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Relational Aggressiveness in Adolescence: Relations With Emotional Awareness and Self-Control

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Abstract

Involvement in relationally aggressive conduct is an important contributor to maladaptive functioning in both childhood and adulthood. Decreased emotional awareness and impairments of self-control are risk factors for relational aggressiveness, while emotional awareness can also be treated as an important prerequisite for proper self-control. The aim of the study was to examine the associations between dimensions of emotional awareness (attention to emotions and emotional clarity), self-control, and relational aggressiveness. Self-control was also examined as a mediating variable between emotional awareness and relational aggressiveness. Self-report measures of trait meta-mood, alexithymia, self-control, and relational aggressiveness were completed by 214 adolescents (129 females), aged 15–23. The confirmatory factor analysis confirmed two factors of emotional awareness: (1) inattention to emotions (reflecting low attention to emotions and externally oriented thinking) and (2) a lack of emotional clarity (reflecting difficulties in identifying emotion, difficulties in describing emotion, and low clarity of emotion). Self-control and mood repair ability inversely correlated with proactive and reactive relational aggressiveness, whereas the clarity component



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of the meta-mood trait only inversely predicted reactive relational aggressiveness. Structural equation modeling (SEM) showed that direct relationships between inattention to emotions and relational aggressiveness, as well as between lack of emotional clarity and relational aggressiveness were non-significant. Nevertheless, a lack of emotional clarity was indirectly and significantly associated with relational aggressiveness through decreased self-control.

Keywords

emotional awareness; attention to emotions; clarity of emotions; relational aggressiveness; self-control

The "class bully" is typically thought of as an individual using overt, physical aggression toward other students. However, bullying also comes in the form of relational aggression, through means of gossip, rejection, lies, etc. (Tackett, Waldman, & Lahey, 2009). Given that relational aggressiveness contributes to serious maladjustment during childhood and adolescence (Crick et al., 1999), investigating its risk factors is of great social importance (cf. Bailey & Ostroy, 2008). Decreased emotional awareness and its accompanying difficulties with emotion regulation constitute one important condition of covert and overt aggression against peers (Kranzler et al., 2016; Kuzucu, 2016; Stegge & Terwogt, 2007). Emotional awareness involves two correlated, but distinct domains of emotional abilities: attention to emotions and emotional clarity (Boden & Thompson, 2017; Coffey, Berenbaum, & Kerns, 2003). Although well-established in previous studies, a two-factor structure of emotional awareness has never been examined in Polish research. It also remains inconclusive whether attention to emotions and emotional clarity have similar or different functions for relational aggressiveness. Another substantive predictor of aggressive and deviant behavior during childhood and adolescence is the inability to maintain proper self-control (due to various impairments of self-regulation) (Denson, Capper, Oaten, Friese, & Schofield, 2011; de Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012). Emotional awareness and self-control are also correlated (Bar-On, 1997; Davies, Stankov, & Roberts, 1998; Gignac, 2010; Petrides & Furnham, 2001), while proper emotional awareness seems to be an important prerequisite of efficient self-control (Tangney, Baumeister, & Boone, 2004). Hence, decreased emotional awareness may lead to aggressive behaviors not only directly, but also through inhibiting self-control (Kuzucu, 2016). However, studies examining the connections between emotional awareness, self-control and relational aggressiveness are quite limited.

The purpose of this study was twofold: (1) to test the two-factor structure of emotional awareness (with facets of attention to emotions and emotional clarity) in Poland, since this data has never been collected, and (2) to analyze the relationships between emotional awareness, self-control, and relational aggressiveness. The present study focuses on adolescence for three reasons: (1) relational aggressiveness peaks during later childhood and adolescence, and causes serious consequences for the mental health of adolescents; (2) developmental changes in adolescence (e.g., an increase in emotion understanding, social sophistication, and a greater significance of social status and close relationships for self-identity) result both in greater relational aggression, as well as in better emotional aware-



ness and self-control; (3) examination of the inhibitory role of emotional awareness and self-control for relational aggressiveness in adolescence may be translated into preventive interventions in schools (Voulgaridou & Kokkinos, 2015). Therefore, this study offers three new pieces of information: (1) a further analysis of antecedents seen with relational aggressiveness in adolescents, (2) an examination of two components of emotional awareness involved in self-control and relational aggressiveness, and (3) suggestions for prevention programs regarding aggression in schools.

Relational Aggressiveness and its Consequences

Relational aggressiveness is defined as the removal or threat of removing relationships to cause harm, including spreading malicious rumors, lies, gossip or secrets, as well as intentionally ignoring or excluding a person from group activities (Crick & Grotpeter, 1995; Crick et al., 1999). Relationally aggressive behaviors (for both victim and perpetrator) are significant predictors of maladaptive functioning in childhood and adolescence (Card, Stucky, Sawalani, & Little, 2008; Heilbron & Prinstein, 2008). Relational aggression is directly related to symptoms of psychopathology (e.g., conduct problems; Keenan et al., 2008), personality disorders (e.g., psychopathy; Marsee & Frick, 2007), internalizing and externalizing problems (Murray-Close, Ostrov, & Crick, 2007), poor social-psychological adjustment, e.g., antisocial behavior, peer rejection, loneliness, delinquency (Crick et al., 2007; Ellis, Crooks, & Wolfe, 2009), and lack of school participation (Crick & Grotpeter, 1995).

Relational aggressiveness is usually a consequence of poor social information processing, i.e., hostile attribution bias (Bailey & Ostrov, 2008; Crick & Grotpeter, 1995) and decreased self-regulation (McLaughlin et al., 2011). Regarding its function, two divergent, but correlated forms of relationally aggressive behaviors can be distinguished: (1) proactive (aggressive behaviors that are planned and displayed to serve a goal-directed end), and (2) reactive (impulsive aggressive behaviors that are displayed in response to a perceived threat and out of hostility or anger) (Murray-Close et al., 2010). Relational aggressiveness has been found to be a stable trait across one's lifespan (Voulgaridou & Kokkinos, 2015). Women tend to be more relationally aggressive than men, but this may depend upon developmental periods (see Bailey & Ostrov, 2008).

