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The Lasting Effects of Cyber Bullying on Well-Being

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Abstract

Experiencing cyber bullying has serious consequences for well-being such as increased stress, and lowered self-esteem, life satisfaction, and positive affect. The goal of the current study was to investigate the influences of cyber bullying on well-being. Forty-two participants were asked to complete questionnaires consisting of: The Brief Multidimensional Student Life Satisfaction Scale (BMSLSS), the Subjective Happiness Scale (SHS), Positive and Negative Affect Scale (PANAS), the Perceived Stress Scale (PSS), the Rosenberg Self-Esteem Scale, the Life Orientation Test (LOT), the Social Experience Questionnaire, and a revised version of the Spanish Cyber Bullying Questionnaire (SCBQ). Results showed strong correlations between cyber bullying and increased stress, as well as cyber bullying and lowered positive affect, life satisfaction, and self-esteem. Other factors were not significantly correlated with cyber bullying. This speaks to the possibility of new intervention programs for cyber bullying, ones that target happiness, negative affect, optimism, and social support.

The Lasting Effects of Cyber Bullying on Well-Being

Past literature, popular media and news reports draw attention to increasing incidences of bullying. Research has been devoted to understanding the impact of social interaction and its effects on individual well-being (Rigby, 2000). Well-being can be defined as the ability to be satisfied, optimistic, happy, have strong social support, as well as being able to manage daily stressors, to have good self-esteem and positive affect (Hadad, 2013). Human interaction can positively or negatively affect one's sense of well-being (Rook, 1984). That being said, there is considerable research examining the lasting impacts of how social interaction, including bullying, affects one's overall well-being and the way that individuals view the world (Young & Sweeting, 2004).

Well-being can be defined both psychologically and subjectively (Sheldon, Ryan, Rawsthorne & Ilardi, 1997). Psychological well-being focuses on self-acceptance, autonomy, managing one's environment, relationships with others, ability to pursue goals, and continued development as a person (Ryff, 1989). Possessing high psychological well-being is to possess a high level of each of these domains, and supports positive overall functioning. However, the meaning of subjective well-being differs slightly in that it is viewed more personally. It contains aspects of how one evaluates one's life and the amount that the person actually likes him/herself. This includes a combination of satisfaction with life, positive/negative affect, mood, and emotion (Diener, Lucas & Oishi, 2002). Interactions with peers can powerfully influence well-being.

Social interaction with peers is important for emotional and social growth. This teaches humans to learn to solve everyday problems with peers, and become an active member in the community (Cohen, 2006). Through social interaction, personal relationships are built, which is a vital part of human life. According to Makino and Tagami (1998), social interaction can be

described as the closeness, enjoyment, influence and confidence with others. Social support contributes to our understanding of social networks and social cues, as well as promotes overall well-being (Lincoln, 2002). Social theorists suggest that humans base their social groups on who provides the most positive impacts (Ryan & Deci, 2000).

Furthermore, experiencing a negative interaction with others may have a greater impact on well-being than positive experiences. For example, humans often remember and internalize poor social encounters more than positive ones. Specifically, poor social interaction may lead to traumatization, and an overall reduced sense of well-being (Rook, 1984). It is possible that having close social ties and strong social support may decrease this vulnerability

An extreme example of poor social interaction is bullying. Experiencing bullying can impact the level of well-being an individual possesses. Bullying is the experience of being victimized when exposed to aversive actions or situations inflicted by another person/other people (Olweus, 1994). Bullying can be physical, which includes hitting, punching, spitting, and more. Relational bullying consists of indirect aggression and can be physically or psychologically violent, by manipulating one's social relationships (Olweus, 1994). Relational bullying is more covert and deceptive than physical bullying. To an observer, relational bullying can be perceived as teasing. However, bullying differs from teasing in that bullying is recurring and damaging, whereas teasing occurs in the moment and has no lasting negative impact (Madsen, 1996).

Bullying has become extremely common, especially in school settings, where the victim cannot escape easily (Smith, 1999). Although bullying can be culture or location-specific, bullying typically includes features consistent across the world. For example, 75% of people admit they have been bullied at one point in their life (Madsen, 1996). An estimated 200 million children around the world are being bullied. As well, 90% of peers are actually present during a

bullying situation, but do not take action. Furthermore, there are sex differences with bullying whereby males are more physically aggressive than females, and tend to transfer their feelings into violent behaviours. On the contrary, bullying by females takes place through indirect means and in more social aggression, or relational bullying (Smith, 1999).

Relational bullying is a subset of bullying that occurs by damaging one's social status and hurting peer relationships. Variables for bullying often include gender, socioeconomic status, number of parents and siblings and academic status (Ma, 2001). It is more common in females as it is a less physically aggressive method of bullying (Wang, Iannotti & Nansel, 2009). Relational bullying is more indirect, often resulting in social exclusion and cattiness. It is covert, and often goes unnoticed by authority figures such as parents or teachers. It is associated with higher psychological distress than physical bullying (Bauman & Del Rio, 2006).

Bullying can have lasting and acute effects. Acute or short-term effects include decrease in sleep or appetite, and difficulty concentrating on schoolwork (Hugh-Jones & Smith, 1999). In addition, the majority of victims that bullies target already possess existing symptoms of anxiety. Therefore, being a victim of bullying can further exacerbate anxiety and increase feelings of depression (Olweus, 1994). This in turns affects feelings of self-esteem and shame, leading to a decrease in their view of their well-being.

