

**Predictive Role of Narcissism, CU Traits, Impulsivity, Empathy and School
Connectedness on Bullying and Victimization**

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January, 2023

Introduction

Repetitive violent behavior in school area is called school bullying and it is a major problem that concerns many people globally. Previous studies have associated bullying and victimization with harmful consequences. Bullying has been related to externalizing behaviors, delinquency, anti-social behaviors, and criminality (Ttofi, Farrington, & Lösel, 2012) while victimization has been associated with poor later mental and physical health outcomes, low self-esteem, depression, poor social relationships, and even economic difficulties (Takizawa, Maughan, & Arseneault, 2014). Consequently, there is an urgent need to develop effective preventive and therapeutic programs. As far as I know, currently in the Greek-Cypriot community, there is lack of programs that will lead to the reduction or the extinction of the phenomenon. One of the reasons that this kind of programs are not implemented successfully in the school community is the lack of knowledge regarding the factors that contribute to increase the risk of the children to get involved in school bullying episodes and the factors that can act as protective factors to the phenomenon.

The current study focuses on the investigation of specific risk and protective factors in order to investigate whether they are associated to school bullying and victimization. Furthermore, the current study will investigate if the specific risk and protective factors can predict the increase or the decrease of the phenomenon of school bullying. Impulsiveness, narcissism and CU traits will be investigated as risk factors, while school connectedness and empathy will be investigated as protective factors. For the purpose of the current study, impulsivity, narcissism and CU traits were chosen as risk factors because according to previous studies there are significant positive relations between bullying and the three individual factors (van Geel, et al.,

2017; Fanti, & Henrich, 2015). Empathy and school connectedness were chosen as protective factors because they have been inversely related to the involvement in bullying according to the bibliography (Springer, et al., 2016; Mitsopoulou, & Giovazolias, 2015). The current study aims to investigate how each individual or contextual factor influences the involvement of students in bullying episodes and the interactive relationship between the factors.

The results of the current study could be extremely useful to the school community and to the school psychologists, in order to design appropriate programs that will contribute to the prevention and the extinction of the phenomenon of school bullying. Notably the current research investigates how the risk factors, and the protective factors affect the children of different school ages. This approach expects to contribute positively in the design procedure of the appropriate programs according to the age of the target group.

School bullying:

In order to define the violent behavior that occurs in the school area as school bullying, some criteria have to be fulfilled. Firstly, it must be done intentionally, aiming to hurt someone. Secondly, it must be repetitive, and thirdly, there must be an imbalance of actual or perceived power (Olweus et al., 1999). The bullying episodes usually occur without provocation from the victim (Olweus et al., 1999).

School bullying can be divided in three categories. The first is called physical bullying and it includes the use of physical force against the victims (e.g. hitting,

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kicking). The second, is called verbal bullying and it includes the use of insults, racist, sexist or homophobic comments. It also includes threats of violence or aggressive remarks against the victims and inappropriate sexual comments. The third is called relational bullying and it includes the exclusion from social groups, in order to socially isolate the victims, and the spread of false or harmful rumors about them. In more recent years, cyberbullying has been added to the previous three categories. Cyberbullying includes any kind of bullying that takes place via electronic means, such as mobile phone calls, messages and pictures or videos that are sent through social media.

School bullying is an important issue globally. A study conducted in the USA among middle and high school students has shown that the estimated 12-month prevalence of school bullying is 20%-28% (Gladden et al., 2014). The phenomenon of school bullying also concerns the Greek-Cypriot community as it has increased dramatically in the past years. A study conducted in the Greek-Cypriot community, in 2010 among 1645 school students randomly selected from schools in urban, suburban, and rural areas of Cyprus, showed that 3.9% of the children are classified as moderately bullies and 5.5% are classified as severely bullies (Stavrinides, et al., 2010). The same study showed that 4.7% of the students of the sample, are identified as moderately victims while 6.6% are identified as severely victims (Stavrinides, et al., 2010). Moreover, the study showed that 4.2% of the sample are classified as bully-victims. Regarding the gender differences, boys score significantly higher than girls on the bullying subscale but there are no significant differences on the victimization subscale (Stavrinides, et al., 2010). Additionally, regarding the age differences, high school children score significantly higher on the bullying subscale

