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From normative influence to social pressure : how relevant others affect whether bystanders join in cyberbullying

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Running head: NORMATIVE INFLUENCE ON CYBERBULLYING BYSTANDERS

From normative influence to social pressure: how relevant others affect whether bystanders
join in cyberbullying

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Abstract

As cyberbullying is a phenomenon that is inherently social, the normative social influence of significant others can play an important role in the behaviour of adolescents involved in cyberbullying incidents. Using data from 525 adolescent bystanders of cyberbullying we created a path model in order to investigate whether injunctive and descriptive norms of certain reference groups can cause bystanders to experience social pressure and join in cyberbullying. The results showed that social pressure fully mediated the relationship between the injunctive norm of friends approving of cyberbullying and joining in cyberbullying as a bystander. Furthermore, both the injunctive norm of parents approving of cyberbullying and bystanders' involvement in cyberbullying perpetration were related to joining in cyberbullying as a bystander.

Keywords: cyberbullying; bystander; social norm; social pressure

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1. Importance of investigating cyberbullying bystanders' reinforcing behaviour

Cyberbullying, or bullying through mobile phone and Internet applications, has received ample research attention from scholars concerned with adolescent wellbeing. Cyberbullying victimisation is related to emotional distress and (social) anxiety (e.g. Kowalski & Limber, 2013; Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012; Pure & Metzger, 2012; Şahin, 2012), depression (e.g. Kowalski & Fedina, 2011; Machmutow, Perren, Sticca, & Alsaker, 2012; Schneider, O'Donnell, Stueve, & Coulter, 2012), school problems (Marsh, McGee, Nada-Raja, & Williams, 2010; Patchin & Hinduja, 2010; Price & Dalglish, 2010), and can in extreme cases even lead to suicidal ideation (Gini & Espelage, 2014) and self-harming behaviour (Price & Dalglish, 2010; Schneider et al., 2012). Due to these potential serious mental and physical health consequences, cyberbullying has become the subject of many research and education initiatives to establish successful intervention and prevention programs. However, cyberbullying is a complex phenomenon and understanding the dynamics of the problem remains work in progress to this day.

Traditional bullying research has provided insights in the importance of group processes in bullying incidents, not only paying attention to victims and perpetrators or bullies, but also considering the bystanders or witnesses that are involved. Bystanders have an important role in the bullying process, as they can either reinforce the bully and increase the negative impact on the victim, or instead can stop the bullying and reduce the negative impact on the victim (Hawkins, Pepler, & Craig, 2001; O'Connell, Pepler, & Craig, 1999; Pepler, Craig, & O'Connell, 2010; Salmivalli, 2010; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). In the context of cyberbullying, current research has mostly

focused on determinants of whether or not bystanders of cyberbullying engage in behaviours aimed at helping the victim, for instance defending the victim in front of the bully (DeSmet et al., 2012, 2013; Freis & Gurung, 2013; Macháčková, Dedkova, Sevcikova, & Cerna, 2013; Obermaier, Fawzi, & Koch, 2014). However, cyberbullying bystanders can also reinforce the bully by actually joining in the bullying, by showing approval (e.g. by laughing), or sometimes even by remaining passive (Van Cleemput, Vandebosch, & Pabian, 2014). Consequently, investigating the determinants of bystanders' reinforcing behaviour may be equally important to gain insights in the dynamics of the cyberbullying problem, and consequently inform cyberbullying programs and interventions.

With regard to the behavioural determinants of bystanders' reinforcing behaviour, most cyberbullying research has focused on personal characteristics of bystanders, including age (Van Cleemput et al., 2014), gender (Barlińska, Szuster, & Winiewski, 2013; Bastiaensens et al., 2014; Van Cleemput et al., 2014), involvement in cyberbullying as victim or perpetrator (Barlińska et al., 2013; Van Cleemput et al., 2014), and psychological traits, such as empathy and social anxiety (Van Cleemput et al., 2014). However, when investigating bystanders' reinforcing behaviour in cases of cyberbullying we also need to consider the social context (both online and offline), in which aggressive behaviour can be affected by group processes and social influence exerted by peers (Bastiaensens et al., 2014; Festl, Scharkow, & Quandt, 2013; Hinduja & Patchin, 2013) and adults (Hinduja & Patchin, 2013; Zhou et al., 2013). Therefore, in this study we wanted to explore how the social context affects bystanders' reinforcing behaviour, by looking at processes of normative social influence and social pressure.

2. Theoretical background

2.1. Normative social influence on bystanders' reinforcing behaviour: differentiation between the "is" and the "ought"

In adolescence, children's attitudes and behaviours are affected by different socialisation agents: adults, including parents, teachers, and other adults with educational roles (Rubini & Palmonari, 2006), but also peers, who play an increasingly important role in adolescents' lives (Scholte & Van Aken, 2006). Biddle, Bank and Marlin (1980) have argued that adolescents may undergo social influences by peers and adults (parents) through their expression of normative standards or modelling of certain behaviours, which can lead adolescents to internalise norms or preferences for conduct. This process of *normative social influence* was defined by Schultz, Tabanico and Rendón (2008, p. 386) as the "conformity to a group norm brought by a desire to be liked by the group members". In their definition, they emphasise that normative social influence operates when an individual, belonging to a certain group, cares about the evaluations of other group members (Schultz et al., 2008). Internalised social norms of peers and adults exert an important influence on cyberbullying perpetration (Ang, Tan, & Mansor, 2011; Burton, Florell, & Wygant, 2013; Heirman & Walrave, 2012; Lazuras, Barkoukis, Ourda, & Tsorbatzoudis, 2013; Pabian & Vandebosch, 2014; Wright & Li, 2012). As traditional bullying research has demonstrated that social norms can also affect adolescent bystanders' reinforcing behaviour (Salmivalli & Voeten, 2004; Sandstrom, Makover, & Bartini, 2012), we expect internalised social norms to impact bystanders' reinforcing behaviour in cases of cyberbullying as well.

According to the theory of normative social behaviour, the impact of norms on behaviour can be divided into norms that relate to the "is" and those that refer to the "ought" (Cialdini, Reno, & Kallgren, 1990; Kallgren, Reno, & Cialdini, 2000). The first category of

normative influences, the “is” or *descriptive norms*, are driven by an individual’s perception of what most (relevant) others do in a particular situation, while the second category, the “ought” or *injunctive norms*, are informed by what (relevant) others approve or disapprove of (Lapinski & Rimal, 2005; Reno, Cialdini, & Kallgren, 1993). In case of cyberbullying, the descriptive norms can relate to the adolescent bystanders’ perception of whether or not other peers engage in cyberbullying (or joining in cyberbullying as bystanders). Injunctive norms on cyberbullying can arise from social influence of both peers and relevant adults, for instance parents and teachers. These norms relate to adolescent bystanders’ perception of how these reference groups feel about cyberbullying, for instance whether they think cyberbullying is not an important problem or whether they think it is unacceptable. It is important to note that descriptive and injunctive norms are informed by bystanders’ perception of relevant others’ behaviour and opinions, rather than the actual behaviour and opinions of relevant others. In this respect, Sandstrom and colleagues (2012) revealed a discrepancy between perception and reality. They found that bystanders often overestimated their friends’ approval of traditional bullying, which was associated with higher levels of joining in bullying.

