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Aggressive Communication Style as Predictor of Cyberbullying, Emotional Well-being, and Personal Moral Beliefs in Adolescence

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A B S T R A C T

Different forms of verbal aggression are often presented in cyberbullying and are used to harm others in online communication. This study proposed to understand the influence of an aggressive communication style on adolescents' intentions to engage in cyberbullying, their emotional well-being, and personal moral beliefs. A convenience sample of 218 adolescents (M_{age} = 14.67, *SD* = 0.84, 53% girls) in Portugal responded to questionnaires. Structural equation modeling analyses were conducted to test mediating effects. An aggressive communication style may lead adolescents to perceive cyberbullying behavior as fair, and to decrease their emotional well-being. Moreover, this communication style may contribute to adolescents' intentions to engage in cyberbullying, and whether they believe this type of behavior is fair or unfair may determine those intentions. These findings contribute to an understanding of determiners of cyberbullying and the provision of insights to develop school interventions in this field.

Palabras clave:
Adolescentes
Intención acerca de un comportamiento
Ciberacoso
Bienestar emocional
Creencias morales personales

Un estilo de comunicación agresivo como predictor del ciberacoso, el bienestar emocional y las creencias morales personales en la adolescencia

R E S U M E N

Diferentes formas de agresión verbal están presentes a menudo en el ciberacoso y se utilizan para dañar a otros en la comunicación online. Este estudio propuso comprender la influencia de un estilo de comunicación agresivo en la intención de los adolescentes de participar en el ciberacoso, su bienestar emocional y sus creencias morales personales. Una muestra de conveniencia de 218 adolescentes (M_{edad} = 14.67, *SD* = 0.84, 53% niñas) en Portugal respondió a los cuestionarios. Se realizaron análisis de modelado de ecuaciones estructurales para probar los efectos de mediación. Un estilo de comunicación agresivo puede llevar a los adolescentes a percibir el comportamiento de ciberacoso como justo y a disminuir su bienestar emocional. Además, este estilo de comunicación puede contribuir a la intención de los adolescentes de participar en el ciberacoso y la creencia de que este tipo de comportamiento sea justo o injusto puede determinar esa intención. Estos hallazgos contribuyen a comprender los factores determinantes del ciberacoso y a proporcionar información para desarrollar intervenciones escolares en esta área.

Peer-to-peer violence has been increasing globally amongst youth, both inside and outside of school (UNICEF, 2017). Cyberbullying refers to a particular form of violence among peers, which is often considered an extension of bullying, defined as willful and repeated harm imposed through electronic means (Patchin & Hinduja, 2006). Thus, it can occur anywhere through social media. Cyberbullying may affect adolescents' mental health and well-being and, in turn, relate to difficulties in school adjustment and performance (UNICEF, 2017). Cyberbullying may be linked to an aggressive communication style, which is an individual factor that may be expressed while communicating with others (Lin et al., 2016). This style of communication seems to be related with aggressors' behavior (Bandura, 1973; Kirchner et al., 1979).

Various theories have brought forth important contributions with regards to the determiners of behavior. According to the Social Cognitive Theory (Bandura, 2001), personal cognitive factors (e.g., knowledge, beliefs/attitudes, and expectations), environmental factors (e.g., social norms, access in community, and influence on others/environment),

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and behavioral factors (e.g., skills and practice) determine individuals' behavior. In this study, we understand an aggressive communication style as a personal cognitive factor. Communication styles may be characterized as cognitive processes which entail micro behavior to get literal meaning across from one individual to another, consisting of individual distinctive features which reflect in the communication act (Agarwal & Gupta, 2018). According to Jakubowski and Lange (1978), there are three main communication styles which relate to unique forms of verbal and nonverbal communication: assertiveness, passivity, and aggressiveness. Assertiveness refers to the expression of personal opinions, thoughts, needs, and feelings in a direct, honest, and adequate way. Passivity consists of denying personal rights and not being able to express personal needs. Finally, aggressiveness entails claiming personal needs and desires without respecting others. Classical studies on aggressive behavior (Bandura, 1973; Kirchner et al., 1979) have connected the combination of deficits in assertiveness and the predominance of an aggressive communication style to aggressors' behavior. In cyberbullying events, aggressive language is one of the primary means used to communicate with others, provoking embarrassment, hurt, and psychological harm (Lin et al., 2016; Veiga Simão et al., 2018). The most frequent forms of verbal aggression in this phenomenon refer to verbal attacks (e.g., on intelligence and physical appearance), insults, and threats (Francisco et al., 2015; Rachoene & Oyedemi, 2017). Therefore, it is relevant to understand how an aggressive communication style affects adolescents' intention to engage in cyberbullying.