An individual who has been victimized by another can experience a lasting decrease in well-being when compared to those who have not been bullied. These experiences can have a lasting impact on an individual (Navarro, Ruiz-Oliva, Larrañaga, & Yubero, 2015). Harmful comments can have a lasting negative impact and lower one's sense of well-being and general happiness. The adolescent cohort may be more sensitive to bullying as they place high value on popularity and keeping up with social trends. As well, adolescents endure physical and pubertal changes

during this time and are often insecure about their appearance, therefore are more sensitive to hurtful comments (Erikson & Erikson, 1998). These bullying experiences can be especially detrimental to self-esteem and self worth during adolescence as teenagers endure a coming-of-age period where it is most important to them to be accepted (O'Moore, & Kirkham, 2001). Although research on the lasting impacts of bullying is limited, victims of bullying are more likely to show symptoms of depression and decreased self-esteem into their adult years, thus leaving a lasting impression (Veenstra, Lindenberg, Oldehinkel, De Winter, Verhulst, & Ormel, 2005).

More recently, cyber bullying has become the new means of harassing others as the use of social media and online communication has become increasingly popular. Cellular phones are becoming more common at a younger age, and their use has been popular in youth as it is seen as a status symbol (Patchin & Hinduja, 2006). Cyber bullying is a form of indirect bullying through the use of technology (Campbell, 2005). Cyber bullying can be conveyed through sending threatening or hurtful messages using e-mails, texting, online chat rooms, and other social media outlets. Both males and females show equal levels of participating in bullying others through electronic means (Woods & White, 2005). In fact, one in three Canadians report they have been cyber bullied in their lives. In addition, nearly half of Canadian teenagers report having some sort of involvement in online bullying (Li, 2006). While cyber bullying is demonstrated by both males and females, females who are victims of cyber bullying tend to show a harsher impact than males (Smith, Mahdavi, Carvalho, Fisher, Russell, & Tippett, 2008). Females may internalize feelings of harassment and thus lead to a lowered sense of well-being. Females are also more likely to be passive victims, where they often do not seek help to stop the cyber harassment (Veenstra et al., 2005).

Similar to traditional bullying, peers often act as bystanders to cyber bullying, and are characterized as passive bullies (Olweus, 1994). Although they may be aware of a victim being harassed, they likely do not intervene to get help. This passiveness may occur as cyber bullying takes place online, therefore a student may not get a teacher involved as it is not happening on school grounds. In addition, this may occur due to the teenagers' lack of appropriate resources to deal with their problems (Li, 2006). It may be easier for an adolescent to turn a blind eye from the situation, as interfering with the bullying situation may go against the social norm of their cohort (O'Moore, & Kirkham, 2001).

Cyber bullying can affect the characteristics of well-being which include feelings of satisfaction, happiness, optimism, social support, being able to manage daily stressors, (Hadad, 2013). For example, children who deal with cyber bullying report feeling less subjective happiness. In addition, those who experience cyber bullying feel less optimism and happiness than those who do not (Navarro, Ruiz-Oliva, Larrañaga & Yubero, 2015). This can be as extreme as adolescents who have experienced cyber or traditional bullying have more suicidal thoughts than those who have not been victimized by bullying (Hinduja & Patchin, 2010).

Cyber bullying causes a lower sense of self-esteem in both the victim and the bully that is inflicting the harassment. This is intriguing as both parties involved in the bullying experience suffer a lowered sense of well-being (Patchin & Hinduja, 2010). Other common characteristics that bullies possess include aggressiveness and isolation from peers, as well as acting impulsively (Olweus, 1994). In addition, both bullies and victims share a sense of being disliked by their peers, having demonstrated anti-social behaviours (Veenstra et al., 2005).

There is little research on the lasting impacts on bullying, and there is even less on the lasting effects of cyber bullying on well-being. The research question in the current study

addresses the lasting impacts on well-being caused by cyber bullying**.** Past literature has shown that it is expected that bullying affects psychological and subjective well-being. Using elements from both of these concepts, research indicates that experiencing bullying, specifically cyber bullying damages well-being. In the current study a combination of variables from psychological and subjective well-being was considered. Variables derived from psychological well-being include: ability to manage stress, and social experience. Whereas, variables from subjective well-being include: affect, satisfaction with life, general happiness, optimism, social support, and self-esteem. Satisfaction was measured using the Student Life Satisfaction Scale (BMSLSS) (Seligson, Huebner & Valois, 2003). Happiness was evaluated using the Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999). Affect was measured using the Positive and Negative Affect Scale (PANAS) (Watson, Clark & Tellegen, 1988). Stress scores were considered using the Perceived Stress Scale (PSS) (Cohen, Kamarck & Mermelstein, 1983). Self-esteem scores were taken into account using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). The Life Orientation Test (LOT) has been used to demonstrate participants' level of optimism (Scheier & Carver, 1985). Social support was measured using the Social Experience Questionnaire (Crick & Grotpeter, 1996). Lastly, cyber bullying was assessed using a revised version of the Spanish Cyber Bullying Questionnaire (SCBQ) (Estévez, Villardón, Calvete, Padilla & Orue, 2010). It was expected that past experiences of cyber bullying affected all measures, in a consistent direction.

