University of Groningen

Bullying Victimisation through an Interpersonal Lens: Focussing on Social Interactions and Risk for Depression

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DOI:
10.33612/diss.198284603

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2022

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):
Franzen, M. (2022). *Bullying Victimisation through an Interpersonal Lens: Focussing on Social Interactions and Risk for Depression*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. https://doi.org/10.33612/diss.198284603

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Chapter 1

General Introduction

Bullying. When people hear the term bullying, many think of children teasing each other on the playground. However, bullying is much more than simple mockery. It is a complex interpersonal phenomenon that most have witnessed and that many have personally experienced. In the research context, bullying is commonly defined as intentional, systematic, and repetitive aggression towards a person who is unable to defend themselves by someone who is in a higher position of power (Olweus, 1996). It can come in various forms, from overt (e.g., hitting, kicking, calling names) to more covert (e.g., gossiping, exclusion from groups), and both offline and online.

Although the bullying conceptualisation by Olweus is widely used (also throughout this dissertation), some disagree on specifics of the definition (see Söderberg & Björkqvist, 2020 for an overview). For example, it has been argued that non-repeated acts of aggression may also be understood as bullying when there is a high probability for repetition and/or when there is long-lasting harm (e.g., uploaded content to the internet which remains accessible for a long period of time; Olweus, 2012). Some also argue that an imbalance of power between the perpetrator/bully and the victim might be a consequence rather than an antecedent of victimisation (Lee, 2006; Smith, 2014) and that therefore bullying should be understood as being part of the more loosely defined concept of peer victimisation (Finkelhor et al., 2012; Söderberg & Björkqvist, 2020). In contrast, Kaufman et al. (2020) showed that victims who reported a power imbalance to the perpetrator compared to victims who did not, had stronger emotional and interpersonal problems and called for bullying victimisation to be distinguished from other forms of peer aggression. In any case, despite disagreements about which peer aggressive acts might be defined as bullying exactly, there is consensus that victimisation does occur, to many individuals, and that it can do detrimental and long-lasting harm to the victim.

Bullying occurs throughout the lifespan. Although most frequent during childhood and adolescence (Cook et al., 2010), bullying is also prevalent during adulthood (Zapf et al., 2020) and even happens in old age (e.g., Jeffries et al., 2018). Occurrences of bullying have also been observed among non-human primates. For example, adolescent and adult male chimpanzees have been observed to continuously use physical aggression against lower status group members in order to maintain and increase their social status and subsequent mating success (Muller & Wrangham, 2004; Sherrow, 2012). Although generally considered less aggressive than chimpanzees (Gruber & Clay, 2016), comparable aggressive displays and behaviours have also been observed in bonobos (Surbeck et al., 2012). Such instrumentalised aggression as a means to gain status is in line with the idea of human perpetrators employing bullying in order to become popular within the group (Sijtsema et al., 2009) and the general idea of a power imbalance between victims and bullies (Olweus, 1996). In sum, these findings highlight a potential evolutionary and developmental component of peer aggression predating our own species and therefore hinting toward a long-standing existence of peer victimisation.

Bullying victimisation is common. Focussing on childhood and adolescence, between 2 and 35% of children and youth report bullying victimisation experiences worldwide (Currie et al., 2009; Hymel & Swearer, 2015; Moore et al., 2017). In 2018, about 10% of elementary school and 5% of middle and high school students in the Netherlands reported being a victim of bullying (Nelen et al., 2018). Thus, numbers suggest that as a child progresses in school, prevalence rates of victimisation usually decrease. Nevertheless, bullying does not stop with the transition out of high school (Pörhölä et al., 2020). Numbers vary per study and country but a review suggests that at least 5% of college and university students are exposed to bullying victimisation (Lund & Ross, 2017).