Behavioral intentions, defined as individuals' perceived probability that they will engage in certain behavior or achieve certain goals (Lenhart, 2007), play an important role in cyberbullying since they may predict actual behavior (Ajzen, 1991). Specifically, according to the Theory of Planned Behavior, individuals consider the implications of their actions before deciding to act (Ajzen & Fishbein, 1980). Considering that personal cognitive factors may influence behavioral intentions (Ajzen, 2008) and behavior (Bandura, 2001), we argue that an aggressive communication style, as a personal cognitive factor (Agarwal & Gupta, 2018), may determine behavioral intentions, which in turn may influence behavior (Ajzen, 1991). In line with this idea, we hypothesize that:

Hypothesis 1: An aggressive communication style will predict adolescents' intentions to engage in cyberbullying behavior, such that those who have this style of communication will report greater intentions to engage in this type of behavior.

An Aggressive Communication Style and its Relation to Emotional Well-being

According to Keyes's model (2007), positive mental health and well-being can be defined by the presence of subjective well-being, which goes beyond the absence of mental illness. In line with this theoretical framework, emotional well-being is one of the three main dimensions contributing to subjective well-being (along with psychological and social dimensions), referring to the predominance of satisfaction with life and the experience of positive emotions as opposed to negative ones (e.g., anger, sadness, fear; Diener, 1984). Cyberbullying is known to negatively impact this dimension of well-being in adolescents. For instance, students who were aggressors and/or victims of cyberbullying reported less satisfaction with their lives (UNESCO, 2017), and victims reported more emotional adjustment difficulties, such as depressive, anxiety, and psychosomatic symptoms and low self-esteem (e.g., Cowie, 2013; Ortega et al., 2012). On the other hand, a state of positive mental health and well-being can act as a protective factor and significantly change the impact of cyberbullying (Brailovskaia et al., 2018). Therefore, emotional well-being seems to play an important role in cyberbullying, especially in terms of the effect it may have on adolescents.

Anger is a predominant negative emotion shared by adolescents in cyberbullying events and also an important predictor of cyberbullying behavior (Lonigro et al., 2014). Specifically, anger can be expressed through aggressive behavior toward others (i.e., in aggressors), may be suppressed or may turn toward the self (i.e., in victims). In addition, coping negatively with anger seems to result in higher levels of cyberbullying behavior (Den Hamer & Konijn, 2016). Moreover, cyberbullying aggressors seem to reveal lower emotional regulation (Lin, 2017) and greater difficulties regulating negative emotions, such as sadness and anger, which seem to be related to different forms of aggressive behavior (Zeman et al., 2002). Considering the definition of emotional well-being (Diener, 1984), the predominance of negative emotions, such as anger, may lead individuals to experience low emotional well-being.

Anger as a personal factor (i.e., emotion) seems to determine cyberbullying behavior, which goes in line with a socio-cognitive perspective on the factors determining an individual's behavior (Bandura, 2001). It is usually directed towards others through words in cyberbullying, since aggressive language is often used to communicate with others in this phenomenon (Veiga Simão et al., 2018). Accordingly, low levels of positive emotions might be related to anger and help explain the relation between cyberbullying and emotional well-being. Thus, we argue that an aggressive communication style may also be related to emotional well-being. Therefore, we hypothesize that:

Hypothesis 2: An aggressive communication style will predict adolescents' emotional well-being, such that those who have this style of communication will report less emotional well-being.