Emotional Awareness and Relational Aggressiveness

Emotional awareness involves accurate perception and understanding of one's own and other people's affective states, and is captured in several frameworks such as emotional intelligence (Mayer, Salovey, & Caruso, 2000), alexithymia (Taylor, Bagby, & Parker, 1991), emotional awareness (Lane & Schwartz, 1987), and mood awareness (Swinkels & Giuliano, 1995). Previous studies have identified two latent dimensions of emotional awareness, in regards to the mentioned constructs of emotional processing (alexithymia, trait metamood, mood awareness, emotional intelligence, etc.): attention to emotions and emotional clarity (Boden & Thompson, 2017; Coffey et al., 2003; Davies et al., 1998; Gohm & Clore, 2002; Palmieri, Boden, & Berenbaum, 2009).



Attention to emotions relates to how one notices, thinks about, and monitors individual feelings (Coffey et al., 2003). High and positive loadings on the attention to emotions dimension occur for the attention subscale from the Trait Meta-Mood Scale (which measures the extent that participants notice, think, and actively seek information regarding their feelings; Salovey et al., 1995) and the monitoring subscale of the Mood Awareness Scale (which measures inclination to focus on or to scrutinize one's mood; Swinkels & Giuliano, 1995). High and negative loadings on attention to emotions are seen for the externally oriented thinking subscale from the Toronto Alexithymia Scale (which measures processing that focuses on concrete, rather than emotional information; Bagby, Taylor, & Parker, 1994). Attention to emotions is linked to higher extraversion and openness, as well as higher affect intensity and lower depression (Coffey et al., 2003; Huang, Berenbaum, & Chow, 2013). Highly emotionally attentive individuals may experience serious behavioral distraction in tasks including emotionally relevant stimuli (Coffey et al., 2003).

Emotional clarity is defined as being in tune with one's own emotions, discriminating between feelings, and understanding specific feelings (Dizén, Berenbaum, & Kerns, 2005; Gohm & Clore, 2002). High and positive loadings on the emotional clarity dimension were found for the clarity subscale from the Trait Meta-Mood Scale (which measures the ability to identify, discriminate between, and understand one's feelings; Salovey et al., 1995) and the labeling subscale from the Mood Awareness Scale (Swinkels & Giuliano, 1995). Contrarily, the difficulties identifying feelings and difficulties describing feeling subscales from the Toronto Alexithymia Scale (Bagby, Taylor, & Parker, 1994) have high and negative loadings on the emotional clarity dimension. Emotional clarity is negatively correlated with self-focused needs (Dizén et al., 2005), whereas lack of emotional clarity is positively correlated with neuroticism (Coffey et al., 2003). People make more utilitarian moral decisions when they possess lower emotional clarity (Koven, 2011).

The two-factor structure of emotional awareness is well-confirmed in previous studies (Boden & Thompson, 2015; Coffey et al., 2003; Palmieri et al., 2009), though it has never been addressed in Polish research. Therefore, the first goal of this study is to examine a model of two correlated facets of emotional awareness: attention to emotions and emotional clarity. The study utilized subscales from the Toronto Alexithymia Scale (Bagby, Taylor, & Parker, 1994) and the Trait Meta-Mood Scale (Salovey et al., 1995), because they are frequently treated as proxy measures of emotional awareness (Boden & Thompson, 2017).

Emotional processing is regarded as a precursory process in triggering aggressive behaviors (Anderson & Bushman, 2002). Various forms of aggressive behaviors are consequences of inaccurate emotional perceptions (e.g., hostile attribution biases) and the inability to regulate affective reactions triggered by these biased perceptions (Chen, Coccaro, & Jacobson, 2012; Kuzucu, 2016). Problems with emotional awareness (e.g., alexithymia) positively correlate with trait aggressiveness (Manninen et al., 2011). Lack of emotional awareness and poor emotional understanding positively correlate with overt, relational, and reputational aggression toward peers (McLaughlin, Hatzenbuehler, Mennin, & Nolen-Hoeksema, 2011), and with abusive sexual behaviors (Moriarty, Stough, Tidmarsh, Eger, &



Dennison, 2001). On the other hand, people able to utilize higher levels of self-introspection and high awareness of their own feelings (i.e., with high private self-awareness; Fenigstein, Scheier, & Buss, 1975) exhibit fewer verbal aggressive behaviors (Kinney, Smith, & Donzella, 2001). Thus, it is hypothesized that emotional awareness would predict lower relational aggressiveness.

Two factors of emotional awareness (attention to emotions and emotional clarity) are correlated, but have distinct functions for the self-regulation of aggressive conduct. Emotional clarity enables more efficient emotion regulation, while attention to emotions may produce mixed results (Boden & Thompson, 2017). It may lead to better detection of emotional states and motivate effective regulation but also may lead to being overwhelmed or confused by one's emotions and to further impairments of self-control. Attention to emotions is highly associated with emotion intensity, whereas emotional clarity is more highly associated with emotion variability (Thompson, Dizen, & Berenbaum, 2009). Both attention to emotions and emotional clarity correlate with lower physical aggressiveness, but clarity also correlates with lower verbal aggressiveness (Garofalo, Holden, Zeigler-Hill, & Velotti, 2016). Therefore, although both attention to emotions and emotional clarity are predicted to inversely correlate with relational aggressiveness, predictions for emotional clarity are stronger.

Self-Control and Relational Aggressiveness

Self-control was defined by Tangney et al. (2004) as the ability to override or change one's inner responses (i.e., moods and emotions), as well as interrupt undesired behavioral tendencies and refrain from acting on them. Similarly, low self-control was defined by Gottfredson and Hirschi (1990) as behaving impulsively, engaging in risk-taking, preferring physical activities over mental ones, choosing simple tasks over complex ones, being self-centered and short-tempered. Self-control encompasses four main processes of self-regulation: (1) standards (clearly stated ideals or goals), (2) monitoring (comparing the self, or the relevant aspect of self, to the standard), (3) self-regulatory strength (colloquially known as willpower), and (4) motivation (specifically, motivation to achieve the goal or meet the standard) (Baumeister & Vohs, 2007).