The current study attempted to fill the gaps in current literature by assessing the relationship of being a victim of cyber bullying and sense of well-being. In addition, the study focused on 17-21 year old females. Participants will be asked to account for their experience during grades 6-10, an important period of social and emotional development. Past literature has investigated the

effects of cyber bullying at the time the act of bullying taking place. However, the current study examined the impact of cyber bullying four to six years after the bullying experience took place. This specific cohort and sex was chosen as previous literature has demonstrated that females internalize feelings of victimization more than males, acting more passively. As well the adolescent cohort is a larger target of being victim to cyber bullying, as they endure an important developmental stage where social trends are most important to them. It was hypothesized that the more one experiences cyber bullying during grades 6-10, the lowered sense of well-being one has.

Method

Participants

Female participants (N = 42) enrolled in Psychology 1000 were recruited through the Brescia Psychology Research Participation System. Participants' age ranged from 17-21 (*M* = 18.44, *SD* = 0.92). The participants were separated into three cyber bullying groups based on their scores (high, medium, low), and a median split was used to generate two social support groups, high and low social support. Participants over the age of 21 were excluded in this study as their experience of cyber bullying may differ from current students' experience.

Materials

After offering written consent, participants completed a demographics questionnaire. A package of eight questionnaires was used. The Brief Multidimensional Student Life Satisfaction Scale (BMSLSS), created by Seligson, Huebner and Valois (2003), a five item, seven-point Likert scale was distributed to each subject to complete. A four item, five-point Likert scale measuring happiness was evaluated using the Subjective Happiness Scale (SHS) (Lyubomirsky

& Lepper, 1999). Affect was evaluated using the Positive and Negative Affect Scale (PANAS), a 20 item, five-point Likert scale (Watson, Clark, & Tellegen, 1988). Stress was measured using the Perceived Stress Scale (PSS), a 14 item five-point Likert scale (Cohen, Kamarck, & Mermelstein, 1983) that assesses how stressful one appraises one's life to be. Participants completed the Rosenberg Self-Esteem Scale, a 10 item, five-point Likert scale to evaluate levels of self-esteem (Rosenberg, M. 1965). Optimism was measured using the Life Orientation Test (LOT), a 10 item, five-point Likert scale (Scheier & Carver, 1985). Social support was analyzed through the Social Experience Questionnaire, a 10 item, five-point Likert scale (Crick & Grotpeter, 1996). Cyber bullying was assessed using a revised version of the Spanish Cyber bullying Questionnaire, an 11 item, five-point Likert scale (Estévez, Villardón, Calvete, Padilla, & Orue, 2010) (see Appendix A). Scales were administered in this order.

Procedure

A maximum of ten participants were tested in a group setting. There were no spoken instructions; all instructions were printed on the given questionnaires. Questionnaires were always given in the same order. Participants were allocated a maximum of 30 minutes to complete the questionnaires, and were allowed to ask questions. Once finished, subjects were debriefed.

Results

A 3 (Cyber Bullying: high, medium, low) x 2 (Social Support: high, low) between-groups Analysis of Variance (ANOVA) was completed to assess the relationship between well-being and cyber bullying. A composite well-being measure (PWB) was created by combining scales measuring self-esteem (Rosenberg's Self-Esteem Scale), positive affect (PANAS), optimism

(LOT), happiness (SHS), and satisfaction (BMSLSS). Participants were divided into three groups based on their cyber bullying scores: low, medium, and high rates. Each group had approximately the same number of participants. As well, participants were divided into two groups based on their social support scores (Social Experience Questionnaire) using a median split, high and low.

Participants who had low social support and low cyber bullying had slightly higher PWB (M = 3.20, SD = .21) than participants who had high social support and low cyber bullying (M = 3.12, SD = .16). Additionally, participants who had medium cyber bullying and low social support (M = 3.19, SD = .24) responded slightly higher than participants in medium cyber bullying with high social support (M = 3.08, SD = .16). Notably, participants experiencing high cyber bullying, with low social support (M = 2.96, SD = .19) had lower PWB than participants in the high cyber bullying group with high social support (M = 3.14, SD = .24).

The ANOVA revealed a significant main effect of cyber bullying on PWB, $F(2, 35) = 3.49$, $p = .042$, $\eta^2 = .17$ (see Figure 1), indicating that experiencing cyber bullying has lasting impacts on PWB. A large proportion of variance in PWB was accounted for by cyber bullying. Neither the main effect of social support ($p = .44$), nor the interaction were statistically significant ($p = .35$).

To determine which groups differed significantly from one another, Bonferroni's correction test for ANOVA was used. As shown in Figure 1, participants who experienced high rates of cyber bullying had significantly lowered levels of PWB than those who experienced medium levels of cyber bullying, $p = .03$. However, those who experienced medium levels of cyber bullying did not significantly differ from those who experienced low levels, nor did those who experienced high cyber bullying differ from those who experienced low cyber bullying, (p's > .1)

To further explore the data, a Pearson correlational analysis was conducted. A two-tailed Pearson correlation coefficient was completed to assess the relationship between well-being and

