

# Extending the Current Theorization on Cyberbullying: Importance of Including Socio-Psychological Perspectives

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**Abstract:** Despite an abundance of research from multiple perspectives and disciplines, to date cyberbullying research has been fragmented and is often conducted atheoretically, using theories borrowed from general psychology and/or criminology, or considers only individual-level explanations such as demographics, personalities, and psychological conditions which may be insufficient to fully understand and explain the behaviour. Social psychological approaches that examine the everyday power relations in children's lives and the study of identity, relationships, and belonging systems may provide meaningful context and a more holistic perspective. The purpose of this paper is to demonstrate the positive impact of applying identity theories and a sociological perspective to the study of cyberbullying. This paper provides an overview of cyberbullying, followed by examples of how general psychological theories and theories borrowed from criminology and aggression have been applied to cyberbullying, including a cyberbullying-specific theory. Several key theories of identity that could be employed in the study of cyberbullying are then identified. Lastly, the utility of using a socio-psychological perspective using social identity theory and social network analysis to study of cyberbullying is explored. In order to manage cyber violence, we need to act on multiple levels, including individual, relational, organizational, and community levels.

**Keywords:** cyberbullying, socio-psychological approach, identity theory, social network analysis

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## 1. Introduction

Cyberbullying is an emerging but much-researched field of study (Berne *et al.*, 2013), integrating researchers from multiple disciplines representing different philosophical, theoretical and practical interests. Cyberbullying is typically defined as “any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others” (Tokunaga, 2010, p. 278). This issue affects a significant proportion of children and adolescents, as socially interactive technologies (SITs) are increasingly embraced by younger children and universally accessed by adolescents (Vaillancourt, Farris, & Mishna, 2017). Whilst benefits can include broader avenues of communication and new learning opportunities, online participation can increase the risk of being exposed to interpersonal conflict and violence, aggression, abuse, and harassment through what has been termed “cyberbullying” (Juvonen & Gross, 2008).

The social isolation adopted to face the COVID-19 pandemic intensified some elements related to digital sociability (hyperexposure, diluted public-private-intimate borders, self-spectacularization) that create conditions for the exacerbation of digital violence and the cyberbullying.

This is a moment of expansion for all the social classes of Web 2.0. If on the hand this massive use of Internet enhance the interaction between people, decreases the isolation, allows some form of normality to be reestablished, has create activities (e.g. parties, yoga, video game competition, meetings) healthily; on the other hand we assist at the spectacularization of the “I” and increase the narcissism, depression, anxiety and violence (Mkhize, & Gopal, 2021).

Often victims of cyberbullying may not report this. Awareness programmes should also be available online where the youth and children are mostly active, including encouraging young people to speak about cyberbullying. Future research on cyberbullying will also focus more on cybersecurity.

Although research on cyberbullying is rapidly increasing around the world, the resulting body of literature is fragmented due to definitional discrepancies, inconsistencies in measurement, and atheoretical inquiry (Bartlett, 2017; Berne *et al.*, 2013; Kowalski *et al.*, 2014; Tokunaga, 2010). Theory usage is essential in understanding social phenomena and yet few definitive theories have been purported to explain best cyberbullying (Savage *et al.*, 2015; Slonje *et al.*, 2013). Of the theories that have been utilized, most have been borrowed and adapted from general psychological or criminology fields. However, cyberbullying is clearly related to social identity and social groups, as it always includes perpetrators and victims who are embedded in

larger social structures and environments. The social context in which cyberbullying occurs (i.e., the position of this behaviour in everyday social life) and the relationship with identity and social interactions are key subjects that require further investigation and a recent call “indicates an urgent need to consider cyberbullying in its cultural context - its social and environmental ecology” (Myers & Cowie, 2019, p.11).

The purpose of this paper is to demonstrate the positive impact of applying identity theories and a sociological viewpoint to the study of cyberbullying. In order to demonstrate these added positive impacts, an overview of cyberbullying is provided followed by four exemplars of how general psychological theories and theories/frameworks borrowed from criminology and aggression have been adopted and applied to cyberbullying, including one cyberbullying-specific theory. An exemplar is provided of: (1) a commonly employed general psychological theory (TRA) used to try to explain cyberbullying; (2) a psychological theory borrowed from criminology and aggression (General Strain Theory); and (3) a comprehensive theory or framework of aggression adopted for cyberbullying (General Aggression Model); and (4) one cyberbullying specific theory (Barlett and Gentile Cyberbullying Model). These theories were selected because of their frequency of use in the literature and because preliminary evidence suggests these theories have some explanatory/predictive power for cyberbullying (see Barlett, 2016; 2017). Several key theories of identity that could be employed in the study of cyberbullying are then identified. Lastly, the utility of using a socio-psychological perspective using social identity theory and social network analysis to study of cyberbullying is explored.

## 2. Overview of Cyberbullying

In recent years, a proliferation of technological devices and platforms (e.g., smartphones, smart televisions, gaming systems, and wearable technology) coupled with computers and tablets have enabled users to interact with others (Mitchell *et al.*, 2016). By offering fast-paced, inexpensive, online communication, SITs are redefining the social networks of today’s youth, allowing new online social networks to form and evolve. These online networks, in turn, may affect the offline social and friendship networks in which youth are immersed (Bryant *et al.*, 2006).

In the recent EU Kids Online study, up to 75% of the youth surveyed (used their smartphone to access the internet daily and more than half of the youth reported accessing social networking sites spending on average, between two and three and a half hours each day online (Smahel *et al.*, 2020). Access to online technologies is on the increase, and as such, users are exposed to the benefits and dangers associated with their use (Vaillancourt *et al.*, 2017).

Although cyberbullying behaviours appear to be a cross-cultural phenomenon, prevalence rates are difficult to determine because researchers use different definitions, criteria, processes and reference periods to categorize participant involvement (Kowalski *et al.*, 2014). These differences limit direct comparisons (Patchin & Hinduja, 2015) and may be partially responsible for the varied prevalence rates identified in the literature (Baldry *et al.*, 2016; for a review of prevalence rates, see Kowalski *et al.*, 2014). For example, results from a 2019 study of 5,000 middle schoolers in the United States showed that 17.4% of students reported being cyberbullied while 6.3% admitted to cyberbullying others in the previous 30 days (Hinduja & Patchin, 2020). One global prevalence estimate based on a meta-analysis of bullying has estimated cyberbullying perpetration rates of approximately 15.5% and victimization rates of 15.2% (Modecki *et al.*, 2014).

The use of SITs allow youth to “torment, threaten, stalk, humiliate, embarrass, exclude, intimidate, or otherwise target others” (Broster & Brien, 2010, p. 416). Cyberbullying experiences may include derogatory messages and comments, false rumours, threats and intimidation, voting/rating websites, sexting, photo modifications, stolen passwords resulting in masquerading, and exclusion (Broster & Brien, 2010; see Willard, 2007 for a taxonomy of types of cyberbullying behaviour). In some cases, cyberbullying is “covert, insidious and anonymous because perpetrators are shielded by screen names” (Shariff & Johnny, 2007, p. 312), and the perceived anonymity can lead to disinhibition and escalated levels of cyberbullying (Broster & Brien, 2010). Other researchers report that cyberbullying perpetrators and victims frequently know each other (Rice *et al.*, 2015). Research has demonstrated that many cyberbullying perpetrators and victims are also involved in traditional bullying (Mishna *et al.*, 2012). The impacts of gender and age on cyberbullying remain unclear (Kowalski *et al.*, 2014, Tokunaga, 2010).