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while there are no significant differences between elementary and high school

students on the victimization subscale (Stavrinides, et al., 2010). These percentages seem to have increased in the following 10 years, as a recent study conducted by the Pedagogical Institute, in 2019, found that in a sample of 900 adolescents (11-15 years old), 14.1% reported that they have bullied another person at least one time, while 22.2% reported that they have been bullied by someone else at least one time (CERE, 2019). According to an international research, Cyprus is among the countries with the highest rates of school violence as 34% of the students reported that they are victims of any type of bullying act at least a few times a month. At the same time, 79% of the students agreed or strongly agreed with the statement “It is a wrong thing to join in bullying” (OECD, 2019). Therefore, there is an urgent need to examine the individual and contextual factors that contribute and maintain the bullying in the school context.

Victimization:

Victimization is the repetitive exposure of a student to the negative actions of one or more other students, in the school area. The negative actions may refer to physical actions (hitting, kicking), verbal actions (insults, threats) or to social exclusion. The student that is being victimized is not able to defend himself/herself (Espelage, & Swearer, 2003). An international study found that 32% of the students of the sample, mentioned that they have been a victim of school bullying at least once in the previous two months (Due & Holstein, 2008).

Undoubtedly, being victimized during the school years increases the risk of the student to develop health problems as well emotional and behavioral difficulties

through adolescence and adulthood. Regarding the health outcomes, students that are being victimized present increased risk of somatic symptoms such as headache, stomachache, back pain, dizziness, sleeping difficulties and an increased risk of being overweight and obese (Moore, et al., 2017). Moreover, the probability of developing symptoms of depression as an adult, is by 74% more increased in individuals that have been bullied at school than for their peers that have not been bullied (Ttofi et al., 2011). Victimization has also been related to other mental health outcomes such as anxiety, psychotic symptoms, suicidal ideation/attempts and substance use (Moore, et al., 2017). Several studies have found that victimized children are at risk of developing aggressive behavior (Villar-Márquez, 2010; Duggins et al., 2016) and criminal behaviors such as vandalism, assault, theft, property crimes and running away (Wong & Schonlau, 2013).

Risk factors

There are plenty of risk factors that can lead someone to exhibit violent behavior or to be victimized. The risk factors can be divided in categories. Some factors can be named environmental risk factors, as they have to do with the environment in which the child is raised while other factors are related to the personal characteristics of a specific person, so they are named individual risk factors. The current study will focus on the investigation of three main individual risk factors, impulsivity, narcissism and CU traits. The specific risk factors were chosen because according to the bibliography there are significant positive relations between them and perpetrating behaviors in the school area (van Geel, et al., 2017; Fanti, & Henrich, 2015).

Impulsivity:

Impulsive individuals tend to act without thinking of the future potential negative consequences of their actions. Consequently, they tend to take decisions without evaluating their actions (Georgiou, Charalambous, & Stavrinides, 2020). According to previous studies, characteristics such as impulsivity, hyperactivity, and attention deficits are the most important individual factors that predict violent behavior among children (Farrington, 2009). Impulsivity could be considered a deficit in the executive functions of the brain and a neuropsychological deficit, which is associated with youth violent behaviour (Morgan & Lilienfeld, 2000). According to Espelage et al. (2001), impulsivity correlated significantly with bullying in 6th grade students. These findings can suggest that impulsive behavior might increase the risk of getting involved in bullying episodes. One of the characteristics of children with Attention-Deficit/Hyperactivity Disorder (ADHD) which was linked through the years to school bullying, is impulsivity. Both self-reported (Unnever & Cornell, 2003) and teacher-rated bullying (Coolidge et al., 2004) was related to impulsivity and ADHD.

Moreover, a study conducted by Álvarez-García, et al. (2018), showed that students that tend to exhibit violent behavior at school are more impulsive than their peers that do not exhibit violent behavior in the school area. Additionally, the same study showed that impulsive students are more at risk of getting involved in cyberbullying episodes (Álvarez-García, et al., 2018).

Other studies showed that not only there is a strong correlation between impulsivity and bullying but also impulsivity is a potent predictor of violent behavior among student in the school area (Haynie et al., 2001; Jolliffe & Farrington, 2011).

Callous-Unemotional traits (CU traits):

CU traits consist of the presence of three dimensions that are related to interpersonal and affective difficulties. The first is called callousness and it includes the lack of guilt, empathy and remorse. The second is the unemotional dimension which includes deficient emotional affect and the third is the uncaring dimension that includes the lack of care for the feelings of other people (Frick, 2004).