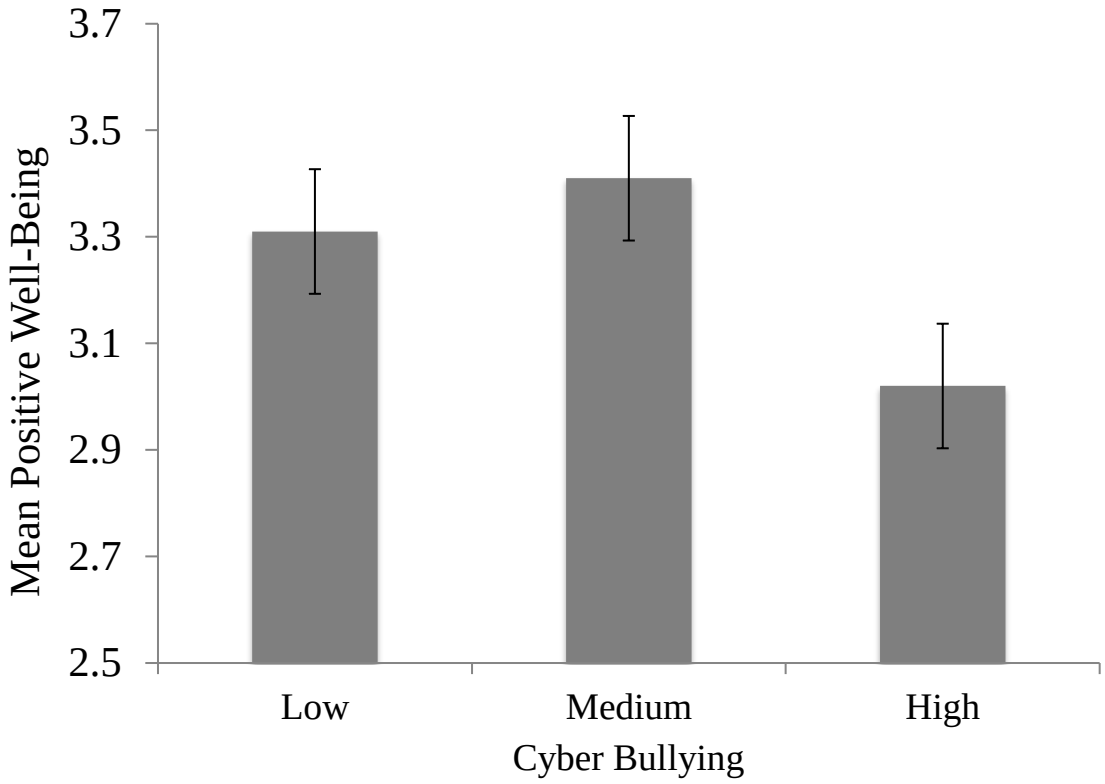

Figure 1. Bar graph depicting mean positive well being for groups of participants who experienced low (n = 12), medium (n = 14) and high (n = 15) cyber bullying. The error bars represent standard error of the mean. * Groups differ $p < .05$.

cyber bullying. Life satisfaction, as measured using the BMSLSS was found to be significantly negatively correlated with cyber bullying, $r(41) = -0.46$, $p < .05$ (see Figure 2), as was positive affect, $r(41) = -.42$, $p < .05$ (see Figure 3). This suggests that experiencing cyber bullying is associated with lowered life satisfaction and positive affect levels. Additionally, self-esteem showed a significant negative correlation with cyber bullying, $r(41) = -.45$, $p < .05$, indicating that experiencing cyber bullying is related to lowered self-esteem (see Figure 4). The correlation of having social support showed a significant negative relationship with cyber bullying, $r(41) = -.35$, $p < .05$, indicating that the more one experiences cyber bullying, the less likely one is to have strong social support (see Figure 5).

Furthermore, stress, measured using the PSS is an aspect of negative well-being. Perceiving one's life as stressful was significantly positively correlated with cyber bullying, $r(41) = .35$, $p < .05$ (see Figure 6). As well, experiencing bullying was significant and positively correlated with cyber bullying, $r(41) = .60$, $p < .05$, suggesting that victims of cyber bullying are also victims of other forms of bullying.

Moreover, optimism, measured using the LOT was not significantly correlated with cyber bullying, $r(41) = .28$, $p = .08$, nor was negative affect, $r(41) = -.13$, $p = .41$. No other relationships were significantly correlated with cyber bullying, p's $> .1$. The ANOVA of the Negative Well-Being measure found no significant effects (p's $> .1$). The full correlation matrix is given in appendix B.