Apart from changes in prevalence rates, also characteristics of bullying change with increasing age. During childhood, bullying is often more overt and more often consists of physical acts of aggression (Côté et al., 2007). During adolescence, it becomes more covert and more often entails verbal aggression and indirect victimisation such as exclusion from the group (Casper & Card, 2017). Transitioning from childhood to adolescence entails turning away from parents and towards peers as a reference group and putting more emphasis on peers' opinions (Steinberg & Morris, 2001). Therefore, being bullied by peers during adolescence and bullying extending from childhood and becoming chronic can have detrimental effects on the victim, with especially chronic victimisation being associated with more long-term maladjustments compared to childhood-limited bullying (e.g., Arseneault, 2018; Halliday et al., 2021; Sheppard et al., 2019). This is why adolescence represents an important period to study bullying victimisation and its consequences.

Consequences of victimisation

Being bullied can have enduring negative effects on victims which for some can be long-lasting. Often, multiple areas of the victim's life are impacted and more chronic and more frequent victimisation are related to greater adverse effects; that is both immediate and also in the long-term (Arseneault, 2018; Hong et al., 2020; Kaufman et al., 2020; Klomek et al., 2015).

Regarding more immediate negative consequences, while still in school and exposed to bullying, victims more often have academic and interpersonal difficulties, feel more isolated and lonely, have fewer friends, and lower self-esteem than peers who are not exposed to bullying (Campbell, 2013; Hutson, 2018; Moore et al., 2017). Victimised youth also report more headaches, stomach issues, and other psychosomatic symptoms (Gini & Pozzoli, 2009; Gini et al., 2014). In addition, victims' mental health is also often impacted. For example, victims of bullying report more depression and anxiety symptoms, psychotic experiences, and suicidal ideation and attempts (Forbes et al., 2019; van Geel et al., 2021; Varese et al., 2012).

Apart from more immediate effects, bullying can also have long-term consequences that occur or remain after the victimisation has stopped. Having been bullied in the past increases being bullied in the future (Arseneault, 2018; Camerini et al., 2020) and is also associated with experiencing other types of interpersonal victimisation such as dating violence (Ellis & Wolfe, 2015; Garthe et al., 2017). Having a history of bullying victimisation during childhood and adolescence has also been reported to increase mental, physical, and societal problems during adulthood (Takizawa et al., 2015; Takizawa et al., 2014; Wolke et al., 2013). For example, compared to individuals without a victimisation history, victims have a higher chance for depression episodes, anxiety, obesity, and cardiovascular diseases (Lee, 2020; Moore et al., 2017; Takizawa et al., 2015). They also face more problems maintaining friendships, more marital problems, are more often in abusive romantic relationships, and have a higher chance to be unemployed (Brimblecombe et al., 2018; Evans-Lacko et al., 2017; Jantzer et al., 2006; Wolke & Lereya, 2015).

Victimisation and depression

One impactful consequence of being victimised is clinical depression. This relation has been established in numerous studies and summarised in various meta-analyses and systematic reviews (i.e., Camerini et al., 2020; Moore et al., 2017; Reijntjes et al., 2010; Schoeler et al., 2018; Ttofi et al., 2011) which showcases the strength and robustness of this association. Being victimised has clearly been established to be related with more depression symptoms compared to bullies and non-involved individuals. The victimisation-depression relation has also been established to be dose-responsive and long-lasting.

Concerning more immediate effects, various studies have found a consistent link between victimization and depression from childhood to adolescence over widely varying time periods (Kaltiala-Heino & Fröjd, 2011; McDougall & Vaillancourt, 2015). For example, childhood victimisation is related to childhood depression symptoms (Wolke & Lereya, 2015). In addition, being victimised in early adolescence has been predictive of depression episodes in later adolescence suggesting a short-term association (e.g., Fahy et al., 2016). Also long-term relations have been established. One meta-analysis reported a an increased chance for depression to be present even 36 years after the victimisation has happened (Ttofi et al., 2011), that is even after statistically accounting for various influential factors. Thus, there is clear evidence that victims are at a substantial risk for having immediate, short- and long-term depression problems which could therefore impact a significant part of their (adult) life. Certainly the long-term link raises the question of how this association can remain even after a prolonged time. This calls for research into mechanisms that explain the increased depression risk of victims of bullying.