Several studies have associated CU traits with bullying in the past years. A study conducted by Viding et al. (2009) found positive correlation between the two variables. A recent meta-analysis states that students scoring high on CU traits tend to get involved more often in bullying episodes than their peers with low CU traits (van Geel et al., 2017). One possible reason according to the researchers is that children with high CU traits are less sensitive to the fear and to the suffering of others, statement that agrees with the definition given by Frick (2004) for the individuals with CU traits. Another study that was conducted in the Greek-Cypriot community, found that CU traits are associated with the involvement of the child in bullying episodes as a bully but not as a victim (Fanti and Kimonis, 2012). Additionally, the co-occurrence of CU traits and conduct problems increases the likelihood of engaging in school bullying as a bully (Fanti, 2013). Moreover, CU traits were also associated with cyberbullying (Fanti et al., 2012).

Even though most of the studies have associated CU traits with the bullies, a study in Taiwan has associated CU traits both with a greater risk of getting involved in bullying both as a bully or a victim (Wang et al., 2019).

Narcissism:

Narcissism consists of feelings of grandiosity, self-love and a desire of power and esteem. Narcissistic individuals present low levels of empathy and emotional intimacy and tend to seek out opportunities for admiration and attention (Campbell, et al., 2011). Narcissism was associated with the engagement of children in bullying both as perpetrators and victims. Narcissistic students may have superiority beliefs and the feeling of grandiosity, but they also seem to have fragile self-view (Fanti & Henrich, 2015). According to a study conducted among 1,416 Greek-Cypriot students, narcissism is more strongly correlated with bullying than victimization (Fanti & Kimonis, 2012). A possible explanation may be that students that have high levels of narcissism may bully their peers to maintain their view of themselves (Thomaes et al., 2009). On the other hand, students with narcissistic traits that show a fragile self-view, are at risk of victimization (Baumeister, Smart, & Boden, 1996).

Another study conducted in the United States among 100 students (10-15 years old), showed that narcissism was positively associated with ringleader bullying (Stellwagen & Kerig, 2013). In some cases, narcissistic students exhibit aggressive behaviors as a way to enter an antisocial but popular group of friends (Rodkin et al., 2000). Moreover, students that score high on the narcissistic scale may tend to engage in bullying because they want to establish social dominance and to enhance a grandiose self-image (Salmivalli, 2001).

Protective factors

Likewise the risk factors, there are several factors that can protect someone from exhibiting violent behavior and from being a victim of school bullying.

Protective factors can also be divided in categories like the risk factors. Some factors can be named environmental protective factors, as they have to do with the environment in which the child is raised while other factors are related to the personal characteristics of a specific person, so they are named individual protective factors.

The current study will focus on the investigation of one individual protective factor and one environmental protective factor. Specifically, empathy and school connectedness will be investigated. Empathy and school connectedness were chosen as protective factors because according to previous studies, they have been inversely related to the involvement in school bullying episodes (Springer, et al., 2016; Mitsopoulou, & Giovazolias, 2015). Moreover, the current study aims to investigate how both individual and contextual factors can act as protective factors. The results could be useful for the development of preventive school-based programs that will aim to ground their techniques on the increase of empathy and school connectedness.

Empathy:

The first protective factor that will be investigated in the current study is empathy, as many studies have shown that the occurrence of this specific individual characteristic can decrease school bullying among students. A study conducted in Finland, found that children with high levels of empathy tended to get less involved in school bullying than their peers that had low empathy (Kaukiainen et al., 1999).

Another empirical data showed that bullies exhibit low affective empathy but not low

cognitive empathy (Jolliffe & Farrington, 2006). This finding agrees with the findings of Sutton et al. (1999) that have shown that children that bully their peers usually understand the emotions of the others, but they are not able to feel or share them.

The study conducted by Álvarez-García, et al. (2018), showed that students that tend to exhibit violent behavior at school are less empathetic than their peers that don't exhibit violent behavior in the school area. Additionally, the same study showed that empathy is a strong protective factor for severe cyberbullying episodes (Álvarez-García, et al., 2018). Therefore, it is extremely important to develop well designed prevention and intervention programs that will increase the levels of empathy of the students and that will help them be resilient to victimization.