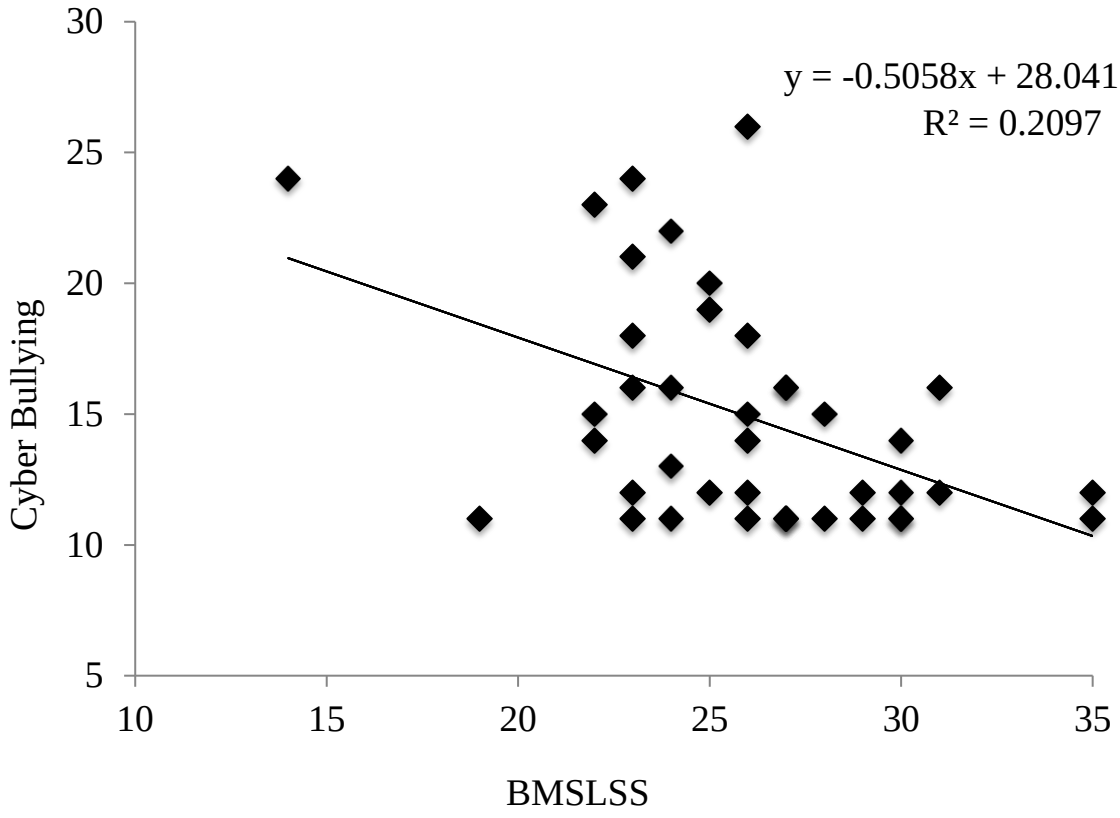

Figure 2. Scatterplot showing the relationship between cyber bullying and life satisfaction, as measured using the BMSLSS. There is a significant negative relationship.

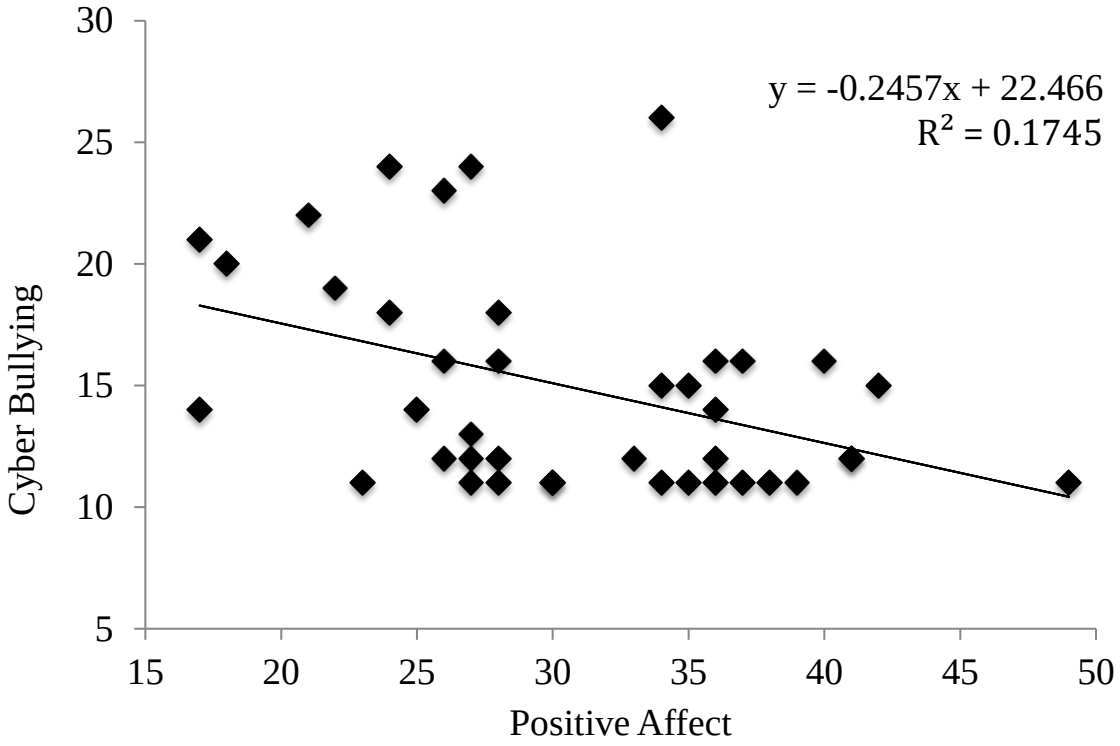

Figure 3. Scatterplot showing the relationship between cyber bullying and positive affect, as gathered from positive aspects of the PANAS. There is a significant negative relationship.