An Aggressive Communication Style and the Role of Personal Moral Beliefs in Behavioral Intentions

This research considers the social cognitive theory of moral agency (Bandura, 2008) to conceptualize personal moral beliefs as being influenced by an aggressive communication style and as determiners of behavioral intentions. According to this perspective, individuals develop agency through self-regulation, which links thought to action (Bandura, 2001). In moral agency, individuals refrain from behaving in ways which violate their moral standards (Osofsky et al., 2005). Self-regulation of harmful behavior functions at a personal level and encompasses social aspects. Individuals are not autonomous moral agents, but rather behave morally according to cognitive, affective, and social influences (Bandura, 2008). Moreover, morality is socially founded, thus, moral standards function at individual and social level, and may cause substantial harm if these standards are not within social boundaries (Bandura, 2008). An aggressive communication style may be linked to how individuals interpret the world surrounding them and the specific circumstances they experience (Crick & Dodge, 1994). How individuals interpret the world is linked to the attitude they have towards these circumstances (Dill et al., 1997). These attitudes may be determined by other individual factors, such as personal beliefs, which Ajzen and Fishbein (1980) have defined as subjective cognitions about different aspects of life in general (i.e., behavior or attributes). An aggressive communication style is often a sign of someone wanting to protect his/her own ideas and opinions, as well as having them being accepted by others, even if it is at the expense of others (Salmivalli & Nieminen, 2002). That is, individuals with this communication style tend to interpret situations as if they were battles, which they want to win at all cost. In view of this, this study proposes that an aggressive communication style may be related to adolescents' personal moral beliefs about cyberbullying. In accordance, we argue that:

Hypothesis 3: An aggressive communication style will predict adolescents' personal moral beliefs about cyberbullying

behavior, such that those who have this style of communication will believe that this type of behavior is fair.

There seems to be a strong relationship between adolescents' attitudes towards cyberbullying and their behavioral intention (Heirman & Walrave, 2012). Specifically, attitudes towards cyberbullying seem to be a strong predictor of adolescents' behavioral intention to engage in cyberbullying. To fully understand adolescents' behavioral intentions, and consequently behavior, it is crucial to understand how personal and social factors influence psychological processes to yield behavioral effects (Bandura, 2005). This study focuses specifically on adolescents' personal moral beliefs and how these may be related to their intentions to engage in cyberbullying. Social experiences affect behavior in the different contexts in which they unfold and how individuals interact within these situations influences how their moral standards develop throughout time and, therefore, guide their behavior (Bandura, 2005). This theoretical approach may help explain how these processes occur in cyberbullying, which is a social phenomenon (Allison & Bussey, 2017). In line with this, we argue that moral beliefs may determine adolescents' behavioral intentions and consequently, their behavior. For instance, lower moral standards have been linked to higher levels of cyberbullying behavior (Perren & Gutzwiller-Helfenfinger, 2012). Thus, we focus on adolescents' personal moral beliefs about cyberbullying behavior, since these beliefs may influence their actions (Barchia & Bussey, 2011). To specify, adolescents may not intervene or may even interfere in the situation in an aggressive manner if they believe the actions of the aggressor are justifiable, which constitutes a moral disengagement mechanism with regards to the situation (Allison & Bussey, 2017; Barchia & Bussey, 2011). Research has shown how moral disengagement could predict adolescents' aggressive behavior in cyberbullying (Pornari & Wood, 2010). Therefore, we hypothesize that:

Hypothesis 4: Adolescents' personal moral beliefs about cyberbullying behavior will predict their intentions to engage in this type of behavior, such that those who find cyberbullying behavior unfair will have lower intentions to engage in this type of behavior.

How individuals interact in face-to-face contexts is different from online environments, especially since pseudonymity and anonymity enable them to be more disinhibited (Bandura, 2004). Furthermore, online contexts enable individuals to disguise their identity and detach themselves from the physical world due to the lack of personal and social sanctions for injurious behavior. Therefore, individuals may feel a moral disconnection more easily when engaging in hurtful behavior and find it more difficult to regulate their moral conduct. In line with this, we argue that adolescents' personal moral beliefs help explain the nature of the relationship between an aggressive communication style and their intentions to engage in cyberbullying behavior. Accordingly, we hypothesize that:

Hypothesis 5: Adolescents' personal moral beliefs about cyberbullying behavior will mediate the relationship between an aggressive communication style and their intentions to engage in this type of behavior, such that the indirect effect will be lower than the direct effect.