School connectedness:

School connectedness is the second protective factor that will be investigated in the present study. Through the years, research has shown that school connectedness can have a protective effect for both bullies and victims. Students that have a positive relationship with their teachers and their peers seem to have fewer behavioral problems as they tend to engage less in risk behaviors and have a stronger emotional connection with the school (Springer, 2016). Another study indicates that both boys and girls that feel connected to their teachers, exhibit lower levels of violent behavior (Resnick, Ireland & Borowsky, 2004). These findings have been supported in the following years by other studies which found that school connectedness can serve as a protective factor and that a good relationship between the students and the

teacher is able to decrease the rates of victimization (Ozer, 2005; Marachi, Astor & Benbenishty, 2007).

A recent study has found that even if school connectedness prevents victimized students from becoming perpetrators as well, this effect is not longitudinal (Duggins et al., 2016). According to the researchers, this may happen because teachers are not able to effectively lessen the occurrence of aggressive behavior between students (Duggins et al., 2016). Using the results of the current study, programs aiming to train teachers in applying appropriate interventions during episodes of school bullying can be developed.

Current Study

The current study investigated the predictive relationship between specific risk and protective factors and bullying and victimization. Impulsivity, narcissism, and CU traits were investigated as risk factors, while school connectedness and empathy were investigated as protective factors.

This study is important because it offers a holistic illustration of the phenomenon of school bullying as the data was collected from a large sample of early adolescents from all the districts of the Greek-Cypriot community. Moreover, given the limited amount of previous work investigating contextual factors in Cyprus, this study is particularly important as investigated the effect of contextual and individual factors on bullying and victimization. Additionally, exploring these factors may be important for the development of functional school-based preventive and therapeutical programs.

Consequently, the hypothesis of the present study were that 1) impulsivity, narcissism and CU traits will be positive predictors of bullying, 2) empathy and school connectedness will be negative predictors of bullying, 3) impulsivity, narcissism and CU traits will negatively predict victimization and 4) empathy and school connectedness will predict negatively victimization.

Methods

Participants

The sample of the current study is consisted of students, of public and private, schools approved by the Ministry of Education from all the regions of the Republic of Cyprus (Nicosia, Larnaka, Limassol, Pafos and Famagusta). Only students with signed parent/guardian consent participated in the research. Students from all the regions of the republic of Cyprus participated in the current study (19% Nicosia, 21% Limassol, 21% Larnaca, 22% Pafos, 17% Ammochostos). The sample of the research consisted of 925 students, 48% boys and 52% girls with mean age 12.87 (sd=2.32).

Procedure

Researchers visited all the schools and informed the head teachers about the importance and the procedure of the current study. Then the online surveys were forwarded to the schools' emails and the head teachers then forwarded them to the students. Data collection was done electronically via an online survey that was completed by the students (10-18 years old). An informed consent was attached before the questions related to the research appeared, so the participants would get informed about the purpose of this research and their confidentiality. Participants had to give their permission to participate in order to be able to proceed with the survey. Then, all the information followed an anonymization process as all the participants had a unique participant code (Case ID). All signed consent forms were stored in a secured space at the Laboratory of Developmental Psychopathology separately from any other data. The set of information that was collected from the individual questionnaires was automatically stored on the online Data Collection Platform

(Redcap) which is compatible with the Personal Data Protection Act (GDPR), with the use of the unique password. This protected the confidentiality of all the information, as they were not matched by any demographic details of the participants. Only the researcher had access to the personal information of the participants as well as to the information that were collected. The data files that emerged from the survey, with the unique code of the participant, were transferred to the statistics file SPSS analysis by the researcher, which were password protected. The data was analyzed only based on the use of the unique code of the participant.

Measures

Bully/Victim Questionnaire (BVQ; Olweus, 1996):

BVQ was used to measure the self-reported victimization and the self-reported bullying perpetration among the students. For the purpose of the study, the Greek version of the questionnaire that has been translated back and forward was used and the scores for bullying and victimization were calculated separately. Students responded to 24 items on a five-point scale (0 = “never”, 1= “once or twice a year”, 2= “once a month”, 3 = “once a week”, 4= “several times a week”). Previous study in Cyprus found that Cronbach’s alpha had a value of .76 and .83 for the bullying and the victimization subscales respectively (Charalampous, et al., 2019).