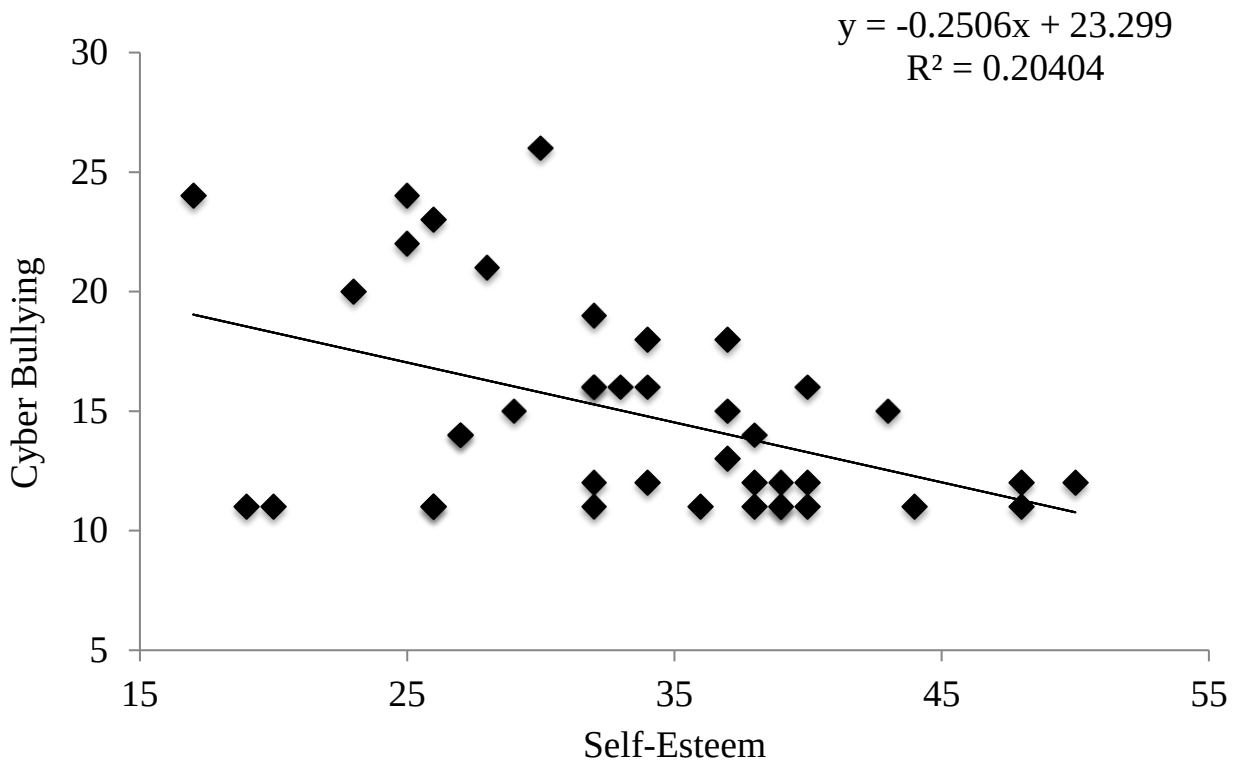

Figure 4. Scatterplot showing the relationship between cyber bullying and self-esteem measured using Rosenberg's Self-Esteem Scale. There is a significant, negative relationship.

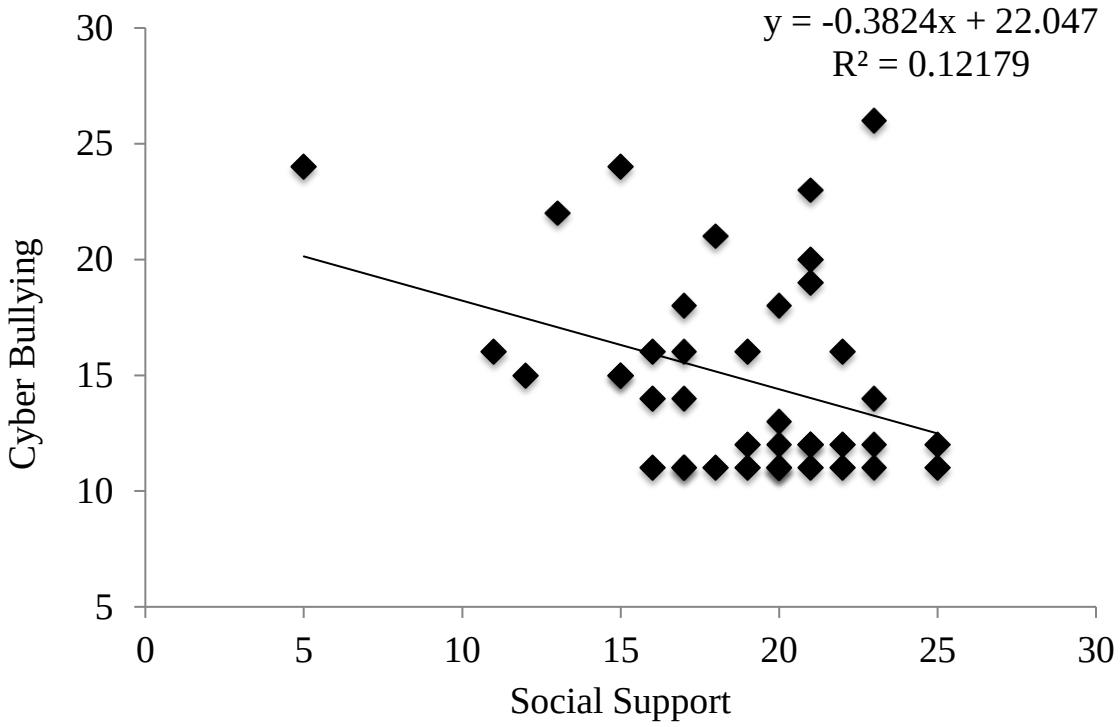

Figure 5. Scatterplot displaying the relationship between cyber bullying and social support measured using the Social Experience Questionnaire. There is a significant negative relationship.