Although research on traditional bullying (Salmivalli & Voeten, 2004; Sandstrom et al., 2012) has investigated the effect of injunctive and descriptive norms on bystander behaviour, these two distinct normative social influences have rarely been explicitly compared to each other within this research field. Pozzoli, Gini and Vieno (2012) related both injunctive and descriptive norms to bystanders’ defending and passively standing by in cases of traditional bullying. With regard to cyberbullying, Pabian and Vandebosch (2014) applied the Theory of Planned Behaviour (Ajzen, 1991) to cyberbullying perpetration and concluded that injunctive norms of peers were more strongly related to intentions to engage in cyberbullying, compared to descriptive norms (of peers). Based on these results we expect

a similar pattern for bystanders' reinforcing behaviour in cases of cyberbullying: bystanders' joining in cyberbullying will be more affected by bystanders' perception of how peers feel about cyberbullying (injunctive norm) than by their perception about peers' cyberbullying behaviour (descriptive norm).

2.2. Impact of injunctive norms on bystanders of cyberbullying: taking into account different reference groups

Following Social Cognitive Theory (Bandura, 1991, 1998, 2010), peers as well as adults can serve as role models for the acquisition and maintenance of aggressive behaviours, such as bullying (Espelage, Bosworth, & Simon, 2000; Idsoe, Solli, & Cosmovici, 2008). However, their (normative) social influence may vary due to a differential relationship with the adolescent (Biddle et al., 1980; Clasen & Brown, 1985; Kandel, 1978; Urberg, 1992).

First, with regard to the social influence of peers as role models for cyberbullying behaviour, the Social Identity/Self-Categorisation Perspective on social norms (Terry & Hogg, 1996; White, Hogg, & Terry, 2002) helps us distinguish between normative social influence of different peer groups, by emphasising "the importance of normative support from salient self-inclusive group memberships" (White et al., 2002, p. 92). This theoretical perspective states that people make categorisations between the "in-group" and "out-groups", subsequently leading to self-enhancement in favour of the in-group (Terry & Hogg, 1996). Traditional bullying research has mainly studied the friendship group as (one of) the most influential in-groups affecting bullying perpetration (Burns, Maycock, Cross, & Brown, 2008) and a lack of willingness to intervene as a bystander (Espelage, Green, & Polanin, 2012). With regard to bystanders of cyberbullying, Bastiaensens et al. (2014) have found that the behaviour of friends, rather than acquaintances, had a higher impact on behavioural intentions to join in cyberbullying. Consequently, we expect that bystanders' perception of

whether or not friends approve of cyberbullying (injunctive norm of friends) will have a higher impact on bystander's joining in cyberbullying than their perception of the approval of lower-affiliated peers (injunctive norm of lower-affiliated peers).

Secondly, apart from peers, adults can also serve as models for the acquisition of negative behaviours such as bullying, not by performing the behaviour themselves per se, but by directly or indirectly imposing their injunctive social norms, for instance through (a lack of) monitoring and sanctioning (Atik & Güneri, 2013; Idsoe et al., 2008; Marini, Dane, Bosacki, & CURA, 2006) and their general engagement in conflict and destructive problem-solving strategies (Stevens, De Bourdeaudhuij, & Van Oost, 2002). The social influence of adults has been compared to that of peers with regard to cyberbullying perpetration (Hinduja & Patchin, 2013; Pabian & Vandebosch, 2014) and (passive) bystander behaviour (Pozzoli et al., 2012). More specifically, Pabian and Vandebosch (2014) considered injunctive norms of peers in comparison to those of parents and teachers in relation to cyberbullying perpetration. They found that injunctive norms of peers were most strongly related to behavioural intentions to engage in cyberbullying, followed by injunctive norms of parents and teachers respectively. Following up on the latter results, we expect that bystanders' perception of parents' approval of cyberbullying (injunctive norm of parents) will more strongly relate to bystanders' joining in cyberbullying, than bystanders' perception of teachers' approval of cyberbullying (injunctive norm of teachers).

2.3. A path model of normative social influence on bystanders' reinforcing behaviour: specific injunctive norms arousing social pressure

Another pivotal aspect of social influence on adolescents involves *social pressure*, which has received a lot of attention in research on adolescents' risk-taking behaviours. Within this research field, social pressure has been conceptualised as a process that involves

relevant others (usually peers) actively encouraging, urging or pressuring the adolescent to act or think in a certain way, which will make the adolescent motivated to do so (Brown, Lohr, & McClenahan, 1986; Clasen & Brown, 1985; Santor, Messervey, & Kusumakar, 2000). The Reasoned Action Approach to health promotion (Fishbein, 2008) has described how normative beliefs on specific others' behaviour (descriptive norms) and normative beliefs on whether specific others think one should or should not perform the behaviour (injunctive norms) can lead to social pressure to perform the behaviour. As the peer group has repeatedly been identified as a key factor in inducing or sustaining bullying behaviour (Pepler et al., 2010; Salmivalli, 2010), we expect peers to have the ability to exert social pressure on bystanders to join in cyberbullying.

Applying this approach to bystander behaviour in cases of cyberbullying, peers' descriptive and injunctive norms might both arouse social pressure to join in bullying, which will in turn lead bystanders to join in cyberbullying. This means that bystanders' perception of peers being involved in cyberbullying behaviour and their perception of peers approving of cyberbullying, will lead bystanders to experience social pressure to join in cyberbullying and will consequently make them more likely to engage in this behaviour. Such an approach goes beyond former research on cyberbullying perpetration (Pabian & Vandebosch, 2014), which has considered peer pressure and the effect of injunctive and descriptive norms of peers as distinct processes that affect intentions to engage in cyberbullying perpetration.

2.4. Personal characteristics in the path model of normative social influence on bystanders' reinforcing behaviour

Based on research on traditional bullying and on social pressure to engage in bullying or antisocial behaviour, we expect that bystanders' personal characteristics could affect the proposed path model of normative social influence. First, adolescents' engagement in

cyberbullying perpetration could affect bystanders' (social pressure to engage in) joining in cyberbullying. Bullies have been identified as more likely to engage in reinforcing bystander behaviour in traditional bullying (Oh & Hazler, 2009), and as more likely to feel pressured to join in bullying, due to processes of (self-)labelling (Burns et al., 2008) and the desire to maintain an aggressive reputation (Burns et al., 2008; Houghton, Nathan, & Taylor, 2012). A similar pattern has been found for cyberbullying, as cyberbullies appear to be more inclined to join in cyberbullying as a bystander (Barlińska et al., 2013; Van Cleemput et al., 2014). Following up on these findings, we expect that cyberbullies will feel more social pressure to join in cyberbullying as a bystander and will be more likely to engage in subsequent behaviour.

Secondly, bystanders' gender and age could also affect the normative social influence process. Boys have been found to be more likely to engage in reinforcing behaviour in cases of traditional bullying (O'Connell et al., 1999; Salmivalli et al., 1996; Salmivalli & Voeten, 2004), while older youngsters have been found to display more reinforcing bystander behaviour in cases of traditional bullying (O'Connell et al., 1999) and cyberbullying (Van Cleemput et al., 2014). Consequently, we hypothesise that older youngsters and boys will be more likely to join in cyberbullying as bystanders. With regard to age and gender effects on social pressure, to the best of our knowledge no traditional bullying or cyberbullying studies have investigated these effects on social pressure to engage in (cyber)bullying behaviours. Related research on social/peer pressure from the field of adolescents' antisocial behaviour (e.g. Brown et al., 1986; Clasen & Brown, 1985; Eamon, 2002; Ngee Sim & Fen Koh, 2003) has shown mixed results with regard to age and gender. This prevents us from generating straightforward expectations of age and gender differences in social pressure to join in cyberbullying as a bystander. Therefore, we would like to include these relationships in the model, without formulating specific hypotheses.