The majority of cyberbullying victims take few if any proactive remedial actions. Victims rarely confide in teachers (Cassidy *et al.*, 2012) and may not confide in parents (Smahel *et al.*, 2020). Youth may not report cyberbullying due to fears of being further victimized, losing access to technology, or being punished (Cassidy *et al.*, 2012). Although some believe that bullying and cyberbullying are *rites of passage* (Hinduja & Patchin, 2020), research has identified many real-world negative ramifications for both the targets and those who bully regardless of method. Cyberbullying involvement is related to innumerable psychological disturbances including depression, anxiety, low self-esteem and life satisfaction, increased suicidal thoughts, social and behaviour problems, and school issues such as absenteeism for both victim and bully (Foody *et al.*, 2015; Kowalski *et al.* 2014; for a full review see Aboujaoude *et al.*, 2015). Cyberbullying has the potential to result in lasting and sometimes deadly consequences (Vaillancort *et al.*, 2017) given the identified

independent relationship between cyberbullying and suicide (Kowalski *et al.*, 2014). More broadly, experiences with cyberbullying hinder the potential of adolescents to take full advantage of the positive opportunities that the internet and cell phones have to offer.

There are several reasons why cyberbullying involvement may have insidious and pervasive effects beyond that of bullying (Vaillancort *et al.*, 2017). First, unlike traditional bullying which tends to be restricted to a single environment (e.g., the school premises, during school hours), cyberbullying extends the bullying beyond the school grounds into the homes of victims (Patchin & Hinduja, 2006). For instance, when bullying occurs through cell phones, individuals are at risk whenever they carry their phone. Cyberbullying can take place 24 hours a day and 7 days a week (including before- or after-school hours or during the weekends) and thereby impede the victim from finding a “bully-free” safe retreat. With SITs being omnipresent in young people’s lives, it may be challenging to avoid or ignore cyberbullying (Kowalski *et al.*, 2014).

Second, electronic means of communication enable cyberbullying messages to be spread rapidly and broadly (Kowalski *et al.*, 2014). For instance, social network sites make it easy to quickly distribute hurtful texts or images within one’s network of contacts. Whereas the target of traditional bullying events is limited to the immediate group of witnesses (and possibly those who heard about the incident through word of mouth), cyberbullying messages can reach a much larger audience. The networked nature of computer-mediated settings also enables the content of the online bullying episodes to spread virally in the online environment. This spread crosses geographic boundaries and involves a larger (theoretically endless) audience of bystanders as compared to traditional forms of school bullying (Vaillancort *et al.*, 2017).

A third distinguishing feature is difficulty in assessing the impact of cyberbullying on the target. Because non-verbal signs are lacking in many forms of electronic communication, it is difficult to estimate whether or not a victim is emotionally affected by hurtful behaviour (Vaillancort *et al.*, 2017). This feature constitutes both a problem of understanding— individuals may not be aware that their actions caused hurt—as well as an element of disinhibition. Cyberbullies may feel less empathic and regretful because tangible feedback is lacking, reducing important inhibiting factors to bullying and perceived as more comfortable to perform (Heirman & Walrave, 2008; Bryce & Fraser, 2013).

Fourth, the fact that offenders and victims often do not find themselves in the same physical setting has been associated with higher levels of anonymous bullying, a decreased level of empathy, and intensified disinhibition to victimize others (Brody & Vangelisti, 2016). Although anonymity is not

uniquely associated with cyberbullying as traditional bullies may also remain anonymous in some cases, such as situations involving property theft or spreading lies (Heirman & Walrave, 2008), cyberbullying frequently takes advantage of the anonymity provided by technology to hide a person's identity through the use of temporary accounts, fake identities or pseudonyms (Langos, 2012). This can reduce the threshold needed to engage in bullying because perpetrators may feel less personally responsible for their behaviour and perceive a lower risk of punishment (Tokunaga, 2010). From the target's point of view, victims tend to feel more frustrated and weak in such cases because it is difficult to respond appropriately to unknown offenders (Sticca & Perren, 2013). Also, cyberbullies may derive power from their advanced technological skills such as hacking or impersonation (Langos, 2012). Nevertheless, the most common methods for cyberbullying, such as texting or posting on a social network site, do not require such advanced skills (Slonje *et al.*, 2013).

Cyberbullying research thus far has mainly concentrated on assessing the prevalence of cyberbullying among youths worldwide or predicting young people's involvement in cyberbullying by focusing on the influence of individual characteristics, such as socio-demographics like age and gender (e.g., Tokunaga, 2010), personality traits (e.g., Tani *et al.*, 2003), or psychological conditions (e.g., Patchin & Hinduja, 2010). Besides, some studies examined shared features of traditional (offline) bullying and cyberbullying (e.g., Kowalski *et al.*, 2008). While these previous studies have certainly enhanced our understanding of the phenomenon, studies examining other levels of influence are needed to understand cyberbullying fully (e.g., Festl & Quandt, 2013).

### **3. Application of Theory use in Cyberbullying Research**

The application and use of theory in research promote understanding, the ability to predict behaviour, the derivation of testable hypotheses, and the ability to empirically test constructs. Although more recent research has begun to explore the use of theories and models to aid in explaining cyberbullying behaviours, most have been limited to adaptations of general psychological theories or borrowed theories from criminology and aggression.

#### **3.1 Example of the application of a general psychological theory**

The *Theory of Reasoned Action* (TRA; Ajzen & Fishbein, 1977) is a general psychological theory with promising explanatory potential for cyberbullying behaviours (Underwood & Bauman, 2018). The theory suggests that individuals act following their intentions. An individual's intention to perform a behaviour such as cyberbullying can be determined by their attitudes

towards the behaviour and their normative beliefs about what important others (i.e., friends, family) think of their performing the behaviour. Cyberbullying researchers have studied subjective norms which are defined as the degree of approval (or disapproval) the individual believes they will obtain from participating in cyberbullying (i.e., my parents will be disappointed in me), descriptive norms related to the individual's perception of the prevalence of cyberbullying in their group of friends (i.e., everyone is doing it), and moral norms related to the belief that cyberbullying is wrong (Underwood & Bauman, 2018).

At least two studies have examined the utility of all components of the TRA in cyberbullying (Doane *et al.*, 2014; Ho *et al.*, 2017). The purpose of the Doane *et al.* (2014) study was to use the TRA to help explain cyberbullying perpetration in a sample of college students. Results demonstrated that attitudes toward cyberbullying were the most significant predictor of intention to cyberbully. The effects of subjective norms were mainly through indirect relations with cyberbullying intentions, but descriptive norms had direct effects on cyberbullying behaviour. Empathy also predicted descriptive norms, injunctive norms, and attitudes.

A more recent study employed the TRA to examine attitudes, subjective norms, injunctive norms (a subset of subjective norms referring to the behaviour preferred by essential others), descriptive norms, and mediation strategies relating to cyberbullying perpetration, specifically as related to social media (Ho *et al.*, 2017). Results demonstrated that youth with negative attitudes towards cyberbullying were less likely to engage in cyberbullying behaviours. Descriptive and injunctive norms were not significantly related to cyberbullying perpetration. Both active and restrictive mediation strategies were negatively associated with cyberbullying perpetration (i.e., parents who employed strategies to restrict technology use or taught youth how to use technology responsibly helped prevent cyberbullying perpetration).

One significant advantage to applying the general psychological theories such as the TRA in the cyberbullying context is the fact that the theories describe "malleable factors that can be influenced via formal and informal experiences" (Underwood & Bauman, 2018, p. 253). For example, in order to reduce cyberbullying intentions and cyberbullying behaviour, Doane, Kelley, and Pearson (2016) developed an online cyberbullying prevention video program based on the TRA and results suggested that the brief and inexpensive cyberbullying intervention was successful at both immediate and one-month follow-up periods.

### **3.2 Example of the application of a theory borrowed from criminology**

General Strain Theory (GST; Agnew, 1992) attempts to explain both instrumental (violence which improves the social position of a criminal) and

expressive violence (violence that vents anger, frustration, or rage; Slocum & Agnew, 2017). The GST posits that individuals who experience strain (e.g., frustration or anger) can be at risk to engage in deviant behaviour. The strain produces negative emotions, and therefore, individuals seek an outlet to respond to the negative emotions and crime (or cyberbullying someone) is one possible response (Agnew, 1992). Negative feelings may lead to alleviating or seeking corrective action – perhaps bullying or cyberbullying others to provide a sense of power and authority over oneself.

