour (Buri, 1991). Robinson et al. (1995) reported internal consistency reliabilities for parenting dimensions with Chronbach alphas of .91, .86, and .75 for Authoritative, Authoritarian and Permissive scales, respectively.

Subscales within each parenting dimension were identified through independent principal factor analyses with obliminal rotation for each parenting dimension (Robinson et al., 1995). Identified subscales within dimensions were four factors in Authoritative, four

factors in Authoritarian, and three factors in the Permissive dimension. These parenting style subscales were identified by eigenvalues greater than one. The Authoritative scale included a total of 27 - items. This was divided into sub-scales of warmth and involvement (11 - items), reasoning/induction (seven items), democratic participation (five items) and good natured/easy going (four items). The Authoritarian scale had a total of 20-items with subscales of verbal hostility (four items), corporal punishment (six items), non-reasoning/punitive (six items) and directiveness (four items). Finally, the Permissive scale had subscales of lack of follow through (six items), ignoring misbehaviour (four items) and self-confidence (five items), with a total of 15 items for the dimension. The PPQ is considered to be empirically established and a meaningful measure of parenting dimensions and subscales within each dimension.

***Modern Parenting Practices Measure.*** Modern parenting practices were examined through a questionnaire custom developed by the researcher to assess modern parenting patterns that are emerging in the literature, such as Helicopter and Uninvolved parenting. It included 80 - items of self-reported parenting practices pertaining to Helicopter and Uninvolved parenting behaviours. Items were developed following an analysis of available literature which provided a broad working definition for item development. Items were retained if they were believed to pertain solely to either Helicopter or Uninvolved parenting styles by face validity. Each item used a 5-point Likert scale ranging from (1) *never* to (5) *always*. Consistent with the PPQ, responses were summed for each parenting dimension to obtain an overall score. Higher scores indicate dominant parenting styles.

*Helicopter Parenting.* The Helicopter scale includes 41-items (see Appendix F) with 5 reverse coded items. Items target levels of parental involvement with their children pertaining

to areas of school, discipline, problems and child achievement. Helicopter parenting refers to a form of over-parenting where parents demonstrate excessive involvement in their child's lives (Segrin et al., 2012). In comparison to Baumrind's parenting typologies, Helicopter parenting is considered to be high on both control and responsiveness. Items related to Helicopter parenting include "I go and speak to my child's school teacher often" and "I always get involved to help sort out any problems my child has". Current research on Helicopter parenting suggests that there is a correlation between exposure to Helicopter parenting and negative self-concept, anxiety, depression and low parent-child communication (Lemoyne & Buchanan, 2011; Segrin et al., 2012).

*Uninvolved Parenting.* The Uninvolved scale included 39-items (see Appendix G) with 13 reverse coded items. Items target involvement levels and responsiveness. Uninvolved parenting was identified by Maccoby and Martin (1983) who reported that Uninvolved parenting may be a sub-group of Permissive parenting, as described by Baumrind (Maccoby & Martin, 1983). Uninvolved parenting is characterised by low control and low responsiveness. Parents show little emotion towards their children as well as allowing children to regulate their own behaviour. Items for Uninvolved parenting include "I do not see the point in setting rules for my child" and "I ignore my child when they are upset". Uninvolved parenting is believed to be associated with negative outcomes such as antisocial behaviour (Kawabata et al., 2011; Maccoby & Martin, 1983).

**Procedure**

Data collection was completed over an eight month period. Recruitment was conducted through secondary schools and consent was obtained from school principals before participant recruitment began. Information and consent forms, for both adolescent and parent,

were distributed within the schools to relevant age groups. All adolescent participants were required to obtain information and consent for themselves and their parents before participation. Adolescents were requested to return signed consent forms to the school. Following the return of consent forms, participants completed questionnaires at the school with the researcher.

Each participant was assigned a unique code identifier (UCI) to allow adolescent and parent data pairing during analysis, and ensure anonymity of information. It was made clear to all participants that responses were anonymous and could not be tracked back to the participant. Furthermore, it was also made clear that all adolescent and parent responses would be kept anonymous from the other party. Participants were informed that they could withdraw their responses if they wished to, up until the time that their data had been added to the database. Two incentives were offered; Adolescents were offered the opportunity to go into the draw for a $50 local shopping centre voucher for their participation; a further opportunity to go in the draw for a $150 local shopping centre voucher was offered once *both* adolescent and parent completed their participation.

Once consent procedures had been satisfied, all students taking part met with the researcher in a room provided by the school where they individually completed questionnaires with the researcher nearby. After completion of the questionnaire, participants were given a debriefing sheet (see Appendix H) with resources regarding cyberbullying support in the event that the questionnaire had raised difficulties or concerns. Participants were also given the parental questionnaire with a postage paid envelope to be returned to the researcher at the University anonymously. Ethical approval for all procedures and measures

was obtained from the University of Canterbury Human Ethics Committee (Ethics reference: HEC 2012/131, Appendix I).

**Coding of Variables**

Analysis of the adolescent measure included a total of 15 dependant variables. This included 12 variables for cyberbullying and three variables for risk taking behaviour. A frequency measure was also constructed for each individual variable, as noted above. The variables of the adolescent questionnaire were organised into the following; overall engagement in cyberbullying behaviours (one variable), engagement in the four types of cyberbullying (four variables), engagement in specific cyberbullying behaviours (seven variables), overall engagement in risk taking behaviours (one variable), engagement in disclosure of information behaviours (one variable) and engagement in meeting in risky situations behaviours (one variable). Table 1 presents a description of how these variables were constructed. For a comprehensive review of variable composition, including questions associated with each variable, see Appendix J (Table 10).

Table 1

*Description of Dependant Variables for Adolescent Measure*

| Variable | Description of Variable Composition |
|---|---|
| Cyberbullying Behaviours | |
| Cyberbullying | This is a composite variable constructed from the summed scores of the four main types of Cyberbullying as outlined below (Written-Verbal, Visual Behaviour, Exclusion and Impersonation). |
| Written – Verbal | This variable is the sum of questions relating to written-verbal cyberbullying behaviours, cyberstalking, denigration, harassment, masquerade and outing. It contained a total of 26 questions. |
| Visual | This variable is the sum of questions relating to visual cyberbullying behaviours including embarrassing pictures, upsetting pictures, pictures for revenge, videos of others being hurt and private content. It contained a total of five questions. |
| Exclusion | This variable is the sum of questions relating to Exclusion Cyberbullying behaviours, including intentional exclusion of other individuals via cell phone and social media. It contained a total of five questions. |
| Impersonation | This variable is the sum of questions relating to Impersonation Cyberbullying behaviours, including impersonating another individual by method of text, picture or phone call. It contained a total of four questions. |

(continued)

Specific Cyberbullying Behaviours

| | |
|---|---|
| Flaming | This variable is the sum of questions relating to Flaming Cyberbullying behaviours, including aggressive, offensive and vulgar content. It contained a total of five questions. |
| Cyberstalking | This variable is the sum of questions relating to Cyberstalking Cyberbullying behaviours, including threats of intimidation via cell phone. It contained a total of four questions. |
| Denigration | This variable is the sum of questions relating to Denigration Cyberbullying behaviours, including sending information that is harmful, untrue or cruel. It contained a total of six questions. |
| Masquerade | This variable is the sum of questions relating to Masquerade Cyberbullying behaviours, including where individuals pretend to be someone else with the intention of making another person look bad. It contained a total of four questions. |
| Outing | This variable is the sum of questions relating to Outing Cyberbullying behaviours, including individuals releasing information that is considered private. It contained a total of two questions. |
| Exclusion | This variable is the sum of questions relating to Exclusion Cyberbullying behaviours, including intentional exclusion of other individuals via cell phone and social media. It contained a total of five questions. |

(continued)

| | |
|---|---|
| Harassment | This variable is the sum of questions relating to Harassment Cyberbullying behaviours, including repeated behaviour of sending rude or insulting messages. It contained a total of two questions. |
| Risk Taking Behaviour | |
| Risk-Taking Behaviour | This is a composite variable constructed from the summed scores of the two areas of Risk Taking Behaviour as outlined below (Disclosure of Information and Meeting in Risky Situations). |
| Disclosure of Information | This variable is the sum of questions relating to Disclosure of Information Risk Taking behaviours, including disclosure of personal information to strangers, people not well known, people only met once and known to the individual. It includes disclosure of personal information, personal pictures, nude and sexual pictures. It contained a total of eight questions. |
| Meeting in Risky Situations | This variable is the sum of questions relating to Meeting in Risky Situations Risk Taking behaviours, including meeting people the individual has only had text or online contact with and giving out contact numbers to strangers or people met once. It contained a total of three questions. |

**Data Entry and Planned Data Analyses**

Data was entered into the Statistical Package for the Social Sciences (SPSS) version 20.0 for Windows 2010. A predetermined 95% confidence level (i.e. a significance of $p <$

.05) was used to obtain statistically significant results. Analysis to satisfy the current research aims was undertaken with the following steps;

Firstly, internal consistencies (Cronbach's alpha coefficients) and descriptive statistics were examined for each measure and their subscales. Second, descriptive statistics were examined for age of access, prevalence and use of cell phones. Gender differences were assessed using either an independent-samples *t*-test for continuous variables or the chi-square test of independence for dichotomous variables.

Third, Exploratory Factor Analysis (EFA) was conducted on the data from the proposed parenting scale. EFA was considered appropriate despite the low participant-item ratio, given evidence that having a greater number of items compared to participants, may not impede factor analysis (De Winter, Dodou, & Wieringa, 2009; Marsh & Hau, 1999). *Bartlett's test of sphericity* was used to test that the correlation matrix was not an identity matrix. The *Kaiser-Meyer-Olkin* (KMO) measure of sampling adequacy was used to examine the correlations (Mooi & Sarstedt, 2011; Pallant, 2010). Internal reliability was assessed using Cronbach's alpha and inter - item correlations. Following EFA, parenting styles in the current sample were examined. This was done using categorical coding from the average parenting scores. Average scores were obtained by the total summed score divided by the number of items per sub-scale.

Fourth, descriptive statistics were examined for all cyberbullying and risk taking behaviour variables. This was followed by one-way between-groups multivariate analysis of variance (MANOVA) to determine gender differences in cyberbullying and risk taking behaviour variables. This was followed by correlational analyses of cyberbullying, risk taking behaviour, and a range of demographic variables.

Fifth, and finally, the relationship between cyberbullying, risk taking behaviour and parenting styles was examined in three steps. This analysis was confined to complete participant pairs, i.e. where data was available for both adolescent and parent. First, Pearson product-moment correlations described the relationship between cyberbullying frequency, risk taking behaviour frequency and parenting styles (Authoritative, Authoritarian, Permissive, Uninvolved and Helicopter). Secondly, a two-stage hierarchical multiple regression examined how parenting styles might be predictive of cyberbullying frequency. The key outcome variable in this model was cyberbullying frequency. Finally, a two-stage hierarchical multiple regression examined how parenting styles might be predictive of risk taking behaviour frequency. The key outcome variable in this model was risk taking behaviour frequency. The results are presented in the following chapter according to these research aims.

## Results

Following an assessment of the characteristics of all scales, the results are presented below according to the study's aims, as outlined in the introduction.

### Assessment of Scales

Descriptive statistics and internal consistency were calculated for all measures and their subscales, as presented in Table 2. A Cronbach's alpha coefficient of .70 or higher is typically recommended for a scale to have adequate reliability (Clark & Watson, 1995; Nunnally, 1978). However, alpha's above .60 have also been regarded as adequate (Holden, Fekken, & Cotton, 1991).

The Authoritative, Authoritarian and Helicopter subscales within the parenting measure achieved good internal consistency, with Cronbach's alpha coefficients of .85, .89 and .86, respectively. The Permissive and Uninvolved subscales within the parenting measure achieved Cronbach alpha coefficients of .55 and .63, below the recommended criterion. Cronbach's alpha coefficients are known to be sensitive to the number of items in a scale, particularly for scales with fewer than 10 items (Pallant, 2010) or over 40 items (Clark & Watson, 1995; Cortina, 1993). As the number of items in a scale increases, the likelihood of achieving a high alpha value also increases (Clark & Watson, 1995). Furthermore, while Cronbach alpha coefficients provide a measure of internal consistency, they do not measure homogeneity; the ability of a scale to assess a single underlying factor or construct. A solution that has been recommended is examining the average inter-item correlation. This may be considered more appropriate than Cronbach alpha coefficients as inter-item correlations provides a measure of average inter-item correlations that is impervious to the number of items, and also provides a measure of homogeneity (Briggs & Cheek, 1986; Clark & Watson, 1995). Clark and Watson (1995) recommend an average inter - item correlation range of .15 - .50, with scores moving toward .50 recognised as demonstrating good internal consistency. The Permissive and Uninvolved parenting scales achieved average inter-item correlations of .05, indicating that they may not be reliable scales, as also suggested by alpha scores.

As reported in Table 2, within the adolescent measure, the Cyberbullying Behaviour scale and Written-Verbal behaviour scale demonstrated good internal consistency, with Cronbach's alpha coefficients of .89 and .86, respectively. The Visual Behaviour scale, Exclusion Behaviour scale and Impersonation Behaviour scale demonstrated alpha

coefficients of .40, .60, and .41. Average inter - item correlations for Visual Behaviour, Exclusion Behaviour and Impersonation Behaviour were .13, .25, and .21, respectively, indicating adequate internal consistency for Exclusion and Impersonation according to the criterion noted above (Clark & Watson, 1995).

For the Specific Cyberbullying Behaviour scale, Flaming, achieved good internal consistency, with a Cronbach's alpha of .71 (Table 2). Other Specific Cyberbullying Behaviour scales ranged from .48 - .69. Average inter-item correlations for Cyberstalking, Denigration, Masquerade, Outing, Exclusion and Harassment were .25, .28, .23, .41, .25, and .36, respectively, indicating adequate internal consistency.

The Risk Taking Behaviour scale achieved good internal consistency, with a Cronbach's alpha coefficient of .72. The Disclosure of Information scale and Meeting in Risky Situations scale obtained coefficients of .68 and .50, with average inter-item correlations of .19 and .22, respectively, indicating adequate internal consistency.

Table 2

*Mean, Standard Deviation and Cronbach Alpha Statistics for Parent and Adolescent Measures*

| Measure | Mean | SD | α |
|---|---|---|---|
| Parent Scales | | | |
| Authoritative | 4.09 | .32 | .85 |
| Authoritarian | 2.20 | .49 | .89 |
| Permissive | 2.65 | .32 | .55 |
| Helicopter | 2.80 | .36 | .86 |
| Uninvolved | 2.50 | .22 | .63 |
| Adolescent Scales | | | |
| *Cyberbullying Scales* | | | |
| Cyberbullying Behaviours | 7.79 | 6.25 | .89 |
| Written-Verbal Behaviours | 6.12 | 4.43 | .86 |
| Visual Behaviour | .26 | .60 | .40 |
| Exclusion Behaviour | .96 | 1.26 | .60 |
| Impersonation Behaviour | .94 | .82 | .41 |
| *Specific Cyberbullying Behaviour Scales* | | | |
| Flaming | 2.64 | 1.48 | .71 |
| Cyber-Stalking | .19 | .61 | .64 |
| Denigration | 1.76 | 1.63 | .69 |
| Masquerade | .42 | .56 | .48 |

(continued)

| | | | |
|---|---|---|---|
| Outing | .62 | .76 | .57 |
| Exclusion | .96 | 1.26 | .60 |
| Harassment | .35 | .63 | .53 |
| *Risk Taking Behaviour Scales* | | | |
| Risk-Taking Behaviours | 2.26 | 2.07 | .72 |
| Disclosure of Information | 1.26 | 1.51 | .68 |
| Meeting in Risky Situations | 1.00 | .93 | .50 |

**Aim 1: To Describe the Age of First Access, Prevalence of Cell Phones in Adolescents, and Demographics Associated with Cell Phone Use at ages 13-17 years of age**

The current sample reported that 100% of participating adolescents had access to or owned a cell phone. In terms of the age adolescents received their first cell phone, 16.5% reported they received their first cell phone under 10 years of age, 62.4% reported they received their first cell phone between ages 10-12 years of age, and 21.2% reported they received their first cell phone between 13-14 years of age. There were no significant gender differences between the age males ($M$ = 14.85, $SD$ = .69) and females ($M$ = 14.69, $SD$ = .58) received their first cell phone, $t$ (41) = -1.16, $p$ = .254.

In terms of time per day spent on cell phones, 22.4% of adolescents reported spending over 3-hours per day using their cell phone, 20% spent 2-3-hours, 20% spent 1-2-hours, 14.1% spent 30-minutes to 1-hour and 23.5% spent under 30-minutes on their cell phone per day. A Chi-square test for independence indicated no significant differences between gender and the amount of time spent on cell phones per day, $\chi^2$ (4, $n$ = 85) = 7.52, $p$ = .11, *phi* = .30. Adolescents reported using their cell phone predominantly for texting their friends (89.4%),

followed by using the internet (4.7%), contacting their parents (3.5%), and gaming (2.4%). A Chi-square test for independence demonstrated there was no significant association between gender and the predominant activity cell phones are used for, $\chi^2$ (3, $n$ = 85) = 1.61, $p$ = .66, *phi* = .14.