2.5. Proposed model

In this study, we propose the creation of a path model of normative social influence on bystanders' joining in cyberbullying. We include the direct effects of peers' injunctive and descriptive norms on bystanders' joining in cyberbullying, as well as the indirect effects of peers' injunctive and descriptive norms on bystanders' joining in cyberbullying via social pressure, in order to test our expectations of full or partial mediation. With regard to peers' injunctive norms, we make the distinction between friends (highly affiliated peers) and class group members (peers with lower affiliation). In sum, we expect that bystanders' perception of friends and class group members approving of cyberbullying and their perception of peers engaging in cyberbullying will be related to higher levels of social pressure to join in cyberbullying, which will in turn lead to elevated levels of joining in as a bystander. In addition, we anticipate that relevant adults' (parents' and teachers') approval of cyberbullying will be directly related to a higher likelihood of bystanders' joining in cyberbullying.

Based on our literature review, we can also formulate some expectations on comparisons of relationship strengths. First, we hypothesise that the injunctive norm of friends will have a stronger relationship with social pressure to join in cyberbullying compared to the injunctive norm of class group members, meaning that friends' approval of cyberbullying causes more social pressure to join in cyberbullying as a bystander. Secondly, we anticipate that injunctive norms of peers (perception of friends' and class group members' approval of cyberbullying) will be more strongly related to social pressure to join in cyberbullying, compared to the descriptive norm of peers (perception of peers' cyberbullying behaviour). Thirdly, we expect that the injunctive norm of parents will have a stronger

relationship with joining in cyberbullying as a bystander, compared to the injunctive norm of teachers.

Bystanders' age, gender and involvement in cyberbullying perpetration will be added to the proposed model as personal characteristics. We expect that cyberbullying perpetration will be positively related to both social pressure and bystanders' joining in cyberbullying. This entails that the more bystanders have engaged in cyberbullying perpetration, the more they will experience social pressure to join in cyberbullying as bystanders and the more likely they will be to join in cyberbullying. Furthermore, we anticipate that boys and older adolescents will be more likely to join in cyberbullying as a bystander. The relationships between gender and age and social pressure to join in cyberbullying as a bystander will be added to the model as well, without specific hypotheses.

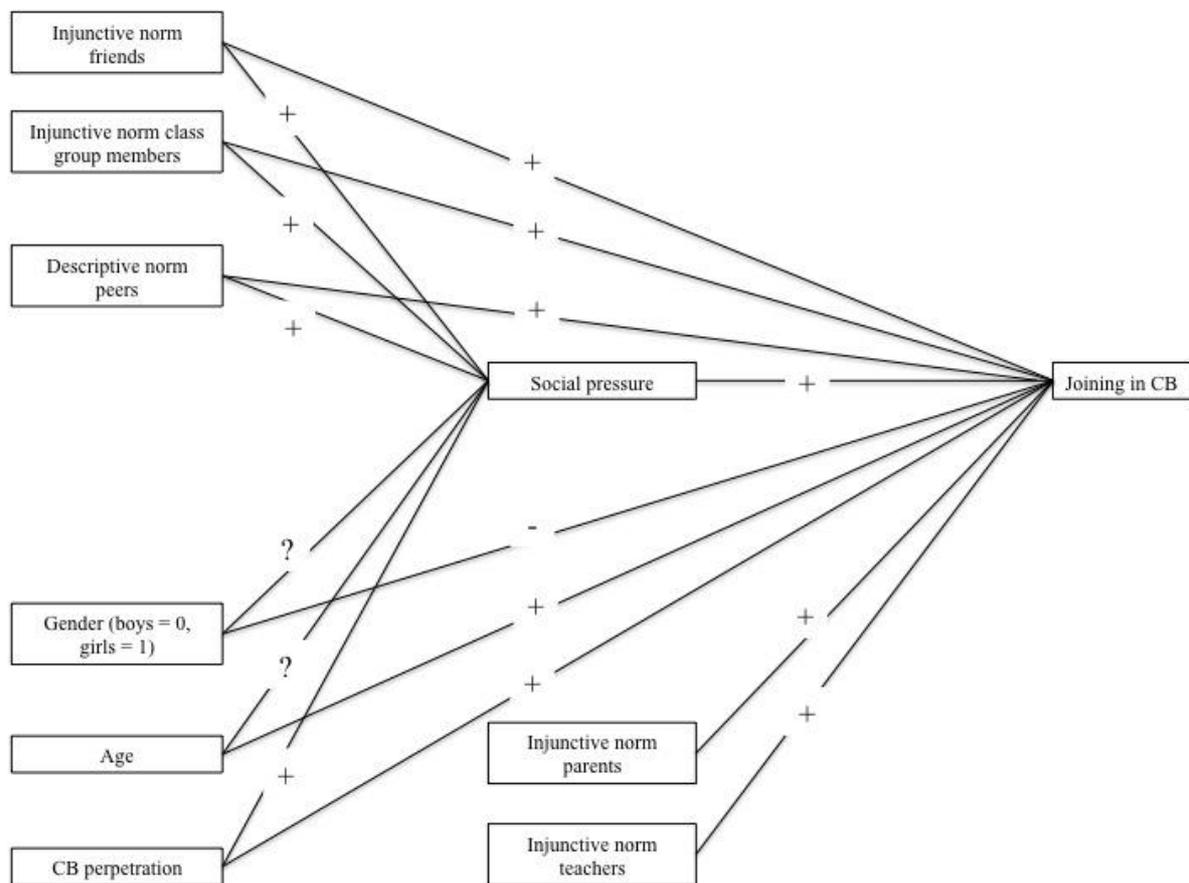


Figure 1. Proposed path model

Note: CB = cyberbullying

3. Method

3.1. Sample

In this paper, we used data from the fourth and last wave (April-May 2013) of a longitudinal study on traditional bullying and cyberbullying with Flemish youngsters, in order to provide the most recent figures on cyberbullying. Respondents for this study were selected from the population of Flemish students from the last year of primary education up to the fifth year of secondary education, on the basis of a random stratified cluster sample and using grade and type of schooling (general, technical and vocational secondary education) as sampling criteria. Data were collected via paper-and-pencil questionnaires administered at school, after the respondents and parents provided their consent¹. This resulted in a sample of 2058 respondents. As some years and schooling types were overrepresented in the obtained sample, the results were weighted based on the proportions of boys and girls per schooling type and per school year or grade in the population.

For the purpose of our research questions and hypotheses, we extracted respondents who had witnessed cyberbullying at least once in the past six months. The respondents who indicated that they were bystanders of cyberbullying ($N = 525$), were 16 years old on average ($M = 15.42$, $SD = 1.69$) and 64 % of them were girls. Twenty-seven cyberbullying bystanders (5 % of bystanders) admitted that they had joined the bully when they witnessed cyberbullying happening. Among these 27 youngsters, with a mean age of 16 ($M = 15.78$, $SD = 1.45$), we could identify 16 boys and 10 girls (1 missing value), as well as 19 cyberbullying perpetrators and 5 victims of cyberbullying.