Low self-control contributes to overt aggression (Özdemir, Vazsonyi, & Çok, 2013), covert aggressiveness (Card et al., 2008) and various forms of violent conduct, e.g., family abuse (Finkenauer et al., 2015; Finkel et al., 2009). People with low self-control and suffering from difficulties with anger management tend to display more antisocial behaviors (Latham & Perlow, 1996; Tangney et al., 2004). In adolescents, anger control inversely correlates with trait anger, hostility, as well as with fewer physically and verbally aggressive acts (Kuzucu, 2016). Better self-control is correlated with agreeableness, perspective taking, and prosocial behavior (Davis & Oathout, 1987; King, George, & Hebl, 2005).

The results discussed above and recent meta-analyses confirm the inhibitory function of self-control for deviant and aggressive behavior (de Ridder et al., 2012; Tangney et al., 2004); accordingly, the current study hypothesizes that self-control is inversely related to relational aggressiveness.



Emotional Awareness, Self-Control, and Relational Aggressiveness

High emotional awareness and proper self-control are independent protective factors for relational aggressiveness. However, self-control may play an additional mediating role between emotional awareness and relational aggressiveness. This assumption is based on the role of emotional states in regulating one's behavior (Carver & Scheier, 1998): not only the specificity of an emotional state experienced in a certain situation, but also being aware of this emotional state play an important role in the self-regulation.

Self-regulation processes involve a series of feedback-loops: action loops and affect loops (Carver & Scheier, 1998, 2011). The action loop involves sensing a present condition (e.g., one's displayed behavior) and comparing it to a self-regulatory standard (an acceptable or desired rate of reduction of the discrepancy between the present condition and the intended condition, e.g., specific moral norm). Any behavioral discrepancy detected in the action loop is treated as an error signal and shown as an affect. If progress toward the intended condition is below the standard, a negative affect is experienced. If the rate of discrepancy reduction is high enough to exceed the standard, a positive affect is seen. If the rate of discrepancy is not distinguishable from the standard, no affect is noted. An affect produced in an action loop undergoes further processing in the affect loop, the aim of which is to change the behavior to conform to the intended condition. For example, if someone wants to lose weight, he/she can pick a target weight, and map out a strategy to achieve this goal. Individuals will track their present weight and eating behaviors, and will compare them to a set standard (the desirable or accepted rate of losing weight). If the discrepancy is high, individuals will feel disappointment or frustration (a negative affect), but if the discrepancy is low (someone loses weight faster than what is noted in the standard), feelings of joy and pride (a positive affect) will appear. The negative affect should encourage individuals to change their own behavior, e.g., to restrict eating fatty foods, whereas the positive affect is a signal saying: "keep your present eating behavior".

Based on the above mentioned reasoning, emotional awareness seems to play a substantial role in at least three important self-regulation processes (Baumeister & Vohs, 2007): (1) in building self-regulatory standards, (2) in monitoring discrepancies between ongoing behavior and self-regulatory standards (signaled as an affect), and (3) in mobilization of self-regulatory strength.

Firstly, high attention to one's emotions and high emotional clarity might help to identify and clarify one's desired or intended conditions, ideals or goals (standards). Indeed, attention to emotions and emotional clarity are associated with need activation intensity, need activation consistency, need differentiation, and need processing style (Dizén, Berenbaum, & Kerns, 2005). While beliefs about the acceptability of relational aggression are positively associated with engagement in relationally aggressive acts (Werner & Nixon, 2005), highly emotionally aware individuals display less hostile attitudes (Castillo, Salguero, Fernández-Berrocal, & Balluerka, 2013) and fewer normative beliefs legitimizing aggression (Ang, Li, & Seah, 2017).



Secondly, monitoring involves comparing a current condition to an internalized standard. The detected discrepancies are shown as an affect (Carver & Scheier, 2011). As emotional awareness is defined as being able to be attentive to, identify, and understand one's emotional state (Boden & Thompson, 2017), a high emotional awareness may help in quickly and accurately identifying affective signals of the discrepancies between one's behaviors and self-regulatory standards. Indeed, monitoring the valence of the feedback received influences persistence, disengagement, and change in goal pursuit (Fishbach & Finkelstein, 2012). When provoked, emotionally aware individuals may more quickly detect and more accurately interpret their own angry reactions and retaliatory impulses being triggered; this can help to implement effective regulation strategies, and then increase self-control over aggressive impulses.

Self-regulatory strategies utilize a substantial amount of strength and energy (Baumeister & Vohs, 2007) and ego depletion (a state of exhaustion of self-control resources) frequently leads to aggressive conduct (Barlett, Oliphant, Gregory, & Jones, 2016). Ego-depleted individuals suffer from dysfunctions in emotional processing (Wagner & Heatherton, 2013), but developing higher abilities of emotional regulation helps in the mobilization of self-regulatory strength to inhibit aggression (Peña-Sarrionandia, Mikolajczak, & Gross, 2015). After receiving self-control training (focused on efficient emotional regulation), aggressive individuals experience less anger toward provocateurs compared to controls (Denson et al., 2011). Self-control relies on similar neural substrates to emotion regulation (Paschke et al., 2016). Moreover, developing more efficient emotional regulation requires deeper emotional awareness (Peña-Sarrionandia et al., 2015; Tamir, Mitchell, & Gross, 2008). Decreased attention to emotions and lower emotional clarity positively correlate with failures in emotion regulation, e.g., problematic impulse control and goal-directed behaviors (Gratz & Roemer, 2004). Hence, higher emotion awareness, through enabling better emotion regulation, may strengthen selfcontrol or help to prevent ego depletion, which, in turn, will inhibit aggressive impulses and behaviors.