## Aim 2: A Parenting Scale will be Developed to Evaluate Modern Parenting Patterns and assess both Traditional and Modern Parenting Styles within Participants

Data from the parent measure was analysed to determine if the proposed parenting scale was appropriate and sound. The scale included 80-items and was completed by 57 participants. The 80-items, made up of the proposed Helicopter and Uninvolved parenting scales, were subjected to Exploratory Factor Analysis, using an oblique rotation, to test if the two proposed parenting styles were evident in the data. Oblique rotation (promax) was employed, as there is no theoretical reason that factors should not be correlated. Phenomena in psychology are assumed to be generally interconnected, indicating that oblique rotations often better represent psychological research (Matsunaga, 2010), which was true in this case.

**Suitability of Data for Analysis**. As noted above, the number of items exceeded the number of participants in the current data set. This brings to the fore the issue of sample size in factor analysis. There is much debate over how large a sample size should be, nevertheless, the typical recommendation is that a larger sample size is better (Pallant, 2010). Small sample sizes may indicate less reliable correlations between variables, more tendency to vary between samples and limited ability to generalise to other populations (Tabachnick & Fidell, 2007). Furthermore, it is suggested that the ratio of items to participants is an important consideration. There are suggestions of 10 participants per one item and also that the number of items should never to exceed the sample size (Aleamoni, 1976; Nunnally, 1978). However,

contrary to this belief, research indicates there is no absolute threshold for minimum sample size, with exploratory factor analysis demonstrating the ability to obtain reliable solutions with small sample sizes under 50 participants (De Winter et al., 2009). Increasing the number of items on a questionnaire has been shown to improve factor structure, particularly with low factor loading patterns, with no existing objection to having more items than participants. Furthermore, with regard to participant-item ratio, studies have indicated that having a greater number of items compared to participants may not impede factor analysis (De Winter et al., 2009; Marsh & Hau, 1999). The current analysis was conducted to identify the general trend between items, rather than confirm a factor structure. Therefore, given the exploratory nature of the current analysis and the review of the literature, exploratory factor analysis was conducted despite the low participant-item ratio.

**Data Consideration**. Items were considered to load onto a factor if the absolute value was greater than .30 (Tabachnick & Fidell, 2007). Items above this criterion were retained to ensure that each item contributed a significant proportion in the measurement of the factor. Examination of items indicated that 17 items loaded below the recommended value. Each of these items was removed individually; item 2.77, 2.120, 2.109, 2.121, 2.71, 2.89, 2.119, 2.135, 2.81, 2.103, 2.131, 2.138, 2.70, 2.111, 2.107, 2.72, and 2.99. See Appendix K (Table 11) for a full list of removed items. Appendix L (Table 12) outlines the final 63 items that were retained and their significant factor loadings. *Kaiser-Meyer-Olkin* (KMO) measure of sampling adequacy and *Bartlett's test of sphericity* were unable to be computed as the data set was too large, given the participant–item ratio. As noted above, the current factor analysis was exploratory in nature, to identify general trends; however, results should be interpreted

with caution given the lack of sampling adequacy and suitability of responses for the current analysis, as shown by KMO and *Bartlett's test of sphericity.*

**Determining Number of Factors to Retain.** 20 factors had eigenvalues greater than 1.00. However, examination of the scree plot suggested a two factor model. It is recommended that when eigenvalues are plotted according to size, factors above the point of the elbow or inflection should be retained (Cattell, 1966). Appendix L (Table 12) presents the results from the factor analysis discussed below.

Following rotation and examination of the pattern matrix, a two factor solution was produced. This solution indicated that 27% of the variance across the 63 items could be explained by a two factor solution. Both factors one and two consisted of primarily one type of question, with over half of the questions within the factor being from one particular scale. Factor one, accounted for 16% of the total variance and consisted predominantly of items relating to the Helicopter parenting scale and was labelled *Helicopter*. Factor two accounted for 11% of the variance and consisted predominantly of items relating to the Uninvolved parenting scale and was labelled *Uninvolved*. From this, it can be established that the proposed parenting categories are reasonably represented by the proposed question set, with no evidence to suggest other reasonable combinations. Therefore, the proposed parenting categories can be used for the analysis of this sample.

**Dominant Parenting Styles**. Table 2 reports the mean, standard deviations and internal consistency for the parenting measure. Results show that 100% of parents within the sample reported Authoritative parenting as their highest average score. This is perhaps not an unexpected result as Authoritative parenting is highly socially desirable. The questions on this subscale demonstrate socially desirable parenting behaviours, which may limit the

accuracy of results. The original study on the Parenting Practices Questionnaire, reported average scores that are comparative to the current sample (Robinson et al., 1995). Robinson et al. (1995) reported scores on the Authoritative scale almost double that of the Authoritarian and Permissive parenting scales.

## Aim 3: To Describe the Type and Frequency of Cyberbullying and Risk Taking Behaviours in Adolescents

**Cyberbullying**. Table 3 presents cyberbullying behaviours and frequency per month by gender. Behaviour refers to the types of cyberbullying, as outlined in the method section. The types examined are Cyberbullying Behaviour, Written-Verbal Behaviour, Visual Behaviour, Exclusion Behaviour and Impersonation Behaviour. The current analysis determined how many behaviours an individual has engaged in, over their lifetime. Frequency refers to how often an individual engages in cyberbullying behaviours. The current analysis determined frequency as how many times an individual engaged in cyberbullying behaviour within a one month time period.

***Behaviours.*** The current study found that 97.65% of the current sample had engaged in one or more cyberbullying behaviours. On average, adolescents reported they engaged in 7.76 cyberbullying behaviours out of the 40 cyberbullying behaviours that were presented. The Written-Verbal type of cyberbullying was the most prevalent, with adolescents reporting engaging in an average of 6.12 behaviours, as shown in Table 3. Visual Behaviour, Exclusion Behaviour and Impersonation Behaviour all obtained scores below one, indicating that on average, adolescents engage in few cyberbullying behaviours of these types.

A one-way between-groups multivariate analysis of variance was performed to determine gender differences in types of cyberbullying behaviour. Five dependant variables were used; Cyberbullying Behaviour, Written-Verbal Behaviour, Visual Behaviour, Exclusion Behaviour and Impersonation Behaviour. The independent variable was gender. Preliminary testing was conducted to check for normality, outliers and multicollinearity. The data set was found to have a right skew due to most participants engaging in few cyberbullying behaviours, indicating a floor effect. Outliers were considered true data points because there are valid extreme cases of cyberbullying, which do represent the genuine population. Despite this, given the socially undesirable nature of cyberbullying, outliers were uncommon. Outliers were not excluded from the data set. No violations of multicollinearity were noted. There were no statistically significant omnibus difference between males and females on the combined dependant variables, $F$ (4, 80) = 1.26, $p$ = .291; Wilks' lambda = .94, $\eta_p^2$ = .059. Therefore, univariate assessment was not explored.

***Frequency.*** Adolescents reported engaging in an average frequency of Cyberbullying 17 times per month. As shown in Table 3, the most frequent type of cyberbullying was Written-Verbal, with an average frequency of 15.4 times per month. Examination of results indicated that frequency corresponds with the number of behaviours engaged in, demonstrated by a positive relationship; As the number of behaviours engaged in increases, so does the frequency.

A one-way between-groups multivariate analysis of variance was conducted to determine sex differences in cyberbullying frequency (i.e., Cyberbullying, Written-Verbal, Visual Behaviour, Exclusion and Impersonation). The independent variable was gender. Preliminary testing was conducted to check for normality, outliers and multicollinearity.

Again, the data set was found to have a right skew due to most participants engaging in few cyberbullying behaviours, indicating a floor effect. Outliers were considered true data points and were therefore not omitted. No violations of multicollinearity were noted. There were no statistically significant omnibus difference between males and females on the combined variables, $F$ (4, 80) = .28, $p$ = .89; Wilks' lambda = .99, $\eta_p^2$ = .014, thus no univariate tests were pursued.

Table 3

*Average Cyberbullying Behaviours and Frequency per Month*

| Cyberbullying | | Male | Female | Total |
|---|---|---|---|---|
| CB | | | | |
| | Behaviours | 7.96 | 7.67 | 7.76 |
| | Frequency | 20.88 | 14.95 | 16.76 |
| WV | | | | |
| | Behaviours | 5.85 | 5.49 | 6.12 |
| | Frequency | 19.42 | 13.74 | 15.48 |
| VB | | | | |
| | Behaviours | .31 | .24 | .26 |
| | Frequency | .12 | .10 | .12 |
| EX | | | | |
| | Behaviours | 1.04 | .93 | .96 |
| | Frequency | .69 | .54 | .59 |
| IM | | | | |
| | Behaviours | .77 | 1.01 | .94 |
| | Frequency | .65 | .57 | .59 |

*Note.* CB = Cyberbullying Behaviour; WV = Written - Verbal Cyberbullying; VB = Visual Behaviour Cyberbullying; EX = Exclusion Cyberbullying; IM = Impersonation Cyberbullying.

***Assessing the Relationships.*** Table 4 presents the Pearson product-moment correlation coefficient between cyberbullying behaviour frequencies and a range of variables. As can be seen (Table 4), as Cyberbullying Frequency increases, adolescents spend more

time on their cell phones, are older in age, and are more likely to have unemployed parents. Adolescents also engage in higher frequencies of Risk Taking Behaviour, Disclosure of Information and Meeting in Risky Situations as Cyberbullying Frequency increases. Furthermore, there is a negative relationship with family income, indicating lower reported Cyberbullying Frequency is related to higher household annual income.

Written-Verbal Frequency achieved significant positive correlations with time per day spent on cell phone, Impersonation Frequency, age, parental employment and Risk Taking behaviour as well as a negative relationship with parental income. Exclusion Frequency achieved a significant negative correlation with age, indicating that Exclusion cyberbullying is more frequent among younger adolescents. Impersonation Frequency achieved significant positive correlations with time per day spent on their cell phone and parental employment. Visual Behaviour Frequency did not obtain any significant correlations.

Table 4

*Pearson Product-Moment Correlation Coefficients for Cyberbullying Frequency, Risk Taking Behaviour and Demographics*

| | CB | WV | VB | EX | IM | Time p/day | Gender | Age | Annual Income | Age Cell phone | Employment | RTB | DISC | MEET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CB | 1.00 | 1.00** | .02 | .14 | .36** | .35** | -.10 | .28** | -.35** | -.18 | .37** | .68** | .56** | .68** |
| WV | 1.00** | 1.00 | .01 | .10 | .32** | .35** | -.10 | .29** | -.36** | -.17 | .35** | .69** | .57** | .69** |
| VB | .02 | .01 | 1.00 | .01 | .08 | .08 | -.02 | -.06 | -.15 | -.18 | .13 | .00 | -.02 | .02 |
| EX | .14 | .10 | .01 | 1.00 | .35** | .07 | -.07 | -.25* | .053 | -.08 | .10 | -.01 | -.05 | .02 |
| IM | .36** | .32** | .08 | .35** | 1.00 | .33** | -.05 | .06 | -.092 | -.17 | .41** | .15 | .12 | .15 |

*Note.* CB = Cyberbullying Frequency; WV = Written - Verbal Frequency; VB = Visual Behaviour Frequency; EX = Exclusion Frequency; IM = Impersonation Frequency; Time p/day = Time per day spent on cell phone; Annual Income = Household Annual Income; Age Cell phone = Age when adolescent got first cell phone; Employment = Parent Employment Status; RTB = Risk Taking Behaviour Frequency; DISC = Disclosure of Information Frequency; MEET = Meeting in Risky Situations Frequency

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the .001 level (2-tailed).

**Specific Cyberbullying Behaviours**. Table 5 presents Specific Cyberbullying Behaviours and Frequency per month. Behaviour refers to the specific cyberbullying behaviours, as outlined in the method section. The types examined are Flaming, Cyberstalking, Denigration, Masquerade, Outing, Exclusion, and Harassment. The current analysis determined how many behaviours an individual had engaged in, over their lifetime. Frequency refers to how often an individual engages in cyberbullying behaviours. The current analysis determined frequency as how many times an individual engaged in cyberbullying behaviour within a one month time period.

***Behaviours.*** As shown in Table 5, Flaming was reported as the dominant Specific Cyberbullying Behaviour, with adolescents engaging in an average of 2.6 Flaming cyberbullying behaviours. This was followed by Denigration, where adolescents reported engaging in an average of 1.8 Denigration cyberbullying behaviours. Adolescents reported engaging in all other Specific Cyberbullying Behaviours less than once, on average; Cyberstalking ($M$ = .19, $SD$ = .61), Masquerade ($M$ = .42, $SD$ = .75), Outing ($M$ = .62, $SD$ = .76), Exclusion ($M$ = .96, $SD$ = 1.26) and Harassment ($M$ = .35, $SD$ = .63).

A one-way between-groups multivariate analysis of variance was performed to determine gender differences in Specific Cyberbullying Behaviours. Seven dependant variables were used; Flaming, Cyberstalking, Denigration, Masquerade, Outing, Exclusion, and Harassment. The data set was again right skewed due to most participants engaging in few cyberbullying behaviours, indicating a floor effect. Outliers were considered true data points and were not omitted. No violations of multicollinearity were noted. There were no statistically significant differences between males and females on the combined dependant variables, $F$ (7, 77) = 1.99, $p$ = .067; Wilks' lambda = .85, $\eta_p^2$ = .15.

***Frequency.*** As shown in Table 5, the most frequent Specific Cyberbullying Behaviour was, Flaming, with an average frequency of 11.76 times per month. This was followed by Denigration with an average frequency of 1.79 times per month. All other Specific Cyberbullying Behaviours (Cyberstalking, Masquerade, Outing, Exclusion and Harassment), obtained frequencies of less than once a month, ranging from .14 to .98 times per month.

A one-way between-groups multivariate analysis of variance was conducted to determine gender differences in Specific Cyberbullying Behaviour Frequency. The data set was again right skewed due to most participants engaging in few cyberbullying behaviours. Outliers were not excluded. No violations of multicollinearity were noted. There were no statistically significant differences between males and females on the combined variables, $F(7, 77) = .66$, $p = .701$; Wilks' lambda = .94, $\eta_p^2 = .06$.

Table 5

*Average Specific Cyberbullying Behaviours and Frequency per Month*

| Specific Behaviour | Male | Female | Total |
|---|---|---|---|
| Flaming | | | |
| Behaviours | 2.88 | 2.53 | 2.64 |
| Frequency | 13.62 | 10.94 | 11.76 |
| Cyberstalking | | | |
| Behaviours | .23 | .17 | .19 |
| Frequency | .12 | .14 | .14 |

(continued)

| | | | |
|---|---|---|---|
| Denigration | | | |
| Behaviours | 2.04 | 1.64 | 1.76 |
| Frequency | 2.19 | 1.62 | 1.79 |
| Masquerade | | | |
| Behaviours | .15 | .54 | .42 |
| Frequency | .48 | .33 | .38 |
| Outing | | | |
| Behaviours | .58 | .64 | .62 |
| Frequency | .29 | .35 | .33 |
| Exclusion | | | |
| Behaviours | 1.04 | .93 | .96 |
| Frequency | .69 | .54 | .59 |
| Harassment | | | |
| Behaviours | .46 | .31 | .35 |
| Frequency | 2.69 | .22 | .98 |

**Risk Taking Behaviour**. Table 6 presents the risk taking behaviours measures and frequency per month. The types examined are Risk Taking Behaviour, Disclosure of Information Behaviour and Meeting in Risky Situations behaviour. The current analysis determined how many behaviours an individual has engaged in, over their lifetime. Frequency refers to how often an individual engages in risk taking behaviours. The current analysis determined frequency as how many times an individual engaged in cyberbullying behaviour within a one month time period.

***Behaviour.*** Out of the current sample, 71.59% of adolescents had engaged in one or more Risk Taking Behaviours. Table 6 shows that on average, adolescents report engaging in 2.26 Risk Taking Behaviours, 1.26 Disclosure of Information behaviours, and 1.00 Meeting in Risky Situations behaviours.

A one-way between-groups multivariate analysis of variance was performed to determine gender differences in Risk Taking for three dependant variables (Risk Taking Behaviour, Disclosure of Information behaviour, Meeting in Risky Situations behaviour). The data set was again right skewed and these outliers were not excluded. No violations of multicollinearity were noted. There were no statistically significant differences between males and females on the combined dependant variables, $F$ (2, 82) = .31, $p$ = .733; Wilks' lambda = .99, $\eta_p^2$ = .01.

***Frequency.*** As shown in Table 6, Risk Taking Behaviour Frequency was the most frequent risk taking behaviour, with an average of 2.82 times per month. This is an expected result given the Risk Taking Behaviour Frequency variable is a composite of Disclosure of Information Frequency and Meeting in Risky Situation Frequency. Adolescents reported engaging in Disclosure of Information behaviours 1.14 times per month and Meeting in Risky Situation behaviours 1.68 times a month.

