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The personality basis of aggression: The mediating role of anger and the moderating role of emotional intelligence

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High neuroticism and low agreeableness have been found to predict higher levels of aggression through an increase of negative emotions such as anger. However, previous research has only investigated these indirect associations for physical aggression, whereas evidence for such indirect effects on other types of aggression (i.e., verbal or indirect aggression) is currently lacking. Moreover, no previous work has investigated the moderating role of Ability Emotional Intelligence (AEI), which may buffer against the effects of anger on aggression. The present study (N = 665) directly addresses these gaps in the literature. The results demonstrate that high neuroticism and low agreeableness were indirectly related to higher levels of physical, verbal, and indirect aggression via increased chronic accessibility to anger. Importantly however, the associations with physical aggression were significantly weaker for those higher (vs. lower) on AEI, confirming the buffering role of AEI. We discuss the implications of our findings for theoretical frameworks aiming to understand and reduce aggression and violent behavior.

Key words: Aggression, neuroticism, agreeableness, personality, anger, emotional intelligence.

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INTRODUCTION

The prevalence of aggression is an important social concern for policy makers and clinical practitioners given its destructive effects not only for the victims but also for the aggressors. During the past few years, several organizations have increased their interest to address the rates, characteristics, and consequences of violent behavior (Lee, 2016). From the victim's perspective, victims of aggression not only suffer from the physical harm but may also show other negative consequences such as depressive symptoms, increased anxiety, lower self-esteem, and stress-related problems (Björkqvist, Österman & Hjelt-Bäck, 1994; Crick & Bigbee, 1998; O'Moore & Kirkham, 2001). From the perpetrator's perspective, aggression has been associated with drug use or delinquent behavior in adolescents (Moffitt, 2006; Ostrov & Godleski, 2009; Piquero, Daigle, Gibson, Piquero & Tibbetts, 2007), and with mental health problems, criminal behavior and unemployment in adults (Alsaker & Olweus, 2002; Asberg, 1994; Coccaro, Noblett & McCloskey, 2009; Farrington, 1991).

Aggression is defined as any behavior directed toward the goal of harming or injuring another individual (Anderson & Bushman, 2002). The literature on this topic distinguishes between different forms of aggression including physical, verbal, and indirect aggression (Björkqvist, 2001; Coie & Dodge, 1998). Physical aggression refers to the use of physical force and encompasses behaviors such as hitting, kicking, and pushing. Verbal aggression consists of verbal attacks in the form of name calling, taunting, or threats. Indirect aggression causes harm indirectly, and includes behaviors such as gossiping, spreading malicious rumors or lies about another person, and rejection or exclusion of someone without directly confronting this person (Björkqvist, 2001; Card, Stucky, Sawalani & Little, 2008).

The serious problems associated with aggressive behavior require the need for understanding the psychological factors and processes underlying aggression in order to design effective prevention and treatment programs to treat this global problem. As an attempt to understand why people engage in aggressive behavior, Anderson and Bushman (2002) developed the General Aggression Model (GAM) offering a theoretical framework which integrates past theorizing and empirical findings on aggression in a unique and parsimonious model. GAM postulates that aggressive behavior occurs as a result of the interplay between psychological factors in three different stages: (1) individual and situational factors; (2) present internal states; and (3) outcomes of appraisal and decision making processes. Situational conditions (e.g., the presence or absence of provocations) and person-based factors as well as their interaction may elicit a specific internal state, composed by certain cognitions (e.g., hostile thoughts), feelings (i.e., anger), and physiological arousal. This internal state influences appraisal and decision-making processes (e.g. individuals may evaluate the situation, think about how to act and consider the possible consequences of different behaviors). Finally, people may or may not engage in aggressive behavior, depending on the content of the appraisal and the decision they have made (for a review, see Anderson & Bushman, 2002).

In the current study, we focused on the associations between personality factors (i.e, neuroticism and agreeableness) and

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different types of aggression, and tested the mediating role of trait anger, and the buffering role of ability emotional intelligence.

THE PERSONALITY BASIS OF AGGRESSION AND THE MEDIATING ROLE OF TRAIT ANGER

Consistent with GAM, a plethora of empirical studies have confirmed the key role of personality traits in the prediction of aggression (Bettencourt, Talley, Benjamin & Valentine, 2006). More specifically, in terms of the Five-Factor Model of personality (Costa & McCrae, 1992) several studies have shown that particularly high neuroticism and low agreeableness are associated with higher levels of aggression (Barlett & Anderson, 2012; Bettencourt *et al.*, 2006; Jones, Miller & Lynam, 2011). Neuroticism refers to a tendency to experience negative emotions such as depression, shame or anxiety, to be easily upset, and to feel insecure and self-conscious. Highly agreeable people are typically kind, trustworthy, cooperative and sensitive in social relationships (e.g., Benet-Martinez & John, 1998; McCrae & Costa, 1999).