Inventory of Callous-Unemotional Traits (ICU; Frick, 2004):

ICU was used to measure the CU traits among the students of the sample. For the purpose of the current study, the standardized version of the questionnaire that

has been translated back and forward in the Greek language was used and the total scores were calculated. Student were asked to answer to 12 items that are rated on a four-point Likert scale from 0 (not at all true) to 3 (definitely true). Some of the questions of the survey are “I am concerned about the feelings of others,” “I care about how well I do at school or work,” and “I do not show my emotions to others”. Previous research has suggested that Cronbach’s alpha ranged from .86-.88 (Kimonis, Fanti, & Singh, 2014).

Antisocial Process Screening Device (APSD; Frick & Hare, 2004):

The APSD is a self-report derivative of the Psychopathy Checklist-Revised (Hare, 2003), used to measure psychopathic traits in children and adolescents. The APSD consists of 20-items, with each item rated on a Likert scale from 0 (not at all true) to 2 (definitely true). For the purposes of the current study, students answered to 7 items from the two subscales of the APSD. The two subscales are narcissism (e.g., “uses other people to get what s/he wants”) and impulsivity (e.g., “engages in risky or dangerous activities”). The standardized version of the questionnaire that has been translated back and forward in the Greek language was used and the total scores were calculated. A recent study found in the subscale of impulsivity, $\alpha = .70$ and in the subscale of narcissism, $\alpha = .81$ (Goulter, et al., 2021)

Basic Empathy Scale (BES; Jolliffe and Farrington, 2006):

The scale has two subscales: the cognitive (9 items) and affective empathy subscales (11 items). Items are scored on a 5-point Likert scale; the possible scores to be obtained from the cognitive and affective empathy subscales ranged from 9 to 45

and from 11 to 55, respectively. Higher scores indicated a higher level of empathy. For the purpose of the study, the Greek version of the questionnaire that has been translated back and forward was used and the scores for cognitive and affective empathy were calculated separately. Previous study that has been conducted in Cyprus found that the Cronbach's alpha was .79 for the cognitive empathy .73 for the affective empathy (Georgiou, & Stavrinides, 2012).

Resnick School Connectedness Questionnaire (Resnick et al., 1997):

School connectedness was assessed using 6 items to measure 3 subscales: teacher support, school belonging, and classmate support. Items were answered using a 4-point Likert scale ranging from 3 (strongly agree) to 0 (strongly disagree). Higher scores represented higher levels of student connection to the school. For the purpose of the study, the Greek version of the questionnaire that has been translated back and forward was used and the total scores were calculated. According to previous research the reliability was $\alpha = .75$ (Loukas, Suzuki, & Horton, 2006).

Plan of analyses

A series of multiple hierarchical regression analyses was performed, in order to investigate the contribution of the risk factors and the protective factors in the prediction of bullying and victimization.

Results

For the purposes of the current study, impulsivity, narcissism, and CU traits were investigated as predictive risk factors of bullying and victimization while empathy and school connectedness were investigated as predictive protective factors of bullying and victimization.

Findings of bullying

To investigate the predictive role of individual and environmental factors in bullying, hierarchical regression analysis was performed. Before the analysis, all the necessary assumptions were tested. Specifically, at the first step, impulsivity, CU traits and narcissism were entered as predictors. At the second step, cognitive empathy and affective empathy were added and at the third step school connectedness was also added. Bullying was used as the outcome variable. The enter method was used.

Regression analysis showed that at the first step, narcissism ($b=.15$, $\beta=.27$, $p<.001$) and impulsivity ($b=.05$, $\beta=.13$, $p<.05$) were positive predictors of bullying. This model explained 13.8 % of variance. By adding cognitive and affective empathy R^2 was .14. However, affective empathy and cognitive empathy were not significant predictors of bullying ($p>.05$). Additionally, school connectedness negatively predicted bullying ($b=-.05$, $\beta=-.18$, $p<.01$), $R^2=.17$. These data showed that students with higher levels of narcissism and impulsivity and lower level of school connectedness are more likely to engage in bullying behaviors.