A one-way between-groups multivariate analysis of variance was conducted to determine gender differences in Risk Taking Behaviour Frequency on three dependant variables; Risk Taking Behaviour Frequency, Disclosure of Information Frequency and Meeting in Risky Situations Frequency. The data set was again found to have a right skewed with outliers left in. No violations of multicollinearity were noted. There were no statistically

significant differences between males and females on the combined variables, $F$ (2, 82) = 2.12, $p$ = .127; Wilks' lambda = .951, $\eta_p^2$ = .05.

Table 6

*Average Risk Taking Behaviour and Frequency per Month*

| Risk Taking Behaviour | Male | Female | Total |
|---|---|---|---|
| Risk Taking Behaviour | | | |
| Behaviours | 2.15 | 2.31 | 2.26 |
| Frequency | 6.29 | 1.30 | 2.82 |
| Disclosure of Information | | | |
| Behaviours | 1.12 | 1.32 | 1.26 |
| Frequency | 2.77 | .42 | 1.14 |
| Meeting in Risky Situations | | | |
| Behaviours | 1.04 | .98 | 1.00 |
| Frequency | 3.52 | .87 | 1.68 |

**Aim 4: To Examine Relations of Cyberbullying and Risk Taking Behaviours with Parenting Styles**

**Assessing the Relationships.** Table 7 below presents Pearson product-moment correlation coefficients, demonstrating that Cyberbullying Frequency correlates significantly with Risk Taking Behaviour Frequency ($r$ = .68, N = 85, $p$ < .001), Authoritative parenting ($r$ = -.39, N = 55, $p$ = .003), and Permissive parenting styles ($r$ = .27, N = 55, $p$ = .05). Pearson product-moment correlation coefficients indicate Cyberbullying Frequency has a large positive relationship with Risk Taking Behaviour and a small positive relationship with

Permissive parenting, according to established guidelines (Cohen, 1988); as Cyberbullying Frequency increases, so does Risk Taking Behaviour Frequency and Permissive parenting. There is a medium negative relationship with Authoritative parenting; as Cyberbullying Frequency increases, Authoritative parenting decreases which may suggest a protective component to Authoritative parenting. As shown in Table 7, Authoritarian, Helicopter and Uninvolved parenting styles, were not significantly correlated with Cyberbullying Frequency.

Pearson product-moment correlation coefficients indicate Risk Taking Behaviour Frequency correlates significantly with Cyberbullying Frequency ($r$ = .68, N = 85, $p$ < .001), and Permissive parenting styles ($r$ = .42, N = 55, $p$ = .002), as shown in Table 7. As Risk Taking Behaviour Frequency increases, so does Cyberbullying Frequency and Permissive parenting. This indicates that Permissive parenting has a moderate relationship with Risk Taking Behaviour Frequency, according to established guidelines (Cohen, 1988). As shown in Table 7, Authoritative, Authoritarian, Helicopter and Uninvolved parenting styles were not significantly correlated with Risk Taking Behaviour Frequency.

Table 7

*Pearson Correlation Coefficients for Cyberbullying, Risk Taking Behaviour and Parenting Styles*

| | CB | RTB | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| CB | | .68** | -.39** | .20 | .27* | .06 | .00 |
| RTB | .68** | | -.13 | .11 | .42** | .05 | .14 |

*Note*. CB = Cyberbullying Frequency; RTB = Risk Taking Behaviour Frequency; 1 = Authoritative; 2 = Authoritarian; 3 = Permissive; 4 = Helicopter; 5 = Uninvolved
* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

**Predicting Cyberbullying Frequency from Parenting Styles.** A two stage hierarchical multiple regression analysis was conducted to assess the ability of parenting styles to predict levels of Cyberbullying Frequency. Examination of collinearity statistics (i.e., Tolerance and VIF) demonstrated they were within acceptable limits. Authoritative parenting was entered at stage one of the regression, followed by the four other parenting styles (Authoritarian, Permissive, Helicopter and Uninvolved) at stage two. Authoritative parenting was entered in stage one, given its significant correlation with Cyberbullying Frequency (Table 7). Furthermore, this also allowed the other parenting styles (Authoritarian, Permissive, Helicopter and Uninvolved) to be assessed in terms of their unique contribution in predicting Cyberbullying Frequency after Authoritative parenting was controlled. Regression statistics are presented in Table 8. At stage one, Authoritative parenting contributed significantly to the regression model, accounting for 15.4% of the variance in cyberbullying frequency, $F$ (1,53) = 9.68, $p < .003$. Introducing the other parenting styles at stage two, accounted for a non-significant 5.5% of the variance ($R^2$ change = .06, $F$ change (4, 49) = .85, $p$ = .503). The overall model accounted for 20.9% of the variance, $F$ (5, 49) = 2.59, $p$ = .037. In the final regression model, Authoritative parenting was the only statistically significant predictor of Cyberbullying Frequency (*beta* = -.37, $p$ = .014).

Table 8

*Summary of Hierarchical Regression Analysis for Parenting Styles predicting Cyberbullying Frequency*

| Predictor | β | *R* | $R^2$ | Δ $R^2$ |
|---|---|---|---|---|
| Step 1 | | .39 | .15 | .15* |
| Authoritative | -.39** | | | |
| Step 2 | | .46 | .21 | .06 |
| Authoritative | -.37** | | | |
| Authoritarian | .03 | | | |
| Permissive | .18 | | | |
| Helicopter | .15 | | | |
| Uninvolved | -.10 | | | |

*Note.* *$p < .05$; **$p < .01$

**Predicting Risk Taking Behaviour Frequency from Parenting Styles.** A two-stage hierarchical multiple regression was conducted to assess the ability of parenting styles to predict levels of Risk Taking Behaviour Frequency. Examination of collinearity statistics (i.e., Tolerance and VIF) demonstrated they were within acceptable limits. Permissive parenting was entered at stage one of the regression, followed by the four other parenting styles (Authoritative, Authoritarian, Helicopter and Uninvolved) at stage two. Permissive parenting was entered in stage one, as it was the strongest individual predictor of Risk Taking Behaviour Frequency within parenting styles ($r = .42$, N = 55, $p < .001$). Furthermore, this allowed the other parenting styles (Authoritative, Authoritarian, Helicopter and Uninvolved)

to be assessed in terms of their unique contribution in predicting Risk Taking Behaviour Frequency after Permissive parenting was controlled.

Regression statistics are presented in Table 9 below. The hierarchical multiple regression revealed that at stage one, Permissive parenting contributed significantly to the regression model, accounting for 17.2% of the variance in Risk Taking Behaviour Frequency, $F$ (1,53) = 11.04, $p$ = .002. Introducing the other parenting styles at stage two, accounted for a non-significant .6% of variance, ($R^2$ change = .006, $F$ change (4, 49) = .09, $p$ = .987). In the final regression model, accounting for 17.8% of variance, $F$ (5, 49) = 2.12, $p$ = .078, Permissive parenting was the only statistically significant predictor of Risk Taking Behaviour Frequency (*beta* = .44 $p$ = .007).

Table 9

*Summary of Hierarchical Regression Analysis for Parenting Styles predicting Risk Taking Behaviour Frequency*

| Predictor | β | $R$ | $R^2$ | $\Delta R^2$ |
|---|---|---|---|---|
| Step 1 | | .42 | .17 | .17* |
| Permissive | .42* | | | |
| Step 2 | | .42 | .18 | .01 |
| Permissive | .44* | | | |
| Authoritative | -.02 | | | |
| Authoritarian | -.06 | | | |
| Helicopter | .06 | | | |
| Uninvolved | -.03 | | | |

*Note.* *$p$ < .05; **$p$ < .01

## Discussion

The primary aim of this thesis was to examine cyberbullying and risk taking behaviours and their relation to parenting styles. Four specific research aims were investigated. The first aim described the age of first access and prevalence of cell phones in adolescents. The majority of adolescents reported they received their first cell phone, between 10-12 years of age and their main cell phone activity was texting friends.

The second aim was to develop a parenting scale that expanded previous measures, to examine modern parenting patterns, followed by assessment of parenting in the current sample. Support was found for a two factor structure, Helicopter and Uninvolved, for the new proposed scale, with items primarily loading on either factor one or factor two. Examination of parenting styles indicated that Authoritative parenting was the dominant parenting style.

The third aim described the type and frequency of cyberbullying and risk taking behaviours in adolescents. Of the current sample, 98% of adolescents engaged in one or more cyberbullying behaviours, with an average frequency of 17 times per month. Written-Verbal was the dominant type of cyberbullying and Flaming was the most common specific cyberbullying behaviour. Cyberbullying was associated with the time per day spent on a cell phone, household annual income, age, parental employment and risk taking behaviours. Of the current sample, 72% of adolescents engaged in one or more risk taking behaviours, at a frequency of three times per month.

The fourth aim examined the relationship between cyberbullying, risk taking behaviours and parenting styles. Authoritative parenting predicted lower levels of

cyberbullying, while Permissive parenting predicted higher levels of risk taking behaviour. The discussion will address each research aim individually.

**Age of First Access and Prevalence of Cell Phones in Adolescents**

First, the current study found that 100% of the sample had access to or owned a cell phone. Second, 62% of the current sample reported they received their first cell phone between ages 10-12 years. These findings support the trend of increasing cell phone access and ownership among adolescents (Brown, 2009; Lenhart, 2012; Rideout et al., 2010). Cell phone ownership has increased substantially over the past five years, with up to 85% of adolescents now owning a cell phone (Brown, 2009; Rideout et al., 2010). Rideout et al. (2010) reported an increase in cell phone ownership of 56% to 85% between 2004 and 2009. This is a considerable increase from 2004 statistics which reported approximately half of adolescents had access to or owned a cell phone (Brown, 2009; Rideout et al., 2010).

Third, nearly one quarter of adolescents were found to spend over three hours per day on their cell phone, with no significant gender differences found. This contrasts Lenhart (2012) who found females text twice as much as males, indicating higher rates of use. Consistent with previous reports, adolescents reported predominantly using their cell phone to text friends. Previous research reports adolescents engage in texting more frequently than other forms of communications, with over half of adolescents using their cell phone to place calls or text friends every day (Brown, 2009; Lenhart, 2012; Rideout et al., 2010).

These findings demonstrate the increasing trend of adolescent cell phone use identified in the literature. While cell phone use itself is not a concern, cell phones are being frequently used to engage in cyberbullying and risk taking behaviours, as demonstrated in

this study. This draws attention to the importance of education on safe cyber practices, monitoring and transparency regarding the use of cell phones to minimise the potential for harmful behaviours.

**Evaluation of the Proposed Scale for Modern Parenting Patterns, including Parenting Styles within the Current Sample**

To our knowledge, no study has developed and examined a scale to assess new parenting constructs such as Helicopter and Uninvolved, within one scale. Research has reported short, research specific scales, that assess Helicopter parenting from the perspective of the adolescents (Lemoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). Uninvolved parenting has also been included in established constructs such as the Parenting Dimensions Inventory (PDI) (Hennessy et al., 2010; Kelley et al., 1992; Maccoby & Martin, 1983; Olvera & Power, 2010). However, as far as is known, a scale of similar dimensions has not been created, making this study unique.

EFA results found evidence for the proposed two factor structure of the proposed scale, despite the small participant-item ratio and lack of sampling adequacy statistics; this suggests that the proposed scale could potentially be combined with the original Parenting Practices Questionnaire. This would provide a comprehensive assessment of the five parenting styles (Authoritative, Authoritarian, Permissive, Helicopter and Uninvolved).

At the item level, 17 items were excluded in the analysis, due to low factor loadings. These items, while initially appearing to assess key components of parenting constructs, failed to meet factor loading criterion, and therefore did not contribute significantly to any factor. The current scale supports other research specific scales, despite different data

collection methods. Research reports Helicopter scales from an adolescent viewpoint, pertaining to parent intervention, stepping in to solve problems, and making important decisions for their adolescent (Lemoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). This is comparative to the current scale, with items also assessing over involvement (e.g., item 2.64, "I always get involved to help sort out any problems my child has"), parent intervention (e.g., item 2.74, "I like to arrange activities for my child to do in their free time"), and over involvement in decision making (e.g., item 2.68, "I feel my child will not reach their full potential without my input"). The Uninvolved construct established in the PDI, assessed level of parental involvement and responsiveness. Items on the current scale were comparative to this, for example "I do not see the point in controlling my child's behaviour" (item 2.116), and "I seldom give my child expectations and guidelines for their behaviour" (item 2.106).

Following the scale development and analysis, Authoritative parenting was found to be the dominant parenting style in the current sample. This is consistent with previous research which has shown Authoritative parenting to obtain higher reported levels than other parenting styles (Robinson et al., 1995). This is contrasted with a study of 99 parent-child dyads, that found Uninvolved parenting the most common (Hennessy et al., 2010). This difference may be due to the socially desirable nature of Authoritative questions, creating potential reporting bias. Individuals are more likely to answer highly on questions that have socially acceptable face validity. For example, item 2.30 "I help my child to understand the impact of behaviour by encouraging them to talk about the consequence of their actions" assesses Authoritative parenting, while item 2.29 "I punish by putting my child off somewhere alone with little if any explanation" assesses Authoritarian parenting.

## Type and Frequency of Cyberbullying and Risk Taking Behaviour in Adolescents

**Cyberbullying**. To our knowledge, there is little current New Zealand data pertaining to the type and frequency of cyberbullying, specifically via cell phone. The majority of adolescents, in the current study, reported engaging in cyberbullying behaviours, with the average adolescent cyberbullying approximately every second day. The most common type of cyberbullying was Written-Verbal, which included phone calls and text messages designed to embarrass, threaten and/or humiliate others. The most common specific behaviour was Flaming, where adolescents send aggressive or offensive messages to bully others.

These results are higher than that of previous research, which reports cyberbullying prevalence from 9-40% (Cross, 2009; Hinduja & Patchin, 2010; Mesch, 2009; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008; Wiederhold & Riva, 2013). One explanation for the difference in results is the focus and depth of the current study. The current study focussed on cell phone cyberbullying, and addressed a comprehensive scope of cyberbullying behaviours. Other studies report focussing on internet and cell phone cyberbullying combined (Hinduja & Patchin, 2010; Mesch, 2009; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008) and including only segments of cyberbullying (i.e., two or three specific behaviours such as Denigration; (Popović-Ćitić et al., 2011). Therefore, there may be limited comparability with the current study. However, it is possible that adolescents in the current study did not regard their behaviour as problematic or of a "bullying" nature, given the large amount of behaviours presented, therefore being more willing to acknowledge their actions.

Cyberbullying was also found to be related to the amount of time spent on cell phones and adolescent age; as adolescents spend more time on their cell phones and get older, their

rate of cyberbullying increases. Increased time spent online has been consistently associated with increased rates of cyberbullying (Mesch, 2009; Perren et al., 2012; Smith et al., 2008). Older adolescents have also been reported more likely to cyberbully, consistent with current results (Cross, 2009; Sbarbaro & Smith, 2011; Smith et al., 2008).

Demographic results indicated that as parent employment increases, so does cyberbullying frequency. This result may be related to parents having less time available for communication, monitoring and interaction with adolescents, as hours of employment increase. Furthermore, lower household annual income was associated with higher rates of cyberbullying. This is comparative with findings that adolescents from higher socio-economic backgrounds intervene or stand up for cyberbully victims more often than those from lower socio-economic backgrounds (Tweens & Graeff, 2012), suggesting less involvement in cyberbullying offending. Gender differences in cyberbullying were not significant in the current study, inconsistent with trends of higher levels of cyberbullying perpetration in males (Popović-Ćitić et al., 2011; Slonje & Smith, 2008).

These results raise concerns regarding the significant prevalence of cyberbullying within adolescents in New Zealand, given the negative effects of cyberbullying and low rates of reporting victimisation (Lauren & Ratliffe, 2011; Smith et al., 2008). Cyberbullying has been associated with low self-esteem, academic difficulties and withdrawal (Hoff & Mitchell, 2009; Lauren & Ratliffe, 2011; Patchin & Hinduja, 2010). Of further concern is the association of depression, substance use and self-harm/suicidal behaviours with cyberbullying (Bauman et al., 2013; Gámez-Guadix et al., 2013; Hay & Meldrum, 2010; Hinduja & Patchin, 2010; Hoff & Mitchell, 2009). These effects have predominantly been

reported in a combination of internet and cell phone cyberbullying behaviours. This study is the first to identify cyberbullying behaviours exclusively by cell phone.

**Risk Taking Behaviour.** The current study found that 72% of the sample engaged in at least one or more risk taking behaviours, with an average frequency of three times per month. This included disclosing personal information, compromising/sexual pictures and meeting people in person not known previously to the individual. This is consistent with previous research where 75% of adolescents engaged in risk taking behaviours, with 25% engaging in four or more different types risk taking behaviours over the past 12 months (Ybarra et al., 2007). Lower prevalence rates of risk taking behaviour have also been reported in contrast to the current study. For example, 17% had engaged in high risk cyber behaviours (Wolak et al., 2008), 16% had met someone in person they had only encountered online (Liau et al., 2005), and 5.4% posted photos of themselves in underwear/swimsuits online (Hinduja & Patchin, 2008). Further to this, adolescents who engage in online risk taking behaviours report more cyberbullying behaviours as well (Gámez-Guadix et al., 2013). Research supports this finding as cyberbullying is associated with online risk taking behaviour, such as viewing inappropriate content (Livingstone et al., 2011). As far as is known, there is little research identifying risk taking behaviours via cell phone in adolescents in New Zealand, allowing little comparison.