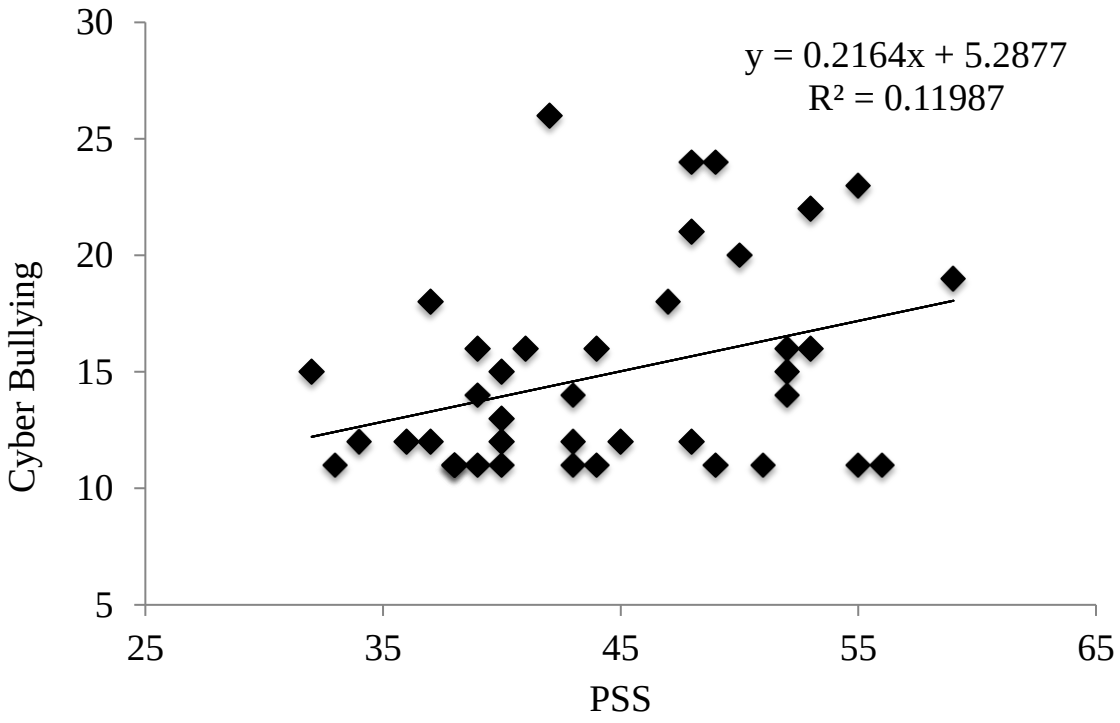

Figure 6. Scatterplot showing the relationship between cyber bullying and stress measured using the PSS. There is a significant positive relationship.

Discussion

Being a victim of cyber bullying has been shown to negatively influence well-being. Results from the current study showed significant relationships between cyber bullying and self-esteem, positive affect, stress, satisfaction, and bullying. The current study hypothesized that the more one experiences cyber bullying, the lowered levels of positive well-being one experiences. An amalgamated Positive Well-Being measure included satisfaction, happiness, positive affect, negative affect, self-esteem, feelings of stress, social experience, optimism, and social support. A one-way analysis of variance revealed a significant main effect of cyber bullying on Positive Well-Being, suggesting that being a victim of cyber bullying leaves lasting damage to Positive Well-Being. Variables that did not have significant correlations with cyber bullying included: negative affect, subjective happiness, and optimism.

The current study's results were consistent with previous findings; experiencing cyber bullying led to lowered feelings of satisfaction, positive affect, and self-esteem. As well, it led to higher levels of stress. Moore, Huebner, and Hills, (2012) studied the effects of cyber bullying and satisfaction, showing a negative relationship, as did the current research. Additionally, Hobbs (2009) found that victims of cyber bullying have lower satisfaction in their family life and school life. However, while this study looked at acute effects of cyber bullying, the current study looked at long-term effects of cyber bullying.

Consistent with previous studies, some hypotheses were supported. Erikson and Erikson's (1998) theory on ego development and importance of self worth during adolescence was supported, in that experiencing bullying has detrimental effects on self-esteem. As well, a significant positive correlation was found between cyber bullying and increased stress, supporting Veenstra et al.'s (2005) suggestion that victims of cyber bullying have increased

levels of stress. Still, this study looked at acute effects, while the current study analyzed long-term effects of experiencing cyber bullying, thus extending past findings.

The effect of cyber bullying on positive well-being suggests that those who experienced cyber bullying the most, also have lowered positive well-being. This evidence was further supported by a strong negative correlation between cyber bullying and social support, suggesting that there is an inverse relationship between the two variables. This observation supports Rook's (1984) suggestion that the combination of low social support and being cyber bullied can increase vulnerability to lowered well-being.