Two facets of emotional awareness may correlate differently with self-control. Attention to emotions can alert individuals of discrepancies between behavior and standards; effective emotional regulation and self-control strategies could then be implemented (Boden & Thompson, 2017). On the other hand, too much focus on emotions can cause someone to be distracted or overwhelmed by emotionally relevant stimuli (see Coffey et al., 2003); this may impede inhibition of self-control. People who are very connected with emotions, but do not understand their emotions well, may be more likely to use ineffective strategies, perhaps because they are overwhelmed and confused by their emotions (Boden & Thompson, 2017). Individuals highly attentive to their feelings may both detect anger more quickly and initiate down-regulation of aggressive impulses more quickly, which help in avoiding relationally aggressive conduct, but also may become overwhelmed by angry feelings, which may result in impairment of self-control, and relationally aggressive acts.



Lack of emotional clarity correlates with more difficulties in impulse control (Gratz & Roemer, 2004), as well as with higher anger and hostility, which predict, in turn, greater physical and verbal aggression (Mitrofan & Ciuluvicâ, 2012). Higher self-complexity (better clarity of personal aspects, traits and motives), a trait similar to emotional clarity, is correlated with better self-regulation (Brown & McConnell, 2009). After a failure, individuals with lower self-complexity quit self-regulatory techniques more quickly than individuals with higher self-complexity (Dixon & Baumeister, 1991). In individuals with low self-complexity, negative affect positively correlates with self-regulatory behavior when this behavior is presumed to reduce the discrepancy with the standard (Brown & McConnell, 2009). Among individuals with high self-complexity, motivation to utilize self-control strategies is high and stable, and does not depend on the anticipated efficiency of regulatory behaviors.

Emotional clarity is expected to positively correlate with self-control. Predictions about associations between attention to emotions and self-control remain inconclusive. Therefore, it is expected that self-control may mediate the relationship between emotional awareness and relational aggressiveness, but specifically, between emotional clarity and relational aggressiveness.

Summary of Predictions

The first goal of the study is to examine the structure of emotional awareness (Boden & Thompson, 2017). According to the results of previous research, the confirmatory factor analysis (CFA) was conducted using the Toronto Alexithymia Scale and the Trait Meta-Mood Scale (cf. Palmieri et al., 2009). It is hypothesized that (1) CFA would confirm a good fit of the model with two correlated dimensions of emotional awareness: attention to emotions and emotional clarity, (2) the attention subscale from the Trait Meta-Mood Scale and externally oriented thinking from the Toronto Alexithymia Scale would have high loadings on the attention to emotions dimension, and (3) the clarity subscale from the Trait Meta-Mood Scale, the difficulties identifying feelings subscale, and the difficulties describing feelings subscales from the Toronto Alexithymia Scale, would have high loadings on the emotional clarity dimension.

The second goal is to examine the connections with emotional awareness, self-control, and relational aggressiveness. (1) It is hypothesized that attention to emotions and emotional clarity would correlate with decreased relational aggressiveness. (2) Self-control is predicted to inversely correlate with relational aggressiveness. (3) Emotional clarity is hypothesized to positively correlate with self-control, whereas the predictions for relationship between attention to emotions and self-control are ambiguous. As previously stated, excessive attention to emotions can cause people to feel overwhelmed or confused (cf. Boden & Thompson, 2017), which can impede self-control. On the contrary, attention to emotions, if not excessive, may also be positively correlated with self-control as it fosters a detection of affective signals of discrepancies with the regulatory standards. (4) It is hypothesized that self-control would play a mediating role between attention to emotions and relational aggressiveness,



but primarily between clarity of emotions and relational aggressiveness. The hypothesis that self-control would serve as a mediator for the relationship between emotional awareness and relational aggressiveness is tested by applying structural equation modeling.

The summary of predictions for goals of the study is presented in Figure 1.

Studies regarding emotional awareness that focus on its relationships with self-control and relational aggressiveness may provide insightful cues for prevention programs in schools and other institutions (see Caprara et al., 2014). This research may produce suggestions on improving students' self-control strategies to overcome aggressive impulses through developing strategies to differentiate, inspect, and understand their feelings.

Method

Participants

Two hundred and fourteen secondary schools students (129 females) participated in this study, with ages ranging from 15 to 23 years (M=17.77; SD=1.01). Two individuals were excluded from the study because of a significant age difference. The study was thus conducted with 212 participants (128 females) aged 15–19 years old (M=17.74; SD=0.94). Participation was voluntary and no payments were involved. After obtaining written permission from the school headmaster, the study was run in small groups, with 10-15 participants per group. A psychologist oversaw each group; teachers were present, but did not collect data. Students were informed that the study was related to human social relations and were assured that all data collected would be strictly used for scientific purposes, and

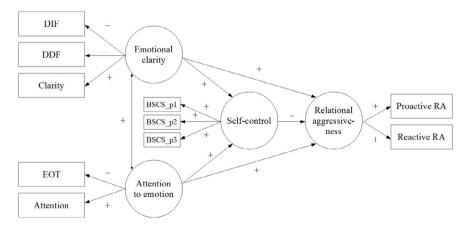


Figure 1. The summary of predictions of the study.

Note. "+" - indicate hypothesized positive relationship; "-" - indicate negative relationship; Identifying - Difficulties identifying feelings; Describing - Difficulties describing feelings; EOT - Externally oriented thinking; RA - Relational aggressiveness



nothing would be shared with the school. Participants were given a set of questionnaires after their verbal consent to participate in the study. Students who chose not to participate in the study stayed in the classroom, but were asked to be quiet so that the others could work. There were no specific criteria of inclusion in this sample. Participants demonstrated similar or lower levels of relational aggressiveness when compared with previous studies (cf. Moroń, 2015). When the study concluded, the students were informed about its purpose and debriefed.

Materials

The Toronto Alexithymia Scale, TAS-20

The TAS-20 (Bagby et al., 1994; Polish translation: Moroń, 2016) consists of three subscales – difficulty identifying feelings (DIF), difficulty describing feelings (DDF), and externally oriented thinking (EOT). The DIF subscale assesses the ability to recognize one's own emotions (7 items; e.g., "I am often confused about what emotion I am feeling"). The DDF subscale measures how well participants convey and describe their emotions to others (5 items; e.g., "I am able to describe my feelings easily"). The EOT is a thinking style that focuses on concrete, rather than emotional, information (8 items; e.g., "I prefer talking to people about their daily activities, rather than their feelings"). The items were assessed on a Likert-type scale from 1 (completely uncharacteristic of me) to 5 (completely characteristic of me). A score for each subscale was computed as an average rating. The TAS-20 is widely used internationally (Taylor & Bagby, 2012) and has shown reliability and construct validity (Taylor, Bagby, & Parker, 2003). The reliability and validity of this method was also satisfactory in studies conducted in Poland (Moroń, 2016).