Research has reported higher levels of unwanted online solicitation in adolescents who engaged in more risky online behaviours, such as sending personal information to unknown people online, compared to those who engage in fewer risky online behaviours (Wolak et al., 2008). Furthermore, higher rates of assault by individuals met without having an offline relationship first (Liau et al., 2005), and higher rates of interpersonal victimisation

(Ybarra et al., 2007) have also been associated with increased rates of online risk taking behaviours. This suggests that as adolescents engage in more risk taking behaviour, they are at higher risk of negative behaviours, are putting themselves at increasing risk, and potentially attracting unwanted attention.

## Relations of Cyberbullying, Risk Taking Behaviour and Parenting Styles

**Cyberbullying.** In the current study, Authoritative parenting was the only significant predictor of cyberbullying amongst the five assessed parenting styles (Authoritative, Authoritarian, Permissive, Helicopter and Uninvolved). Authoritative parenting was negatively associated with the frequency of cyberbullying, predicting lower levels of cyberbullying. These findings support past research that has shown Authoritative parenting and associated traits, such as responsiveness (Maccoby & Martin, 1983), is associated with lower levels of traditional bullying and cyberbullying (Baldry & Farrington, 1998, 2005; Dehue et al., 2012; Georgiou, 2008). Furthermore, Authoritative parenting is associated with parents having increased knowledge of a child's cyber behaviour, increased limits or rule setting, and monitoring of behaviour (Eastin et al., 2006; Mesch, 2009; Rosen et al., 2008). These parental behaviours act as a protective mechanism, decreasing the rates of cyberbullying (Mesch, 2009). Authoritative parenting is also reported to diminish the harmful effects of bullying victimisation, self-harm and suicidal ideation (Hay & Meldrum, 2010), highlighting the importance of supportive parental behaviours. This implies that parents, who encourage dialogue with their children, set clear boundaries, guidelines and expectations, while being responsive and supportive, rather than punitive in punishment, have adolescents who engage in fewer cyberbullying behaviours.

Permissive parenting obtained a small correlation with cyberbullying. These results contrast that of previous studies reporting significant relationships between Permissive parenting and cyberbullying (Dehue et al., 2012). Such findings suggest that parents who take a tolerant approach to their child's behaviour, exerting little control or authority but are highly responsive are associated with increased rates of cyberbullying. The current study also contrasts prior research in that no significant relationships were found between Uninvolved parenting, Authoritarian parenting and cyberbullying (Baldry & Farrington, 1998; Dehue et al., 2012; Floros et al., 2012). Differences in results may be due to the low sample size in the current study, which may have skewed data, along with the socially desirable nature of the parenting measure.

These results highlight the importance of parenting practices and the ripple effect of parenting behaviour on adolescent behaviour. Of particular importance are Authoritative parenting practices, given their protective power, with more adaptive outcomes associated, i.e. lower rates of cyberbullying. Research has already begun to note these results, with increased parental supervision and monitoring recommended as a prevention strategy for cyberbullying (Perren et al., 2012). These results emphasise the importance of imparting parenting knowledge and advice, to ensure a secure home environment, where a child can flourish.

**Risk Taking Behaviour.** Permissive parenting was the strongest predictor of risk taking behaviour, with higher levels of Permissive parenting predicting higher levels of risk taking behaviour. This is consistent with previous research where Permissive parenting has been associated with risky internet behaviours, including meeting someone offline who they had no existing offline connection with (Rosen et al., 2008) These findings may be

associated with the idea that parenting style impacts cyber monitoring and boundaries. Parents with Permissive parenting tendencies are less likely to implement monitoring behaviours compared to Authoritative parenting (Eastin et al., 2006; Rosen et al., 2008). This suggests that parenting behaviours where parents are highly responsive, but do not implement boundaries, is predictive of adolescents engaging in risk taking behaviours.

**Summary of Main Cyberbullying Findings**

The current study found that all participating adolescents had access to or owned a cell phone, which they predominantly used for texting others. It was established that 98% of adolescents have engaged in cyberbullying behaviours and 72% have engaged in risk taking behaviours. Of further concern is the frequency with which cyberbullying occurs, with adolescents cyberbullying another person approximately every second day, typically in Written-Verbal form. Research indicating prevalence of cyberbullying in New Zealand is scarce, however, the current results emphasise the significant problem with cyberbullying in New Zealand.

Predictive relationships were also established with regard to parenting styles, cyberbullying, and risk taking behaviour. Authoritative parenting was found to predict lower levels of cyberbullying, indicating that it contains a protective component, with adolescents less likely to cyberbully if they have Authoritative parenting practices in their home environment. Following this, Permissive parenting, with high responsiveness and low boundaries, was found to predict higher levels of risk taking behaviour.

**Clinical and Research Implications**

A number of clinical and research implications can be identified from the findings of this study. These implications include 1) the increased rates of access to cell phones, cyberbullying and risk taking behaviours in adolescents, 2) Support for a new parenting scale assessing modern parenting practices, and 3) the predictive ability of parenting styles with regard to cyberbullying and risk taking behaviour.

High rates of cell phone ownership, cyberbullying and risk taking behaviour raise concerns for the developmental well-being of today's adolescents. Several studies have found serious effects of being a cyberbully victim, including withdrawal, low self-esteem, self-harm, depression and suicidal ideation (Bauman et al., 2013; Gámez-Guadix et al., 2013; Hoff & Mitchell, 2009; Patchin & Hinduja, 2010). Further to this, adolescents often do not report cyberbullying (Lauren & Ratliffe, 2011; Slonje & Smith, 2008), leading to a cascading effect of severity. Effects of cyberbullying are not limited to psychological well-being, but have also been associated with problematic internet use, substance use and academic under-achievement (Gámez-Guadix et al., 2013; Patchin & Hinduja, 2010). Effects of risk taking behaviour have also been identified, including interpersonal victimisation and online solicitation (Liau et al., 2005; Wolak et al., 2008). The detection of these effects raises questions regarding long-term adjustment for adolescents who have experienced cyberbullying or risk taking behaviour. Given the relatively new area of cyberbullying, little research exists regarding long term effects; however, the current study emphasises the importance of understanding potential outcomes to ensure early intervention, support and monitoring, to safeguard the well-being of adolescents.

This study is the first of its kind to examine a comprehensive scale of modern parenting practices, providing further evidence to the current literature of Helicopter and Uninvolved parenting patterns. This potentially allows a comprehensive assessment of parenting to be developed, with both traditional and modern parenting practices included, rather than a piecemeal approach. This would assist with systematic assessment of parenting, allowing specificity of individual parenting practices to be determined.

This study has also highlighted how parenting styles are predictive of cyberbullying and risk taking behaviour. Few studies have successfully examined this relationship with specific adolescent behaviours. Parents who are able to maintain a democratic style of parenting, are less likely to have adolescents who cyberbully others. This demonstrates, not what we do wrong as parents, but how we, as parents, do well. Open communication, clear boundaries and expectations, as associated with Authoritative parenting, are protective practices with positive outcomes (Mesch, 2009; Perren et al., 2012). In contrast, Permissive parenting behaviours may have negative effects, resulting in adolescents engaging in harmful risk taking behaviours. Parents who are highly responsive to their children, but do not provide any boundaries, authority or limits, are likely to have children engaging in high risk situations. Given the negative outcomes of risk taking behaviour, this raises concern for children exposed to these parental behaviours. The current results implore the advocacy of appropriate parenting practices through imparting advice, knowledge and support to families. They emphasise the importance for health care providers, clinicians, and educational providers, to be aware of the relationship between parenting patterns and adolescent behaviour, particularly cyberbullying and risk taking behaviours.

**Strengths of Current Study**

This study is one of the first to look at cyberbullying in detail, identifying and examining specific behaviours exclusively via cell phones. By using high levels of specificity, the current study was able to identify specific cyberbullying types and behaviours that are problematic. Where other studies used small cyberbullying questionnaires (Popović-Ćitić et al., 2011) , the current study examined detailed specific behaviours, allowing a greater range of cyberbullying behaviours to be assessed. It is possible adolescents may not consider their behaviour cyberbullying when it is broken down into specific behaviours, allowing these incidents to be more easily identified in the current study. Furthermore, prior studies (Hinduja & Patchin, 2010; Mesch, 2009; Patchin & Hinduja, 2010; Popović-Ćitić et al., 2011; Slonje & Smith, 2008; Smith et al., 2008) have examined cyberbullying across technological mediums (i.e., internet and cell phone). The current study provided prevalence data regarding cell phone use only. This provides information pertinent for efficient intervention, allowing areas of most concern to be targeted.

Second, this study was able to obtain a broad range of adolescents over a wide spread of schools. It is hoped that the range of participants recruited may have achieved a representative sample of the New Zealand population.

Third, the parenting scale that was implemented in the current study is one of the first to be developed and examined with regard to modern parenting patterns. Despite the lack of ability to determine fully its psychometric properties, the scale provided evidence to suggest two constructs, as proposed. Other studies have created smaller, study specific scales for new parenting practices (Lemoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). In

comparison, the current study provided a comprehensive scale, providing in-depth analysis of parenting behaviours.

**Limitations of Current Study**

The current study was not without its own limitations and these should be considered alongside the interpretations of findings. Although efforts were made to remedy limitations in this study, there are several that need to be mentioned.

Participants were assessed in terms of their cyberbullying offending behaviour with no reference to experiences of victimisation. Despite efforts to ensure participants understood the anonymity of their responses, and the specificity of the questionnaire to assess specific behaviours, socially desirable responding may still be an issue, given the adverse nature of cyberbullying.

Given the practical constraints of time, data was collected for 88 adolescents and 88 parents. Furthermore, missing data meant that complete data was only available for 85 adolescents and 58 parents. This limited the ability to complete adequate factor analysis on the parenting scale. *Bartlett's test of sphericity* and *KMO* statistics were unable to be completed due to the participant-item ratio, suggesting limited sampling adequacy.

It is possible that the socially desirable nature of the Parenting Practices Scale (Robinson et al., 1995) and the proposed scale influenced responding. Although the current study found comparative proportions of dominant parenting styles to previous research (Robinson et al., 1995), it is important to consider the accuracy of these results. Questions relating to parenting styles are easily interpreted, with socially desirable behaviours evident.

**Suggestions and Directions for Future Research**

Although this study has contributed to the literature in terms of understanding in-depth cyberbullying, risk taking behaviours and their relations to parenting styles, the area warrants further investigation.

Despite the fact that research has indicated the adequacy of small sample sizes in factor analysis (De Winter et al., 2009; Marsh & Hau, 1999), to validate and confirm the current results, additional research would benefit from further studying the proposed scale. This would clarify the factor structure, as an individual entity, as well as combined with the Parenting Practices Questionnaire, and provide further psychometric assessment and validation. Therefore, future research would benefit from a larger sample size, given the comprehensive nature of the proposed parenting scale.

The current study identified limitations of social desirability within the Parenting Practices Questionnaire (Robinson et al., 1995) and the proposed scale. Future research should include a social desirability measure to examine this effect further.

Examination of cyberbullying and risk taking behaviours in the current study has provided insight into prevalence rates and specific behaviours that are problematic. Further research would benefit from assessing the long term effects of cyberbullying, given the high prevalence rate. Furthermore, research should include questions pertaining to victimisation alongside offending, which would seek to address this limitation of the current study. With regard to risk taking behaviour, further research may examine reasons for engaging in online risk taking behaviours and moderating factors. This would allow intervention to be specific, comprehensive and target pertinent areas.

The current study discovered trends between parenting styles, cyberbullying and risk taking behaviour. While these associations have highlighted the importance of parenting practices, future research may benefit from comparing this to adolescent perception of parenting experiences. This would seek to identify any consistent discrepancies between parent report and adolescent report, allowing future research to further identify areas of intervention salient to both parent and adolescent perspectives.

**Concluding Remarks**

The current study examined cyberbullying, risk taking behaviour and their relation with parenting styles. Furthermore, this study was unique, in that, no known study has developed and examined a comprehensive scale to assess Helicopter and Uninvolved parenting practices. This study found that 98% of adolescents engaged in cyberbullying behaviours and 72% in risk taking behaviours, with significant associations with parenting styles. Authoritative parenting practices were found to contain a protective factor over cyberbullying, predicting lower cyberbullying rates, while Permissive parenting predicted higher levels of risk taking behaviour.

Despite statistical difficulties with factor analysis, the results tentatively supported a two factor structure, indicating the presence of Helicopter and Uninvolved parenting constructs. Until further confirmation, conclusions based on the current factor structure are limited and potentially misleading. However, with further confirmation of the structure, this scale could potentially be used alongside other parenting scales to provide a comprehensive account of parenting practices within assessments. It is hoped that the current study will stimulate future research ideas regarding the impact of parenting patterns on adolescent behaviour.

To conclude, the findings of this study have important implications for parenting and adolescent well-being. Children are accessing cell phones from young age, predominantly to interact with peers, in both positive and negative ways. First it is hoped that the demonstrated increase in access, cyberbullying and risk taking behaviour rates will help emphasise the importance of detection and intervention, given the negative outcomes observed thus far. Further, it accentuates the importance of monitoring, informed use, and limit setting within the parent-child relationship and the impact of parental behaviour of adolescent well-being.

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**Appendix A**

Rosemary Carson
Psychology Department
University of Canterbury
Email: rosemary.carson@pg.canterbury.ac.nz
August 2012

UNIVERSITY OF CANTERBURY
*Te Whare Wānanga o Waitaha*
CHRISTCHURCH NEW ZEALAND

## Adolescent Information Sheet

### You are invited to take part in a University project!

**What is the project?**

We want to know how many adolescents aged 13-17 years old own cell phones and what they use them for the most. In particular we are looking at cyberbullying and risk taking behaviours related to cell phone use in New Zealand.

We will also be asking your parents questions around their parenting behaviour. This will give us information about how you use your cell phone and your parent's behaviour.

**What will happen during the project?**

This part is really easy! Once you return your consent form to the school, a research assistant from the University will come and see you at your school. They will give you a questionnaire to fill out about cyberbullying and risk taking behaviours. Then that's it, your part is done! You will then be given a questionnaire to take home for one of your parents to fill out. They will then fill this out and post it back to the University-so we need you to remind them to do this! But don't worry; they cannot see your answers to your questionnaire.

**Are there good and bad things about the project?**

There are no foreseen risks for this project. We ask you only to complete the questionnaire at school and then get your parents to complete theirs and post it back. If you decide you do not want to be in the study then you can pull out but there are no right or wrong answers. No one will be angry if you do not want to take part. If you say yes now and then change your mind later and say no that is OK. Participation is *absolutely* voluntary!

Once you have completed your questionnaire you will go in the draw to win a $50.00 voucher for Farmers. Once your parents have completed their questionnaire you will be placed in a second draw for $150.00 voucher for Farmers. The information you provide us with will be very helpful in helping us work out the relationship between parent behaviour and cell phone use in teenagers.

**Who will know what I did in the project?**

No one else except the main researcher and their supervisor will have access to the information you provide us during the study. Your parents will not see the information either. The information is completely confidential and will not be stored with your name on it but with a code so no one can identify the information. The data will be stored securely for a period of 10 years and then destroyed.

As a participant you will also have access to the final research results after the project is completed.

Thank you for taking the time to consider my request. If you want to know more about this study (either now or at a later date), please feel free to contact me.

**Primary Researcher Details**
Rosemary Carson
rosemary.carson@pg.canterbury.ac.nz

**Supervisor Details**
Martin Dorahy
Department of Psychology
University of Canterbury
Private Bag 4800
Christchurch 8140
New Zealand
Ph: 03 364 3416
martin.dorahy@canterbury.ac.nz

**Co-Supervisor**
Verena E Pritchard-MSc, PhD
Lecturer
Aberystwyth
Department of Psychology, Penbryn 5
Penglais Campus
Aberystwyth
Ceredigion
Wales,UK,SY23-3UX
Tel:+44-(0)-1970-624081
Email:vep@aber.ac.uk

We are committed to treating all case study participants in a fair and ethical manner. This project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

**University of Canterbury Human Ethics Committee**
University of Canterbury
Private Bag 4800
Christchurch 8140, New Zealand

human-ethics@canterbury.ac.nz

**This study has been reviewed and approved by the University of Canterbury Human Ethics Committee. Ref number: HEC 2012/131**

Rosemary Carson
Psychology Department
University of Canterbury
Email: rosemary.carson@pg.canterbury.ac.nz
August 2012

UNIVERSITY OF CANTERBURY
*Te Whare Wānanga o Waitaha*
CHRISTCHURCH NEW ZEALAND

## Adolescent Assent Form

**Project name: Cyberbullying and Parenting Styles; Modern Parenting**

- **I have read and understood what I have to do. On this basis I agree to take part in this project knowing that no one else but the researchers will know what I answer.**
- **I understand also that I can withdraw from the project at any time.**
- **I note that the project has been reviewed *and approved* by the University of Canterbury Human Ethics Committee**.