A social ecological perspective on bullying

There are different views and perspectives on the basis of which one can view and examine bullying and its precursors and consequences. One view that has become more and more prominent is the social ecological perspective which has its roots in Bronfenbrenner's ecological theory of development (Bronfenbrenner, 1977, 1979). It describes bullying as a reciprocal interplay between the individual, the family, peer group, school, community, and culture (Hong & Espelage, 2012) and has anthropological, sociological, and psychological influences. On a more global level, it describes that a general consistency in a person’s life course can serve as a buffer against bullying experiences. In turn, major changes for example in family structures (e.g. separation of parents) can increase negative interpersonal experiences such as peer aggression (Breivik & Olweus, 2006). Cultural norms regarding how seriously bullying is taken in government and school policies can also have an impact. Schools that have integrated anti-bullying policies and engage in anti-bullying programmes have shown to have significantly less bullying incidents (Huitsing et al., 2020). Another aspect that can serve as a buffer is how closely networks around the victim interact with each other. Good communication between parents and teachers can ensure a tight knit network in which victimisation is recognised and addressed swiftly. This increases the victim’s trust in them and increases the chances of the victim actually seeking help when in distress (Bjereld et al., 2021; Bjereld et al., 2017; Fekkes et al., 2004) and thus decreases chances for more long-term negative outcomes. In contrast, abusive or unstable family constellations, teachers who do not take bullying incidents seriously, or peers who do not intervene can lead to the victim feeling unsafe and unsupported (Bjereld et al., 2017; Fekkes et al., 2004; O'Brennan et al., 2009). This in turn can again increase re-victimisation as well as negative mental health consequences for the victim. Lastly, the social-ecological model also describes that characteristics of the individual themselves can have an impact on bullying likelihood and coping. This helps explain why LGBTQ+ youth, overweight youth, or individuals with mental health problems face an increased risk of being bullied (Abreu & Kenny, 2018; Cook et al., 2010; van Geel et al., 2014).

Taking a social-ecological perspective highlights that life is interpersonal in nature and that our lives are intertwined. Accordingly, bullying can be viewed as a complex interpersonal phenomenon which is impacted both positively and negatively by social contexts. As bullying is interpersonal by definition, applying the social ecological perspective to gain more understanding of how individual characteristics of the victim interact with social contexts seems therefore highly warranted. This way we not only gain a better understanding of both initial victimisation and re-victimisation but also how such (past) interpersonal situations can impact the current and future state of mind and mental health.

In this dissertation, I followed the recommendation of taking a social-ecological perspective and examined bullying victimisation through an interpersonal lens. More specifically, I have taken a psychological approach focussing on the interpersonal style of victims of bullying, and how their interpersonal style is related to their depression symptoms.

Understanding interpersonal style using the interpersonal situation and interpersonal circumplex

Interpersonal processes are complex. Interpersonal situations involve the interaction between at least two persons and an exchange of interpersonal behaviours (verbally and non-verbally). However, apart from behaviours, also social-cognitive and affective aspects can influence such an encounter. As also highlighted in the Contemporary Integrative Interpersonal Theory (CIIT; Pincus, 2005; Pincus & Ansell, 2013), there is a constant interplay between perceptions, affective states, and behaviours. Importantly, following CIIT interpersonal processes are seen as dynamic and as occurring between but also within persons. This means that interpersonal processes are presumed to occur also inside a person's mind via mental representations of the self and others (e.g., dreams, anticipated events; Hopwood et al., 2019). Interpersonal functioning is therefore an interplay of perceiving, interpreting, feeling, and behaving, not only during an interpersonal encounter but also impacted by past experiences and expectations of future experiences.

CIIT describes interpersonal situations as a basis for individuals to develop and determine their level of self-esteem and secure attachment with others. In other words, interpersonal situations are seen as crucial human experiences where, over the course of life, social learning occurs (Hopwood et al., 2019; Pincus & Ansell, 2013). Therefore, interpersonal situations are seen as playing a key role in every person's development. Yet, not all interpersonal situations might have equal weight in influencing a person. Although some might only play a minor role in an individual's development, other interpersonal situations that are perceived as drastic might have stronger, more long-lasting effects. For example, situations that are perceived as unsafe and that are paired with an unpleasant emotional experience can feel as a threat to the aspired motives of security and self-esteem and can cause dysregulation in the self (e.g., ego threat), affect (e.g., anger), and the interpersonal style (e.g., hostility), potentially even long-term (Pincus, 2005; Pincus & Ansell, 2013; Pincus et al., 2010).