Patchin and Hinduja (2011) explored the bullying behaviours (both traditional and non-traditional, including cyberbullying) of students in response to the negative emotions or strains they were experiencing using elements of the GST. Partial support was found for the use of the GST as a guiding framework for bullying/cyberbullying. A direct relationship was found between strain and bullying - youth who experienced strain were more likely to engage in bullying or cyberbullying behaviours. Youth who endorsed feelings of anger and frustration also reported participating in bullying and cyberbullying.

Paez (2018) explored and expanded on the social factors (views on family relationships, acceptance by peers, school, pressure from schoolwork) hypothesized to impact youth engagement in cyberbullying behaviours through the framework of GST (Agnew, 1992). Five social factors were used to explore the potential strains experienced by youth on both traditional bullying and cyberbullying. Results demonstrated that youth reporting low levels of satisfaction with family relationships, negative feelings about school, and lower acceptance levels by their peers were more likely to participate in cyberbullying. The overall findings supported the influence of strain-based social factors on engagement in cyberbullying.

### **3.3 Example of the application of a comprehensive aggression framework**

Despite the applicability and utility of some generalized and borrowed theories to cyberbullying, some researchers advocate for the use of “a cohesive theory to explain why people choose to cyberbully others” (Savage & Tokunaga, 2017, p. 354) The General Aggression Model (GAM; Anderson, 2002) is an overarching framework for understanding aggressive and violent behaviours. It is a “comprehensive and integrative social-cognitive framework for understanding aggression” (DeWall *et al.*, 2011, p. 245). In order to understand a single episode of aggression, an individual is thought to pass through three critical stages: (1) *inputs* consisting of person-specific variables such as sex, age, personality traits, values, maladaptive behaviours, and technological efficacy, and situation-specific inputs such as provocation, peer support, parental involvement, and school climate; (2) these input fac-



tors then influence the individual's *internal states* and are impacted by the interrelationship of the individual's affect, cognition, and arousal through schemas and scripts related to hostility; and (3) which in turn lead to an *appraisal of the outcome* and *decision making*. Decision making leads to either a thoughtful action or an impulsive action. A feedback loop then influences future aggressive events (Savage & Tokunaga, 2017).

Kowalski *et al.* (2014) first identified common correlates of both cyberbullying perpetration (e.g., moral disengagement) as well as cyberbullying victimization (e.g., risky online behaviour). Protective factors (e.g., parental online monitoring) commonly cited in the literature, were also identified. The GAM was used as a guiding framework to illuminate the strength of relationships between the behavioural and psychological correlates found in the meta-analysis. Results showed risk factors that may lead individuals to become involved in cyberbullying or become a victim include anger, moral disengagement, risky online behaviour, and frequency of Internet use. Protective factors identified included school safety, school climate, and parental monitoring. Lastly, several variables were associated with an increased level of reporting for both cyberbullying and victimization, including increased depression, decreased life satisfaction, and increased drug and alcohol use. A negative relationship was observed between academic achievement and cyberbullying perpetration.

A more recent study employed the GAM to explore whether person-specific inputs, including trait verbal aggression, internet self-efficacy, and social skills, contributed to cyberbullying perpetration among a sample of 201 college students (Savage & Tokunaga, 2017). Results indicated the GAM was able to identify person-centred input factors that in turn predicted an individual's decision to use harmful messages against others through SITs. More specifically, verbal aggression was positively associated with cyberbullying perpetration, and the interaction between verbal aggressiveness and social skills on cyberbullying perpetration depended on an individual's degree of internet self-efficacy. At low levels of internet self-efficacy, degree of trait aggressiveness and level of social skills did not predict cyberbullying perpetration. In contrast, participants with high internet self-efficacy, high trait verbal aggressiveness scores, and higher social skills were less likely to send harmful messages through SITs (Savage & Tokunaga, 2017).

Comprehensive frameworks are not without their shortcomings. For example, required sample sizes increase with the complexity of the models, the resulting analyses require advanced statistical modelling techniques, and interpretation of results becomes problematic. Although the ability to identify relevant factors and explore interactions between the factors is a benefit, others have argued that the GAM, in particular, does not do a good job of taking situational factors into consideration (e.g., Ferguson & Dyck, 2012).

Despite this comprehensive framework and other borrowed theories which are often supported by extensive research in their original fields, Barlett *et al.*, (2017) have argued that general theories, no matter how well established they are, are unable to distinguish between cyberbullying and bullying or to account for the overlap that is often observed between these behaviours. In order for explanations to move beyond mere empirical generalizations and basic practical utility (Bengtson, Putney, & Johnson, 2005), the development of a new theory may be required.

### 3.4 Example of the application of a Cyberbullying-Specific Theory

In response to the use of general theories to predict cyberbullying, the Barlett Gentile Cyberbullying Model was developed (BCGM; Barlett & Gentile, 2012). The BCGM is based on research that suggests “cyber and traditional bullying are correlated but psychologically different forms of behaviours (Barlett *et al.*, 2017, p. 148). Traditional bullying and cyberbullying are hypothesized to be different because the physical strength or stature differences required to create power differentials in traditional bullying are irrelevant in cyberbullying; and unlike traditional bullying, cyberbullies perceive themselves to be anonymous (Vanderbosch & van Cleemput, 2008). The BCGM attempts to explain how an initial cyber-attack can lead to continued cyberbullying behaviour via learning processes based on two social-learning theories: (a) the Distal General Aggression model (Anderson & Bushman, 2002) and (b) the General Learning Models (Gentile *et al.*, 2009). Together, these models predict that experiences with or exposure to a stimulus are a learning trial in which an individual pairs cognitive, affective, and arousal based feelings with the social and behavioural outcomes of the stimulus.

According to the BCGM, the ability and self-efficacy of engaging in cyberbullying behaviour are developed from several learning trials where the aggressor learns that: (a) they are anonymous to the victim; (b) any size differences between the victim and bully are irrelevant; (c) the non-physical nature of the cyberbullying leaves no physical marks on the victim; (d) the bully does not have to see the direct effect of harm on the victim; and (e) it is difficult for the bully to be identified by parents and authorities making it easier to harm without being punished. After the learned outcomes become automatic and accessible, then positive attitudes towards cyberbullying will form. Perceived anonymity is related to aggressive attitudes, and additional studies show that perceived anonymity predicts subsequent cyberbullying.

A longitudinal study of College students was conducted to test the full BCGM model (Barlett *et al.*, 2017). Students completed self-report instruments linked to the key constructs of the BCGM model including perceived anonymity, belief in the irrelevance of muscularity for online bullying, positive attitudes towards cyberbullying, cyberbullying perpetration, and

traditional bullying perpetration across three time points approximately three months apart. Results supported the BCGM hypotheses. Anonymity perceptions and belief in the irrelevance of muscularity for online bullying predicted wave two cyberbullying attitudes which predicted cyberbullying perpetration at wave three. Similar results were found when controlling for traditional bullying at wave one. Results demonstrated that the BCGM was able to specify “the psychological mechanisms involved in cyberbullying while also showing incremental validity evidence” (Barlett *et al.*, 2017, p. 152). Findings from this study can be used to help inform the development and improvement of interventions and the continued study of the processes underlying cyberbullying.