I (your name)_____agree to participate in the project described above.

**Please write out your name and sign on the lines below. Then bring this form (along with the form that your parents or legal guardian have signed) back to school with you to give to your teacher.**

*Your name:* _____

*Your signature*_____

*Date:* _____

Rosemary Carson
Psychology Department
University of Canterbury
Email: rosemary.carson@pg.canterbury.ac.nz
August 2012

**Appendix B**

Rosemary Carson
Psychology Department
University of Canterbury
Email: rosemary.carson@pg.canterbury.ac.nz
August 2012

UNIVERSITY OF CANTERBURY
*Te Whare Wānanga o Waitaha*
CHRISTCHURCH NEW ZEALAND

**Parents Information Sheet**

Research on Cyberbullying and Parenting Styles

Dear Parent,

You and your adolescent are invited to take part in a research project *"Cyberbullying and Parenting Styles"* that aims to describe cyberbullying and risky behaviours in adolescents and their relationship with parenting styles. Your involvement in this project will include:

- Your adolescent completing a questionnaire that asks questions about their cell phone use (i.e., what they use it for, type of use i.e., PXT, text, call), risky behaviours and bullying. We do not ask that your adolescent shows their cell phone to the interviewer or researchers in the study.

- You completing a questionnaire as the parent that will be sent home with your adolescent. This questionnaire contains questions regarding parenting and demographics. A university addressed and stamped envelope will be available for its return so that no cost is involved.

The project is being undertaken by Rosemary Carson (Master's Thesis and Clinical Psychology Student).

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**Cyberbullying**

Cyberbullying is Bullying. It's using the internet, a mobile phone or other technology to hurt somebody or embarrass them. Children are growing up today with access to more and more technology and quickly adapt to new ways of communicating and often use the internet and mobile phones as a way to reach friends 24/7. This means that bullying can now happen outside school, wherever and however. It can include sending anonymous messages, circulating photos that are offensive or embarrassing, spreading rumours, sending nasty comments and threats. Cyberbullying can have detrimental effects for an individual potentially causing them to feel

ashamed, humiliated, depressed, and angry. Individuals often report feeling like there is no escape.

If you wish to access more information regarding cyberbullying or get advice, please see the contact details below for the primary researcher and supervisor. Alternatively, the details directly below will give you access to information, advice and support if required. **NETSAFE** are an independent non-profit organization that promotes confident, safe, and responsible use of online technologies. They can be contacted on 0508 NETSAFE (0508-638-723) or email queries@netsafe.org.nz.

The following websites also provide information regarding cyberbullying, support and advice:

www.netsafe.org.nz

www.cyberbullying.org.nz

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With the increase we are seeing in cyberbullying behaviour via cell phone, it is becoming increasingly important to determine the relationship between these behaviours and family life. In particular we are interested in the relationship between parenting styles and cyberbullying. As society is developing, the way we parent our children is also developing. To date there is little research identifying the impact these differing ways of parenting are having on our adolescents. This information is being sought to begin to understand the role of the cell phone in family life and in cyberbullying behaviours.

It is envisioned that your adolescent's questionnaire will take approximately 10-15 minutes and your questionnaire, approximately 15 minutes. If you participate in the research project, your questionnaire will be sent home from school with your adolescent.

The results of the project may be published, but you may be assured of the complete confidentiality of data gathered in this investigation. Access to the final research results will be available for participants after the completion of data collection and analysis.
No identifying information will ever be released about you or your adolescent to a third party without consent. To ensure confidentiality, data will be stored in locked filing cabinets and participants identified by a number code only. In short, all information will be kept in the strictest confidence. Furthermore, in line with normal practice, data will be stored securely for a period of 10 years and then destroyed. In addition, while you may ask your adolescent about their interview their answers will be kept private, as will yours.

The participation of all adolescents and their parents is absolutely voluntary, and you have the right to withdraw at any stage. There are no known risks of these evaluations. All information that is collected is done with care and respect for you and your family's privacy. Your adolescent will be entered into a draw for a $50.00 Farmers Voucher on the completion of their

questionnaire. On the return of your questionnaire, you and your adolescent will be entered into a small draw (less than 70 people) to win a $150 Farmers voucher.

Thank you for taking the time to consider my request. If you want to know more about this study (either now or at a later date), please feel free to contact me.

**Primary Researcher Details**
Rosemary Carson
rosemary.carson@pg.canterbury.ac.nz

**Supervisor**
Martin Dorahy
Department of Psychology
University of Canterbury
Private Bag 4800
Christchurch 8140
New Zealand
Ph: 03 364 3416
martin.dorahy@canterbury.ac.nz

**Co-Supervisor**
Verena E Pritchard-MSc, PhD
Lecturer
Aberystwyth
Department of Psychology, Penbryn 5
Penglais Campus
Aberystwyth
Ceredigion
Wales,UK,SY23-3UX
Tel:+44-(0)-1970-624081
Email:vep@aber.ac.uk

We are committed to treating all case study participants in a fair and ethical manner. This project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

**University of Canterbury Human Ethics Committee**
University of Canterbury
Private Bag 4800
Christchurch 8140, New Zealand
human-ethics@canterbury.ac.nz

**This study has been reviewed and approved by the University of Canterbury Human Ethics Committee. Ref number: HEC 2012/131**

Rosemary Carson
Psychology Department
University of Canterbury
Email: rosemary.carson@pg.canterbury.ac.nz
August 2012

UNIVERSITY OF CANTERBURY
*Te Whare Wānanga o Waitaha*
CHRISTCHURCH NEW ZEALAND

**Parents Consent Form**

- **I have read and understood the description of the above-named project. On this basis I agree to participate as a subject in the project and to allow my adolescent to participate as a subject.**

- **I consent to publication of the results of the project with the understanding that my anonymity will be preserved.**

- **I also understand that I and my adolescent can withdraw at any time from the project, including withdrawal of information provided.**

- **I note that the project has been reviewed *and approved* by the University of Canterbury Human Ethics Committee**.

On this basis I agree to allow my adolescent _____ to participate in the described study above.

**NAME (please print): _____**

**Signature: _____**

**Adolescent's full name: _____**

## Appendix C

# Adolescent Questionnaire

**Thank you for taking the time to fill out this questionnaire! All your answers are kept strictly private. Instead of using your name, we will use a unique code so that your answers are not able to be identified. Please answer ALL of the questions. If you are not sure of the answer, guess, or select the option that seems most appropriate!**

**Part 1**

Q1.2 What is your Unique Code Identifier (UCI)?

Q1.3 What is your gender?

- ❍ Male
- ❍ Female

Q1.4 What is today's date?

Q1.5 Do you have a cell phone or have access to one?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Part B

Q1.6 Is this your personal cell phone or a family cell phone?

- ❍ Personal
- ❍ Family

Q1.7 How old were you when you got your first cell phone?

- ❍ Under 10 years old
- ❍ 10-12 years old
- ❍ 13-14 years old
- ❍ 15 years old
- ❍ 16 years old
- ❍ 17 years old

Q1.8 How long do you spend on your cell phone each day?

- ❍ Under 30minutes
- ❍ 30 minutes - 1 hour
- ❍ 1-2 hours
- ❍ 2-3 hours
- ❍ 3 + hours

Q1.9 What do you use your cell phone for the most?

- ❍ Texting my friends
- ❍ Texting my parents
- ❍ Calling my friends
- ❍ Calling my parents
- ❍ Sending photos to people
- ❍ Going on the Internet
- ❍ Playing games

**Part 2**

Q2.1 Do you ever send mean and/or spiteful text messages to other people?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you ever make phone calls to bully...

Q2.2 How often would you do this?

- ❍ Never
- ❍ Less than once a month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a week
- ❍ 2-3 times a week
- ❍ Daily

Q2.3 Do you ever make phone calls to bully/insult and/or be spiteful to others?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you ever send text messages to bully...

Q2.4 How often would you do this?

- ❍ Never
- ❍ Less than once a month
- ❍ Once a month
- ❍ 2-3 times a month
- ❍ Once a week
- ❍ 2-3 times a week
- ❍ Daily

Q2.5 Do you ever send text messages to bully/insult and/or be spiteful to people?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you ever send pictures/pxts of som...

Q2.6 How often would you do this?

- ❍ Never
- ❍ Less than once a month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.7 Do you ever send pictures/pxts of someone to others that may have been embarrassing to that person?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent pictures from your...

Q2.8 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.9 Have you ever sent pictures from your cell phone to another person intending to upset them?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent pictures from your...

Q2.10 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.11 Have you ever sent pictures from your cell phone to someone as a way to be mean or to "get back" at them?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To ave you ever sent videos from your ce...

Q2.12 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.13 Have you ever sent videos from your cell phone of someone getting beaten up or hurt to others?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent videos from your c...

Q2.14 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.15 Have you ever sent videos from your cell phone of someone else with private content (i.e. sexual content) to others?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent a text message fro...

Q2.16 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.17 Have you ever sent a text message from another person's cell phone pretending to be them?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent a pxt from someone...

Q2.18 What was this for?

- ❍ To be mean to them
- ❍ To embarrass them
- ❍ Because I thought it was funny
- ❍ To get revenge for something
- ❍ Because they asked me to
- ❍ Other:_____

Q2.19 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.20 Have you ever sent a pxt from someone else's cell phone pretending to be them?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever made a phone call off s...

Q2.21 What was this for?

- ❍ To be mean to them
- ❍ To embarrass them
- ❍ Because I thought it was funny
- ❍ To get revenge for something
- ❍ Because they asked me to
- ❍ Other:_____

Q2.22 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.23 Have you ever made a phone call off someone else's cell phone pretending to be them?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent photos from someon...

Q2.24 What was this for?

- ❍ To be mean to them
- ❍ To embarrass them
- ❍ Because I thought it was funny
- ❍ To get revenge for something
- ❍ Because they asked me to
- ❍ Other:_____

Q2.25 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.26 Have you ever sent photos from someone elses' cell phone that were of a personal nature (i.e. personal content) that would upset/embarrass them?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent aggressive or angr...

Q2.27 What was this for?

- ❍ To be mean to them
- ❍ To embarrass them
- ❍ Because I thought it was funny
- ❍ To get revenge for something
- ❍ Because they asked me to
- ❍ Other:_____

Q2.28 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.29 Have you ever sent aggressive or angry text messages?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To have you ever sent rude text messages?

Q2.30 Who were the text messages to?

- ❍ A specific person
- ❍ To a group about a person
- ❍ Both

Q2.31 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.32 Have you ever sent rude text messages?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent a text message wit...

Q2.33 Who were the text messages to?

- ❍ A specific person
- ❍ To a group about a person
- ❍ Both

Q2.34 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.35 Have you ever sent a text message with sexual content?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent a text message wit...

Q2.36 Who were the text messages to?

- A specific person
- To a group about a person
- Both

Q2.37 How often would you do this?

- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q2.38 Have you ever sent a text message with swear words?

- Yes
- No

If No Is Selected, Then Skip To Have you ever sent a text message usi...

Q2.39 Who were the text messages to?

- A specific person
- To a group about a person
- Both

Q2.40 How often would you do this?

- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q2.41 Have you ever sent a text message using offensive language?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages thre...

Q2.42 Who were the text messages to?

- ❍ A specific person
- ❍ To a group about a person
- ❍ Both

Q2.43 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.44 Have you ever sent text messages threatening to hurt someone?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever made phone calls threat...

Q2.45 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.46 Have you ever made phone calls threatening to hurt someone?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To have you ever sent text messages or m...

Q2.47 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.48 have you ever sent text messages or made phone calls to intimidate others?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages or m...

Q2.49 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.50 Have you ever sent text messages or made phone calls to make people feel powerless?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages and/...

Q2.51 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.52 Have you ever sent text messages and/or phone calls to make people scared of you?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages that...

Q2.53 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.54 Have you ever sent text messages that are mean about others to someone else?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages that...

Q2.55 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.56 Have you ever sent text messages that are untrue about someone else?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages that...

Q2.57 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.58 Have you ever sent text messages that were designed to embarrass someone?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages that...

Q2.59 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.60 Have you ever sent text messages that were designed to "get back at" someone?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages that...

Q2.61 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.62 Have you ever sent text messages that were designed to make someone feel stupid?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent photos that were a...

Q2.63 How often would you do this?

- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q2.64 Have you ever sent photos that were altered images of people you know?

- Yes
- No

If No Is Selected, Then Skip To Have you ever made phone calls to oth...

Q2.65 How often would you do this?

- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q2.66 Have you ever made phone calls to others that intentionally make someone else look bad?

- Yes
- No

If No Is Selected, Then Skip To Have you ever made a Facebook post fr...

Q2.67 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.68 Have you ever made a Facebook post from your cell phone that makes someone else look bad?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent a text message to ...

Q2.69 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.70 Have you ever sent a text message to others that makes someone else look bad?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent a photo from your ...

Q2.71 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.72 Have you ever sent a photo from your cell phone to others that makes someone else look bad?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent information and/or...

Q2.73 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.74 Have you ever sent information and/or photos on your cell phone to others that you have been asked to keep a secret?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent text messages and/...

Q2.75 How often would you do this?

- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q2.76 Have you ever sent text messages and/or made phone calls about information that is sensitive to a person or may embarrass them?

- Yes
- No

If No Is Selected, Then Skip To If you use Facebook on your phone, ha...

Q2.77 How often would you do this?

- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q2.78 If you use Facebook on your phone, have you ever excluded someone from a group you have created?

- Yes
- No
- Don't use Facebook on my phone

If Yes Is Not Selected, Then Skip To Have you ever intentionally not inclu...

Q2.79 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.80 Have you ever intentionally not included someone in a group via cell phone (i.e. Facebook)?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever tricked someone into re...

Q2.81 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.82 Have you ever tricked someone into revealing information and then forwarded it to others?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent mass texts to a gr...

Q2.83 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.84 Have you ever sent mass texts to a group of people (i.e. friends) and deliberately excluded someone from the message?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever deliberately excluded s...

Q2.85 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.86 Have you ever deliberately excluded someone from a social event by not including them in a mass text invite you have made?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever repeatedly sent offensi...

Q2.87 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.88 Have you ever repeatedly sent offensive messages (i.e. more than 1 at once)?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent more than one bull...

Q2.89 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q2.90 Have you ever sent more than one bullying/insulting and/or spiteful message to the same person?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To End of Block

Q2.91 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

**Part 3**

Q5.1 Have you ever disclosed personal information about yourself via cell phone to strangers or people not well known to you (i.e. stranger, someone you met once at a party)?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Have you ever sent personal pictures ...

Q5.2 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.3 Have you ever sent personal pictures of yourself to others on your cell phone?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you send nude and/or sexual pictur...

Q5.4 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.5 Do you send personal pictures to people you know and/or people you don't know (i.e. someone you met once at a party)? Tick as many as apply to you.

- ❑ People you know e.g. friends
- ❑ Stranger
- ❑ Met once at a party
- ❑ Only text contact

Q5.6 What do these pictures include?

- ❍ Sexual
- ❍ Nude
- ❍ Both
- ❍ Other:_____

Q5.7 Do you send nude and/or sexual pictures to people that you know well?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you send nude and/or sexual pictur...

Q5.8 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.9 Do you send nude and/or sexual pictures to someone that you do not know well (i.e. have not met in person or have only met once)

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you meet people in person that you...

Q5.10 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.11 Do you meet people in person that you have only ever texted before?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you ever go out with someone that ...

Q5.12 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.13 Do you ever go out with someone that you have only ever met online?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you ever give your cell phone numb...

Q5.14 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.15 Do you ever give your cell phone number to people that you don't know very well (i.e. only just met, at a party, through a friend)?

- ❍ Yes
- ❍ No

If No Is Selected, Then Skip To Do you use your cell phone as a way t...

Q5.16 How often would you do this?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q5.17 Do you use your cell phone as a way to get to know someone?

- ❍ Yes
- ❍ No

**All Done! Thanks for taking the time to complete the questionnaire. You will now be placed in the draw to win a $50 voucher for Westfield Riccarton. Please remember to remind your parents to complete their questionnaire. Once their questionnaire is complete you will go in the draw to win ANOTHER voucher of $150 for Westfield Riccarton! Thanks!**

**If this questionnaire has raised difficult issues or concerns for you regarding cyberbullying, below are details of where you can go to for help or advice: Talk to someone you trust about the issue – a friend, parent or member of staff at your school. You can speak with NetSafe staff during office hours on 0508 NETSAFE (0508 638 723). If you want support to deal with cyberbullying then you can talk with the following specialist youth counseling services:**

**Youthline: Their helpline is 0800 37 66 33 or you can free txt 234**

**What's Up: Their free helpline 0800 WHATSUP (0800 942 87 87) and operates from 12 noon to midnight**

**Lifeline: They provide a 24/7 phone counseling service on 0800 543 354**

**http://www.cyberbullying.org.nz/ This website also provides information about cyberbullying, what it is, how to deal with it and who to talk to.**

**Appendix D**

# Parent Questionnaire

**Thank you for taking the time to complete this questionnaire-your help is invaluable! All answers are kept strictly confidential and to ensure your anonymity, your questionnaire will be identified by a unique code rather than your name. Please fill out ALL of the questions. If you are not sure, please select the option that seems most appropriate.**

**Part 1**

Q1.2 What is your Unique Code Identifier (UCI)?