In conclusion, this paper intends to achieve a better understanding of the role of a verbal aggressive communication style in cyberbullying. Thus, we studied the relationship with different individual variables, which may be associated with this phenomenon. Specifically, the aims of this study are to assess the relationship between an aggressive communication style and intentions to engage in cyberbullying behavior. We also tried to understand the role of an aggressive communication style on adolescents' emotional well-being. Furthermore, we intended to understand how this communication style influences adolescents' personal moral beliefs about cyberbullying, since they enable individuals to gain control over their thoughts, feelings, motivation, and actions (Bandura, 2006). Finally, to understand the specific role of personal moral beliefs as potential determiners of individuals' actions (Bandura, 2006), another aim of this study was to determine the mediating effects of personal moral beliefs in the relationship between an aggressive communication style and adolescents' intentions to engage in cyberbullying. Figure 1 presents our conceptual model.

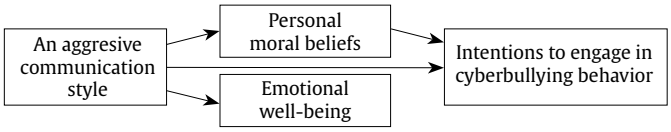

Figure 1. An aggressive Communication Style Predicting Emotional Well-being, Personal Moral Beliefs, a Mediator Variable, and Intentions to Engage in Cyberbullying Behavior.

Method

Participants

A convenience sample of 218 9th graders (M_{age} = 14.67, *SD* = 0.84, 53% girls) from three public schools in Lisbon participated in this study. Student participation in data collection depended on students' own volunteerism and parental consent. Specifically, all students from the schools were contacted. However, only those who had parental consent and gave their own consent participated in the study. The final sample was therefore not chosen by the research team, as this could create bias in the participation, but rather, only based on parental and students' own consent.

Instruments

During the initial development of the measures used in the present study within our research projects on cyberbullying (SFRH/BPD/110695/2015; PTDC/MHC-PED/3297/2014), facial validity was tested with three adolescents and by a panel of seven experts to understand whether the items of assessment instruments were appropriate for the specific constructs and assessment objectives (Hardesty & Bearden, 2004).

Aggressiveness in Interpersonal Communication (AIC). This instrument is a 10-item task and was developed based on Jakubowski and Lange's (1978) theory of communication styles, specifically with regards to aggressiveness. As this resource is a performance task, and not a questionnaire, we decided to assess its internal structure and reliability with the Item Response Theory (IRT) approach by computing Rasch analysis with the Winsteps program (Linacre, 2013), which measured its unidimensionality, as well as participants' scores of aggressiveness in hypothetical situations. Participants were asked to respond to daily life situations of adolescents (e.g., "A friend says to you [Your shirt is really horrible!]. How likely do you respond? [What's that got to do with you?]"). In doing so, they should position themselves in each situation and respond in the manner presented in terms of likelihood from 1 (*not likely at all*) to 5 (*very likely*). Winsteps enabled us to estimate participants' scores on a one-dimensional logit scale and evaluate the properties of the AIC.

We used Rasch polytomous methodology to examine the instrument and participants' scores. All items were assessed to understand whether they had excessive infit and outfit mean square residuals. None of the items showed infit/outfit higher than 1.5, as well as *z* statistic > 2.00, as suggested in the literature (Bond & Fox, 2007). We considered other reliability indicators from Rasch measures for AIC, including Cronbach's alpha, Person separation reliability (PSR), and item separation reliability (ISR) (Smith, 2001). AIC revealed a Cronbach's α of .72, a PSR of .69, and an ISR of .99.

These scores indicate good internal consistency reliability (Fox & Jones, 1998), even though the PSR revealed difficulty on participants' behalf. After removing subjects with excessive infit/outfit, PSR was .70, ISR remained stable (.99), and Cronbach's α increased to .73.