The Trait Meta-Mood Scale, TMMS

TMMS (Salovey et al., 1995; a Polish translation) is a 30-item scale consisting of three subscales—attention, clarity, and repair. The attention subscale measures the extent to which participants notice, think and actively seek information regarding their feelings (13 items; e.g., "I pay a lot of attention to how I feel"). The clarity subscale refers to the ability to identify, discriminate between, and understand one's own feelings (11 items; e.g., "I am usually very clear about my feelings"). The repair subscale shows how individuals self-assess their own feelings (6 items; e.g., "When I become upset, I remind myself of all the pleasures in life"). The items were ranked on a scale from 1 (completely uncharacteristic of me) to 5 (completely characteristic of me). Scores from all subscales were tallied and an average was taken. The TMMS has good reliability and construct validity not only in English, but in other language versions as well (e.g., Salguero, Fernández-Berrocal, Balluerka, & Aritzeta, 2010). Three psychologists, all fluent in English, translated the TMMS for this study. By means of group discussion and consultation with a bilingual psychologist, the translation of the TMMS was checked to ensure its comprehension in the group of adolescents and its



content validity by referring to wordings of similar questionnaires in their Polish adaptations (Jaworowska & Matczak, 2001).

The Brief Self-Control Scale, BSCS

The BSCS (Tangney et al., 2004; a Polish translation) consists of 13 items assessed on a scale ranging from 1 (*not at all typical of me*) to 5 (*very much typical of me*). Example items include: "I often act without thinking through all the alternatives," "I have trouble concentrating", and "At times, pleasure and fun distract me from getting work done." An average score was tallied for all tests assessed. Three psychologists, all fluent in English, translated the BSCS for this study. The translation was then screened during the group discussion and checked by the bilingual psychologist. The BSCS translation was prepared to be understandable for adolescents; the scale's content validity was confirmed.

The Proactive, reactive, and romantic relational aggression scales

The Proactive, Reactive, and Romantic Relational Aggression Scales (Murray-Close et al., 2010; Polish translation: Moroń, 2015) consists of 14 items measuring proactive, reactive, and romantic aspects of relational aggression. In the present study, the relational aggressiveness toward a romantic partner subscale was excluded from the analysis because not every participant was involved in a romantic relationship. Some examples: "I have intentionally ignored a person until I was given what I wanted" (proactive relational aggressiveness; 4 items) and "When I am not invited to do something with a group of people, I will exclude those people from future activities" (reactive relational aggressiveness; 5 items). The items were assessed on a scale from 0 (*never*) to 3 (*very often*). The overall score for relational aggressiveness was averaged using the proactive relational aggressiveness scale and the reactive relational aggressiveness scale. The reliability of the proactive relational aggressiveness subscale was $\alpha = .62$; relational aggressiveness was, $\alpha = .62$; the overall reliability of the scale was .72.

Results

Structure of Emotional Awareness

Data involving means, standard deviations, and correlations among alexithymia, trait meta-mood, self-control, and relational aggression are presented in Table 1.

Difficulties identifying feelings and difficulties describing feelings, as well as the clarity and the repair components of trait meta-mood were correlated significantly with self-control. The clarity and the repair subscales of TMMS were also correlated positively with relational aggressiveness. Correlation between the clarity and proactive relational aggressiveness was marginally weaker than between the clarity and reactive relational aggressiveness, Z = 1.70, p = .089. Correlation between self-control and proactive relational aggressiveness was significantly weaker than between self-control and reactive relational aggressiveness, Z = -2.04, p = .041.



2.35

0.84

2.67

0.85

2.31

0.64

.67

M

SD

α

Scale	1	2	3	4	5	6	7	8	9
1. DIF									
2. DDF	.60***								
3. EOT	.13	.22***							
4. Attention	11	19*	51***						
5. Clarity	71***	60***	19*	.17*					
6. Repair	40***	34***	12	.20**	.52***				
7. Self-control	29***	16*	10	.09	.30***	.19*			
8. Proactive relational aggressiveness	.01	01	03	10	.01	17*	14*		
9. Reactive relational aggressiveness	.09	.09	.01	05	13 [†]	19*	28***	.47***	

Table 1

Means, Standard Deviations, Reliabilities and Intercorrelations Between Variables

Note. DIF = difficulties identifying feelings; DDF = difficulties describing feelings; EOT = externally oriented thinking. $^{\dagger}p < .06. *p < .05. **p < .01. ***p < .001.$

3.55

0.62

.81

3.35

0.66

3.27

0.91

.80

2.80

0.59

.78

0.30

0.39

.62

A confirmatory factor analysis was conducted aimed at examination of the internal structure of emotional awareness¹. It was expected that: (1) the externally oriented thinking subscale and the attention subscale (TMMS) would have high loadings on the latent variable of attention to emotions, and that (2) the difficulty identifying feelings subscale, the difficulty describing feelings subscale from TAS-20, and the clarity subscale from TMMS would have high loadings on the latent variable of emotional clarity (Coffey et al., 2003; Palmieri et al., 2009). The model demonstrated satisfactory goodness of fit, $\chi^2(4) = 4.16$, p = .39, RMSEA = .014, 90% CI [0, .105], GFI = 1.00, TLI = .99. The externally oriented thinking subscale ($\lambda = .477$, p < .001) and the attention subscale of the TMMS ($\lambda = .477$, $\lambda =$