Findings of victimization

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To examine the predictive role of individual and environmental factors to victimization, hierarchical regression analysis was performed. Before the analysis, all the necessary assumptions were tested. Specifically, at the first step, impulsivity, CU traits and narcissism were entered as predictors. At the second step cognitive empathy and affective empathy were added and at the third step school connectedness was also added. Victimization was used as the outcome variable. The enter method was used.

Outcome from regression analysis revealed that at the first step narcissism ($b=.17$, $\beta=.14$, $p<.001$) and impulsivity ($b=.12$, $\beta=.14$, $p<.05$), $R^2=.05$ positively predicted victimization. At the second step by adding affective and cognitive empathy results showed that only affective empathy was a positive predictor of victimization ($b=.06$, $\beta=.15$, $p<.05$), $R^2=.08$. At the third step school connectedness was added, $R^2=.16$. Narcissism ($b=.16$, $\beta=.13$, $p<.05$) and affective empathy ($b=.07$, $\beta=.16$, $p<.01$) predicted positively victimization, whereas school connectedness ($b=-.20$, $\beta=-.30$, $p<.001$) negatively predicted victimization. These findings conclude that students who had higher levels of narcissism and affective empathy and lower levels of school connectedness present higher risk to be victimized in the school.

Discussion

The current study aimed to investigate the predictive impact of specific risk and protective factors on bullying and victimization among students. Narcissism, impulsivity and CU traits were investigated as risk factors while school connectedness and empathy were investigated as protective factors.

The results support the hypothesis that narcissism positively predicts bullying. Individuals with narcissistic characteristics engage in bullying behavior in order to achieve social gain and dominance by intimidating their peers (Fanti, & Frangou, 2018). In this way, bullies tend to maintain their grandiose self-image (Fanti, & Henrich, 2015). The results of the current study were similar to previous studies that proved that bullying behaviors can positively be predicted by narcissism (Farrell, & Vaillancourt, 2019). Previous studies have proved that narcissistic behavior during adolescence was positively related with bullying after a year (Fanti, & Henrich, 2015). Moreover, previous research mentions that individuals high on narcissism were less likely to stop engaging in bullying behavior across time proving that narcissism predicts bullying behavior longitudinally as well (Fanti, & Kimonis, 2012). However, the current research did not confirm the validity of the hypothesis that narcissism predicts negatively victimization. Contrary, our study found that narcissism can positively predict victimization. This finding is in accordance with previous studies that found that individuals with high narcissistic traits may perceive themselves as victims of others' more often than individual with low narcissistic traits (McCullough et al, 2003). However, it seems that even though narcissism was related to the onset of victimization during early adolescence, it is not related to continuation

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of victimization into middle adolescence (Fanti, & Kimonis, 2012). According to

Fanti & Kimonis (2012), students in early adolescence may be more vulnerable and

might be placed at higher risk for being victimized. Additionally, bibliography

mentions that if highly narcissistic students fail to maintain and strengthen their self-image, they have an increased risk for peer victimization (Fanti, & Henrich, 2015).

Narcissism was as well positively correlated with cyber victimization (Zerach, 2016).

Our initial hypotheses were that impulsivity would positively predict bullying and negatively predict victimization. However, one of our hypothesis was confirmed while the other one was not supported. Current study has found that high levels of impulsivity can predict both bullying and victimization among students. According to previous studies impulsivity is linked to victimization (Despota, Kokkinos, & Fanti, 2021). Our findings are in accordance with the longitudinal study of Fanti, & Kimonis, 2012 that mentioned that students that score high on impulsivity had increased chances of being victimized at age 12. Moreover, the same study stated that this group of adolescent had a more stable course of victimization at age 14. According to the bibliography, impulsive adolescents tend to exhibit little forethought. Consequently, their impulsive behavior increases the risk of getting themselves in risky situations like peer victimization (Jang, et. al., 2003). Moreover, previous publications have stated that impulsive individuals tend to present decreased social skills as well as lack of behavioral and emotional behavioral control. These characteristics increase the risk of getting involved in behaviors that get the attention of bullies and encourage victimization (Fanti, & Kimonis, 2012). As mentioned above, in the current study impulsivity was found to predict bullying behavior. The lack of emotional and behavioral control that was mentioned above puts impulsive

students at a higher risk of becoming perpetrators as well. Adolescents high on impulsivity tend to have the need for immediate satisfaction of their emotional needs and act without thinking of the possible consequences of their actions. (Orue, Calvete, & Gamez-Guadix, 2016). Several previous studies that investigated the link between impulsivity and bullying have concluded that impulsivity is a positive predictor of bullying behavior. Our findings agree to the longitudinal study of Georgiou, Charalambous, & Stavrinides (2020), that was conducted in Cyprus among 558 adolescents with ages from 14 to 17 years old that found significant positive correlation between impulsivity and bullying. These findings can as well be explained by the fact that individuals with high levels of impulsivity have lower levels of self-control that often lead to engaging in bullying behaviors (Haynie et al., 2001).