Applying CIIT to the context of bullying, a person can experience dysregulation through stressful negative encounters with bullies, as well as with witnesses or bystanders that do not intervene and therefore add to the perceived unsafety of the situation. As bullying victimisation occurs repeatedly by definition, such distressing interpersonal situations can give rise to unsafe and threatening representations of the self and others and can result in enduring patterns of maladaptive interpersonal functioning (cf. Hopwood et al., 2019). This means that such past encounters can impact a victim's current and future interpersonal style which in turn can be related to relationship problems and even psychopathology.

For example, victims might increasingly expect that interpersonal situations are accompanied by hostility and unsafety (i.e., altered perceptions) and might also experience increased negative affect. Following the idea that perceptions, affect, and behaviours are interrelated, interpersonal behaviours could therefore also be impacted and victims could turn to maladaptive interpersonal behaviours as a way of coping with and trying to gain control over the situation (cf. Hopwood et al., 2019). Thus, the victim might develop maladaptive behavioural responses as a result of their negatively coloured mental representation of an interpersonal situation. Such behavioural responses can increase the likelihood of originally neutral interpersonal encounters turning into negative ones. For instance, during encounters with bullies who are (perceived as) dominant and hostile, victims might increasingly behave submissively as an attempt to not further trigger the bully, or they might turn to hostile responses as an attempt to defend themselves. Both responses, hostility and submissiveness, can actually increase the chances of re-victimisation by hostile, dominant bullies who consider non-assertive victims as easy targets (Salmivalli, 2010). Repeated victimisation experiences can feed into the cycle of unsafe perceptions, negative affect, and adverse behavioural responses and subsequently lead to more interpersonal conflicts. The victim's negative expectations could be reaffirmed and consequently strengthen the vigilance and negative expectations of future social situations, potentially across social encounters and not only with the bullying perpetrator. If interpersonal situations are persistently impaired and deviate from normative interpersonal encounters, individuals might struggle to communicate their own interpersonal needs but also to comprehend the needs and intentions of others (Hopwood et al., 2019). In the long run, this can lead to relationship problems (e.g., with family, friends, romantically) and psychopathologies (see Figure 1; Hopwood et al., 2013; Horowitz et al., 2006; Pincus & Hopwood, 2012; Pincus & Wright, 2011).

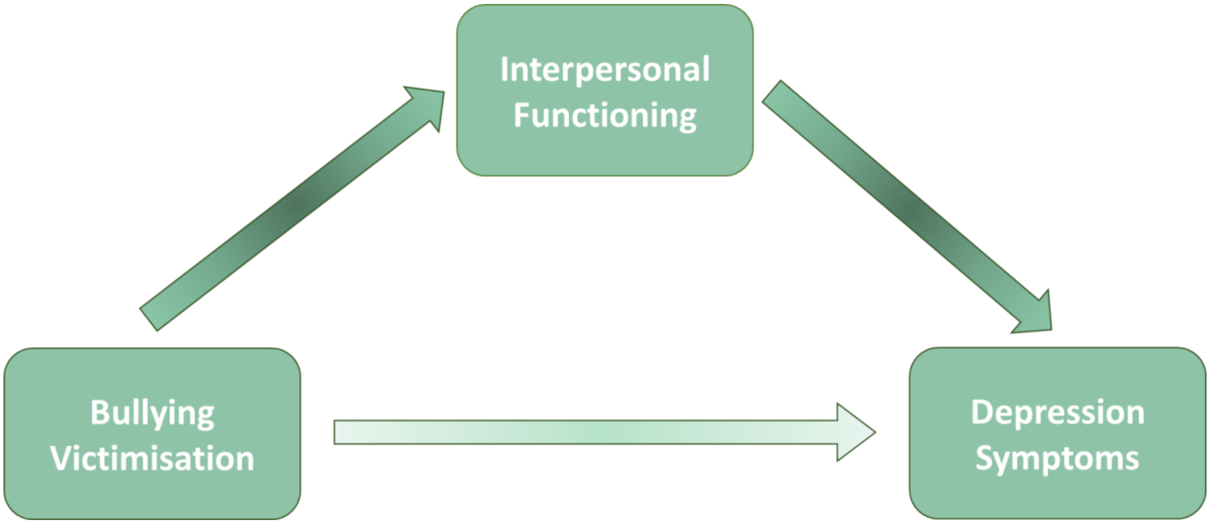

Figure 1. Representation of my proposed mediation model.