¹ In this fourth wave, 173 students did not receive parental consent or provide consent themselves. Consequently, they were excluded from the data collection.

3.2. Measures

In the questionnaire, cyberbullying was introduced as “bullying through the internet or mobile phones”. Respondents were provided with a definition of bullying, containing the key elements proposed by Olweus (1993): repetition, intention to hurt, and power imbalance. The concepts proposed in the path model (see figure 1) were all measured with one item each, measured on a seven-point Likert scale from “Totally disagree” (1) to “Totally agree” (7), unless stated otherwise. The one-item injunctive and descriptive norm measures were based on the injunctive and descriptive normative belief items proposed by Ajzen (2002) to measure normative beliefs regarding specific reference groups. Means and standard deviations of the item scores are for the sample of cyberbullying bystanders ($N=525$).

Injunctive norm of friends approving of cyberbullying was assessed through the item “My friends would think it is good if I would bully someone through the Internet or mobile phone”. Within the sample of bystanders of cyberbullying, this item had a mean score of $M = 2.34$, with standard deviation $SD = 1.49$.

Injunctive norm of class group members approving of cyberbullying was measured with the reversed item “My class group members would not think it is good if I would bully someone through the Internet or mobile phone” (reversed scale: $M = 3.04$, $SD = 1.75$).

Injunctive norm of parents approving of cyberbullying was assessed as the reversed of “My parents would not approve of me bullying someone through the Internet or mobile phone” (reversed scale: $M = 1.76$, $SD = 1.41$).

Injunctive norm of teachers approving of cyberbullying was measured as “My teachers would think it is good if I bully someone through the Internet of mobile phone” ($M = 1.67$, $SD = 1.38$).

Descriptive norm of peers engaging in cyberbullying was measured with the item “Bullying on the Internet is simply common with young people” ($M = 5.42$, $SD = 1.41$).

Social pressure to join in cyberbullying as a bystander was assessed by the item “Sometimes I feel obliged to join in bullying through the Internet or mobile phone, even though I do not want to myself” ($M = 2.29$, $SD = 1.54$).

Joining in cyberbullying was part of the question “In these past six months, what have you done when you saw that others were bullied through the Internet or mobile phone?” Respondents could indicate whether they had joined in the bullying on a dichotomous scale (0 = no, 1 = yes). As said before, 27 respondents or 5 % of the sample of cyberbullying bystanders ($N=525$) admitted that they had joined in cyberbullying.

Cyberbullying perpetration was assessed with an item asking about the frequency of cyberbullying perpetration within the past six months, measured on a seven-point Likert scale ranging from “Never” (1) to “Multiple times a week” (7). In the sample of cyberbullying bystanders ($N=525$), 16 % indicated that they had cyberbullied someone at least once in the past six months. Most youngsters who had cyberbullied others did this only once (7 % of the sample) or a couple of times (4 %) in the past six months.

3.3. Data analysis

In order to assess whether the proposed path model of normative social influence adequately fits the data, we performed path analysis using MPlus 7². This type of data analysis is called path analysis as the model only contains observed variables and no latent concepts. Because joining in cyberbullying as a bystander is a dichotomous dependent variable, means and variances adjusted weighted least squares estimation (WLSMV) was

²developed by Muthén and Muthén, see <http://www.statmodel.com>.

used. The data were weighted to match the population (see section 3.1.). School was used as clustering variable.

4. Results

Results of the path analysis revealed that the path model estimated provides an adequate fit for the data, supported by the chi-square test of model fit ($\chi^2(2) = 2.847, p = .241$) and the robustness of fit indices (RMSEA = .033 (90% CI: .000–.111); CFI = 0.972; TLI = 0.766). The correlations between the study variables are presented in table 1.

Table 1
Correlations between study variables

	1	2	3	4	5	6	7	8	9	10
1. Joining in CB	-	.496***	.604***	.270**	.464***	.472***	.094	.070	-.251	.816***
2. Social pressure		-	.616***	.204***	.301***	.387***	.106	.066	-.331***	.412***
3. Injunctive norm friends			-	.381***	.422***	.530***	.086	.044	-.485***	.502***
4. Injunctive norm class group members				-	.332***	.248***	-.025	.146	-.188	.284***
5. Injunctive norm parents					-	.386***	-.133**	-.130	-.265***	.345***
6. Injunctive norm teachers						-	.003	.046	-.363***	.449***
7. Descriptive norm peers							-	.064	-.064	.156**
8. Age								-	-.164*	.153
9. Gender									-	-.210*
10. CB perpetration										-

Note: CB = cyberbullying; *** = $p < .001$, ** = $p < .01$, * = $p < .05$

Table 2 and figure 2 both display the unstandardized and standardized probit regression coefficients of the path model and the two-tailed p -value. Injunctive norms, descriptive norms and the personal characteristics included in the model (cyberbullying

perpetration, age and gender) explain 35 % of the variance in social pressure to join in cyberbullying. In turn, these variables together with social pressure explain 53 % of the variance in bystanders' joining in cyberbullying.

Table 2

Unstandardized and standardized probit regression coefficients of the path model, with two-tailed p-value

Path	<i>B (SE)</i>	Two-tailed p-value of <i>B</i>	β
Injunctive norm friends → social pressure	0.545 (.089)	< .001***	0.547
Injunctive norm friends → joining in CB	0.181 (.198)	.362	0.200
Injunctive norm class group members → social pressure	-0.047 (.045)	.297	-0.052
Injunctive norm class group members → joining in CB	-0.146 (.199)	.463	-0.179
Descriptive norm peers → social pressure	0.062 (.071)	.382	0.055
Descriptive norm peers → joining in CB	0.007 (.146)	.963	0.007
Social pressure → joining in CB	0.221 (.074)	.003**	0.243
Injunctive norm parents → joining in CB	0.243 (.115)	.034*	0.249
Injunctive norm teachers → joining in CB	0.090 (.146)	.536	0.092
Gender (boys = 0; girls = 1) → social pressure	-0.271 (.203)	.182	-0.087
Gender (0 = boys, 1 = girls) → joining in CB	0.160 (.610)	.793	0.057
Age → social pressure	-0.083 (.070)	.240	-0.073
Age → joining in CB	-0.031 (.167)	.851	-0.030
CB perpetration → social pressure	0.059 (.092)	.519	0.036
CB perpetration → joining CB	0.473 (.151)	.002**	0.321