Even though previous studies have linked individuals with CU traits to bullying behaviors (Viding et al., 2009; van Geel et al., 2017; Fanti and Kimonis, 2012) and victimization (Wang et al., 2019), the current study did not find any statistically significant result. Suggesting that CU traits are not a predictive factor in bullying nor victimization behaviors among the current sample. First possible reason for that is that the sample that has participated in the current study did not have enough individuals who exhibited CU traits. It is also possible that other intervening variables or interactions could moderate or mediate this relationship. Moreover, another reason that could justify the results is that the tools used to measure CU traits or bullying and victimization might not have been sensitive enough or might not adequately reflect the complexity of the certain variables.

Our findings validate the hypothesis that school connectedness can negatively predict bullying behaviors. More specifically, it seems that students that

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feel safe at school, are involved in meaningful roles at school and have opportunities for academic and creative engagement (Whitlock, 2006) are less likely to become perpetrators in bullying episodes in the school setting. According to Young (2004) strong school bonds are related to reduced risk of bullying behaviors. Results of the current study substantiate the initial hypothesis that school connectedness can negatively predict the involvement of students in bullying episodes as victims as well. Meaning that students that have a strong connection with their school are less likely to be victims of school bullying. Previous studies seem to agree to the current findings as they have found as well that strong school connectedness was related to reduced risk of victimization behaviors (Young 2004; Nickerson, Brock, Chang, & O'Malley, 2006). A cross-sectional study held in the United States over a 2-year period found that school students that with high levels of school connectedness have decreased risk of being victimized in the school setting (Duggins, et al., 2016). According to a study that was conducted in California among students in grades 5 to 12 higher levels of school connectedness decrease the risk of being victimized by peers (You, et al., 2008).

Contradictory to previous studies (Kaukiainen et al., 1999; Álvarez-García, et al., 2018), and to our hypothesis the current study did not find any statistically significant relation between empathy and perpetrators. Moreover, our initial hypothesis that empathy will negatively predict victimization has been refuted as the evidence collected exhibited that high levels of affective empathy can predict higher levels of victimization. The same conclusion derives from Kokkinos, & Kipritsi (2012), who found in a sample of 206 Greek students, that victimization was predicted by high levels of affective empathy. Similar results are derived from the

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study of van Noorden et al. (2016), that investigated the association of empathy and victimization. In accordance to our results, it was found that victims of bullying reported more affective empathy than non-victims. It seems that children that experience victimization more often experience others' emotions to a larger extent, are more sensitive to emotions in general and display their emotions to a larger extent (van Noorden et al., 2016). This may make them more appealing to bullies who want to hurt them and see the result of their bullying (van Noorden et al., 2016). In conclusion, these findings support the statement that individuals with high levels of affective empathy display higher possibility of reporting victimization episodes than they peers as they are more aware of their emotional state (Garner, & Lemerise, 2007). This particular study did not find any significant relation between cognitive empathy and victimization. While according to our hypothesis a negatively predictive association was expected, the nature of human behavior and the aspects of these variables might not have yielded a straightforward relationship in this specific study. Moreover, possible contextual factors such as cultural differences or specific environments might have played a role in the lack of significant differences between the two variables.

Limitations, Strengths and Clinical Implications

Current study has some limitations that should be mentioned. First, the sample was consisted only of students. If parents and teachers would have participated in the research as well, we would have achieved a more representative image of the phenomenon of bullying and victimization in the Republic of Cyprus. Secondly, there were some issues regarding data collection as there was a significant amount of missing data as some students did not answer all the items.

However, ongoing research has a notable number of strengths. To begin with, the sample size was significantly considerable. Moreover, our research has external validity as findings are applicable and generalizable to real-world settings. It is of notable importance the fact that the current study has investigated personal, as well as contextual factors. As far as we know, it is one of the few studies that was conducted in the Republic of Cyprus that investigated both categories of factors. Lastly, ethical issues were taken into consideration as informed consent was essential and participants' confidentiality was ensured throughout the study.