In order to understand and examine interpersonal functioning, CIIT relies on a model known as the interpersonal circumplex (IPC; Kiesler, 1983; Leary, 1957; Wiggins, 1991). It provides a scaffolding for systematically describing reciprocal interpersonal processes along two orthogonal dimensions: agency and communion (see Figure 2). Agency represents striving towards status and leadership and, at a behavioural level, the interplay of dominance and submissiveness. Communion is characterised by affiliation seeking with others and the exchange of warm and agreeable and cold and quarrelsome behaviours. Interpersonal situations are often described using the concept of interpersonal complementarity which is defined as the exchange of agency and communion. More specifically, quarrelsomeness inviting quarrelsomeness in others, and agreeableness inviting agreeableness, and dominance inviting submissiveness and vice versa (Orford, 1986; Sadler et al., 2011).

This dissertation project is the first to apply CIIT (including the IPC) and the concept of interpersonal complementarity to examine interpersonal functioning of victims of bullying. My aim was to introduce these theories and models in the context of bullying as a means to improve our understanding of victims' interpersonal problems and heightened risk for depression.

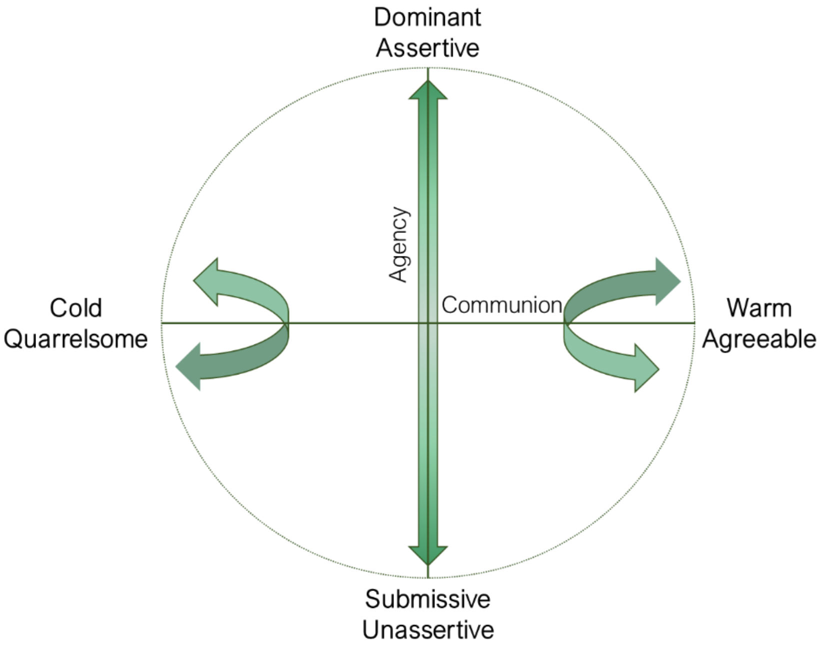

Figure 2. Visual representation of the interpersonal circumplex and the related concept of complementarity of behaviours as depicted by arrows. The x-axis represents communion (ranging from cold/quarrelsome to warm/agreeable) and the y-axis represents agency (ranging from dominant/assertive to submissive/unassertive).