#### **4. A socio-psychological perspective in cyberbullying theory and research: one step beyond**

As anticipated before, despite the utility of some generalized and unified theories to cyberbullying, the fields of social psychology and sociology remind us of the importance of considering an ecological approach to the management of the violence (Di Napoli, *et al.*, 2019, Fermani, *et al.*, 2020). Bronfenbrenner’s Social Ecology Model (1979) identifies four environmental systems (Microsystem, Mesosystem, Exosystem, Macrosystem). Bronfenbrenner believed that a person’s development was affected by everything in their surrounding environment. This social ecology model can be applied to cyberbullying in adolescence because education, peers, community and media as relevant ‘settings’ can either enhance or inhibit an individual’s experience of digital technology and the cyber bullying environment around them. Cyberbullying research considering only individual-level explanations such as demographics, personalities, and psychological conditions could be reductionist and may be insufficient to fully understand and explain the behaviour (Bansel, *et al.* 2009, Menesini, 2012). An individualistic approach is problematic from a pycso-sociological standpoint, especially concerning the definition of cyberbullying. A new approach requires that the everyday power relations in children’s lives are examined by analysing the discourses related to the normalized practices of power relations in schools and broader society. Further, social psychology, the bridge between sociology and psychology, has tried over time to give greater importance to the context and holistic theories (e.g Social identity theory, or the Social network analysis and correlates Theory) as suggest the Bronfenbrenner’s Social Ecology Model. The identity achievement in an individual and his behaviour is increasingly studied in light of relationships and belonging systems. This process has significant consequences in the perception of social categories and our behavioural response towards their members. Furthermore, Schott and Søn-

dergard (2014) and Dehue *et al.* (2018) argued for a shift towards more relational approaches, considering not only the individual but the whole context.

#### **4.1 Example of Identity Theory applied to Cyberbullying: psychosocial aspects**

According to Riva (2019), crucial to the subject of adolescent participation in online social interaction and in cyberbullying is the concept of social identity. In particular, the *Theory of Social Identity* (SIT- Tajfel, 1982) helps us understand the processes that are activated in the cyberbully that are never an “isolated” subject in front of the victim. Tajfel conceived social identity as that part of an individual’s self-concept, which derives from the individual’s membership of a social group (or groups) and the value and emotional significance attached to this membership. This approach was an essential step in demonstrating that self-definition varies with the social context, becoming defined at the group level in intergroup contexts as representatives of the salient social categories. Tajfel and Turner (1986) observed: the in-group bias is the tendency to favour one’s own group and to discriminate the out-group, to evaluate themselves positively and support a positive self-concept. Each social network is the birthplace of social identity and allows an individual to manage his/her own social identity.

In the case of cyberbullying, individuals may cast themselves in a favourable light to further attract peer approval and recognition—perhaps by indicating their participation in deviance or crime to affirm their self-conception of maturity (Hinduja & Patchin, 2010). The SIT can also help explain why in cyberbullying, it is easier to distance emotionally from the out-group members. According to Demoulin *et al.* (2004), the use of web technology can increase de-humanization and infrahumanization phenomena understood as the tendency to attribute more ‘humanness’ to one’s in-group than to out-groups. It has also been found that the association de-humanization/infrahumanization and violence is only valid for individuals with common control of their behaviour (Capozza *et al.*, 2014). The SIT illustrates the importance of promoting the positive potential of belonging sentiment. This theoretical paradigm is useful as a coping strategy, indicating how to channel, in a constructive way, the energy that social identification can emanate. Working on groups, on culture, and on group representations can prevent and help overcome the counterculture underlying cyberbullying. Introducing contradictory online, supporting alternative positions (even with proper institutional support “Whole school approach”) can stem violence.

These concepts can be complemented by the *Personal Reputation Theory* (PRT - Emler & Reicher, 1995). According to PRT, adolescents behave in a transgressive way simply to communicate something about themselves to the public. It is a strategy adopted by the individual to build and maintain

a particular reputation within the social context in which she/he interacts, and that reflects her/his orientation towards formal authority. Infringing social rules becomes a way of managing her/his own reputation, a means of strengthening her own /his identity within a group that collectively endorses such norms of antisocial behaviour. In this way, cyberbullying should be interpreted as an act of communication relative to the identity: the bully without followers, would not be anyone. Internet, as a means of communication, therefore becomes fundamental for “publicizing,” divulging acts of bullying, and “creating” an audience which contributes to strengthening the bully’s identity. The bully feels proud and responsible for her acts which she judges as demonstrations of her strong self as an aggressor.

Moreover, the Internet can be used to destroy the victim’s reputation in the eyes of the peer group, and also in the eyes of an even more vast group. Research on an extensive sample of nearly 6000 adolescents confirms some hypotheses about the effect of cyberbullying victimization on self-esteem and loneliness as a function of attacks to the reputation of the victims (Brighi *et al.*, 2012). Adolescents victimized by denigration diffused by video on social networking had the lowest scores for self-esteem and higher loneliness scores compared to cyber victims where there was no reputational attack.

The speed and ease with which online social identities follow one another make it possible to manage one’s reputation and that of others. Because the cyberbully can easily use social networks to change his own social identity (personal branding) and manage others impression, he can also modify the way easily in where others perceive the identity of others (reputation management), e.g. the victim’s reputation. These results suggest that the management of reputation during adolescence may be a crucial task for adolescents, as suggested by PRT.

In light of SIT and PRT, the sense of interpersonal responsibility changes completely. So, another process later labelled “deindividuation” by self-categorization theory is an important and lasting contribution. *Deindividuation Theory* (DT -Festinger *et al.*, 1952) refers to the process in which an individual loses their self-awareness and sense of individuality in social interactions. The larger the size of the group (e.g., as experienced online), the higher the degree of anonymity experienced by the group’s members, hence the stronger antisocial behaviour. Online anonymity can also foster an increased sense of deindividuation. Experimental studies (Keum & Miller, 2018) of online interactions have observed that the heightened identification of group norms and reliance on stereotypes as a result of deindividuation was associated with increased online expressions conveying intergroup differences among Internet users in their online interactions. This helps to explain how in cyberbullying, the group has a negative preventive impact in the formation of stereotypes because giving the cyberbully an imagined group,

but present, witness to the deviant action. For example, imagining a virtual group as a spectator of our online actions will extreme our stereotypes and lead to polarising our deviant behaviours.

Furthermore, as claimed by Social Psychology, posting a selfie or an Instagram story has the aim of generating respect but also emulation in who will look. The social component of the selfie is explained in the very root of the word: the selfie is not a simple self-timer but an automatic shutter posted on a social. The narrative links meanings and identities and creates the positioning of the subject (Riva, 2019).

Young people with low self-esteem could manifest high levels of deindividuation, of social dominance orientation, and of discrimination and stigmatization towards other groups. The tendency for derogation will be greater as more individuals feel they can increase the well-being of the group and themselves (Nesdale & Scarlett, 2004). The web amplifies the loss of contact with reality and deregulation. The group is always in the background, imagined but it is also real, for example through the “likes” (a powerful form of approval, gratification, and stimulus). It encourages conformism, creates a false consensus that transforms criminal behaviour into socially appreciated characteristics (Pancani, 2020).

Finally, the *Place-Identity Theory* (PIT - Proshansky *et al.*, 1983) has provided important contributions to the field of psychology by emphasizing the influence of the physical environment on identity and self-perception. Place-identity is a substructure of self-identity and is comprised of perceptions and comprehensions regarding the environment, it develops as a child learns to see her or himself as distinct from, but related to, the physical environment. Here social and environmental skills and relationships are learned, and the “lenses” are formed through which the child later will recognize, evaluate and create places. According to Twigger-Ross *et al.*, (2003), place can be defined as a social entity or “membership group” providing identity.