According to the recent meta-analysis (Boden & Thompson, 2017), we have accepted that the internal structure of emotional awareness is well-established. The attention to emotion facet is represented by the attention subscale from the TMMS and externally oriented thinking from the TAS-20, while emotional clarity is represented by the clarity subscale from the TMMS, and the difficulties identifying feelings as well as difficulties describing feelings subscales from the TAS-20. Thus, we used scores for abovementioned subscales in the study (additionally we showed their intercorrelations in Table 1). Measurement models for TAS-20 and TMMS were close to acceptable, TAS-20: $\chi^2/(167) = 316.14$; p = <.001; $\chi^2/df = 1.88$; GFI = .867; AGFI = .833; RMSEA = .066 and TMMS: $\chi^2/(402) = 790.44$, p < .001; $\chi^2/df = 1.97$; GFI = .793; AGFI = .761; RMSEA = .070. Reliabilities of subscales of both measures were also acceptable (see Table 1). Due to these two criteria we confirmed that the TAS-20 and TMMS subscales were internally consistent. The data on the loadings of items of the TAS-20 and the TMMS on their respective subscales are provided in the additional materials. We have chosen to use the confirmatory factor analysis to extract facets of emotional awareness rather than other approaches (exploratory structural equation modeling, multidimensional scaling or exploratory factor analysis; see Boden and Thompson, 2015; Palmieri et al., 2009) to obtain greater restrictiveness and clarity of indicators in the analysis.



0.44

0.42 .62 -.391, p < .001) had high loadings on the first factor, while the difficulty identifying feelings subscale (λ = .707, p < .001), the difficulty describing feelings subscale (λ = .608, p < .001) of TAS-20, and the clarity subscale of the TMMS (λ = -.548, p < .001) had high loadings on the second factor. The first factor measured the degree to which one attends to concrete and externally oriented (as opposed to emotional) aspects of one's world and reflected low attention to emotions. Therefore, it was described as inattention to emotions. The second factor measured the low ability to clearly identify and describe one's emotions and, consequently, was described as a lack of emotional clarity.

Emotional Awareness, Self-Control, and Relational Aggressiveness

Structural equation modeling (SEM) was used to examine the hypothesized structure of relationships between factors of emotional awareness, self-control, and relational aggressiveness. The measurement model involved 4 latent constructs (inattention to emotions, lack of emotional clarity, self-control, and relational aggressiveness) and 10 observed variables (the attention subscale from the TMMS and the EOT for inattention to emotions, the DIF, the DDF, and the clarity subscale from the TMMS for a lack of emotional clarity, three item parcels for self-control², and the proactive and reactive relational aggressiveness subscales for relational aggressiveness). Direct and indirect paths (with selfcontrol as a mediating variable) between facets of emotional awareness and relational aggressiveness were examined. In line with the contemporary approach of mediation analysis (Rucker, Preacher, Tormala, & Petty, 2011), although there was no direct association between inattention to emotions and relational aggressiveness, as well as between a lack of emotional clarity and relational aggressiveness, the examination of mediation using self-control was justified with theoretical reasons explained in the definition of self-control (Tangney et al., 2004). The SEM was conducted using a 'lavaan' package in R 3.1.3. (Rosseel, 2012). Because previous studies found well-established developmental and gender differences in regards to relational aggressiveness (Bailey & Ostroy, 2008), the gender and age of participants were controlled in the subsequent analysis.

The test of the measurement model resulted in a good fit to the data, $\chi^2(29) = 28.36$, RMSEA = 0, 90% CI [0; .051], GFI = 0.99, AGFI = 0.99; high and significant loadings were found on the latent variables.

During the next part of the study, a structural model was run. The model included a covariance between the latent variables of inattention to emotions and a lack of emotional clarity, and direct paths: (1) between inattention to emotions and self-control, (2) between a lack of emotional clarity and self-control, (3) between inattention to emotions and relational aggressiveness, (4) between a lack of emotional clarity and relational aggressiveness,

Three item parcels for BSCS were formed according to the balancing approach (single factor analysis parceling) due to the suggested unidimensional approach to BSCS (Lindner, Nagy, & Retelsdorf, 2015). The item with the highest item-scale correlation was paired with the item that has the lowest item-scale correlation. The next highest and next lowest items were paired in the second parcel. The third highest and third lowest were paired to form the third parcel, till the allocation of all items of BSCS (see Landis, Beal, & Tesluk, 2000).



and (5) between self-control and relational aggressiveness. Gender and age of participants were controlled (see Bailey & Ostrov, 2008). The structural model resulted in good fit to the data, $\chi^2(47) = 73.55$, p = .008, RMSEA = .052, 90% CI [.027; .074], GFI = .999, AGFI = .999, TLI = .942). The results found: (1) paths from inattention to emotions to self-control, b = -.014, SE = .10, p = .880, (2) direct relationship between inattention to emotions and relational aggressiveness, b = -.027, SE = .09, p = .748, and (3) between a lack of emotional clarity and relational aggressiveness, b = .035, SE = .10, p = .714—which were non-significant. Paths from a lack of emotional clarity to self-control, b = -.431, SE = .10, p < .001, and from self-control to relational aggressiveness, b = -.309, SE = .10, p = .002, were found to be significant. The covariation between inattention to emotions and a lack of emotional clarity, b = .254, SE = .09, p = .003, was also significant. The correlations between age, gender, and relational aggressiveness were non-significant (respectively: b = .038, SE = .08, p = .632, and b = -.199, SE = .15, b = .194). The results of SEM are presented in Figure b = .038.

The indirect path: the inattention to emotions \rightarrow self-control \rightarrow relational aggressiveness was non-significant, b = .004, SE = .03, p < .880, whereas the indirect path: a lack of emotional clarity \rightarrow self-control \rightarrow relational aggressiveness was significant, b = .13, SE = .06, p < .016.