Present research is of high importance as it offers to experts significant information about the specific factors that were investigated and their role in the phenomenon of bullying and victimization in the school area. The present investigation can be used by specialists in the development of school-based preventive and interventional programs that aim to decrease the in-question phenomenon. Bullying is one of the main challenges that School Psychologists have to face on a weekly basis. An important number of students get involved in bullying episodes either as perpetrators or victims. Evidence based plans that include teachers and parents and that aim to reduce bullying by targeting the decrease of the factors

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that were found to predict positively bullying and victimization and the increase of the factors that were found to negatively predict these behaviors should be implemented in schools. Future studies should investigate the role of furthermore personal and contextual factors in this phenomenon in order to achieve the implementation of programs that will take into consideration all the important aspects.

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Conclusion

The current study was conducted in order to investigate the predictive effect of specific risk and protective factors on bullying and victimization in the school setting. This study is of highly importance in the Republic of Cyprus as the phenomenon of bullying is very concerning. Previous researches conducted in our country have shown that there is an upward trend of this phenomenon. This means that the number of students that get involved in bullying as bullies or victims increases dramatically every year.

As it is well known, bullying is a destructive behavior that harms individuals in the school setting. It is a phenomenon that leaves student with emotional scars and consequences that can last a lifetime. As future school psychologists we have an important role in the decrease of this kind of behavior in the school setting and in the application of strategies that foster a safe and inclusive environment for all students. Fighting bullying requires collective effort and part of our role is to collaborate with parents, teachers, community, and policymakers in order to transform schools into a safe place where every student feels accepted and included. It is of highly importance to create and apply in the school setting programs that aim to increase empathy and school connectedness as the current study suggested. Our programs should include principles such as open dialogue, conflict resolution, and acceptance of diversity. These programs should provide targeted interventions and awareness campaigns that empower both students and teachers. By implementing preventive and interventional measures and fostering a culture of empathy and belongingness, students will be able to prevent and address bullying behavior effectively. It is of crucial importance to

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understand that such programs will not only address immediate concerns but also

contribute to the long-term psychological well-being of students.

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Appendix

Table 1. Multiple Regression analysis for dependent variable Bullying from the independent variables CU traits, Impulsivity, Narcissism, Empathy and School Connectedness

<i>Model</i>	<i>B</i>	<i>SE B</i>	β	<i>R</i>	<i>R</i> ²
Step 1	.787	.048		.372	.138
CU Traits	.026	.034	.043		
Narcissism	.148	.036	.271**		
Impulsivity	.054	.027	.131*		
Step 2	.765	.080		.375	.140
CU Traits	.030	.035	.050		
Narcissism	.147	.036	.270**		
Impulsivity	.053	.027	.129*		
Affective Empathy	.010	.012	.048		
Cognitive Empathy	-.001	.016	-.002		
Step 3	.921	.093		.411	.169
CU Traits	.014	.035	.023		
Narcissism	.147	.035	.270**		
Impulsivity	.045	.027	.110		
Affective Empathy	.012	.012	.059		
Cognitive Empathy	.006	.016	.022		
School Connectedness	-.053	.017	-.176*		

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

Table 2. Multiple Regression analysis for dependent variable Victimization from the independent variables CU traits, Impulsivity, Narcissism, Empathy and School Connectedness

<i>Model</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>R</i>	<i>R²</i>
Step 1	.853	.113		.234	.055
CU Traits	-.018	.081	-.013		
Narcissism	.167	.084	.136*		
Impulsivity	.124	.063	.135*		
Step 2	.573	.187		.285	.081
CU Traits	.017	.081	.012		
Narcissism	.159	.083	.129		
Impulsivity	.122	.062	.133		
Affective Empathy	.066	.027	.145*		
Cognitive Empathy	.028	.038	.045		
Step 3	1.159	.211		.402	.162
CU Traits	-.046	.078	-.034		
Narcissism	.158	.079	.129*		
Impulsivity	.092	.060	.100		
Affective Empathy	.074	.026	.163**		
Cognitive Empathy	.053	.037	.084		
School Connectedness	-.199	.038	-.295**		

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