Personal moral beliefs about cyberbullying behavior. This instrument is a 9-item one-dimensional questionnaire that asks adolescents (on a Likert-type scale from 1 = *fair* to 6 = *unfair*) to think about whether the specific behavior of cyberbullying is fair or unfair ("I think seeing someone being threatened online is fair/unfair"; α = .81). After an exploratory factor analysis explaining 59% of the variance, the values of a confirmatory factorial analysis were good according to the literature in a previous study (Hooper et al., 2008), namely, $\chi^2(22) = 26.55$, $p > .05$, $\chi^2/df = 1.21$, CFI = .98, GFI = .93, IFI = .98, RMSEA = .02 [.00, .04], SRMR = .04, AIC = 72.55 (see Veiga Simão et al., 2018).

Behavioral intentions in cyberbullying is a two-dimensional questionnaire. This instrument asks adolescents (on a Likert scale of 1 = *not probable* to 5 = *very probable*) to indicate their behavioral intentions regarding cyberbullying behavior. After an exploratory analysis explaining 85% of the variance, confirmatory factorial analysis values were good according to the literature in a previous study (Hooper et al., 2008), namely $\chi^2(134) = 296.06$, $p < .001$, $\chi^2/df = 2.20$, CFI = .91, IFI = .91, RMSEA = .04 [.03, .05], SRMR = .09, AIC = 370.06. We only used "intentions to engage in cyberbullying behavior" (α = 0.91), which asked adolescents whether they would engage in cyberbullying behavior in the next six months (i.e., "If in the next six months I see someone threatening someone on the Internet, there is a possibility that I will do the same.").

Emotional well-being sub-scale. This instrument is a 3-item sub-scale of the Portuguese version of the Mental Health Continuum-Short Form for adolescents (Matos et al. 2010), which evaluates the predominance of positive emotions and quality of life (e.g., "How often have you felt happy?"; α = .79) on a 6-point Likert type scale (varying from 0 = *never* to 5 = *every day*). A confirmatory factorial analysis revealed good values according to the literature (Hooper et al., 2008), namely $\chi^2(72) = 194.15$, $p <$, $\chi^2/df = 2.697$, CFI = .93, IFI = .93, RMSEA = .06 [.05, .08], SRMR = .05, AIC = 260.15.

Procedure

In a first phase, we requested and were granted authorization to conduct this study by the Ministry of Education of Portugal, the Portuguese National Commission of Data Protection, the Deontology Committee of the Faculty of Psychology of the University of Lisbon, schools' boards of directors, teachers, parents, and adolescent participants. The instruments were administered to adolescents in a classroom context with computers with Internet access in their own schools by researchers of this study. Prior to filling out the instruments and performing the AIC task, all students were informed that their participation was based on confidentiality and their data would remain anonymous, and that they could have psychological support (i.e., with a professional psychologist) if they needed to talk to someone during or after participating. Moreover, we informed all students that they could quit at any time they wished to. All the students in the final sample chose to participate.

Data Analysis

Database was previously treated for missing values by transforming raw data into *z* scores and by removing outliers. Before performing structural equation modeling, we computed Pearson correlations of the variables included in our structural equation model. We evaluated the significance of regression coefficients with AMOS (v. 23, SPSS Inc., Chicago, IL). Parameters were estimated through the asymptotically distribution-free method due to the non-normal distribution of data, which is characteristic of cyberbullying data. Normality of variables was evaluated with the univariate and multivariate skewness and kurtosis. We used χ^2 tests to assess the significance of the total, direct and indirect effects (Marôco, 2010). Moreover, effects $p < .05$ were considered significant. Also, we used the bootstrapping method (2,000 samples, CI 90%) to test for mediation effects (Preacher & Hayes, 2008).

Results

Table 1 shows correlations between variables in our hypotheses. An aggressive communication style was negatively related to personal moral beliefs regarding cyberbullying behavior and emotional well-being, and positively related to adolescents' intentions to engage in cyberbullying behavior.