In the case of cyberbullying, we speak of virtual environments, not real physical places. The symbolic value is still very strong and the online environment “materializes”, and has a concreteness and a role in the mind of the cyberbully. We cannot forget that thanks to the medium in which the cyberbully is located, he/she can leverage anonymity. The online site allows it to be a no-place; it does not need physical supremacy; it is disconnected from physical places that may be more secure or insecure than others. The cyberbully acquires a virtual place identity that manages in terms of reputation and behaviours. For the first time, social networks allow for the creation of hybrid social networks - virtual and real - creating a new “interreality” social space much more malleable and dynamic than the previous (Riva, 2019). The fusion of networks characterizes the interaction between online and offline and allows an individual to control and change the social experience and so-

cial identity in a completely new way than in the past with often overlooked risks and opportunities. The first “interreality” paradox is the fusion of social identities. In a social network, an individual shows him/herself as a friend, a student, a son/daughter, a professor. Strong ties mingle with weak ties, and the differentiations between social roles disappear. If in the communities preceding social networks, people tended to assume a specific social identity, now social identities converge even if the subjects involved do not want or are not aware of them (Riva, 2019). Scholars (Memon *et al.*, 2018) allege that inability to effectively distinguish between real and unreal leads to a new set of paradoxes putting the social-ness of social networks into question, at least in terms of positive impact on our social well-being: false self-impression, suicide, violence, lowliness, lack of self-control and the shortening of attention span, mood swings.

The cyberbullying episodes do not need the coexistence of the bully and the victim, nor the temporal simultaneity between the acts of the bully and their repercussions on the victim: psychological violence manifests itself thanks to asynchronous and remote communications. Furthermore, while the bullied victim may have spaces and moments away from the bully, the cyberbullying victim does not have a safe place to hide because virtual environments constantly remain active. Social networks change spatial boundaries and, therefore, also change our social and place identity. Places lose meaning, and communities weaken. The deviant identity of the cyberbully is strengthened thanks to space it is experiencing, the group of its followers is confused and more influential; the victim loses its consistency as a human being. The cyberbullying episodes do not need the coexistence of the bully and the victim, nor the temporal simultaneity between the acts of the bully and their repercussions on the victim. While the bullied victim may have spaces and moments away from the bully, the cyberbullying victim does not have a safe place to hide because virtual environments always remain active. To our knowledge, PIT has never been considered or used to help explain the cyberbullying phenomenon. Place-identity theory may be useful to decode the variables associated with what we might call “virtual place identity” or “medium identity”. The ability for an adolescent to possess multiple identities is very real because of the virtual world and the ability to cyberbully behaviours ‘spillover’ into the real physical world and vice versa. The considerable number of special effects and the fact that the contents are deleted after 24 hours have made the stories in Instagram the ideal tool for those who want to play with their social identity. Furthermore, it is possible that social identities also multiply based on the social network being used (personal branding).

However, is the virtual place identity just a branch of our social identity? Is a social identity just like our social identity as students, as parents, as

friends, as a partner, or is it something more? This is an important question because we believe that its peculiar characteristics of management and interpretation of space, time, body, borders/frame, rules and communication make it “autonomous”.

#### **4.2 Cyberbullying from a social perspective: the importance of social context**

From a social perspective, cyberbullying takes place in a (virtual) social context, and it is a social phenomenon in itself, considering the following aspects.

First, cyberbullying tends to take place among people who know each other in daily life. Research has shown that in many cases, offenders are to be found among peers (Kowalski *et al.*, 2012; Slonje *et al.*, 2013). Besides, many studies show that victims and offenders of traditional bullying are more likely to be engaged in cyberbullying as well (Salmivalli *et al.*, 2013; Slonje *et al.*, 2013; Sticca & Perren, 2013; Wyman *et al.*, 2010).

Secondly, if traditional forms of bullying occur mainly within established social environments (such as schools), as they rely on pre-determined social structures and conflicts, there is strong evidence that cyberbullying becomes part of these bullying structures. Cyberbullying often takes place between individuals who know one another in real life, such as schoolmates, implying that they may be involved in multiple kinds of social as well as bully interactions (Livingstone & Helsper, 2010).

As bullying and cyberbullying behaviour are often socially motivated (Sijtsema *et al.*, 2009), the social position of a person should be considered as a relevant explanatory factor in a specific social context. Despite its importance, the social influences of the peer group environment on cyberbullying have been scarcely addressed so far.

##### **4.2.1 Researching cyberbullying: the contribution of social network analysis**

Considering previous researches, few studies have focused on the role of cyberbullying within the context of social relationships, and this highlights three main research gaps from a social perspective in relations to the previous presented theories based on individual and intra-group perspectives:

1. The first research gap is concerned with the patterns of cyberbullying behaviour (who is being bullied by whom?). Whereas the patterns of bullying interactions have been the topic of research on traditional bullying (see, for instance, Huitsing *et al.*, 2012; Huitsing & Veenstra, 2012), the field of cyberbullying has exclusively focused on bullying roles (that is, who are the victims and who are the perpetrators) rather than bullying patterns (i.e. the networks of bullying interactions).



2. In addition to the lack of research on cyberbullying patterns, few studies have investigated the role of social status in cyberbullying behaviour. For examples, the study by Festl and Quandt (2013), which focused on cyberbullying in particular, has investigated only a single aspect of social status, that is, best friendship relationships, but many others remain unexplored (power relationships, gender, age and so on).
3. While previous research has highlighted the nature and extent of cyberbullying behaviours (Patchin & Hinduja, 2011), few studies have attempted to better understand the possible underlying causes or correlates of cyberbullying participation. Since cyberbullying takes place within the context of different human interactions, it is therefore not merely “individual” behaviour, but also highly “social” and embedded in the surroundings.

Considering these gaps, research on cyberbullying can benefit from studying interactions and relationships within the relevant contexts, using a social perspective. As noted earlier, socio-structural research on cyberbullying is still in its early stages, but there is a considerable interest in the last decade, in explaining cyberbullying by integrating a structural and sociological perspective (Neves & de Oliveira Pinheiro, 2010; Festl, & Quandt, 2013) and using a related methodology such as social network analysis.

This framework concerns not only the application of new methods and tools but also, perhaps primarily, a different perspective. Social network analysis is grounded in people’s social relationships and takes actor interactions as its focus of analysis. As cyberbullying involves actors interacting within a broader set of social relationships, it is crucial to understand the contextual factors, which lead to involvement in such behaviour.

For this purpose, the use of a social network perspective<sup>1</sup> is a highly proper perspective and toolkit to study contacts and social ties. Social network analysis can be considered as both as a perspective on the social reality, as well as a collection of tools for studying social ties and interactions and its methods are suitable for identifying structures and processes in specific contexts offline and online. Network analysis could be used to scrutinize the ways by which the victims are targeted, the behavior of the users, to find how information spreads and sentiment analysis of the user to detect opinion of the users about cyberbullying.

For example, the concepts of weak ties and bridging relationships are similar to what children and adolescents often experience in social and virtual based relationships, at least according to the circumstantial evidence put

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<sup>1</sup> The approach proceeds from the idea that individuals are embedded in different types of social networks. These networks consist of actors (labeled nodes) which are tied by relationships or interactions (referred to as ties) (Marin & Wellman, 2011; Borgatti *et al.*, 2009).

forth in the mainstream media. The strength of social ties online is based on an assessment of the strength of identification with both online communities and offline friends in addition to the scale of personal social networks online and offline. Young people navigate online with a combination of both strong and weak ties continually, through various forms of interaction and intimacy (Ahn, 2012; Keipi *et al.* 2017). The Internet can foster both forms of social ties through enhancements of communication and access to others (Panek *et al.*, 2013). Here, young people use social tools online to maintain both strong ties already existing offline and those created online in addition to taking advantage of the scope of social networks partners to develop new weak ties on a desired scale (Davidson & Martellozzo, 2013).

Research has recently been carried out concerning the relationship between cyberbullying and the strength of social ties through analyses of social networks (Festl & Quandt, 2013; Silva *et al.*, 2018; Wegge *et al.* 2013; Wegge *et al.*, 2014). This research has been valuable in its social network analysis approach, where links have been discovered between how relational reciprocity and closeness are related to the likelihood of being cyberbullied or cyberbullying others.