Interpersonal functioning of victims of bullying

Victims of bullying have been shown to struggle interpersonally (Cook et al., 2010; Jenkins et al., 2016). In terms of the IPC, victims seem to be less agentic than non-involved individuals. For example, victims have been reported to behave more submissively and more withdrawn and to lack assertiveness and status orientation (Fox & Boulton, 2006b; Perren & Alsaker, 2006; Sijtsema et al., 2009). According to the idea of complementarity of interpersonal behaviours, submissiveness pulls for dominance and vice versa. This can be a reason why non-assertive individuals are chosen by dominant bullies as they are perceived as easy targets (Salmivalli, 2010). Also, social situations with assertive bullies can lead to submissiveness and withdrawal in victims, suggesting adaptations in interpersonal style as a consequence of the victimisation. Chances for the victimisation to continue can further increase. This interplay between bullies' dominance and victims' submissiveness exemplifies the status or power difference between the involved individuals which is part of the definition of bullying.

Some studies also suggest that victims have tendencies to be less communal. Specifically, victims have been reported and also indicated themselves to be more reactively aggressive than peers without bullying experiences (Manring, Christian Elledge, et al., 2018; Salmivalli & Helteenvuori, 2007). This can be a response to (at least perceived) hostile interpersonal situations and can also perpetuate aggressive responses by others (again in line with the model of complementarity). Indeed, research has reported social-cognitive and perceptive differences between victims and their peers. For example, victims seem to overinterpret others' intentions as being hostile and less trustworthy (Ziv et al., 2013). Additionally, victims might have trouble understanding how others feel (i.e., cognitive empathy; van Noorden et al., 2015) and correctly identifying facial emotions (Pozzoli et al., 2017). Also on an emotional level, victims seem to experience social situations more negatively and less positively than non-involved individuals (Dill et al., 2004; Hanish et al., 2004; Rauschenberg et al., 2021). In sum, victims seem to have interpersonal difficulties affecting behavioural, social-cognitive, and affective functioning which might have strengthened as a consequence to experiencing bullying.

CIIT proposes that maladaptive interpersonal functioning can also have an impact on relationships on a broader level, outside of specific social situations (i.e., the bullying situation). For victims, this can help to understand why they generally struggle interpersonally, not only with bullies, and also long-term. Studies report that victims are more often rejected by peers and have fewer friends (Gini, 2008; Veenstra et al., 2007), have lower quality friendships and romantic relationships and also struggle more in maintaining these relationships, both in school (Ellis & Zarbatany, 2007) and adulthood (Jantzer et al., 2006). Additionally, victims have reported their social relationships to lack trust and affection, again, both in school (Betts et al., 2017; Carney et al., 2011) and beyond (Jantzer et al., 2006). These findings illustrate the potential that interpersonal functioning offers in explaining victims' long-term negative consequences. Having interpersonal struggles has been linked to poor mental health in non-bullied populations (Beevers et al., 2007; Hammen, 2006) and has also been proposed to play a role in explaining victims' psychopathologies such as depression (Arseneault, 2018; Hansen et al., 2012). In this dissertation, I investigated whether and how victims' depression symptoms can be explained by their interpersonal style.

Interpersonal functioning and depression symptoms

Many of the above discussed maladaptive interpersonal processes have been suggested to play an explanatory role in the development and maintenance of depression (e.g., Coyne, 1976; Gadassi & Rafaeli, 2015; Hammen, 2006; Joiner, 1994; Sato & McCann, 2007; Vrshek-Schallhorn et al., 2015). For example, stressful interpersonal situations can increase hostile attribution, perception, and interpretation biases that can contribute to suspiciousness of others and lead to defensive and hostile or withdrawn interpersonal behaviours (Smith et al., 2016). As low communal and agentic interpersonal behaviours are usually perceived as unpleasant by others (Moskowitz, 2009, 2010), they can serve as a social repellent and could weaken the individual's supporting network (O'Connor, 2011). Rejections and confrontations in social situations can arise which in turn could promote isolation, self-criticism, and worthlessness (Hammen, 2006) which are considered symptoms of depression (American Psychiatric Association, 2013). In the context of depression maintenance, repeatedly experiencing negative interpersonal situations and interpersonal rejection from others can for some serve as self-verifying information. Cognitions of low self-worth and low self-esteem are confirmed and further strengthened. The cycle continues as the chance for stressful and negative interpersonal situations further increases. In sum, and in line with CIIT, it is the interplay of interpersonal behaviours, perceptions, and affect not only internally within a person's mind but also between interaction partners that can fuel interpersonal problems and internalising problems. Importantly, these processes are thought to be long-lasting indicating potential long-term interpersonal problems and depression symptoms.