Note: CB = cyberbullying; *** = $p < .001$, ** = $p < .01$, * = $p < .05$

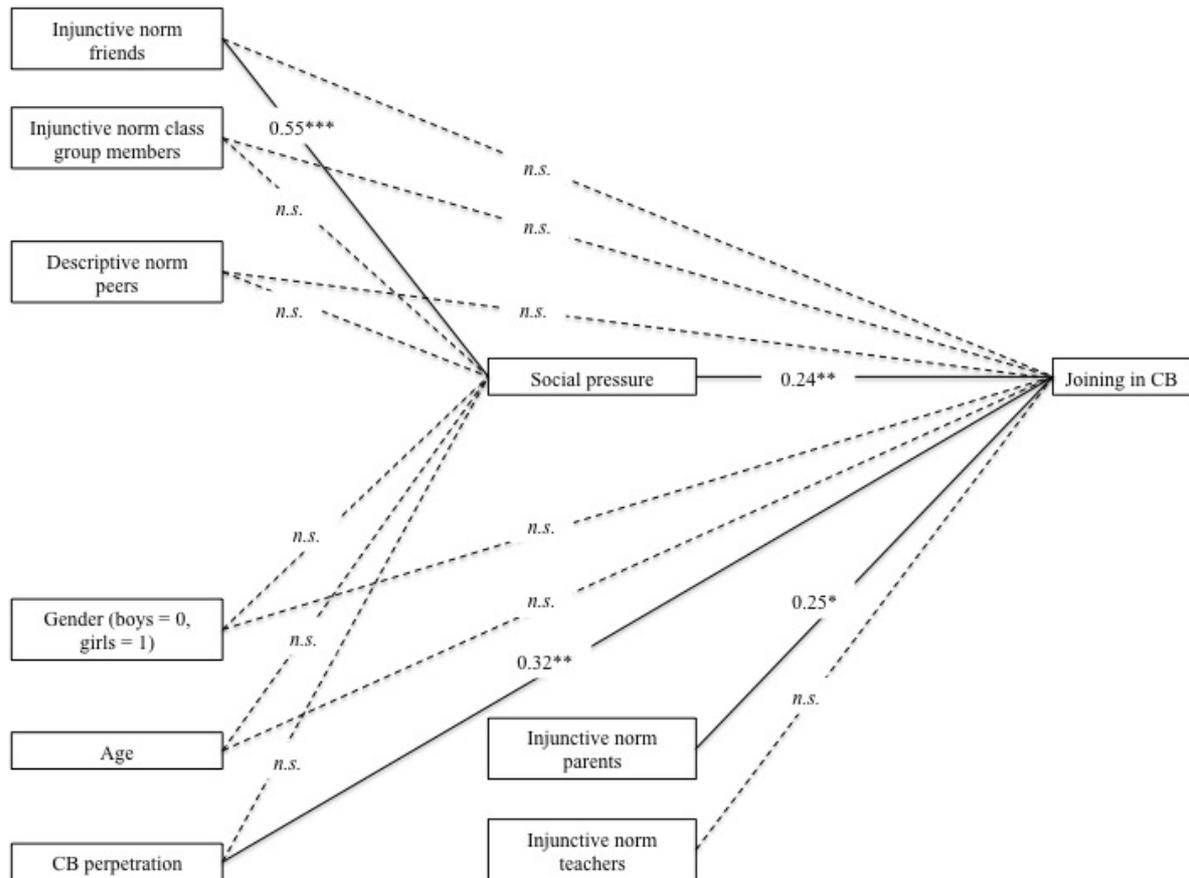


Figure 2. Path model results

Note: CB= cyberbullying; *** = $p < .001$, ** = $p < .01$, * = $p < .05$; RMSEA = .033 (90% CI: .000–.111); CFI = 0.972, TLI = 0.766; $\chi^2(2) = 2.847, p = .241$.

First, with regard to the normative social influence of peers, the results of the path analysis reveal that the injunctive norm of friends approving of cyberbullying is significantly positively related to social pressure ($\beta = 0.547, p < .001$), which is in turn significantly related to joining in cyberbullying ($\beta = 0.243, p = .003$). As expected, there is no significant direct effect of the injunctive norm of friends on joining in ($\beta = 0.200, p = .362$). These results provide evidence for the hypothesised mediation via social pressure in the effect of the injunctive norm of friends on bystanders' joining in cyberbullying. A significant relationship with social pressure was found neither for the injunctive norm of class group members ($\beta = -0.052, p = .297$), nor for the descriptive norm of peers ($\beta = 0.055, p = .382$). Furthermore, in line with our expectations, the injunctive norm of class group members ($\beta = -0.179, p = .463$)

and the descriptive norms of peers ($\beta = 0.007, p = .963$) were not significantly related to joining in.

Secondly, with regard to the normative social influence of adults on joining in cyberbullying, we found a significant positive effect for the injunctive norm of parents ($\beta = 0.249, p = .034$), but not for the injunctive norm of teachers ($\beta = 0.092, p = .536$).

Thirdly, of the personal characteristics included in the model only cyberbullying perpetration turned out to have a significant positive effect on joining in ($\beta = 0.321, p = .002$), as expected. However, contrary to our expectations, cyberbullying perpetration did not significantly affect social pressure ($\beta = 0.036, p = .519$). Bystanders' age and gender were neither significantly related to social pressure (age: $\beta = -0.073, p = .240$; gender: $\beta = -0.087, p = .182$), nor to joining in cyberbullying (age: $\beta = -0.030, p = .851$; gender: $\beta = 0.057, p = .793$).

5. Conclusion and discussion

In this study we used data from 525 Flemish adolescent bystanders of cyberbullying in order to investigate how injunctive and descriptive norms of peers (friends and class group members) and injunctive norms of adults (parents and teachers) affect bystanders' joining in cyberbullying, directly or indirectly via social pressure. Furthermore, we assessed how bystanders' gender, age and cyberbullying perpetration affect the proposed normative social influence process.

5.1. Path model of normative social influence on bystanders' joining in cyberbullying

The findings of this study are in line with the Reasoned Action Approach (Fishbein, 2008), which states that social norms can cause social pressure to engage in a certain kind of

behaviour. We found that social pressure fully mediated the relationship between the injunctive norm of friends and joining in cyberbullying as a bystander. More concretely, bystanders' perception of friends approving of cyberbullying was related to a higher experience of social pressure to join in cyberbullying as a bystander and to higher levels of subsequent joining in cyberbullying. To the best of our knowledge, this study is the first in the field of (cyber)bullying to relate injunctive norms to social pressure, instead of considering them as two separate concepts affecting bystander behaviour (see e.g. Pabian & Vandebosch, 2014; Pozzoli et al., 2012).

5.2. Differentiation in normative social influence: comparison of norm types and reference groups

While the injunctive norm of friends approving of cyberbullying was significantly related to bystanders' joining in cyberbullying via social pressure, the injunctive norms of class group members approving of cyberbullying had no significant relationship (via social pressure) with bystanders' joining in cyberbullying. This finding is in line with the Social Identity/Self-Categorisation Perspective (Terry & Hogg, 1996; White et al., 2002), which advocates a stronger normative social influence exerted by members of the "in-group". It also matches the results of previous research on bystanders of cyberbullying (Bastiaensens et al., 2014) which found that good friends affect bystanders' joining in cyberbullying more than acquaintances.

In this study, the descriptive norm of peers engaging in cyberbullying did not significantly affect social pressure. This means that there was no relationship between bystanders' perception of peers' cyberbullying behaviour and social pressure to join in cyberbullying as a bystander. In their application of the Theory of Planned Behaviour (Ajzen, 1991) to cyberbullying perpetration, Pabian and Vandebosch (2014) came to a similar

conclusion of injunctive norms of peers being more strongly related to behavioural intentions to engage in cyberbullying than descriptive norms of peers.

With regard to normative social influence of adults, we found that the injunctive norm parents was positively related to joining in cyberbullying as bystander. In line with findings by Pabian and Vandebosch (2014) on cyberbullying perpetration, this means that bystanders' perception of parents' approval of cyberbullying makes them more likely to join in cyberbullying. The injunctive norm of teachers approving of cyberbullying did not have a significant effect on bystanders' joining in cyberbullying, which points towards a more important normative role for parents than for teachers.