Tabla 1. Descriptive Statistics of the Variables

Variables	Mean (*SD*)	Correlations		
		1	2	3
1. Aggressive communication style	2.09 (0.62)			
2. Personal moral beliefs	5.22 (0.65)	-.27**		
3. Emotional well-being	4.89 (0.92)	-.20**	.02	
4. Intentions to engage in cyberbullying behavior	1.45 (0.58)	.15*	-.23**	-.05

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

All predictor variables were tested (direct and indirect effects individually) in the model and were significant, as suggested in the literature (Preacher & Hayes 2008). An aggressive communication style predicted adolescents', personal moral beliefs negatively (β = -.29 with an effect size of .08), their emotional well-being negatively (β = -.20 with an effect size of .04) and their intentions to engage in cyberbullying behavior positively (β = .15 with an effect size of .03). Also, adolescents' personal moral beliefs predicted their intentions to engage in cyberbullying behavior negatively (β = -.23 with an effect size of .05). Those who believed cyberbullying behavior was unfair reported lower intentions to engage in cyberbullying behavior.

Then, we tested a model with the independent variable an aggressive communication style, the two dependent variables, including emotional well-being and intentions to engage in cyberbullying behavior, and the "personal moral beliefs" mediator variable. The model revealed a good fit with significant direct and indirect paths of an aggressive communication style in interpersonal relations on adolescents' intentions to engage in cyberbullying behavior through personal moral beliefs and on their emotional well-being, $\chi^2(2) = .41$, $p > .05$, $\chi^2/df = .84$, CFI = 1.00, GFI = .99, IFI = 1.00, RMSEA = .00 [.00, .08], SRMR = .01, AIC = 16.41.

The standardized total effect of aggressiveness on adolescents' intentions to engage in cyberbullying behavior was .15, 90% CI [.05, .24], -.20, 90% CI [-.31, -.07] on their emotional well-being, and -.27, 90% CI [-.41, -.16] on their personal moral beliefs. The standardized total effect of adolescents' personal moral beliefs on their intentions to engage in cyberbullying behavior was -.21, 90% CI [-.33, -.08].

While an aggressive communication style had a negative direct effect on personal moral beliefs, -.28, 90% CI [-.42, -.17], it had a positive effect on adolescents' intentions to engage in cyberbullying behavior, .09, 90% CI [-.01,.17]. This means that those who revealed an aggressive communication style tended to believe that cyberbullying behavior was fair and to report greater intentions to engage in cyberbullying behavior. Personal moral beliefs had a negative direct effect on adolescents' intentions to engage in cyberbullying behavior, -.18, 90% CI [-.30, -.07].

The indirect effect of an aggressive communication style on adolescents' intentions to engage in cyberbullying behavior through personal moral beliefs was lower than the direct effect,

.05, 90% CI [.02, -.10]. This means that adolescents' personal moral beliefs diminished the effect of this negative communication style on their intentions to engage in cyberbullying behavior. The model we present also showed a significant, but negative direct effect of an aggressive communication style on adolescents' emotional well-being, -.29, 90% CI [-.46, -.11].

Discussion

Results regarding *H*1 support the notion that harmful behavior may be determined by personal factors (Bandura, 2004). Specifically, these results suggest that an individual's aggressive communication style may influence his/her behavioral intentions in relation to cyberbullying. This, in turn, highlights the importance of working styles of communication when intervening with adolescents in this phenomenon. Results which concern *H*2 help explain previous findings about the negative effects of cyberbullying on adolescents' emotional adjustment and well-being (Cowie, 2013; Ortega et al., 2012; UNESCO, 2017), since using verbal aggression to communicate with others is usually present in cyberbullying situations (Veiga Simão et al., 2018). Specifically, these results suggest that an aggressive communication style may be one of the individual factors contributing to a decrease in adolescents' emotional well-being when they get involved in cyberbullying, considering the relation between cyberbullying and anger, as a negative emotion predominant in this type of violent events and an important predictor of cyberbullying (Lonigro et al., 2014). Accordingly, if there is a predominance of negative emotions (e.g., anger, sadness, fear) instead of positive ones (e.g., happiness, joy, contentment) this reflects low emotional well-being (Diener, 1984; Keyes, 2007). Finally, results regarding *H*3 reinforce the idea that an aggressive communication style may be associated with how individuals interpret their surrounding environment, as well as the specific situations they are involved in (Crick & Dodge, 1994), which is inevitably related to the attitude (i.e., based on personal moral beliefs) they have towards these circumstances (Ajzen & Fishbein, 1980; Dill et al., 1997). Hence, these results highlight the role of an aggressive communication style in personal moral beliefs which affect an individual's attitudes in relation to cyberbullying. This is particularly relevant considering that this communication style may lead to the consideration that cyberbullying is fair, thus affecting how adolescents intend to act towards that behavior.