Q1.3 What is your relationship to the adolescent?

- ❍ Biological mother
- ❍ Biological father
- ❍ Step mother
- ❍ Step father
- ❍ Foster mother
- ❍ Family relative
- ❍ Other:_____

Q1.4 Which of the following age groups do you come into?

- ❍ Under 30
- ❍ 30-34 years
- ❍ 35-39 years
- ❍ 40-44 years
- ❍ 45-50 years
- ❍ 50-59 years
- ❍ Over 60 years

Q1.5 Are you in paid employment at the moment?

- ❍ Yes
- ❍ No

Q1.8 Is you partner/marriage partner in paid employment at the moment? (if applicable)

- ❍ Yes
- ❍ No
- ❍ Not Applicable

Q1.11 What is your total family income before taxes for the last 12 months?

- ❍ Less than $15,000 ($192 per week)
- ❍ $15,000-$25,000
- ❍ $25,000-$40,000
- ❍ $40,000-$50,000 ($769-$962 per week)
- ❍ $50,000-$70,000
- ❍ $70,000 and over per year ($1,346 per week)

Q1.12 Which ethnic group do you belong to? You can choose more than one group.

- ❍ New Zealand  European or Pakeha
- ❍ Maori
- ❍ Samoan
- ❍ Cook Island
- ❍ Tongan
- ❍ Chinese
- ❍ Indian
- ❍ Other:_____

**Part 2**

**Below is a list of statements about parents & their relationships with their adolescent. For each of the statements, circle the number of the 5-point scale that best describes how that statement applies to you and your adolescent.**

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 2.2 I guide my adolescent by punishment more than by reason. | 1 | 2 | 3 | 4 | 5 |
| 2.3 I encourage my adolescent to talk about their troubles. | 1 | 2 | 3 | 4 | 5 |
| 2.4 I know the names of my adolescent's friends. | 1 | 2 | 3 | 4 | 5 |
| 2.5 I give praise when my adolescent is good. | 1 | 2 | 3 | 4 | 5 |
| Q2.6 I find it difficult to discipline my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.7 I spank when my adolescent is disobedient. | 1 | 2 | 3 | 4 | 5 |
| Q2.8 I joke and play with my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.9 I withhold scolding and/or criticism even when my adolescent acts contrary to our wishes | 1 | 2 | 3 | 4 | 5 |
| Q2.10 I show sympathy when my adolescent is hurt or frustrated. | 1 | 2 | 3 | 4 | 5 |
| Q2.11 I punish by taking privileges away from my adolescent with little if any explanation. | 1 | 2 | 3 | 4 | 5 |
| Q2.12 I spoil my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.13 I give comfort and understanding when my adolescent is upset. | 1 | 2 | 3 | 4 | 5 |
| Q2.14 I yell or shout when my adolescent misbehaves. | 1 | 2 | 3 | 4 | 5 |
| Q2.15 I am easy going and relaxed with my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.16 I allow my adolescent to annoy someone else. | 1 | 2 | 3 | 4 | 5 |
| Q2.17 I tell my adolescent our expectations regarding behaviour before my adolescent engages in an activity. | 1 | 2 | 3 | 4 | 5 |
| Q2.18 I scold and criticize to make my adolescent improve. | 1 | 2 | 3 | 4 | 5 |
| Q2.19 I show patience with my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.20 I grab my adolescent when being disobedient. | 1 | 2 | 3 | 4 | 5 |
| Q2.21 I state punishments to my adolescent and do not actually do them. | 1 | 2 | 3 | 4 | 5 |
| Q2.22 I am responsive to my adolescent's feelings or needs. | 1 | 2 | 3 | 4 | 5 |
| Q2.23 I allow my adolescent to give input into family rules. | 1 | 2 | 3 | 4 | 5 |
| Q2.24 I argue with our adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.25 I appear confident about parenting abilities. | 1 | 2 | 3 | 4 | 5 |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Q2.26 I give our adolescent reasons why rules should be obeyed. | 1 | 2 | 3 | 4 | 5 |
| Q2.27 I appear to be more concerned with my own feelings than with my adolescent's feelings. | 1 | 2 | 3 | 4 | 5 |
| Q2.28 I tell my adolescent that we appreciate what they try or accomplish. | 1 | 2 | 3 | 4 | 5 |
| Q2.29 I punish by putting my adolescent off somewhere alone with little if any explanation. | 1 | 2 | 3 | 4 | 5 |
| Q2.30 I help my adolescent to understand the impact of behaviour by encouraging them to talk about the consequence of their own actions. | 1 | 2 | 3 | 4 | 5 |
| Q2.31 I am not afraid that disciplining my adolescent for misbehaviour will cause my child not to like me. | 1 | 2 | 3 | 4 | 5 |
| Q2.32 I take my adolescent's desires into account before asking the adolescent to do something. | 1 | 2 | 3 | 4 | 5 |
| Q2.33 I explode in anger towards my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.34 I am aware of problems or concerns about my adolescent in school. | 1 | 2 | 3 | 4 | 5 |
| Q2.35 I threaten my adolescent with punishment more often than actually giving it. | 1 | 2 | 3 | 4 | 5 |
| Q2.36 I express affection by hugging, kissing, and holding my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.37 I ignore my adolescent's misbehaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.38 I use physical punishment as a way of disciplining my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.39 I carry out discipline after my adolescent misbehaves. | 1 | 2 | 3 | 4 | 5 |
| Q2.40 I apologize to my adolescent when making a mistake in parenting. | 1 | 2 | 3 | 4 | 5 |
| Q2.41 I tell my adolescent what to do. | 1 | 2 | 3 | 4 | 5 |
| Q2.42 I give into my adolescent when they cause a commotion about something. | 1 | 2 | 3 | 4 | 5 |
| Q2.43 I talk it over and reason with my adolescent when they misbehave. | 1 | 2 | 3 | 4 | 5 |
| Q2.44 I slap my adolescent when they misbehave. | 1 | 2 | 3 | 4 | 5 |
| Q2.45 I disagree with my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.46 I allow my adolescent to interrupt others. | 1 | 2 | 3 | 4 | 5 |
| Q2.47 I have warm and intimate times together with my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.48 When two adolescent s are fighting, I discipline them first and ask questions later. | 1 | 2 | 3 | 4 | 5 |
| Q2.49 I encourage my adolescent to freely express themselves even when disagreeing with parents. | 1 | 2 | 3 | 4 | 5 |
| Q2.50 I bribe my adolescent with rewards to bring about compliance. | 1 | 2 | 3 | 4 | 5 |
| Q2.51 I scold and criticize when my adolescent's behaviour | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| doesn’t meet my expectations. | | | | | |
| Q2.52 I show respect for my adolescent‘s opinions by encouraging my child to express themselves. | 1 | 2 | 3 | 4 | 5 |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Q2.53 I set strict well-established rules for my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.54 I explain to my adolescent how I feel about their good and bad behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.55 I use threats as punishment with little or no justification. | 1 | 2 | 3 | 4 | 5 |
| Q2.56 I take into account my adolescent‘s preferences in making plans for the family. | 1 | 2 | 3 | 4 | 5 |
| Q2.57 When my adolescent asks why he/she has to conform, I state because I said so, or I am your parent and I want you to. | 1 | 2 | 3 | 4 | 5 |
| Q2.58 I appear unsure on how to solve my adolescent‘s misbehaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.59 I explain the consequences of my adolescent’s behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.60 I demand that my adolescent does/do things. | 1 | 2 | 3 | 4 | 5 |
| Q2.61 I channel my adolescent’s misbehaviour into a more acceptable activity. | 1 | 2 | 3 | 4 | 5 |
| Q2.62 I shove our adolescent when they are disobedient. | 1 | 2 | 3 | 4 | 5 |
| Q2.63 I emphasize the reasons for rules. | 1 | 2 | 3 | 4 | 5 |
| Q2.64 I always get involved to help sort out any problems my adolescent has. | 1 | 2 | 3 | 4 | 5 |
| Q2.65 I like to be involved in all aspects of my adolescent‘s life. | 1 | 2 | 3 | 4 | 5 |
| Q2.66 I respond immediately to my adolescent‘s every need. | 1 | 2 | 3 | 4 | 5 |
| Q2.67 I solve my adolescent‘s problems instead of watching them struggle. | 1 | 2 | 3 | 4 | 5 |
| Q2.68 I feel my adolescent will not reach their full potential without my input. | 1 | 2 | 3 | 4 | 5 |
| Q2.69 I like my adolescent to discuss any decisions they make with me before making them. | 1 | 2 | 3 | 4 | 5 |
| Q2.70 I like my adolescent to solve problems on their own when working through a task* | 1 | 2 | 3 | 4 | 5 |
| Q2.71 I want my adolescent to succeed at all things they try. | 1 | 2 | 3 | 4 | 5 |
| Q2.72 I want my adolescent to work things out independently even if it means failing sometimes.* | 1 | 2 | 3 | 4 | 5 |
| Q2.73 I like to be able to supervise my adolescent clearly at all times. | 1 | 2 | 3 | 4 | 5 |
| Q2.74 I like to arrange activities for my adolescent to do in their free time. | 1 | 2 | 3 | 4 | 5 |
| Q2.75 I praise my adolescent all the time, even if they fail. | 1 | 2 | 3 | 4 | 5 |
| Q2.77 I worry more about my adolescent‘s educational achievement and safety more than other areas of their life. | 1 | 2 | 3 | 4 | 5 |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Q2.78 I worry about my adolescent‘s achievement in all areas of their life.* | 1 | 2 | 3 | 4 | 5 |
| Q2.79 I feel that I should solve task-orientated problems for my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.80 I have firm expectations of my adolescent‘s ability and make these clear to my adolescent, regardless of whether they achieve them or not. | 1 | 2 | 3 | 4 | 5 |
| Q2.81 I expect my adolescent to reach my expectations without unnecessary support or help.* | 1 | 2 | 3 | 4 | 5 |
| Q2.82 I think it is appropriate to get involved with my adolescent‘s education. | 1 | 2 | 3 | 4 | 5 |
| Q2.83 I never ignore my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.84 I let my adolescent’s teachers know that it is their responsibility to ensure my adolescent’s academic success. | 1 | 2 | 3 | 4 | 5 |
| Q2.85 I often talk to the school to ensure my adolescent achieves to their highest ability. | 1 | 2 | 3 | 4 | 5 |
| Q2.86 If my adolescent does not succeed highly at school I will talk to the teacher and get them to fix this. | 1 | 2 | 3 | 4 | 5 |
| Q2.87 I often contact my adolescent on their cell phone when they are out with friends. | 1 | 2 | 3 | 4 | 5 |
| Q2.88 I require my adolescent to have their cell phone on them at all times so that I can contact them. | 1 | 2 | 3 | 4 | 5 |
| Q2.89 I want my adolescent to stay in their home town after completing their education so that I can stay involved in their life. | 1 | 2 | 3 | 4 | 5 |
| Q2.90 When my adolescent gets frustrated with an activity or task I often finish the activity or task for them. | 1 | 2 | 3 | 4 | 5 |
| Q2.91 I let my adolescent problem solve when they are frustrated instead of completing tasks for them.* | 1 | 2 | 3 | 4 | 5 |
| Q2.92 When my adolescent gets in trouble it is seldom their fault. | 1 | 2 | 3 | 4 | 5 |
| Q2.93 If my adolescent does something wrong they are usually provoked by someone else. | 1 | 2 | 3 | 4 | 5 |
| Q2.94 When doing activities or playing games with my adolescent I let them win. | 1 | 2 | 3 | 4 | 5 |
| Q2.95 When my adolescent plays sport, I’m always there to cheer them on. | 1 | 2 | 3 | 4 | 5 |
| Q2.96 When my adolescent comes last, I tell them it doesn’t matter. | 1 | 2 | 3 | 4 | 5 |
| Q2.97 I think it is important for adolescent to succeed so I let them win at games and activities that we play together. | 1 | 2 | 3 | 4 | 5 |
| Q2.98 I often speak for my adolescent to make sure their request is understood. | 1 | 2 | 3 | 4 | 5 |
| Q2.99 I get upset if someone else disciplines my adolescent. | 1 | 2 | 3 | 4 | 5 |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Q2.100 I am proud to be involved in all aspects of my adolescent‘s life. | 1 | 2 | 3 | 4 | 5 |
| Q2.101 Over and above everything else I feel it is important to protect my adolescent with regard to their safety and education. | 1 | 2 | 3 | 4 | 5 |
| Q2.102 I go and speak to my adolescent’s school teacher often. | 1 | 2 | 3 | 4 | 5 |
| Q2.103 I always drive my adolescent to school. | 1 | 2 | 3 | 4 | 5 |
| Q2.104 I find a way to praise my adolescent every day. | 1 | 2 | 3 | 4 | 5 |
| Q2.105 I give my adolescent rewards if they have tried but not succeeded. | 1 | 2 | 3 | 4 | 5 |
| Q2.106 I seldom give my adolescent expectations and guidelines for their behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.107 I allow my adolescent to make their own decisions. | 1 | 2 | 3 | 4 | 5 |
| Q2.108 I do not discipline my adolescent when they are doing something wrong. | 1 | 2 | 3 | 4 | 5 |
| Q2.109 If I am busy doing something else for myself, I do not respond immediately to my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.110 Activities that I want to do take priority over my adolescent’s needs. | 1 | 2 | 3 | 4 | 5 |
| Q2.111 I am very affectionate towards my adolescent i.e. lots of hugs.* | 1 | 2 | 3 | 4 | 5 |
| Q2.112 I always respond immediately to my adolescent’s needs.* | 1 | 2 | 3 | 4 | 5 |
| Q2.113 I am always loving towards my adolescent even while telling them off. * | 1 | 2 | 3 | 4 | 5 |
| Q2.114 I do not show much affection to my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.115 I do not worry about the behaviour of my adolescent and have a “kids will be kids” attitude. | 1 | 2 | 3 | 4 | 5 |
| Q2.116 I do not see the point in controlling my adolescent’s behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.117 I worry constantly.* | 1 | 2 | 3 | 4 | 5 |
| Q2.118 I am always worried about my adolescent.* | 1 | 2 | 3 | 4 | 5 |
| Q2.119 I believe that my needs are just as important as my adolescent’s. | 1 | 2 | 3 | 4 | 5 |
| Q2.120 If I am doing activities for myself I will not stop to interact with my adolescent during this time. | 1 | 2 | 3 | 4 | 5 |
| Q2.121 I always know who my child is with at any stage. * | 1 | 2 | 3 | 4 | 5 |
| Q2.122 I do not view myself as responsible for my adolescent’s behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.123 I do not see the point in setting rules for my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.124 I do not comfort my adolescent every time they are distressed. | 1 | 2 | 3 | 4 | 5 |
| Q2.125 I get involved in my adolescent‘s school activities.* | 1 | 2 | 3 | 4 | 5 |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Q2.126 I do not get involved in my adolescent's school work. That is their teacher's responsibility. | 1 | 2 | 3 | 4 | 5 |
| Q2.127 I take a lot of notice of my adolescent's school achievement. * | 1 | 2 | 3 | 4 | 5 |
| Q2.128 I do not encourage my adolescent to take part in extra-curricular activities. | 1 | 2 | 3 | 4 | 5 |
| Q2.129 My adolescent is very independent. I do not worry about their whereabouts. | 1 | 2 | 3 | 4 | 5 |
| Q2.130 I do not feel it is my right to put limits on my adolescent's behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.13 I help my adolescent with homework frequently.* | 1 | 2 | 3 | 4 | 5 |
| Q2.13 I taught my adolescent basic skills (i.e. numbers and letters) before they started school.* | 1 | 2 | 3 | 4 | 5 |
| Q2.133 I do not punish my adolescent for bad behaviour. | 1 | 2 | 3 | 4 | 5 |
| Q2.134 I do not like to be around when my adolescent is displaying strong emotion. | 1 | 2 | 3 | 4 | 5 |
| Q2.135 I ignore my adolescent when they are upset. | 1 | 2 | 3 | 4 | 5 |
| Q2.136 I put in place strong behavioural boundaries for my adolescent.* | 1 | 2 | 3 | 4 | 5 |
| Q2.137 I often dismiss my adolescent's emotions. | 1 | 2 | 3 | 4 | 5 |
| Q2.138 I feel overwhelmed with my own issues. | 1 | 2 | 3 | 4 | 5 |
| Q2.139 I always attend parent-teacher conferences if possible.* | 1 | 2 | 3 | 4 | 5 |
| Q2.140 I interact with my adolescent minimally. | 1 | 2 | 3 | 4 | 5 |
| Q2.141 I feel emotionally distant from my adolescent. | 1 | 2 | 3 | 4 | 5 |
| Q2.142 I like a lot of time to myself. | 1 | 2 | 3 | 4 | 5 |
| Q2.143 I like it when my adolescent spends a lot of time at other people's places. | 1 | 2 | 3 | 4 | 5 |
| Q2.144 I am at home most nights of the week. * | 1 | 2 | 3 | 4 | 5 |