5.3. Personal characteristics in normative social influence on bystanders' joining in cyberbullying

Cyberbullying perpetration, age and gender were included in the path model of normative social influence on bystanders' joining in cyberbullying. We found that the more adolescents engaged in cyberbullying perpetration, the more likely they were to join in cyberbullying as a bystander. This result points towards an overlap between the roles of perpetrator and reinforcing bystander, as had been demonstrated for traditional bullying (Oh & Hazler, 2009). However, perpetrators of cyberbullying did not experience more social pressure to join in cyberbullying as bystanders. According to this study's results, being a cyberbully makes adolescent bystanders' more likely to join in cyberbullying, but does not elevate their feeling of being pressurised to join in cyberbullying (against their own will). A possible explanation was provided by Burns and colleagues (2008), who found that bullies have the feeling they need to be consistent in their behaviour. Consequently, the pressure to join in cyberbullying as a bystander could come from within, caused by the cyberbully's need

to avoid cognitive dissonance (Festinger, 1962), and will be in compliance with the bystanders' own will.

With regard to gender and age we firstly did not find significant effects on joining in cyberbullying as a bystander. These results contradict our expectations based on traditional bullying (O'Connell et al., 1999; Salmivalli et al., 1996; Salmivalli & Voeten, 2004) and cyberbullying (Van Cleemput et al., 2014) research. Secondly, no age or gender differences were found in bystanders' social pressure to join in cyberbullying. As research on social/peer pressure in adolescents' antisocial behaviour (e.g. Brown et al., 1986; Clasen & Brown, 1985; Eamon, 2002; Ngee Sim & Fen Koh, 2003) revealed mixed results regarding age and gender, further research is warranted to determine whether and how boys and girls react differently when being exposed to social pressure to join in cyberbullying as a bystander.

6. Limitations and recommendation for future research

Although this study offers an innovative approach to normative social influence on bystanders of cyberbullying, it also has some limitations that need to be recognised. First, in the proposed model we included general injunctive and descriptive norms about cyberbullying, without specifying the cyberbullying behaviour under concern (e.g. perpetration, joining in as a bystander). By including more specific injunctive and descriptive norms on joining in cyberbullying as a bystander, we could establish a more nuanced relationship between normative social influence and social pressure to join in cyberbullying as a bystander.

Secondly, this study's proposed model of normative social influence contains both injunctive norm items reflecting relevant others thinking cyberbullying is good, and reversed items about relevant others thinking cyberbullying is not good or relevant others

disapproving of cyberbullying. It must be noted, however, that a low score on relevant others' disapproval of cyberbullying can also just point towards indifference about whether or not the adolescent bystander would join in cyberbullying, and must not necessarily mean that relevant others approve of cyberbullying. This could be especially true for adults, whose indifference towards cyberbullying or towards adolescents' online behaviour in general might lead to adolescents lacking a normative framework on respectful online behaviour. Such a problem of concept/item interpretation could be overcome in future studies by using the same wording for all items and by formulating all items in the same direction (either acceptance of or indifference towards cyberbullying). Furthermore, using multiple items to measure one construct could increase the measures' reliability and validity.

Thirdly, the distinction between injunctive norms of peers with different affiliation to the bystander was operationalised as an opposition between friends and class group members. However, we do not know whether youngsters see friends and class group members as two separate categories in terms of affiliation, or whether they perceive a large overlap between the two. Moreover, other important peer reference groups might also be considered, for instance youth subcultures or social status groups, such as the popular or controversial youth (Scholte & Van Aken, 2006). Using (focus group) interviews with youngsters, future research could aim to identify important reference groups with regard to bystanders' joining in cyberbullying, in order to inform survey research. Such a distinction in specific reference groups could also be made with regard to descriptive norms of peers, a distinction that was not made in the present study.

Lastly, despite the large sample of bystanders ($N=525$), only 5 % of this sample or 27 adolescents admitted that they had joined in cyberbullying. Even though respondents were ensured that their answers to the questions would remain anonymous, they were probably still

engaged in socially desirable answering. In order to overcome this problem, questionnaires could include questions measuring tendency to engage in social desirable answering (e.g. Crowne & Marlowe, 1960; Reynolds, 1982; Strahan & Gerbasi, 1972) and could complement youngsters' accounts with behavioural reports of other actors (e.g. other peers, teachers, parents). In addition, we have to acknowledge that joining in cyberbullying can contain a wide range of possible behaviours (e.g. laughing, calling names yourself,...). Therefore, future research could aim to measure a wider array of different, specific reinforcing behaviours. These reinforcing behaviours should best be measured on seven-point Likert-scales to increase potential variation in the data.

7. Implications for school programs and interventions on cyberbullying

Based on the findings of this study we are able to formulate some recommendations for interventions and school programs that aim to tackle and prevent cyberbullying. First, as we found that friends' approval of cyberbullying causes bystanders to feel social pressure to join in cyberbullying and perform subsequent behaviour, program components targeting bystanders could focus on a) changing bystanders' perceptions of friends approving of (cyber)bullying, which is often overestimated by adolescent bystanders (Sandstrom et al., 2012), and b) teaching bystanders' how to deal with social pressure of friends urging them to join in cyberbullying. These goals could be achieved by providing youngsters with information on friends' disapproval of cyberbullying or joining in cyberbullying as a bystander (e.g. by setting up small group discussions of fictitious cyberbullying situations), and by using social pressure resistance methods, for instance relating intended behaviour to values and utilising psychological inoculation (Bartholomew, Parcel, Kok, Gottlieb, & Fernandez, 2011). A similar social-norms-based approach has already been implemented in evidence-based cyberbullying prevention programmes. An example includes the Italian

“Noncadiamointrappola” programme, which utilises peer-education to influence cyberbullying-related norms and behaviours (Menesini, Nocentini, & Palladino, 2012). Moreover, as our study showed that (frequent) cyberbullies have a higher chance of joining in cyberbullying as bystanders as well, it is advisable to tackle these two behaviours together in cyberbullying intervention and prevention programs.

Secondly, our study reveals an important role of parents in providing a normative framework with regard to cyberbullying. Therefore, interventions could encourage parents to provide their children with informational, emotional, appraisal and instrumental support (Bartholomew et al., 2011) to help them act appropriately online, especially when being confronted with cyberbullying as a bystander.

References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T
- Ajzen, I. (2002, September). Constructing a TpB questionnaire: conceptual and methodological considerations. Retrieved from http://chuang.epage.au.edu.tw/ezfiles/168/1168/attach/20/pta_41176_7688352_57138.pdf
- Ang, R. P., Tan, K.-A., & Mansor, A. T. (2011). Normative beliefs about aggression as a mediator of narcissistic exploitativeness and cyberbullying. *Journal of Interpersonal Violence*, 26(13), 2619–2634. doi:10.1177/0886260510388286
- Atik, G., & Güneri, O. Y. (2013). Bullying and victimization: predictive role of individual, parental, and academic factors. *School Psychology International*, 34(6), 658–673. doi:10.1177/0143034313479699