From a social network analysis perspective, it is, therefore, useful to look at the features of 1) online created (full) networks or “communities” that develop when people with similar interests meet online (e.g., in gaming groups or blog group), 2) online networks that are based on (full) offline networks (e.g., how do minors from the same school communicate online with each other?, who e-mails with whom?, who is befriended with whom on social network sites?) and 3) the online ego networks of teenagers (e.g., the total number of people young people communicate with online, regardless of the context they know these people from). This a strong improvement considering previous theory only focusing on the individual aspects of the cyberbullying process and the relation between victims and perpetrators. What SNA is adding to the analysis is the importance of considering the social structure of the peer groups to better understand potential patterns of behaviours and intervention.

Examining some recent and innovative research examples, we could identify how the importance of the exploration of relational aspects and social ties available in the online setting through both enhanced communication and access to others brings both positive and negative effects to the lives of young people. Repeated exposure to the online setting may increase both benefits and costs in the lives of young people.

Furthermore, the links between various dimensions of social ties both online and offline and experiences of harassment victimization online also need to be studied in localized settings (such as school contexts, peer-related groups, etc.). The purpose of the study by Hinduja and Patchin (2012),

was to determine the extent to which peers, parents, and educators influence the cyberbullying behaviours of adolescents. Results indicated that cyberbullying offending is associated with perceptions of peers behaving similarly and the likelihood of sanction by adults. Specifically, youth who believed that many of their friends were involved in bullying and cyberbullying were themselves more likely to report cyberbullying behaviours. At the same time, respondents who believed that the adults in their life would punish them for cyberbullying were less likely to participate. The study also provides additional evidence of the importance of parents and educators taking cyberbullying behaviours seriously because those students who believed that they would be sanctioned were less likely to engage in cyberbullying. In short, parents, educators, and teens themselves need to work together to establish a climate at school and in the community where bullying in all its forms is socially condemned and formally prohibited and sanctioned (when necessary). Through such efforts, the quality of relationships between all stakeholders will be enhanced, and can consequently contribute towards the establishment of healthier behavioural norms among those youth—both online and offline.

Social network analysis, studying the patterns of online bullying can enhance school and community prevention programs. It provides insight into whether prevention should focus on cyberbullying and traditional bullying separately, or whether both phenomena should be discussed together and tackled in a similar manner, which has been debated by Olweus (2012) and Menesini (2012). Improving teachers' and educators' knowledge about the social structure of the classroom can increase their effectiveness in intervening in bullying and cyberbullying connections.

In the study by Festl and Quandt (2013), which used an explorative survey study based on the analysis of two complete school networks, they expand the explanation strategies of cyberbullying to higher levels of social generalization. In line with previous research, the findings support traditional explanations via sociodemographic and personality factors. However, the findings also revealed network positioning to be a comparably strong forecaster for cyberbullying. Therefore, they argued that without taking structural factors into account, individual explanations would remain insufficient.

In order to address this issue, the study by Wegge *et al.* (2014) focused on the school environment and assessed (1) how patterns of bullying and cyberbullying relate and (2) how electronic forms of bullying can be linked to the social context at school. The social network analysis performed showed that victims tend to be cyberbullied by the same peers who bully them offline, i.e. the patterns of school bullying are related with who bullies are in the online context. What the study added, however, is that offline bully patterns affect cyberbullying, even when controlling for other negative interaction patterns

between the victim and perpetrator, such as online revenge taking or mutual cyberbullying. Thus, strong support was provided for the notion that cyberbullying is an extension of the bullying which occurs at school. Additionally, evidence showed that teenagers who face victimization on the Internet or mobile phone tend to respond through retaliation by bullying back online. It suggests that technology can “empower” online victims to respond in undesirable ways, such as bullying back online.

## 5. Conclusion and further steps

The analysis and the review of different theories regarding identity and social aspects highlight the positive impact of applying identity theories and a social viewpoint to the study of cyberbullying. Identity achievement is a crucial aspect in the prevention and study of cyberbullying. Until the advent of the media, the characteristics of identity had spatial and temporal constraints. Today these dimensions have been modified by the online environment. Furthermore, applying some classical theories of social psychology is essential for a better understanding of the cyberbullying phenomenon. For example, the dynamics about the intergroup bias especially when the group is reimagined to be in a virtual place, the active role in the definition of the reputation management/personal branding, the processes of de-individualization and anonymity caused by the Internet environment, the moral identity and the responsibility attributed all remain constructs which can offer essential tools and intervention strategies. We hypothesize it is helpful to begin to structure the characteristics of a “virtual place identity”, meaning it as an autonomous construct. In order to manage cyber violence, we should act on multiple levels, including individual, relational, organizational, and community levels, as recommended by the World Health Organization and by recent papers (e.g., Fermani *et al.*, 2020).

A further step is using a social network perspective that can be conceived as an innovative research agenda for the analysis of cyberbullying from a social perspective. The proposed approaches promise further speculative insights for cyberbullying, which may ultimately also help parents, teachers, educators and public institutions to act upon negative behaviour within specific social contexts.

In summary, the approaches and questions presented here can be conceived as a research agenda for the analysis of cyberbullying from a different perspective. The step forward is an analysis concerns not only the application of new methods and tools, but also, perhaps primarily, a fundamentally different perspective, grounded in people’s social relationships and actor interactions as its main focus of analysis.

As cyberbullying essentially involves actors interacting within a broader set of social relationships, it is crucial to understand the contextual factors which lead to involvement in such negative behaviour. The proposed approaches promise further academic insight into the issue of cyberbullying, which may ultimately also help educators and organizations to act upon negative behaviour within specific social contexts.

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## References

- Aboujaoude, E., Savage, M. W., Starcevic, V., & Salame, W. O. (2015). Cyberbullying: Review of an old problem gone viral. *Journal of Adolescent Health, 57*, 10-18. doi:10.1016/j.jadohealth. 2015.04.011
- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology, 30*(1), 47-87.
- Ahn, J. (2012). Teenagers' experiences with social network sites: Relationships to bridging and bonding social capital. *The Information Society, 28*, 99-109. doi:10.1080/01972243.2011.649394
- Ajzen, I., Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*, 888-918.
- Anderson, C.A., Bushman, B.J. (2002). Human aggression. *Annual Review of Psychology, 53*, 27-51.
- Baldry, A.C., Farrington, D.P., Sorrentino, A. (2016). Cyberbullying in youth: A pattern of disruptive behavior. *Psicología Educativa, 22*, 19-26.
- Bansel, P., Davies, B., Laws, C., Linnell, S. (2009). Bullies, bullying and power in the contexts of schooling. *British Journal of Sociology of Education, 30*, 59-69.
- Barlett, C. P. (2016). Past, present, and future theoretical developments in predicting cyberbullying behavior. In M. Wright (Ed.), *A socio-ecological approach to cyberbullying*. New York, NY: Nova Science Publishers.
- Barlett, C.P. (2017). From theory to practice: Cyberbullying theory and its application to intervention. *Computers in Human Development, 72*, 269-275.
- Barlett, C., Chamberlin, K., & Witkower, Z. (2017). Predicting cyberbullying perpetration in emerging adults: A theoretical test of the Barlett Gentile Cyberbullying Model. *Aggressive Behavior, 43*, 147-154. doi: 10.1002/ab.21670
- Barlett, C.P., & Gentile, D.A. (2012). Attacking others online: The formation of cyberbullying in late adolescence. *Psychology of Popular Media Culture, 1*, 123-135. doi:10.1037/a0028113
- Bengtson, V.L., Putney, N.M., & Johnson, M. (2005). The problem of theory in gerontology today. In *The Cambridge Handbook of Age and Ageing* (pp. 3-20). Cambridge University Press.