Discussion

The first goal of the present study was to explore the internal structure of emotional awareness, which was hypothesized to consist of two components: attention to emotions and emotional clarity (cf. Coffey et al., 2003). The confirmatory factor analysis confirmed the two-factor structure of emotional awareness, but the loadings of the subscales of alexithymia and trait meta-mood on two latent variables were contrary to predictions. The first component indicates an externally oriented thinking style and low attention to one's affec-

Due to low loading of proactive relational aggressiveness on the latent variable of relational aggressiveness, analyses were rerun separately for proactive and reactive relational aggressiveness. Items of proactive and reactive relational aggressiveness scales, respectively, were taken as indicators of each latent dependent variable. The model for proactive relational aggressiveness had satisfactory goodness of fit, $\chi^2(48) = 74.04$; p = .009; $\chi^2/2$ df = 1.54; CFI = .959; TLI = .944; RMSEA = .051, and the paths: lack of emotional clarity \Rightarrow self-control, b = 1.54; CFI = .959; -.435; SE = .10; Z = -4.439; p < .001, and self-control \Rightarrow proactive relational aggressiveness, b = -.175; SE = .08; Z = -2.09; p = .036, were significant (other paths were non-significant). The indirect effect: lack of emotional clarity → self-control → proactive relational aggressiveness was marginally significant, b = .08; SE = .04; Z = 1.756; p = .079. The model for reactive relational aggressiveness had satisfactory goodness of fit (after dropping out one non-significant item of the reactive relational aggressiveness scale), $\chi^2(42) = 55.72$, p = .207; $\chi^2/df =$ 1.33; CFI = .988; TLI = .984; RMSEA = .028, and the paths: lack of emotional clarity \rightarrow self-control, b = -.433; SE = .10; Z = -4.428; p < .001, and self-control \Rightarrow proactive relational aggressiveness, b = -.185; SE = .10; Z = .10-1.915; p = .056, were significant (other paths were non-significant). The indirect effect: lack of emotional clarity \rightarrow self-control \rightarrow reactive relational aggressiveness was marginally significant, b = .08; SE = .05; Z = 1.656; p =.098. Analyses carried out separately for both forms of relational aggressiveness repeated the pattern of results obtained previously: lack of emotional clarity was a negative predictor of self-control, self-control was a negative predictor of both proactive and reactive relational aggressiveness, and there was a marginally significant indirect effect: lack of emotional clarity → self-control → proactive/reactive relational aggressiveness.



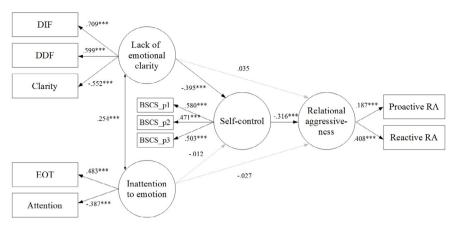


Figure 2. The structural model of relationships between inattention to emotion, unclear emotion, self-control, and relational aggressiveness.

Note. Identifying – Difficulties identifying feelings; Describing – Difficulties describing feelings; EOT – Externally oriented thinking; BSCS_p1-p3 – parcels of items of Brief Self-Control Scale; RA – Relational aggressiveness. Gray lines indicate non-significant paths. Standardized coefficients are depicted. *p < .05. **p < .01. ***p < .01.

tive states (labeled as inattention to emotions). The second component indicates low clarity of emotions, and high levels of difficulties describing and identifying feelings (labeled as a lack of emotional clarity). Both inattention to emotions and a lack of emotional clarity indicate decreased emotional awareness—one of the key components of emotional dysregulation (D'Agostino, Covanti, Monti, & Starcevic, 2017). Emotional dysregulation underlies a range of psychiatric symptoms and disorders (Beauchaine, 2015), which suggests that both identified components reflect risk factors for psychopathology.

The second goal was to examine correlations between emotional awareness, self-control, and relational aggressiveness. It was hypothesized that relational aggressiveness would be inversely correlated with attention to emotions and emotional clarity. In the present study, the direct associations between the inattention to emotions and relational aggressiveness, as well as between the lack of emotional clarity and relational aggressiveness were mostly non-significant. However, the clarity subscale of the TMMS, a component of emotional clarity, correlated negatively with the reactive form of relational aggressiveness. In previous studies, lack of emotional awareness and lack of emotional clarity correlated differently with specific forms of aggressiveness, e.g., both correlated positively with physical aggressiveness, but only lack of clarity correlated with verbal aggressiveness (Garofalo et al., 2016). On the other hand, a lack of emotional awareness and lack of emotional clarity did not correlate with intimate partner abuse (Gratz & Roemer, 2004). These results may indicate that the form of aggressive behavior moderates associations between facets of emotional awareness and aggressiveness. Clarity of emotion is more pronounced for reactive (impulsive), but not proactive (premeditated) forms of aggressiveness (see Long, Fel-

ton, Lilienfeld, & Lejuez, 2014). This finding also corresponds with the results of Edwards and Bond (2012); they showed that poor self-concept clarity was the strongest predictor of hostile attributions and aggressive social scripts among offenders. Additionally, it was demonstrated that individuals with a higher ability to repair their moods also possess a lower tendency to be relationally aggressive. This finding corresponds with studies that demonstrated correlations of effective emotional regulation with lower aggressiveness (cf. Peña-Sarrionandia et al., 2015).

Taken together, these results may demonstrate that individuals with higher clarity of emotions and higher emotion regulation abilities avoid being relationally aggressive, which is likely due to their awareness of the negative consequences that would ensue, e.g., higher social rejection and relational victimization (Wang et al., 2015). They could also develop more effective strategies in improving mood and social relations, e.g., savoring (Szczygieł & Mikolajczak, 2017). Although the magnitude of the above-mentioned correlations was low, the study confirmed that particular aspects of emotional clarity are directly and negatively associated with relational aggressiveness.

The hypothesis concerning an inverse relationship between self-control and relational aggressiveness was confirmed. The inhibitory role of self-control in relational aggressiveness discovered here is congruent with results of the previous analysis (de Ridder et al., 2012). The current study also showed that the strength of the relationship between self-control and aggressiveness depends on the form of aggressiveness that is involved. Self-control plays a stronger role in reactive relational aggressiveness—its connection with proactive relational aggressiveness was weaker.