- Bandura, A. (1991). Social Cognitive Theory of Self-Regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248–287. doi:10.1016/0749-5978(91)90022-L
- Bandura, A. (1998). Health promotion from the perspective of Social Cognitive Theory. *Psychology & Health*, 13(4), 623–649. doi:10.1080/08870449808407422
- Bandura, A. (2010). Social Cognitive Theory for personal and social change by enabling media. In *Entertainment-Education and Social Change* (pp. 75–96). New York and London: Routledge, Taylor and Francis Group.
- Barlińska, J., Szuster, A., & Winiewski, M. (2013). Cyberbullying among adolescent bystanders: role of the communication medium, form of violence, and empathy. *Journal of Community & Applied Social Psychology*, 23(1), 37–51. doi:10.1002/casp.2137
- Bartholomew, L. K., Parcel, G. S., Kok, G., Gottlieb, N. H., & Fernandez, M. E. (2011). *Planning health promotion programs. An Intervention Mapping Approach* (Third ed.). San Francisco: Jossey-Bass.
- Bastiaensens, S., Vandebosch, H., Poels, K., Van Cleemput, K., DeSmet, A., & De Bourdeaudhuij, I. (2014). Cyberbullying on social network sites. An experimental study into bystanders' behavioural intentions to help the victim or reinforce the bully. *Computers in Human Behavior*, 31(0), 259–271. doi:10.1016/j.chb.2013.10.036
- Biddle, B. J., Bank, B. J., & Marlin, M. M. (1980). Parental and peer influence on adolescents. *Social Forces*, 58(4), 1057–1079. doi:10.2307/2577313
- Brown, B. B., Lohr, M. J., & McClenahan, E. L. (1986). Early adolescents' perceptions of peer pressure. *The Journal of Early Adolescence*, 6(2), 139–154. doi:10.1177/0272431686062005

Burns, S., Maycock, B., Cross, D., & Brown, G. (2008). The power of peers: why some students bully others to conform. *Qualitative Health Research*, *18*(12), 1704–1716.

doi:10.1177/1049732308325865

Burton, K. A., Florell, D., & Wygant, D. B. (2013). The role of peer attachment and normative beliefs about aggression on traditional bullying and cyberbullying. *Psychology in the Schools*, *50*(2), 103–115. doi:10.1002/pits.21663

Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A Focus Theory of Normative Conduct: recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, *58*(6), 1015–1026. doi:10.1037/0022-3514.58.6.1015

Clasen, D., & Brown, B. B. (1985). The multidimensionality of peer pressure in adolescence. *Journal of Youth and Adolescence*, *14*(6), 451–468. doi:10.1007/BF02139520

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*(4), 349–354. doi:10.1037/h0047358

DeSmet, A., Bastiaensens, S., Van Cleemput, K., Poels, K., Vandebosch, H., & De Bourdeaudhuij, I. (2012). Mobilizing bystanders of cyberbullying: an exploratory study into behavioural determinants of defending the victim. In B. K. Wiederhold & G. Riva (Eds.), *Annual review of cybertherapy and telemedicine 2012: advanced technologies in the behavioral, social and neurosciences* (Vol. 181, pp. 58–63). Amsterdam, The Netherlands: IOS Press. doi:10.3233/978-1-61499-121-2-58

DeSmet, A., Veldeman, C., Poels, K., Bastiaensens, S., Van Cleemput, K., Vandebosch, H., & De Bourdeaudhuij, I. (2013). Determinants of self-reported bystander behavior in cyberbullying incidents amongst adolescents. *Cyberpsychology, Behavior, and Social*

Networking. doi:10.1089/cyber.2013.0027

Eamon, M. K. (2002). Poverty, parenting, peer, and neighborhood influences on young adolescent antisocial behavior. *Journal of Social Service Research*, 28(1), 1–23.

doi:10.1300/J079v28n01_01

Espelage, D. L., Bosworth, K., & Simon, T. R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling & Development*, 78(3), 326–333. doi:10.1002/j.1556-6676.2000.tb01914.x

Espelage, D. L., Green, H., & Polanin, J. (2012). Willingness to intervene in bullying episodes among middle school students: individual and peer-group influences. *The Journal of Early Adolescence*, 32(6), 776–801. doi:10.1177/0272431611423017

Festinger, L. (1962). Cognitive Dissonance. *Scientific American*, 207, 93–102.

doi:10.1038/scientificamerican1062-93

Festl, R., Scharnow, M., & Quandt, T. (2013). Peer influence, internet use and cyberbullying: a comparison of different context effects among German adolescents. *Journal of Children & Media*, 7(4), 446–462. doi:10.1080/17482798.2013.781514

Fishbein, M. (2008). A Reasoned Action Approach to health promotion. *Medical Decision Making*, 28(6), 834–844. doi:10.1177/0272989X08326092

Freis, S. D., & Gurung, R. A. R. (2013). A Facebook analysis of helping behavior in online bullying. *Psychology of Popular Media Culture*, 2(1), 11–19. doi:10.1037/a0030239

Gini, G., & Espelage, D. L. (2014). Peer victimization, cyberbullying, and suicide risk in children and adolescents. *The Journal of the American Medical Association*, 312(5), 545–

546. doi:10.1001/jama.2014.3212

Hawkins, D., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development, 10*(4), 512–527. doi:10.1111/1467-9507.00178

Heirman, W., & Walrave, M. (2012). Predicting adolescent perpetration in cyberbullying: An application of the Theory of Planned Behavior. *Psicothema, 24*(4), 614–620.

Hinduja, S., & Patchin, J. (2013). Social influences on cyberbullying behaviors among middle and high school students. *Journal of Youth and Adolescence, 1*–12. doi:10.1007/s10964-012-9902-4

Houghton, S. J., Nathan, E., & Taylor, M. (2012). To bully or not to bully, that is not the question: Western Australian early adolescents' in search of a reputation. *Journal of Adolescent Research, 27*(4), 498–522. doi:10.1177/0743558411432638

Idsoe, T., Solli, E., & Cosmovici, E. M. (2008). Social psychological processes in family and school: more evidence on their relative etiological significance for bullying behavior. *Aggressive Behavior, 34*(5), 460–474. doi:10.1002/ab.20259

Kallgren, C. A., Reno, R. R., & Cialdini, R. B. (2000). A Focus Theory of Normative Conduct: when norms do and do not affect behavior. *Personality and Social Psychology Bulletin, 26*(8), 1002–1012. doi:10.1177/01461672002610009

Kandel, D. B. (1978). Homophily, selection and socialization in adolescent friendships. *The American Journal of Sociology, 84*(2), 427–436.

Kowalski, R. M., & Fedina, C. (2011). Cyber bullying in ADHD and Asperger Syndrome

populations. *Research in Autism Spectrum Disorders*, 5(3), 1201–1208.

doi:10.1016/j.rasd.2011.01.007

Kowalski, R. M., & Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *Journal of Adolescent Health*, 53(1, Supplement), S13–S20. doi:10.1016/j.jadohealth.2012.09.018

Lapinski, M. K., & Rimal, R. N. (2005). An explication of social norms. *Communication Theory*, 15(2), 127–147. doi:10.1111/j.1468-2885.2005.tb00329.x

Lazuras, L., Barkoukis, V., Ourda, D., & Tsorbatzoudis, H. (2013). A process model of cyberbullying in adolescence. *Computers in Human Behavior*, 29(3), 881–887.

doi:10.1016/j.chb.2012.12.015

Macháčková, H., Dedkova, L., Sevcikova, A., & Cerna, A. (2013). Bystanders' support of cyberbullied schoolmates. *Journal of Community & Applied Social Psychology*, 23(1), 25–36. doi:10.1002/casp.2135

Machmutow, K., Perren, S., Sticca, F., & Alsaker, F. D. (2012). Peer victimisation and depressive symptoms: can specific coping strategies buffer the negative impact of cybervictimisation? *Emotional and Behavioral Difficulties*, 17(3-4), 403–420.

doi:10.1080/13632752.2012.704310

Marini, Z. A., Dane, A. V., Bosacki, S. L., & CURA, Y.-. (2006). Direct and indirect bully-victims: differential psychosocial risk factors associated with adolescents involved in bullying and victimization. *Aggressive Behavior*, 32(6), 551–569. doi:10.1002/ab.20155

Marsh, L., McGee, R., Nada-Raja, S., & Williams, S. (2010). Brief report: text bullying and traditional bullying among New Zealand secondary school students. *Journal of Adolescence*,

33(1), 237–240. doi:10.1016/j.adolescence.2009.06.001

Menesini, E., Nocentini, A., & Palladino, B. E. (2012). Empowering students against bullying and cyberbullying: Evaluation of an Italian peer-led model. *International Journal of Conflict and Violence*, 6(2), 314–321.