Results showed a significant correlation between experiencing bullying and cyber bullying. The results suggested that individuals who are targets of cyber bullying are also targets of bullying, and have low social support. Consistent with previous literature, not having a strong sense of social support can lead to higher rates of bullying and cyber bullying, as social support can serve as a buffer against feelings of depression and lowered well-being (Rigby & Slee, 1999). Previous literature has shown that being a victim of bullying and cyber bullying leads to lowered well-being, as extreme as experiencing suicidal ideation among adolescence (Hinduja & Patchin, 2010).

Other factors making up the amalgamated Positive Well-Being measure were not significant, including optimism, happiness, and negative affect. It is intriguing that positive affect was shown to be significant, however negative affect was not. Responses for negative affect were low, (M = 21.02, SD = 26), ranging in scores (9-40). While in comparison with previous literature, Peker (2015) found contrasting results that both victims and bullies of cyber bullying experienced higher levels of negative affect. This may be explained by a number of reasons. It is possible that this indicates a floor effect, which is the clustering of scores at the low end of the scale such that

further decreases cannot be demonstrated. However, previous research such as Hugh-Jones and Smith's study (1999), analyzed acute effects of cyber bullying on negative affect, whereas the current study evaluated long-term effects of cyber bullying. It is possible that negative affect is a symptom of cyber bullying that recovers over time (3-5 years), whereas changes in positive affect take longer to recover. Future research should investigate this further.

It is important to note the limitations of the study in order to understand the outcome of the results. It is possible that the participants demonstrated a social desirability bias in which the participants responded on the questionnaires in a manner that would give a more favourable impression than other responses. Therefore, this bias could potentially explain why optimism, happiness, and negative affect were not significantly correlated with cyber bullying. Given our understanding of these measures, there was an expectation that these measures would be affected by cyber bullying, but it is unclear why they were not. This is a potential question for future research; it is possible that these variables recover over time or that the measures are not sensitive enough.

Since the study was limited to forty-two female participants, there are limitations of how the results can be generalized. Perhaps if males were included in the study, results would have differed. This would have been interesting, as previous literature from Veenstra et al., (2005) has suggested that there are sex differences across victims of standard bullying, where males are more overtly aggressive, and females tend to be covert and discreet. As a perpetrator of cyber bullying, it is unknown if there is a sex difference, but it is evident that there is a sex difference in perpetrating traditional forms of bullying (Veenstra et al., 2005). There is evidence that males and females respond differently to cyber bullying; while males are more passive victims, females internalize their feelings and are more sensitive to cyber bullying (Smith, et al., 2008). As a

victim of cyber bullying, there is evidence of sex differences, suggesting that this research looking at the impact of cyber bullying on the well-being of females cannot be generalized to males. Future research should replicate the study in a broader population.

In sum, this study provides a better understanding of the relationship between well-being and past experience with cyber bullying. The experience of cyber bullying leaves a lasting negative impact on well-being. With this knowledge, future research should further assess the impacts cyber bullying has, and use it for anti-bullying campaigns in schools, as well as treatment interventions.

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Appendix A

Revised Spanish Cyber bullying Questionnaire (Estévez, Villardón, Calvete, Padilla, & Orue, 2010)

		Circle if any of these things happened to you anytime during grades 6 to 10. Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
1	Received threatening or insulting messages by email.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
2	Received threatening or insulting messages by cell phone.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
3	Humiliating or embarrassing images of me were posted on the internet.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
4	Embarrassing jokes, rumours, or gossip about me were sent to others by text message or email.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
5	Embarrassing jokes, rumours, or gossip about me were posted on the internet, such as on social media.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
6	Someone sent embarrassing or insulting e-mail messages to other people using my email address	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5

7	Someone recorded a video or picture of me by while I was forced to do something humiliating or ridiculous.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
8	Embarrassing or humiliating pictures or videos of me were sent to other people.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
9	My secrets, private information, or compromising images of me were posted online by someone else	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
10	I was deliberately excluded from an online group.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5
11	I repeatedly received messages that included threats or that were very intimidating.	Never Rarely Sometimes Often Always 1----------2----------3----------4----------5

Appendix B

Table 1

Correlations Between Measures Related to Well-Being and Cyber Bullying

Measure	1	2	3	4	5	6	7	8	9	10
1. BMSLSS	1	.47**	-.01	-.45**	-.40**	.65**	-.53**	.40*	-.40*	-.46**
2. SHS	.47**	1	.001	.48**	-.54**	.70**	-.75**	.30	-.31*	-.26
3. NA	-.01	.001	1	.10	.07	-.13	.11	.03	.01	-.13
4. PA	.45**	.48**	.10	1	-.37*	.50**	-.54**	.15	-.28	-.42**
5. PSS	-.40**	-.54**	.07	-.37*	1	-.68**	.70**	-.05	.25	.35*
6. SE	.65**	.69**	-.13	-.50**	-.68**	1	-.75**	.34*	-.42**	-.45**
7. LOT	-.53**	-.75**	.12	-.54**	.70**	-.76**	1	-.24	.35*	.28
8. Social Support	.39*	.03	.03	.15	-.05	.34*	-.24	1	-.63**	-.35*
9.Bullying	-.40*	-.31*	.01	-.28	.25	-.41**	.35*	-.63**	1	.6**
10. Cyber Bullying	-.46**	-.26	-.13	-.42**	.35*	-.45**	.28	-.35*	.60**	1

* $p < .05$
** $p < .01$