In line with the idea that maladaptive interpersonal functioning is associated with depression, research reports individuals with depression to have interpersonal difficulties (which are similar to those of victims of bullying). Studies report individuals with depression to be more submissive, non-assertive, and socially withdrawn in comparison to individuals without depression symptoms (e.g., Cain et al., 2012; Dawood et al., 2013; Girard et al., 2017). Such submissive responses are stronger when the interaction partner is perceived as dominant and the individual feels inferior in the social situation (Zuroff et al., 2007). There are also studies that found associations between having hostile and irritable traits and depression symptoms (e.g., Dawood et al., 2013; McEvoy et al., 2013). However, findings regarding low communion seem less consistent (e.g., Girard et al., 2017) compared to studies reporting low agency in populations with depression. Nevertheless, apart from findings on interpersonal behaviours, studies also suggest poorer functioning in social-cognitive and affective interpersonal domains. For example, individuals with depression seem to have a bias to negatively interpret social interactions and others' intentions to be hostile and a tendency to expect ambiguous situations to have a negative outcome (Mathews & Mackintosh, 2000; Smith et al., 2016; Wisco & Nolen-Hoeksema, 2010). In line with the symptomatology of depression, individuals also frequently experience more negative affect, more stress, and feel less safe in interpersonal situations (Dunkley et al., 2017; Wichers et al., 2007). This is also reflected in studies reporting individuals with depression to have lower quality relationships and fewer friends (Bird et al., 2018; Hames et al., 2013).

Interpersonal functioning as an explanatory link between bullying victimisation and depression symptoms.

In this dissertation, I examined if interpersonal difficulties may be a connecting link between bullying victimisation and depression. I have described what interpersonal situations consist of and how interpersonal difficulties can generally arise. Here, CIIT and the IPC serve as a helpful basis to characterise interpersonal functioning and to explain the development of interpersonal conflicts. Theories in the field of depression that have described interpersonal processes as a precursor and maintaining factor have been around for decades and have steadily been adapted and refined (i.e., Coyne, 1976; Segrin, 2011; Shahar et al., 2004). Comparably, the conceptualisation of bullying as an interpersonal process has been introduced rather recently (Hong & Espelage, 2012; Swearer &

Espelage, 2004), and only a few years ago researchers have specifically recommended to examine interpersonal processes as a mechanism for negative consequences of victimisation (Arseneault, 2018; Klomek et al., 2015). In this dissertation, I have followed these recommendations and conducted multiple studies to gain a better understanding about how interpersonal functioning can help explain the increased risk for depression that victims of bullying face compared to individuals who have not been bullied.

Main aim of this dissertation

The global aim of my dissertation was to test if the interpersonal functioning of victims of bullying can help explain their increased risk for depression. The focus on interpersonal characteristics was based on the notion that interpersonal situations are part of everyone's life. Almost on a daily basis we interact with other people. Conversations often are the basis on which we build friendships and relationships, how we communicate what we feel, think, and believe about the world around us, and how we can connect with others. Because our lives are so interpersonal in nature, having trouble in interpersonal situations, whether it is how to appropriately behave, or how interaction partners' emotions and intentions are perceived, can have a detrimental effect on many aspects of our life. This is why interpersonal characteristics have a great potential to explain the development of interpersonal conflicts as well as the development of mental health problems. This project was the first to apply CIIT as a theoretical basis to systematically study interpersonal functioning in victims of bullying and to explain how victims develop depression symptoms.

Interpersonal functioning is context-sensitive and therefore varies not only between individuals but also within a person (Reis, 2014). In order to capture and actually study those between- and within-person differences, more elaborate methods are necessary that go beyond questionnaire-based assessments. In ***chapter two***, I present three methodologies, namely, experimental designs, performance-based measures, and intensive repeated measures in naturalistic settings (IRM-NS). I argue why and discuss how they can be applied in the field of bullying, in order to systematically study interpersonal functioning in victims. This includes studying causal associations between victimisation experiences and interpersonal functioning as well as within-person variability (e.g., are there specific contexts in which victims show more interpersonal struggles). This in turn can help to better understand how and why victims more often develop depression as compared to individuals without bullying experiences.