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. doi:10.1016/j.childyouth.2011.08.032

Ngee Sim, T., & Fen Koh, S. (2003). A Domain Conceptualization of Adolescent Susceptibility to Peer Pressure. *Journal of Research on Adolescence*, 13(1), 57–80.
doi:10.1111/1532-7795.1301002

Obermaier, M., Fawzi, N., & Koch, T. (2014). Bystanding or standing by? How the number of bystanders affects the intention to intervene in cyberbullying. In *Papers presented at the 64th Annual Conference of the International Communication Association*. Seattle (USA).

O’Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: insights and challenges for intervention. *Journal of Adolescence*, 22(4), 437–452.
doi:10.1006/jado.1999.0238

Oh, I., & Hazler, R. J. (2009). Contributions of personal and situational factors to bystanders’ reactions to school bullying. *School Psychology International*, 30(3), 291–310.
doi:10.1177/0143034309106499

Olweus, D. (1993). *Bullying at School: What we know and what we can do*.
Malden/Oxford/Carlton: Blackwell Publishers Ltd.

Pabian, S., & Vandebosch, H. (2014). Using the theory of planned behaviour to understand cyberbullying: the importance of beliefs for developing interventions. *European Journal of Developmental Psychology, 11*(4), 463–477. doi:10.1080/17405629.2013.858626

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

Pepler, D., Craig, W., & O'Connell, P. (2010). Peer processes in bullying. Informing prevention and intervention strategies. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools. An international perspective* (pp. 469–479). New York/Oxon: Routledge.

Pozzoli, T., Gini, G., & Vieno, A. (2012). The role of individual correlates and class norms in defending and passive bystanding behavior in bullying: a multilevel analysis. *Child Development, 83*(6), 1917–1931. doi:10.1111/j.1467-8624.2012.01831.x

Price, M., & Dalgleish, J. (2010). Cyberbullying. Experiences, impacts and coping strategies as described by Australian young people. *Youth Studies Australia, 29*(2), 51–59.

Pure, R. A., & Metzger, M. (2012). The outcomes of online and offline victimization by sex: males' and females' reactions to cyberbullying versus traditional bullying. In *Papers presented at the 63rd Annual Meeting of the International Communication Association*. Phoenix (USA).

Reno, R. R., Cialdini, R. B., & Kallgren, C. A. (1993). The transsituational influence of social norms. *Journal of Personality and Social Psychology, 64*(1), 104–112.
doi:10.1037/0022-3514.64.1.104

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-

Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38(1), 119–125.

doi:10.1002/1097-4679(198201)38:1<119::AID-JCLP2270380118>3.0.CO;2-I

Rubini, M., & Palmonari, A. (2006). Adolescents' relationships to institutional order. In S. Jackson & L. Goossens (Eds.), *Handbook of adolescent development*. New York (USA): Psychology Press.

Şahin, M. (2012). The relationship between the cyberbullying/cybervictimization and loneliness among adolescents. *Children and Youth Services Review*, 34(4), 834–837.

doi:10.1016/j.chilyouth.2012.01.010

Salmivalli, C. (2010). Bullying and the peer group: a review. *Aggression and Violent Behavior*, 15(2), 112–120. doi:10.1016/j.avb.2009.08.007

Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: participant roles and their relations to social status within the group. *Aggressive Behavior*, 22(1), 1–15. doi:10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T

Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development*, 28(3), 246–258. doi:10.1080/01650250344000488

Sandstrom, M., Makover, H., & Bartini, M. (2012). Social context of bullying: do misperceptions of group norms influence children's responses to witnessed episodes? *Social Influence*, 8(2-3), 196–215. doi:10.1080/15534510.2011.651302

Santor, D. A., Messervey, D., & Kusumakar, V. (2000). Measuring peer pressure, popularity, and conformity in adolescent boys and girls: predicting school performance, sexual attitudes,

and substance abuse. *Journal of Youth and Adolescence*, 29(2), 163–182.

doi:10.1023/A:1005152515264

Schneider, S. K., O'Donnell, L., Stueve, A., & Coulter, R. W. S. (2012). Cyberbullying, school bullying, and psychological distress: a regional census of high school students.

American Journal of Public Health, 102(1), 171–177. doi:10.2105/AJPH.2011.300308

Scholte, R. H. J., & Van Aken, M. A. G. (2006). Peer relations in adolescence. In *Handbook of adolescent development* (pp. 175–199). New York (USA): Psychology Press.

Schultz, W. P., Tabanico, J. J., & Rendón, T. (2008). Normative beliefs as agents of influence: basic processes and real-world applications. In W. D. Crano & R. Prislin (Eds.), *Attitudes and attitude change* (pp. 385–409). New York (USA): Psychology Press.

Stevens, V., De Bourdeaudhuij, I., & Van Oost, P. (2002). Relationship of the family environment to children's involvement in bully/victim problems at school. *Journal of Youth and Adolescence*, 31(6), 419–428. doi:10.1023/A:1020207003027

Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlow-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 28(2), 191–193. doi:10.1002/1097-4679(197204)28:2<191::AID-JCLP2270280220>3.0.CO;2-G

Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: a role for group identification. *Personality and Social Psychology Bulletin*, 22(8), 776–793.

doi:10.1177/0146167296228002

Urberg, K. A. (1992). Locus of peer influence: social crowd and best friend. *Journal of Youth and Adolescence*, 21(4), 439–50. doi:10.1007/BF01537896

Van Cleemput, K., Vandebosch, H., & Pabian, S. (2014). Personal characteristics and contextual factors that determine “helping”, “joining in” and “doing nothing” when witnessing cyberbullying. *Aggressive Behavior, 40*(5), 383–396. doi:10.1002/ab.21534

White, K. M., Hogg, M. A., & Terry, D. J. (2002). Improving attitude-behavior correspondence through exposure to normative support from a salient ingroup. *Basic & Applied Social Psychology, 24*(2), 91–103. doi:10.1207/S15324834BASP2402_2

Wright, M. F., & Li, Y. (2012). Kicking the digital dog: a longitudinal investigation of young adults’ victimization and cyber-displaced aggression. *Cyberpsychology, Behavior, and Social Networking, 15*(9), 448–454. doi:10.1089/cyber.2012.0061

Zhou, Z., Tang, H., Tian, Y., Wei, H., Zhang, F., & Morrison, C. M. (2013). Cyberbullying and its risk factors among Chinese high school students. *School Psychology International, 34*(6), 630–647. doi:10.1177/0143034313479692