**Thank you for completing this questionnaire! You and your adolescent will now be placed in the draw to win a $150 voucher for Westfield Riccarton. Any questions please contact Rosemary Necklen; rosemary.necklen@pg.canterbury.ac.nz**

## Appendix E

### Parenting Practices Questionnaire

| Below is a list of statements about parents' relationships with their children. Can you tell me how descriptive or not descriptive each of these statements is of how you are with your child. | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I guide my child by punishment more than by reason | 1 | 2 | 3 | 4 | 5 |
| I know the names of my child's friends | 1 | 2 | 3 | 4 | 5 |
| I find it difficult to discipline my child | 1 | 2 | 3 | 4 | 5 |
| I give praise when my child is good | 1 | 2 | 3 | 4 | 5 |
| I spank when my child is disobedient | 1 | 2 | 3 | 4 | 5 |
| I joke and play with my child | 1 | 2 | 3 | 4 | 5 |
| I withhold scolding and/or criticism even when my child acts contrary to our wishes | 1 | 2 | 3 | 4 | 5 |
| I show sympathy when my child is hurt or frustrated | 1 | 2 | 3 | 4 | 5 |
| I punish by taking privileges away from my child with little if any explanation | 1 | 2 | 3 | 4 | 5 |
| I spoil my child | 1 | 2 | 3 | 4 | 5 |
| I give comfort and understanding when my child is upset | 1 | 2 | 3 | 4 | 5 |
| I yell or shout when my child misbehaves | 1 | 2 | 3 | 4 | 5 |
| I am easy going and relaxed with my child | 1 | 2 | 3 | 4 | 5 |
| I allow my child to annoy someone else | 1 | 2 | 3 | 4 | 5 |
| I tell my child our expectations regarding behaviour before my child engages in an activity | 1 | 2 | 3 | 4 | 5 |

*Robinson, Mandleco, Frost Olsen, & Hart (1995)*

| | | | | | |
|---|---|---|---|---|---|
| I scold and criticize to make my child improve | 1 | 2 | 3 | 4 | 5 |
| I show patience with my child | 1 | 2 | 3 | 4 | 5 |
| I grab my child when being disobedient | 1 | 2 | 3 | 4 | 5 |
| I state punishments to my child and do not actually do them | 1 | 2 | 3 | 4 | 5 |
| I am responsive to my child's feelings or needs | 1 | 2 | 3 | 4 | 5 |
| I allow my child to give input into family rules | 1 | 2 | 3 | 4 | 5 |
| I argue with our child | 1 | 2 | 3 | 4 | 5 |
| I appear confident about parenting abilities | 1 | 2 | 3 | 4 | 5 |
| I give our child reasons why rules should be obeyed | 1 | 2 | 3 | 4 | 5 |
| I appear to be more concerned with my own feelings than with my child's feelings | 1 | 2 | 3 | 4 | 5 |
| I tell my child that we appreciate what they try or accomplish | 1 | 2 | 3 | 4 | 5 |
| I punish by putting my child off somewhere alone with little if any explanation | 1 | 2 | 3 | 4 | 5 |
| I help my child to understand the impact of behaviour by encouraging them to talk about the consequence of their own actions | 1 | 2 | 3 | 4 | 5 |
| I am not afraid that disciplining my child for misbehaviour will cause my child not to like me | 1 | 2 | 3 | 4 | 5 |
| I take my child's desires into account before asking the child to do something | 1 | 2 | 3 | 4 | 5 |
| I explode in anger towards my child | 1 | 2 | 3 | 4 | 5 |

*Robinson, Mandleco, Frost Olsen, & Hart (1995)*

| | | | | | |
|---|---|---|---|---|---|
| I am aware of problems or concerns about my child in school | 1 | 2 | 3 | 4 | 5 |
| I threaten my child with punishment more often than actually giving it | 1 | 2 | 3 | 4 | 5 |
| I express affection by hugging, kissing, and holding my child | 1 | 2 | 3 | 4 | 5 |
| I ignore my child's misbehaviour | 1 | 2 | 3 | 4 | 5 |
| I use physical punishment as a way of disciplining my child | 1 | 2 | 3 | 4 | 5 |
| I carry out discipline after my child misbehaves | 1 | 2 | 3 | 4 | 5 |
| I apologize to my child when making a mistake in parenting | 1 | 2 | 3 | 4 | 5 |
| I tell my child what to do | 1 | 2 | 3 | 4 | 5 |
| I give into my child when they cause a commotion about something | 1 | 2 | 3 | 4 | 5 |
| I talk it over and reason with my child when they misbehave | 1 | 2 | 3 | 4 | 5 |
| I slap my child when they misbehave | 1 | 2 | 3 | 4 | 5 |
| I disagree with my child | 1 | 2 | 3 | 4 | 5 |
| I allow my child to interrupt others | 1 | 2 | 3 | 4 | 5 |
| I have warm and intimate times together with my child | 1 | 2 | 3 | 4 | 5 |
| When two children are fighting, I discipline the children first and ask questions later | 1 | 2 | 3 | 4 | 5 |
| I encourage my child to freely express themselves even when disagreeing with parents | 1 | 2 | 3 | 4 | 5 |

*Robinson, Mandleco, Frost Olsen, & Hart (1995)*

| | | | | | |
|---|---|---|---|---|---|
| I bribe my child with rewards to bring about compliance | 1 | 2 | 3 | 4 | 5 |
| I scold and criticize when my child's behaviour doesn't meet my expectations | 1 | 2 | 3 | 4 | 5 |
| I show respect for my child's opinions by encouraging my child to express themselves | 1 | 2 | 3 | 4 | 5 |
| I set strict well-established rules for my child | 1 | 2 | 3 | 4 | 5 |
| I explain to my child how I feel about their good and bad behaviour | 1 | 2 | 3 | 4 | 5 |
| I use threats as punishment with little or no justification | 1 | 2 | 3 | 4 | 5 |
| I take into account my child's preferences in making plans for the family | 1 | 2 | 3 | 4 | 5 |
| When my child asks why he/she has to conform, I state because I said so, or I am your parent and I want you to | 1 | 2 | 3 | 4 | 5 |
| I appear unsure on how to solve my child's misbehaviour | 1 | 2 | 3 | 4 | 5 |
| I explain the consequences of my child's behaviour | 1 | 2 | 3 | 4 | 5 |
| I demand that my child does/do things | 1 | 2 | 3 | 4 | 5 |
| I channel my child's misbehaviour into a more acceptable activity | 1 | 2 | 3 | 4 | 5 |
| I shove our child when they are disobedient | 1 | 2 | 3 | 4 | 5 |
| I emphasize the reasons for rules | 1 | 2 | 3 | 4 | 5 |

*Robinson, Mandleco, Frost Olsen, & Hart (1995)*

**Appendix F**

**Below is a list of statements about parents & their relationships with their adolescent. For each of the statements, circle the number of the 5-point scale that best describes how that statement applies to you and your adolescent.**

| | Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I always get involved to help sort out any problems my child has. | 1 | 2 | 3 | 4 | 5 |
| I like to be involved in all aspects of my child's life. | 1 | 2 | 3 | 4 | 5 |
| I respond immediately to my child's every need. | 1 | 2 | 3 | 4 | 5 |
| I solve my child's problems instead of watching them struggle. | 1 | 2 | 3 | 4 | 5 |
| I feel my child will not reach their full potential without my input. | 1 | 2 | 3 | 4 | 5 |
| I like my children to discuss any decisions they make with me before making them. | 1 | 2 | 3 | 4 | 5 |
| I like my child to solve problems on their own when working through a task. * | 1 | 2 | 3 | 4 | 5 |
| I want my child to succeed at all things they try. | 1 | 2 | 3 | 4 | 5 |
| I want my child to work things out independently even if it means failing sometimes. * | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| I like to be able to supervise my children clearly at all times. | 1 | 2 | 3 | 4 | 5 |
| I like to arrange activities for my child to do in their free time. | 1 | 2 | 3 | 4 | 5 |
| I praise my child all the time, even if they fail. | 1 | 2 | 3 | 4 | 5 |
| I worry more about my child's educational achievement and safety more than other areas of their life. | 1 | 2 | 3 | 4 | 5 |
| I worry about my child's achievement in all areas of their life. * | 1 | 2 | 3 | 4 | 5 |
| I feel that I should solve task-orientated problems for my child. | 1 | 2 | 3 | 4 | 5 |
| I have firm expectations of my child's ability and make these clear to my child, regardless of whether they achieve them or not. | 1 | 2 | 3 | 4 | 5 |
| I expect my child to reach my expectations without unnecessary support or help. * | 1 | 2 | 3 | 4 | 5 |
| I think it is appropriate to get involved with my child's education. | 1 | 2 | 3 | 4 | 5 |
| I never ignore my child. | 1 | 2 | 3 | 4 | 5 |
| I let my child's teachers know that it is their responsibility to ensure my child's academic success. | 1 | 2 | 3 | 4 | 5 |
| I often talk to the school to ensure my child achieves to their highest ability. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| If my child does not succeed highly at school I will talk to the teacher and get them to fix this. | 1 | 2 | 3 | 4 | 5 |
| I often contact my child on their cell phone when they are out with friends. | 1 | 2 | 3 | 4 | 5 |
| I require my child to have their cell phone on them at all times so that I can contact them. | 1 | 2 | 3 | 4 | 5 |
| I want my child to stay in their home town after completing their education so that I can stay involved in their life. | 1 | 2 | 3 | 4 | 5 |
| When my child gets frustrated with an activity or task I often finish the activity or task for them. | 1 | 2 | 3 | 4 | 5 |
| I let my child problem solve when they are frustrated instead of completing tasks for them. * | 1 | 2 | 3 | 4 | 5 |
| When my child gets in trouble it is seldom their fault. | 1 | 2 | 3 | 4 | 5 |
| If my child does something wrong they are usually provoked by someone else. | 1 | 2 | 3 | 4 | 5 |
| When doing activities or playing games with my child I let them win. | 1 | 2 | 3 | 4 | 5 |
| When my child plays sport, I'm always there to cheer them on. | 1 | 2 | 3 | 4 | 5 |
| When my child comes last, I tell them it doesn't matter. | 1 | 2 | 3 | 4 | 5 |
| I think it is important for children to succeed so I let them win at games and activities that we play together. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| I often speak for my child to make sure their request is understood. | 1 | 2 | 3 | 4 | 5 |
| I get upset if someone else disciplines my child. | 1 | 2 | 3 | 4 | 5 |
| I am proud to be involved in all aspects of my child's life. | 1 | 2 | 3 | 4 | 5 |
| Over and above everything else I feel it is important to protect my child with regard to their safety and education. | 1 | 2 | 3 | 4 | 5 |
| I go and speak to my child's school teacher often. | 1 | 2 | 3 | 4 | 5 |
| I always drive my child to school. | 1 | 2 | 3 | 4 | 5 |
| I find a way to praise my child every day. | 1 | 2 | 3 | 4 | 5 |
| I give my child rewards if they have tried but not succeeded. | 1 | 2 | 3 | 4 | 5 |

*Note:* *reverse coded

**Appendix G**

## Below is a list of statements about parents & their relationships with their adolescent. For each of the statements, circle the number of the 5-point scale that best describes how that statement applies to you and your adolescent.

| | Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I seldom give my child expectations and guidelines for their behaviour. | 1 | 2 | 3 | 4 | 5 |
| I allow my child to make their own decisions. | 1 | 2 | 3 | 4 | 5 |
| I do not discipline my child when they are doing something wrong. | 1 | 2 | 3 | 4 | 5 |
| If I am busy doing something else for myself, I do not respond immediately to my child. | 1 | 2 | 3 | 4 | 5 |
| Activities that I want to do take priority over my child's needs. | 1 | 2 | 3 | 4 | 5 |
| I am very affectionate towards my child i.e. lots of hugs. * | 1 | 2 | 3 | 4 | 5 |
| I always respond immediately to my child's needs. * | 1 | 2 | 3 | 4 | 5 |
| I am always loving towards my child even while telling them off. * | 1 | 2 | 3 | 4 | 5 |
| I do not show much affection to my child. | 1 | 2 | 3 | 4 | 5 |
| I do not worry about the behaviour of my child and have a "kids will be kids" attitude. | 1 | 2 | 3 | 4 | 5 |
| I do not see the point in controlling my child's behaviour. | 1 | 2 | 3 | 4 | 5 |
| I worry constantly. * | 1 | 2 | 3 | 4 | 5 |
| I am always worried about my child * | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| I believe that my needs are just as important as my child's. | 1 | 2 | 3 | 4 | 5 |
| If I am doing activities for myself I will not stop to interact with my child during this time. | 1 | 2 | 3 | 4 | 5 |
| I always know who my child is with at any stage. * | 1 | 2 | 3 | 4 | 5 |
| I do not view myself as responsible for my child's behaviour. | 1 | 2 | 3 | 4 | 5 |
| I do not see the point in setting rules for my child. | 1 | 2 | 3 | 4 | 5 |
| I do not comfort my child every time they are distressed. | 1 | 2 | 3 | 4 | 5 |
| I get involved in my child's school activities. * | 1 | 2 | 3 | 4 | 5 |
| I do not get involved in my child's school work. That is their teacher's responsibility. | 1 | 2 | 3 | 4 | 5 |
| I take a lot of notice of my child's school achievement. * | 1 | 2 | 3 | 4 | 5 |
| I do not encourage my child to take part in extra-curricular activities. | 1 | 2 | 3 | 4 | 5 |
| My child is very independent. I do not worry about their whereabouts. | 1 | 2 | 3 | 4 | 5 |
| I do not feel it is my right to put limits on my child's behaviour. | 1 | 2 | 3 | 4 | 5 |
| I help my child with homework frequently. * | 1 | 2 | 3 | 4 | 5 |
| I taught my child basic skills (i.e. numbers and letters) before they started school. * | 1 | 2 | 3 | 4 | 5 |
| I do not punish my child for bad behaviour. | 1 | 2 | 3 | 4 | 5 |
| I do not like to be around when my child is displaying strong emotion. | 1 | 2 | 3 | 4 | 5 |
| I ignore my child when they are upset. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| I put in place strong behavioural boundaries for my child. * | 1 | 2 | 3 | 4 | 5 |
| I often dismiss my child's emotions. | 1 | 2 | 3 | 4 | 5 |
| I feel overwhelmed with my own issues. | 1 | 2 | 3 | 4 | 5 |
| I always attend parent-teacher conferences if possible. * | 1 | 2 | 3 | 4 | 5 |
| I interact with my child minimally. | 1 | 2 | 3 | 4 | 5 |
| I feel emotionally distant from my child. | 1 | 2 | 3 | 4 | 5 |
| I like a lot of time to myself. | 1 | 2 | 3 | 4 | 5 |
| I like it when my child spends a lot of time at other people's places. | 1 | 2 | 3 | 4 | 5 |
| I am at home most nights of the week. * | 1 | 2 | 3 | 4 | 5 |

*Note:* *reverse coded

## Appendix H

**If this questionnaire has raised difficult issues or concerns for you regarding cyberbullying, below are details of where you can go to for help or advice: Talk to someone you trust about the issue – a friend, parent or member of staff at your school. You can speak with NetSafe staff during office hours on 0508 NETSAFE (0508 638 723). If you want support to deal with cyberbullying then you can talk with the following specialist youth counseling services:**

**Youthline: Their helpline is 0800 37 66 33 or you can free txt 234**

**What's Up: Their free helpline 0800 WHATSUP (0800 942 87 87) and operates from 12 noon to midnight**

**Lifeline: They provide a 24/7 phone counseling service on 0800 543 354**

**http://www.cyberbullying.org.nz/ This website also provides information about cyberbullying, what it is, how to deal with it and who to talk to.**

## Appendix I

UNIVERSITY OF CANTERBURY
*Te Whare Wānanga o Waitaha*
CHRISTCHURCH NEW ZEALAND

HUMAN ETHICS COMMITTEE

Secretary, Lynda Griffioen
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2012/131

26 September 2012

Rosemary Necklen
Department of Psychology
UNIVERSITY OF CANTERBURY

Dear Rosemary

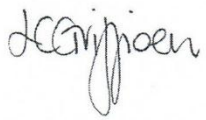
The Human Ethics Committee advises that your research proposal "Relationship between cyber-bullying and parenting styles; modern parenting" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 24 September 2012.

We have now received legal advice on your survey and are satisfied that you will not have a legal requirement to report illegal behaviour. While we acknowledge that you have grappled with this issue, we remain deeply concerned regarding the ethics of gathering information about children who have been either victims or perpetrators of cyber-bullying when you have no process in the research project for dealing with serious cases. We would expect that any further work in this area requiring HEC approval would discuss these issues in much more depth.

Best wishes for your project.