There is a relatively small number of previous studies (see chapter 2) that have used performance-based measures to assess interpersonal characteristics of victims of bullying. Most often, those studies only assessed one specific interpersonal aspect, limiting the comparability between studies using different methods. Applying various performance-based measures, in ***chapter three***, I systematically assessed three different interpersonal characteristics in order to streamline the understanding of victim's interpersonal functioning and to gain a multi-faceted picture within the same sample of individuals. This way, I was able to simultaneously compare multiple interpersonal characteristics, assessed in a controlled setting, between victims and non-involved individuals. In detail, I tested how valid their perceptions of potential interaction partners are (i.e., emotion recognition task), whether they can interpret other's emotional states accurately (i.e., empathic accuracy task), and I assessed participants' likely behavioural responses to other persons' emotions (i.e., facial emotion response task). So far, none of the innovative tasks that I applied have been used in samples with bullying victims. Specifically, my study was the first to use virtual reality (VR), real-life autobiographical video stimuli, and the facial emotion response task to assess victims' interpersonal characteristics. Those tasks offer the systematic study of interpersonal characteristics with increased ecological validity. For example, VR provides for a highly immersive context through which the complexity of experiences of the real world can be simulated in a controllable and reproducible manner (McCall, 2016). This is certainly beneficial when studying context-sensitive interpersonal functioning.

In my next study, as described in ***chapter four***, I went beyond examining victims' general interpersonal functioning and comparing them to those of peers without bullying experiences (between-person differences), and also examined how interpersonal characteristics vary within the individual (within-person differences). In addition, I did so at two time points, once while participants are in their last year of high school and again one year later, after their transition out of school. This way, I assessed interpersonal functioning while individuals were still in the likely bullying environment (i.e., school) and also short-term longitudinal associations between interpersonal functioning and victimisation experiences once they left the bullying environment. Therefore, my study helped to gain insight into the potential stability of victims' interpersonal functioning after a major life transition, and to test how their interpersonal style during high school is related to their depression symptoms a year later. In line with my own recommendations from chapter two, I conducted an IRM-NS study to assess victims' interpersonal functioning in daily life. More specifically, I applied event-contingent recording of social interactions (ECR; Moskowitz, 1994;

Moskowitz & Sadikaj, 2014) to assess their everyday interpersonal behaviours, perceptions, and affect when having a conversation with others. This way, I was able to assess real-life interpersonal characteristics close in time to actual interpersonal situations, thereby minimising recall bias, while also assessing the context in which the social interaction took place. This way, I could examine both between-person differences of interpersonal functioning between victims and non-involved peers as well as within-person variability of their context-sensitive interpersonal characteristics.

In my final study, as described in ***chapter five***, I tested my mediation model. Specifically, I examined whether victims' hostile and non-assertive interpersonal traits explained their increased risk for depression compared to non-involved peers. More specifically, I tested whether victimisation experiences at the age of 13 years were predictive of their depression symptoms at age 19 and whether their interpersonal style assessed at age 16 partly explained this relation. This was possible by taking advantage of the large, longitudinal, population-based study TRAILS. TRAILS assessed adolescents' personality traits which included the assertiveness and hostility facets of the NEO-PI-R (Costa & McCrae, 1985, 1992). These facets represent a more trait-like representation of interpersonal functioning as compared to the more state-like assessment in my ECR study in chapter four. Of note, I tested my mediation model based on self-reported victimisation experiences and again using peer-reported information. Previous research suggests there to be a differential effect between the two nomination types, with self-reported victimisation to be more strongly related to internalising symptoms than peer-reported victimisation (Christina et al., 2021). I took the initiative to test my mediation model for both nomination types and therefore expanding previous research by examining whether there is also a differential effect regarding the role of interpersonal traits in explaining victims' depression symptoms.

In ***chapter six***, I summarise and discuss the main findings of the preceding chapters. The focus of this chapter lies on putting the findings into perspective and integrating them into the existing literature. Furthermore, I discuss general limitations, as well as (clinical) implications and recommendations for future research.