Accordingly, results concerning *H*4 revealed that those who believed cyberbullying behavior was unfair reported lower intentions to engage in cyberbullying behavior. This result complements results found in previous studies demonstrating that adolescents' personal moral beliefs predicted the appropriation of verbal aggressions they witnessed in cyberbullying situations to communicate with others online (Veiga Simão et al., 2018). Specifically, adolescents who may find cyberbullying behavior unfair (i.e., with high personal moral beliefs) may use less of the language they witnessed in cyberbullying situations. These beliefs may also be related to their intentions to engage in cyberbullying situations, and potentially with expressions and words they saw being used in these incidents, which in turn may contribute to an increase of aggressive interactions.

Moreover, we found that adolescents' personal moral beliefs explained the nature of the relationship between an aggressive communication style and their intentions to engage in cyberbullying behavior (*H*5). Specifically, these personal moral beliefs diminished (or controlled) the effect of a negative communication style on their intentions to engage in cyberbullying behavior. Therefore, these beliefs serve as a mediator between this communication style and adolescents' intentions to engage in cyberbullying behavior. These results reinforce the fact that moral behavior is guided and regulated by the continuous exercise of evaluative self-influence (Bandura, 2004). Specifically, individuals may intend to engage in injurious behavior, as is the case of cyberbullying, but their evaluative self-influence, which may be in the form of personal moral beliefs, hinders them from doing so (Osofsky et al., 2005). This self-directedness encompasses adolescents' moral agency, through self-regulatory processes of moral reasoning regarding cyberbullying behavior, which then lead to behavioral intentions and actions (Bandura, 2001). This reflection emphasizes the socio-cognitive approach of moral agency with regards to cyberbullying intentions and behavior, and how it directs the self in changing moral reasoning into action through self-regulatory processes (Bandura, 2001). This evidence is of substantial importance because of the influence an aggressive communication style may have on the pre-processes of cyberbullying behavior (i.e., before it occurs), which involve behavioral intentions. The role of personal moral beliefs in adolescents' engagement in cyberbullying behavior may be better understood if we consider the particularities of online contexts, namely the possibility to assume pseudonyms or anonymous profiles and the physical distance in virtual interactions. These aspects altogether may contribute to the creation of a detachment from the impact of harmful behavior towards others, leading individuals more easily to morally disengage from cyberbullying perpetration (Bandura, 2004). Accordingly, if an individual perceives injurious behavior as morally fair, this may also help explain a lower activation of self-regulatory mechanisms, particularly regarding aggressive communication.

These results were based on a rather small convenience sample of 218 students, which could constitute a limitation of this study for the generalization of findings. However, it provides as important contribution for future larger-scale studies. Accordingly, taking these findings into account, understanding how this communication style may be changed is imperative, as it may have an impact on the consequences of cyberbullying (i.e., emotional adjustment and well-being), as well as on its perpetuation amongst adolescents. For instance, using aggressive language may lead towards greater intentions to engage in cyberbullying behavior, as we hypothesized. However, whether adolescents believe this type of behavior is fair or unfair may determine if they in fact, have those intentions, which may lead to cyberbullying behavior itself. Such results seem to make sense according to the Social Cognitive Theory (Bandura, 2001), since they emphasize the determining role of personal beliefs in behavior. Also, results emphasize the relevance of personal moral beliefs in explaining adolescents' behavioral intentions concerning cyberbullying events, in line with the Theory of Planned Behavior (Ajzen, 2008).

The findings presented in this study contribute to a better understanding of the determinants of cyberbullying behavior, but they also contribute to the scientific knowledge regarding educational interventions which address this phenomenon. Specifically, they give relevance to communication as a main area to intervene with adolescents. Promoting a more assertive style of communication amongst adolescents should be a must in the design of intervention programs against cyberbullying. This could, consequently, contribute to positive mental health and well-being, which can act as a protective factor in relation to cyberbullying (Brailovskaia et al., 2018).

Conflict of Interest

The authors of this article declare no conflict of interest.

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