Yours sincerely

*pp* 

Lindsey MacDonald
***Chair***
***University of Canterbury Human Ethics Committee***

## Appendix J

Table 10

*Adolescent Measure Dependant Variables; Composition of Individual Questions*

| Variable | Individual Questions Composing the Variable |
|---|---|
| Cyberbullying Behaviour Variables | |
| Cyberbullying | 1. Do you ever send mean and/or spiteful text messages to other people?<br>2. Do you ever make phone calls to bully and/or be spiteful to others?<br>3. Do you ever sent text messages to insult people?<br>4. Have you ever sent aggressive or angry text messages?<br>5. Have you ever sent rude text messages?<br>6. Have you ever sent a text message with sexual content?<br>7. Have you ever sent a text message with swear words?<br>8. Have you ever sent text messages and/or phone calls to make people scared of you?<br>9. Have you ever sent text messages or made phone calls to make people feel powerless?<br>10. Have you ever sent text messages or made phone calls to intimidate others?<br>11. Have you ever made phone calls threatening to hurt someone?<br>12. Have you ever sent text messages threatening to hurt someone? |

(continued)

13. Have you ever sent text messages that are mean about others to someone else?
14. Have you ever sent text messages that are untrue about someone else?
15. Have you ever sent text messages that were designed to embarrass someone?
16. Have you ever sent text messages that were designed to "get back at" someone?
17. Have you ever sent text messages that were designed to make someone feel stupid?
18. Have you ever sent photos that were altered images of people?
19. Have you ever sent more than one rude or insulting message to the same person?
20. Have you ever repeatedly sent offensive messages?
21. Have you ever made phone calls to others that intentionally make someone else look bad?
22. Have you ever made a Facebook Post from your cell phone that makes someone else look bad?
23. Have you ever sent a text message to others that makes someone else look bad?
24. Have you ever sent a photo from your cell phone to others that makes someone else look bad?
25. Have you ever sent information and/or photos on your cell phone to others that you had been asked to keep a secret?

(continued)

26. Have you ever sent text messages and/or made phone calls about information that is sensitive to a person or may embarrass them?
27. Have you ever sent pictures/pxts to others that may have been embarrassing to that person?
28. Have you ever sent pictures from your cell phone to another person intending to upset them?
29. Have you ever sent pictures from your cell phone to someone as a way to be mean or "get back" at them?
30. Have you ever sent videos from your cell phone of someone getting beaten up or hurt to others?
31. Have you ever sent videos from your cell phone of someone else with private content i.e. sexual content to others?
32. It you use Facebook on your phone, have you ever excluded someone from a group you have created?
33. Have you ever intentionally not included someone in a group via cell phone (i.e. Facebook)?
34. Have you ever tricked someone into revealing information and then forwarded it to others?
35. Have you ever sent mass texts to a group of people (i.e. friends) and deliberately excluded someone from the message?
36. Have you ever deliberately excluded someone from a social event by not including them in a mass text you have made?
37. Have you ever sent a text message from another person's phone pretending to be them?

(continued)

| | |
|---|---|
| | 38. Have you ever sent a pxt from someone else's phone pretending to be them? |
| | 39. Have you ever made phone call off someone else's cell phone pretending to be them? |
| | 40. Have you ever sent photos from someone else's cell phones that were of a personal nature i.e. personal content that would upset/embarrass them? |
| Written – Verbal | 1. Do you ever send mean and/or spiteful text messages to other people? |
| | 2. Do you ever make phone calls to bully and/or be spiteful to others? |
| | 3. Do you ever sent text messages to insult people? |
| | 4. Have you ever sent aggressive or angry text messages? |
| | 5. Have you ever sent rude text messages? |
| | 6. Have you ever sent a text message with sexual content? |
| | 7. Have you ever sent a text message with swear words? |
| | 8. Have you ever sent text messages and/or phone calls to make people scared of you? |
| | 9. Have you ever sent text messages or made phone calls to make people feel powerless? |
| | 10. Have you ever sent text messages or made phone calls to intimidate others? |
| | 11. Have you ever made phone calls threatening to hurt someone? |
| | 12. Have you ever sent text messages threatening to hurt someone? |

(continued)

13. Have you ever sent text messages that are mean about others to someone else?
14. Have you ever sent text messages that are untrue about someone else?
15. Have you ever sent text messages that were designed to embarrass someone?
16. Have you ever sent text messages that were designed to “get back at” someone?
17. Have you ever sent text messages that were designed to make someone feel stupid?
18. Have you ever sent photos that were altered images of people?
19. Have you ever sent more than one rude or insulting message to the same person?
20. Have you ever repeatedly sent offensive messages?
21. Have you ever made phone calls to others that intentionally make someone else look bad?
22. Have you ever made a Facebook Post from your cell phone that makes someone else look bad?
23. Have you ever sent a text message to others that makes someone else look bad?
24. Have you ever sent a photo from your cell phone to others that
25. Have you ever sent information and/or photos on your cell phone to others that you had been asked to keep a secret?

(continued)

| | |
|---|---|
| | 26. Have you ever sent text messages and/or made phone calls about information that is sensitive to a person or may embarrass them? |
| Visual Behaviour | 1. Have you ever sent pictures/pxts to others that may have been embarrassing to that person?<br>2. Have you ever sent pictures from your cell phone to another person intending to upset them?<br>3. Have you ever sent pictures from your cell phone to someone as a way to be mean or "get back" at them?<br>4. Have you ever sent videos from your cell phone of someone getting beaten up or hurt to others?<br>5. Have you ever sent videos from your cell phone of someone else with private content i.e. sexual content to others? |
| Exclusion | 1. It you use Facebook on your phone, have you ever excluded someone from a group you have created?<br>2. Have you ever intentionally not included someone in a group via cell phone (i.e. Facebook)?<br>3. Have you ever tricked someone into revealing information and then forwarded it to others?<br>4. Have you ever sent mass texts to a group of people (i.e. friends) and deliberately excluded someone from the message?<br>5. Have you ever deliberately excluded someone from a social event by not including them in a mass text you have made? |
| Impersonation | 1. Have you ever sent a text message from another person's phone pretending to be them? |

(continued)

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|---|---|
| | 2. Have you ever sent a pxt from someone else's phone pretending to be them?<br>3. Have you ever made phone call off someone else's cell phone pretending to be them?<br>4. Have you ever sent photos from someone else's cell phones that were of a personal nature i.e. personal content that would upset/embarrass them? |
| Specific Cyberbullying Behaviour Variables | |
| Flaming | 1. Have you ever sent aggressive or angry text messages?<br>2. Have you ever sent rude text messages?<br>3. Have you ever sent a text message with sexual context?<br>4. Have you ever sent a text message with swear words?<br>5. Have you ever sent a text message with offensive language? |
| Cyber-Stalking | 1. Have you ever sent text messages and/or phone calls to make people scared of you?<br>2. Have you ever sent text messages or made phone calls to make people feel powerless?<br>3. Have you ever sent text messages or made phone calls to intimidate others?<br>4. Have you ever made phone calls threatening to hurt someone?<br>5. Have you ever sent text messages threatening to hurt someone? |
| Denigration | 1. Have you ever sent text messages that are mean about others to someone else? |

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| | |
|---|---|
| | 2. Have you ever sent text messages that are untrue about someone else? |
| | 3. Have you ever sent text messages that were designed to embarrass someone? |
| | 4. Have you ever sent text messages that were designed to "get back at" someone? |
| | 5. Have you ever sent text messages that were designed to make someone feel stupid? |
| | 6. Have you ever sent photos that were altered images of people? |
| Masquerade | 1. Have you ever made phone calls to others that intentionally make someone else look bad? |
| | 2. Have you ever made a Facebook Post from your cell phone that makes someone else look bad? |
| | 3. Have you ever sent a text message to others that makes someone else look bad? |
| | 4. Have you ever sent a photo from your cell phone to others that makes someone else look bad? |
| Outing | 1. Have you ever sent information and/or photos on your cell phone to others that you had been asked to keep a secret? |
| | 2. Have you ever sent text messages and/or made phone calls about information that is sensitive to a person or may embarrass them? |
| Exclusion | 1. It you use Facebook on your phone, have you ever excluded someone from a group you have created? |

(continued)

| | |
|---|---|
| | 2. Have you ever intentionally not included someone in a group via cell phone (i.e. Facebook)?<br>3. Have you ever tricked someone into revealing information and then forwarded it to others?<br>4. Have you ever sent mass texts to a group of people (i.e. friends) and deliberately excluded someone from the message?<br>5. Have you ever deliberately excluded someone from a social event by not including them in a mass text you have made? |
| Harassment | 1. Have you ever sent more than one rude or insulting message to the same person?<br>2. Have you ever repeatedly sent offensive messages? |
| Risk Taking Behaviour Variables | |
| Risk-Taking Behaviour | 1. Have you ever disclosed personal information about yourself via cell phone to strangers or people not well known to you (i.e. stranger, someone you met once at a party)?<br>2. Have you ever sent personal pictures of yourself to others on your cell phone?<br>3. Do you send personal pictures to people you know, i.e. friends?<br>4. Do you send personal pictures to people you don't know, i.e. stranger?<br>5. Do you send personal pictures to someone you met once at a party? |

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|---|---|
| | 6. Do you send personal pictures to people you have only had text contact with?<br>7. Do you send nude and/or sexual pictures to people you know well?<br>8. Do you send nude and/or sexual pictures to someone that you do not know well (i.e. have not met in person or have only met once)?<br>9. Do you meet people in person that you have only texted before?<br>10. Do you ever go out with someone that you have only ever met online?<br>11. Do you ever give your cell phone number to people you don't know very well i.e. only just met, at a party, through a friend? |
| Disclosure of Information | 1. Have you ever disclosed personal information about yourself via cell phone to strangers or people not well known to you (i.e. stranger, someone you met once at a party)?<br>2. Have you ever sent personal pictures of yourself to others on your cell phone?<br>3. Do you send personal pictures to people you know, i.e. friends?<br>4. Do you send personal pictures to people you don't know, i.e. stranger? |

(continued)

| | |
|---|---|
| | 5. Do you send personal pictures to someone you met once at a party?<br>6. Do you send personal pictures to people you have only had text contact with?<br>7. Do you send nude and/or sexual pictures to people you know well?<br>8. Do you send nude and/or sexual pictures to someone that you do not know well (i.e. have not met in person or have only met once)? |
| Meeting Risky Situations | 1. Do you meet people in person that you have only texted before?<br>2. Do you ever go out with someone that you have only ever met online?<br>3. Do you ever give your cell phone number to people you don't know very well i.e. only just met, at a party, through a friend? |

## Appendix K

Table 11

*Scale Items Removed from Exploratory Factor Analysis*

| Scale Item | Question |
|---|---|
| 2.77 | I worry more about my child's educational achievement and safety more than other areas of their life. |
| 2.120 | If I am doing activities for myself I will not stop to interact with my child during this time. |
| 2.109 | If I am busy doing something else for myself, I do not respond immediately to my child. |
| 2.121 | I always know who my child is with at any stage.* |
| 2.71 | I want my child to succeed at all things they try. |
| 2.89 | I want my child to stay in their home town after completing their education so that I can stay involved in their life. |
| 2.119 | I believe that my needs are just as important as my child's. |
| 2.135 | I ignore my child when they are upset. |
| 2.81 | I expect my child to reach my expectations without unnecessary support or help.* |
| 2.103 | I always drive my child to school. |
| 2.131 | I help my child with homework frequently.* |
| 2.138 | I feel overwhelmed with my own issues.-. |
| 2.70 | I like my child to solve problems on their own when working through a task.* |

(continued)

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|---|---|
| 2.111 | I am very affectionate towards my child i.e. lots of hugs.* |
| 2.107 | I allow my child to make their own decisions. |
| 2.72 | I want my child to work things out independently even if it means failing sometimes.* |
| 2.99 | I get upset if someone else disciplines my child. |

*Note:* *reverse coded

## Appendix L

Table 12

*Factor Loadings for Exploratory Factor Analysis with Oblique Rotation of Parenting Style Measures*

| Item Number | Scale Item | 1 | 2 |
|---|---|---|---|
| 2.86 | If my child does not succeed highly at school I will talk to the teacher and get them to fix this. | **.659** | |
| 2.75 | I praise my child all the time, even if they fail. | **.639** | |
| 2.66 | I respond immediately to my child's every need. | **.623** | |
| 2.79 | I feel that I should solve task-orientated problems for my child. | **.617** | |
| 2.67 | I solve my child's problems instead of watching them struggle. | **.606** | |
| 2.93 | If my child does something wrong they are usually provoked by someone else. | **.590** | |
| 2.102 | I go and speak to my child's school teacher often. | **.552** | |
| 2.98 | I often speak for my child to make sure their request is understood. | **.523** | |
| 2.73 | I like to be able to supervise my children clearly at all times. | **.521** | |
| 2.69 | I like my children to discuss any decisions they make with me before making them. | **.516** | |
| 2.92 | When my child gets in trouble it is seldom their fault. | **.514** | |
| 2.84 | I let my child's teachers know that it is their responsibility to ensure my child's academic success. | **.513** | |

(continued)

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|---|---|---|---|
| 2.118 | I am always worried about my child.* | **.504** | |
| 2.85 | I often talk to the school to ensure my child achieves to their highest ability. | **.484** | |
| 2.78 | I worry about my child's achievement in all areas of their life.* | **.482** | |
| 2.64 | I always get involved to help sort out any problems my child has. | **.464** | -.338 |
| 2.74 | I like to arrange activities for my child to do in their free time. | **.461** | |
| 2.113 | I always love towards my child even while telling them off. * | **.460** | |
| 2.112 | I always respond immediately to my child's needs.* | **.459** | .335 |
| 2.65 | I like to be involved in all aspects of my child's life. | **.456** | -.398 |
| 2.68 | I feel my child will not reach their full potential without my input. | **.452** | |
| 2.105 | I give my child rewards if they have tried but not succeeded. | **.449** | |
| 2.94 | When doing activities or playing games with my child I let them win. | **.441** | |
| 2.87 | I often contact my child on their cell phone when they are out with friends. | **.403** | |

(continued)

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|---|---|---|
| 2.90 | When my adolescent gets frustrated with an activity or task I often finish the activity or task for them. | **.402** |
| 2.91 | I let my adolescent problem solve when they are frustrated instead of completing tasks for them.* | **-.395** |
| 2.96 | When my child comes last, I tell them it doesn't matter. | **.391** |
| 2.125 | I get involved in my child's school activities.* | **.388** |
| 2.110 | Activities that I want to do take priority over my child's needs. | **-.386** |
| 2.135 | I never ignore my child. | **.363** |
| 2.97 | I think it is important for adolescent to succeed so I let them win at games and activities that we play together | **.356** |
| 2.136 | I put in place strong behavioural boundaries for my child.* | **.355** |
| 2.80 | I have firm expectations of my adolescent's ability and make these clear to my adolescent, regardless of whether they achieve them or not. | **.353** |
| 2.104 | I find a way to praise my child every day. | **.353** |
| 2.117 | I worry constantly.* | **.352** |

(continued)

| | | | |
|---|---|---|---|
| 2.101 | Over and above everything else I feel it is important to protect my adolescent with regard to their safety and education. | **.352** | -.348 |
| 2.88 | I require my child to have their cell phone on them at all times so that I can contact them. | **.346** | |
| 2.116 | I do not see the point in controlling my child's behaviour. | | **.736** |
| 2.130 | I do not feel it is my right to put limits on my child's behaviour. | | **.692** |
| 2.127 | I take a lot of notice of my child's school achievement.* | | **-.672** |
| 2.108 | I do not discipline my child when they are doing something wrong. | | **.662** |
| 2.125 | I do not get involved in my child's school work. That is their teacher's responsibility. | | **.652** |
| 2.139 | I always attend parent-teacher conferences if possible.* | | **-.619** |
| 2.81 | I think it is appropriate to get involved with my child's education. | | **-.611** |
| 2.144 | I am at home most nights of the week.* | | **-.556** |
| 2.115 | I do not worry about the behaviour of my child and have a "kids will be kids" attitude. | | **.553** |
| 2.133 | I do not punish my child for bad behaviour. | | **.550** |

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|---|---|---|---|
| 2.129 | My child is very independent. I do not worry about their whereabouts. | | **.548** |
| 2.142 | I like a lot of time to myself. | | **.538** |
| 2.114 | I do not show much affection to my child. | | **.534** |
| 2.137 | I often dismiss my child's emotions. | | **.527** |
| 2.100 | I am proud to be involved in all aspects of my child's life. | .332 | **-.512** |
| 2.123 | I do not see the point in setting rules for my child. | | **.500** |
| 2.141 | I feel emotionally distant from my child. | | **.472** |
| 2.128 | I do not encourage my child to take part in extra-curricular activities. | | **.470** |
| 2.122 | I do not view myself as responsible for my child's behaviour. | | **.438** |
| 2.106 | I seldom give my child expectations and guidelines for their behaviour. | | **.435** |
| 2.143 | I like it when my child spends a lot of time at other people's places. | | **.434** |
| 2.132 | Taught my adolescent basic skills (i.e. numbers and letters) before they started school.* | | **-.411** |
| 2.95 | When my child plays sport, I'm always there to cheer them on. | | **-.403** |

(continued)

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|---|---|---|
| 2.124 | I do not comfort my child every time they are distressed. | **.399** |
| 2.134 | I do not like to be around when my child is displaying strong emotion. | **.389** |
| 2.140 | I interact with my child minimally. | **.309** |

*Note*: * = reverse coded; Factor 1 = Helicopter; Factor 2 = Uninvolved