Emotional awareness was also expected to be an important prerequisite for self-control. The present study provides a partial confirmation of this hypothesis. A lack of emotional clarity was found to inversely predict self-control, which is in line with the findings of Mikolajczak, Luminet, Leroy, and Roy (2007). They demonstrated that difficulty identifying feelings and difficulty describing feelings (components of lack of emotional clarity) were negatively correlated with self-control (assessed with the Trait Emotional Intelligence Questionnaire; Petrides & Furnham, 2001). Gratz and Roemer (2004) also found stronger positive correlations between lack of emotional clarity and difficulties in impulse control as compared with lack of emotional awareness and difficulties in impulse control. Emotional clarity, but not attention to emotions, was found to help in regulating one's emotions, i.e., adaptive regulation strategies (Velasco, Fernández, Páez, & Campos, 2006). Understanding one's feelings may be useful in developing effective self-control strategies. Lack of emotional clarity (e.g., inability to label inner experiences accurately) results in poor self-regulation (Taylor et al., 1997). Similarly, individuals with high self-concept clarity rely on their own understanding to guide their behavior in social interactions; they are better equipped than those who score low in self-concept clarity (Campbell et al., 1996; Guadagno & Burger, 2007). Lack of correlation between attention to emotions and self-control could be explained by the "self-absorption paradox"— this indicates that more self-awareness is accompanied by higher levels of psychological distress (Salovey et al., 1995; Trapnell &



Campbell, 1999). Self-attentiveness combines two unrelated, distinct dispositions of reflection and rumination (Şimşek, Ceylandağ, & Akcan, 2013; Trapnell & Campbell, 1999). Individuals who are highly attentive to their own feelings may engage in reflection over feelings of hurt or anger experienced in a situation where they were provoked, which results in a high focus on these feelings and greater distress. They may also become overwhelmed by these feelings, as a result of rumination. Such a suppressing effect of self-attentiveness may be the reason for the lack of significant associations between attention to emotions and self-control.

The current study also examined the mediating role of self-control in the relation between emotional awareness and relational aggressiveness. A lack of emotional clarity was found to be inversely correlated with self-control and, indirectly, with reduced relational aggression. Self-control did not play a mediating role between inattention to emotions and relational aggressiveness. The present study also found that the form of aggressive behavior moderates associations between the lack of emotional clarity and relational aggressiveness, as well as between self-control and relational aggressiveness (relationships were significant for reactive forms of relational aggressiveness). This indicates that proper self-control and higher clarity of emotion may reduce impulsive relational aggression, but do not necessarily prevent premeditated forms of relational aggression. When reviewing the dynamics between emotional awareness, self-control and relational aggressiveness, inattentiveness to emotions was shown to correlate with lack of emotional clarity. However, only the second dimension inversely predicts self-control, and may indirectly promote relational aggressiveness. Based on Carver and Scheier's (2011) approach, the lack of emotional clarity (which is more likely to occur in people who are also inattentive to their emotions) may result in poor self-control (and next in higher relational aggressiveness) because of: (1) less clear standards of regulation of aggressive behavior (e.g., higher legitimization of aggressive behavior; see Ang et al., 2017); (2) distortion of the understanding of discrepancies between one's aggressive intentions and standards aimed at inhibiting aggressive behaviors, which may result in behavioral disinhibition; (3) lower ability to maintain self-regulatory strength (e.g., because of less efficient emotion regulation; see Peña-Sarrionandia et al., 2015). These suggestions require future investigation into the moderating role of normative beliefs in relation to aggression (Bailey & Ostrov, 2008) and study designs using the strength model of self-regulation (Baumeister & Vohs, 2007).

The present study has a few limitations. (1) The methods used to measure emotional awareness, self-control, and relational aggressiveness were self-reported. This may have confounded the results with social desirability (Crowne & Marlowe, 1960). Future research should utilize measuring techniques that are free from socially-desirable responses. (2) A comprehensive analysis of relational aggression within a social context should be taken into account, e.g., examining emotional awareness and self-control in real or hypothetical situations of conflict (see Coccaro et al., 2009). (3) The directions of associations between emotional awareness, self-control, and relational aggressiveness were based on theories and empirical findings, but obtained results of mediation analyses did not infer causality. (4)



The methods used in the present study (TMMS, BSCS) were translated for the purpose of the current study and have a limited analysis of validity.

To confirm our findings, future studies should examine relationships between emotional awareness, self-control, and relational aggressiveness using the experimental design. Secondly, the intensity of affect, resulting from aggressive behavior situations, should also be considered. It is possible that high attention to emotions, when connected with intense affective responding, might lead to a higher readiness to act aggressively. Another important issue to further investigate is the mediating role of reflection and rumination in regards to associations between attention to emotions and relational aggressiveness.

The present study confirmed a two-dimensional structure of emotional awareness with the factors of inattention to emotions and a lack of emotional clarity. The predictive role of emotional awareness in self-control and relational aggressiveness was partially confirmed, namely lack of emotional clarity was inversely associated with self-control, and indirectly with higher relational aggressiveness. The present study offers the following instruction for social practice:

(1) Prevention programs to reduce aggressive tendencies among school pupils should focus on accurate self-perception of emotions and on improving abilities of mood repair. Education in regards to attending to one's own feelings is important, but understanding one's own emotions is needed to efficiently control one's aggressive impulses. (2) Self-control may prevent relational aggressiveness. Therefore, triggers leading to ego-depletion in school settings should be especially monitored by authorities, since this is a risk factor for aggression (helping youngsters implement stronger self-control strategies, after a situational or chronic depletion occurs) (cf. Baumeister, Vohs, & Tice, 2007; Schmeichel & Vohs, 2009). (3) Lack of emotional clarity negatively correlates with self-control. Abilities to accurately discriminate and identify one's own feelings should be developed to achieve better skills to self-regulate, and, indirectly, to inhibit relationally aggressive conduct.

Recommendations for implementing emotional awareness programs are offered based on the current study. Education on emotional awareness, without explaining how to use emotional information to regulate behavior, may be inefficient. Emotional awareness training should be used as an instrument in other ability training as well (e.g., self-control). Future studies should examine the effectiveness of implementing these recommendations for various groups of adolescents.

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Competing Interests

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Data Availability

The data analyzed in this paper are freely available via the PsychArchives repository. For further information see the "Supplementary Materials" section.

Supplementary Materials

Data and codebooks are accessible via the PsychArchives repository.

Index of Supplementary Materials

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