- Berne, S., Frisén, A., Schultze-Krumbholz, A., Scheithauer, H., Naruskov, K., Luik, P., Zukauskienė, R. (2013). Cyberbullying assessment instruments: A systematic review. *Aggression and Violent Behavior, 18*(2), 320–334.
- Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network Analysis in the Social Sciences. *Science, 323*(5916), 892-895.
- Brighi, A. & Melotti, G. & Guarini, A. & Genta, M. & Ortega-Ruiz, R. & Mora-Merchan, J. & Smith, P. & Thompson, F. (2012). Self-Esteem and Loneliness in Relation to Cyberbullying in Three European Countries. 10.1002/9781119954484.ch3.
- Brody, N., & Vangelisti, A.L. (2016). Bystander Intervention in Cyberbullying. *Communication Monographs, 83*(1), 94-119. doi: 10.1080/03637751.2015.1044256
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge: Harvard University Press.
- Broster, R., Brien, K. Cyber-bullying of educators by students: Evolving legal and policy developments. *Education and Law Journal, 20*(1), 35–61.
- Bryant, J.A., Sanders-Jackson, A., Smallwood, A.M.K. (2006). IMing, text messaging, and adolescent social networks. *Journal of Computer-Mediated Communication, 11*, 577–592.
- Bryce, J., Fraser, J. (2013). “It” s common sense that it’s wrong’: Young people’s perceptions and experiences of cyberbullying. *CyberPsychology, Behavior & Social Networking, 6*(11), 783-787.
- Capozza, D., Falvo, R., Di Bernardo, G. A., Vezzali, L., Visintin, E. P. (2014). Intergroup contact as a strategy to improve humanness attributions: A review of studies. *TPM-Testing, Psychometrics, Methodology in Applied Psychology, 21*(3), 349-362.
- Cassidy, W., Brown, K., & Jackson, M. (2012). ‘Under the radar’: Educators and cyberbullying in schools. *School Psychology International, 33*, 520-532. doi:10.1177/0143034312445245.
- Davidson, J., & Martellozzo, E. (2013). Exploring young people’s use of social networking sites and digital media in the internet safety context. *Information, Communication & Society, 16*, 1456–1476. doi:10.1080/1369118X.2012.701655
- Dehue, F., Völlink, T., Gunther, N., & Jacobs, N. (2018). Stop Online Bullies: The advantages and disadvantages of a standalone intervention. In *Reducing Cyberbullying in Schools* (pp. 175-188). Academic Press.
- Demoulin, S., Leyens, J. P., Paladino, M. P., Rodriguez-Torres, R., Rodriguez-Perez, A., Dovidio, J. (2004). Dimensions of “uniquely” and “non-uniquely” human emotions. *Cognition and emotion, 18*(1), 71-96.
- DeWall, C.N., Anderson, C.A., Bushman, B.J. (2011). The General Aggression Model: Theoretical extensions to violence. *Psychology of Violence, 1*(3), 245-258.
- Doane, A.N., Kelley, M.L., Pearson, M.R. (2016). Reducing cyberbullying: A Theory of Reasoned Action-Based video prevention program for college students. *Aggressive Behavior, 42*, 136-146.
- Doane, A. N., Pearson, M. R., & Kelley, M. L. (2014). Predictors of cyberbullying perpetration among college students: An application of the Theory of Reasoned Action. *Computers in Human Behavior, 36*, 154-162. doi: 10.1016/j.chb.2014.03.051
- Emler, N., & Reicher, S. (1995). *Adolescence and delinquency: The collective management of reputation*. Edinburgh: Blackwell Publishing.
- Ferguson, C.J., & Dyck, D. (2012). Paradigm change in aggression research: The time has come to retire the General Aggression Model. *Aggression and Violent Behavior, 17*(3), 220–228. doi: 10.1016/j.avb.2012.02.007

- Fermani, A., Bongelli, R., Canestrari, C., Muzi, M., Riccioni, I., & Burro, R. (2020). "Old Wine in a New Bottle". Depression and Romantic Relationships in Italian Emerging Adulthood: The Moderating Effect of Gender. *International Journal of Environmental Research and Public Health*, 17(11). doi: 10.3390/ijerph17114121
- Festinger, L., Pepitone, A., Newcomb, T. (1952). Some consequences of de-individuation in a group. *The Journal of Abnormal and Social Psychology*, 47(2S), 382-389.
- Festl, R., Quandt, T. (2013). Social relations and cyberbullying: The influence of individual and structural attributes on victimization and perpetration via the Internet. *Human Communication Research*, 39(1), 101-126.
- Festl, R., Scharnow, M., Quandt, T. (2015). The individual or the group: A multilevel analysis of cyberbullying in school classes. *Human Communication Research*, 41(4), 535-556.
- Foody, M., Samara, M., Carlbring, P. (2015). A review of cyberbullying and suggestions for online psychological therapy. *Internet Interventions*, 2(3), 235-242.
- Gentile, D.A., Anderson, C.A., Yukawa, S., Ihori, N., Saleem, M., Ming, L. K., Shibuya, A., Liau, A.K., Khoo, A., Bushman, B.J., Huesmann, L.R., & Sakamoto, A. (2009). The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Personality and Social Psychology Bulletin*, 35, 752-763. doi:10.1177/0146167209333045
- Heirman, W., Walrave, M. (2008). Assessing concerns and issues about the mediation of technology in cyberbullying. *Journal of Psychosocial Research on Cyberspace*, 2(2) 1-12.
- Hinduja, S. & Patchin, J.W. (2020). Cyberbullying identification, prevention, and response. Cyberbullying Research Center. Retrieved September 2, 2020, from <https://cyberbullying.org/Cyberbullying-Identification-Prevention-Response.pdf>
- Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, 14(3), 206-221. doi: 10.1080/13811118.2010.494133.
- Ho, S.S., Chen, L., Ng, A.P.Y. (2017). Comparing cyberbullying perpetration on social media between primary and secondary school students. *Computers & Education*, 109, 74-84.
- Huitsing, G., Veenstra, R. (2012). Bullying in classrooms: Participant roles from a social network perspective. *Aggressive behavior*, 38(6), 494-509.
- Huitsing, G., van Duijn, M. A. J., Snijders, T. A. B., Wang, P., Sainio, M., Salmivalli, C., Veenstra, R. (2012). Univariate and multivariate models of positive and negative networks: Liking, disliking, and bully-victim relationships. *Social Networks*, 34(4), 645-657.
- Juvonen, J., Gross, E.F. (2008). Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health*, 78(9), 496-505.
- Keipi, T., Kaakinen, M., Oksanen, A., & Räsänen, P. (2017). Social tie strength and online victimization: An analysis of young people aged 15-30 years in four nations. *Social Media+ Society*, 3(1), doi: 10.1177/2056305117690013.
- Keum, B.T., Miller, M.J. (2018). Racism on the Internet: Conceptualization and recommendations for research. *Psychology of Violence*, 8(6), 782-791.
- Kowalski, R.M., Giumetti, G.W., Schroeder, A.N., & Lattanner, M.R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073-1137.
- Kowalski, R. M., Limber, S. P., & Agatston, P.W. (2012). Cyber bullying: Bullying in the digital age. West Sussex: Blackwell Publishing Ltd.
- Langos, C. (2012). Cyberbullying: The challenge to define. *Cyberpsychology, Behavior, and Social Networking*, 15(6), 285-289.

- Livingstone, S., & Helsper, E. (2010). Balancing opportunities and risks in teenagers' use of the Internet: The role of online skills and internet self-efficacy. *New Media and Society*, 12, 309–329.
- Marin, A., & Wellman, B. (2011). *Social Network Analysis: An Introduction*. In J. Scott & P. J. Carrington (eds.), *The SAGE Handbook of Social Network Analysis* (pp. 1-25). London: SAGE.
- Menesini, E. (2012). Cyberbullying: The right value of the phenomenon. Comments on the paper Cyberbullying: An overrated phenomenon?. *European Journal of Developmental Psychology*, 9(5), 544–552.
- Memon, A.M., Sharma, S.G., Mohite, S.S., & Jain, S. (2018). The role of online social networking on deliberate self-harm and suicidality in adolescents: A systematized review of literature. *Indian Journal of Psychiatry* [online]. 60(4), 384–392. ISSN 0019-5545. Available at: doi:10.4103/psychiatry.IndianJPsychiatry\_414\_17.
- Mkhize, S., & Gopal, N. (2021). Cyberbullying Perpetration: Children and Youth at Risk of Victimization during Covid-19 Lockdown. *International Journal of Criminology and Sociology*, 10, 525-537.
- Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully-victims. *Children and Youth Services Review*, 34(1), 63-70.
- Mitchell, K. J., Jones, L. M., Turner, H. A., Shattuck, A., & Wolak, J. (2016). The role of technology in peer harassment: Does it amplify harm for youth? *Psychology of Violence*, 6(2), 193-204. doi: 10.1037/a0039317
- Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health*, 55, 602-611. doi: 10.1016/j.jadohealth.2014.06.007
- Myers, C. & Cowie, H. (2019). Cyberbullying across the lifespan of education: Issues and interventions from school to university. *International Journal of Environmental Research and Public Health*, 16, 1217. 10.3390/ijerph16071217.
- Nesdale, D., & Scarlett, M. (2004). Effects of group and situational factors on pre-adolescent children's attitudes to school bullying. *International Journal of Behavioral Development*, 28(5), 428-434.
- Neves, J., & Pinheiro, L. de O. (2010). Cyberbullying: A Sociological Approach. *International Journal of Technoethics*, 1(3), 24–34. <https://doi.org/10.4018/jte.2010070103>
- Olweus, D. (2012). Comments on cyberbullying article: A rejoinder. *European Journal of Developmental Psychology*, 9(5), 559–568.
- Paez, G. R. (2018). Cyberbullying among adolescents: A General Strain Theory perspective. *Journal of School Violence*, 17(1), 74-85.
- Pancani, L. (2020). La psicologia sociale nell'era digitale. In Andrighetto, L., Riva, P. *Psicologia sociale*. Il Mulino: Bologna, 287-310.
- Panek, E., Nardis, Y., & Konrath, S. (2013). Mirror or megaphone: How relationships between narcissism and social networking site use differ on Facebook and Twitter. *Computers in Human Behavior*, 29, 2004–2012. doi:10.1016/j.chb.2013.04.012
- Patchin, J.W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice*, 4(2), 148-169.
- Patchin, J.W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health*, 80(12), 614–621. doi: 10.1111/j.1746-1561.2010.00548.x



- Patchin, J. W. & Hinduja, S. (2011). Traditional and Non-traditional bullying among youth: A test of General Strain Theory. *Youth & Society*, 43(2), 727-751.
- Patchin, J. W. & Hinduja, S. (2015). Measuring cyberbullying: Implications for research. *Aggression and Violent Behavior*, 23, 69-74.
- Di Napoli, I., Procentese, F., Carnevale, S., Esposito, C., & Arcidiacono, C. (2019). Ending intimate partner violence (IPV) and locating men at stake: an ecological approach. *International journal of environmental research and public health*, 16(9), 1652.
- Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of environmental psychology*, 3(1), 57-83.
- Rice, E., Petering, R., Rhoades, H., Winetrobe, H., Goldbach, J., Plant, A., Montoya, J., & Kordic, T. (2015). Cyberbullying perpetration and victimization among middle-school students. *American Journal of Public Health*, (105)3, e66-e72.
- Riva, G., (2019). *Nativi Digitali. Crescere e apprendere nel mondo dei nuovi media*. Il Mulino: Bologna.
- Savage, M. W., Jones, S., & Tokunaga, R. S. (2015). Cyberbullying: A mental health perspective. In E. Aboujaoude, & V. Starcevic (Eds.), *Mental health in the digital age: Grave dangers, great promise* (pp. 118-134). New York: NY: Oxford University Press.
- Savage, M. W., & Tokunaga, R. S. (2017). Moving toward a theory: Testing an integrated model of cyberbullying perpetration, aggression, social skills, and Internet self-efficacy. *Computers in Human Behavior*, 71, 353-361.
- Schott, R.M.; Søndergaard, D.M. *School Bullying: New Theories in Context*; Cambridge University Press: Cambridge, MA, USA, 2014.
- Shariff, S. & Johnny, L. (2007). Cyber-libel and cyber bullying: Can schools protect student reputations and free expression in virtual environments? *Education Law Journal*, 16, 307-342.
- Silva, Y. N., Hall, D. L., & Rich, C. (2018). BullyBlocker: toward an interdisciplinary approach to identify cyberbullying. *Social Network Analysis and Mining*, 8(1), 18.
- Slocum, L.A., & Agnew, R. (2017). Strain theory, violence, and aggression. In P. Sturme (Ed.), *The Wiley Handbook of Violence and Aggression*. Chichester, UK: John Wiley & Sons Ltd.
- Slonje, R., Smith, P.K., & Frisen, A. (2013). The nature of cyberbullying, and strategies for prevention. *Computers in Human Behavior*, 29(1), 26-32.
- Smahel, D., Machackova, H., Mascheroni, G., Dedkova, L., Staksrud, E., Ólafsson, K., Livingstone, S., and Hasebrink, U. (2020). EU Kids Online 2020: Survey results from 19 countries. EU Kids Online. Doi: 10.21953/lse.47fdeqj010fo
- Sticca, I., & Perren, S. (2013). Is cyberbullying worse than traditional bullying? Examining the differential roles of medium, publicity, and anonymity for the perceived severity of bullying. *Journal of Youth and Adolescence*, 42(5), 739-750.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual review of psychology*, 33(1), 1-39.
- Tajfel, H., & Turner, J. C. (1986). An integrative theory of intergroup relations. *Psychology of intergroup relations*, 1, 7-24.
- Tani, F., Greenman, P.S., Schneider, B.H., & Fregoso, M. (2003). Bullying and the Big Five: A study of childhood personality and participant roles in bullying incidents. *School Psychology International*, 24(2), 131-146.
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26, 277-287.

- Twigger-Ross, C., Bonaiuto, M., & Breakwell, G. (2003). Identity theories and environmental psychology. In M. Bonnes, Lee, T. and M. Bonaiuto (pp. 203-33). *Psychological theories for Environmental Issue*, Farnham, VT: Ashgate.
- Underwood, M.K., & Bauman, S.A. (2018). Cyberbullying. In T. Malti and K.H. Rubin (Eds.), *Handbook of Child and Adolescent Aggression* (pp. 249-267). New York, NY: The Guilford Press.
- Vaillancourt, T., Faris, R., & Mishna, F. (2017). Cyberbullying in children and youth: Implications for health and clinical practice. *The Canadian Journal of Psychiatry / La Revue Canadienne de Psychiatrie*, 62(6), 368-373.
- Vandebosch, H. & Van Cleemput, K. (2008). Defining cyberbullying: A qualitative research into the perceptions of youngsters, *CyberPsychology & Behavior*, 11(4): 499-503. doi:10.1089/cpb.2007.0042
- Wegge, D., Van Cleemput, K., Vandebosch, H., & Eggermont, S. (2013). Setting an agenda for future research into cyber bullying using social network analysis. In R. Hanewald (Ed.), *From cyber bullying to cyber safety: Issues and approaches in educational contexts*, New York: Nova Science Publishers, 303- 324.
- Wegge, D. Eggermont, S. & Vandebosch, H. (2014). Who Bullies Whom Online: A Social Network Analysis of Cyberbullying in a School Context. *Communications*, 39(4), 415–433. <https://doi.org/10.1515/commun-2014-0019>
- Willard N.E. (2007). *Cyberbullying and Cyberthreats: Responding to the Challenge of Online Social Aggression, Threats, and Distress*. Champaign, IL: Research Press.
- Wyman, I, Saylor, K, Taylor, I. A., & Comeaux, C. (2010). Comparing children and adolescents engaged in cyberbullying to matched peers. *Cyberpsychology, Behavior, and Social Networking*, 15(2), 195-199.