GAM states that personality traits influence aggression through their impact on aggressive emotions. More specifically, higher levels of neuroticism predispose individuals to react more strongly to stressful events and negative stimuli, thereby increasing negative emotions (Schneider, 2004). Over time, this oversensitivity to environmental stressors further develops into a more chronic state of higher psychological distress and negative affect, including anger. Such chronic accessibility of anger among neurotic individual increases the likelihood to aggress against others (Barlett & Anderson, 2012; Schneider, 2004). Indeed, the association between anger, as a stable individual difference variable (i.e., trait anger) and aggression has received substantial empirical support (Cornell, Peterson & Richards; 1999; Spielberger, 1988; Wittmann, Arce & Santisteban, 2008).

Also individuals with relatively lower levels of agreeableness are typically more likely to engage in aggression. Indeed, those lower in agreeableness are more likely to notice and pay more attention to negative and provocative cues in their daily lives. As such, they are more prone to show increased chronic levels of negative and aggressive emotions (i.e., trait anger), which in turn, lead to aggression against others (Barlett & Anderson, 2012).

Taken together, trait anger particularly stands out as potential underlying mechanism explaining the association of personality traits with aggression. In line with this idea, Barlett and Anderson (2012) provided evidence for the mediator role of aggressive emotions, including trait anger, in the association of neuroticism and agreeableness with violent and physical aggression in a US sample. However, these authors only examined physical and violent forms of aggression. Given that physical aggression has been shown to be uniquely associated with several maladjustment indicators (Card *et al.*, 2008), it is presently unclear whether the findings of Barlett and Anderson (2012) would apply to other types of aggression such as verbal and indirect aggression. Therefore, the first aim of the present research was to test whether trait anger mediates the relationship of neuroticism and agreeableness with different types of aggression (physical, verbal, and indirect).

EMOTIONAL INTELLIGENCE AS MODERATOR IN THE RELATIONSHIP BETWEEN TRAIT ANGER AND AGGRESSION

Not all individuals respond to anger by engaging in aggressive behavior. Aggression research has explored the role of individual's emotional abilities as a key factor determining whether individuals react aggressively when feeling angry or, instead, whether they are able to regulate feelings of anger and respond in a non-aggressive way (Roberton, Daffern & Bucks, 2012). This set of emotional abilities for perceiving, using, understanding, and managing emotions (Mayer & Salovey, 1997) is defined as Emotional Intelligence (EI).

EI can be conceptualized from two theoretical approaches: as a trait or as an ability. Trait Emotional Intelligence (TEI) refers to a constellation of emotion-related self-perceptions and dispositions, and is measured through self-report questionnaires (Petrides, Pita & Kokkinaki, 2007). Ability Emotional Intelligence (AEI) is considered a set of abilities related to processing emotional information that support the adaptive use of emotions as part of our cognitive processes. AEI is conceptualized as a type of intelligence and can be measured with tests of maximal performance involving emotional problem-solving tasks. AEI tests are considered to be objective because participants can give better and worse answers on such tests, as determined by consensus or expert scoring (Mayer, Salovey & Caruso, 2000). To investigate the role of the emotional intelligence in the association between trait anger and aggression, we focused on Ability Emotional Intelligence (AEI), rather than Trait Emotional Intelligence (TEI). The latter reflect the extent to which people tend to use their emotional abilities rather than providing an indicator of their levels of emotional abilities themselves (AEI).

Recent studies have shown that people with higher AEI are less likely to engage in aggressive behavior than people with lower AEI (García-Sancho, Salguero & Fernández-Berrocal, 2014). This negative relationship was found in three types of aggression: physical, verbal, and indirect in cross-sectional and longitudinal studies and the associations was stronger with physical than verbal and indirect aggression (García-Sancho, Salguero & Fernández-Berrocal, 2016; García-Sancho, Salguero & Fernández-Berrocal, 2017). AEI has also been shown to be negatively associated with anger rumination (García-Sancho *et al.*, 2017). In keeping with GAM emphasizing the importance of appraisal and decision-making processes, we argue that individuals with high AEI employ their abilities to better perceive and understand aggressive emotions and regulate their anger before acting. In other words, for individuals with chronically higher levels of anger, higher levels of AEI will help them to process and manage their angriness in a socially acceptable, non-aggressive way and thus more likely to refrain from engaging in aggressive behaviors. Therefore, the second aim of the current study is to test, for the first time, whether higher levels of AEI act as a buffering factor against the effect of trait anger on different types of aggression.

THE PRESENT STUDY

Our main aim was twofold. First, we aimed to extend previous findings showing indirect associations of neuroticism and

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agreeableness with physical aggression through trait anger by examining different types of aggression rather than only focusing on physical aggression. More specifically, we tested whether the effects of neuroticism and agreeableness on physical, verbal, and indirect aggression are mediated by trait anger.

Second, given the important role of emotional abilities for processing and acting upon feelings of anger (e.g., Garcia-Sancho *et al.*, 2016), we tested whether AEI functions as buffer mechanism in the indirect associations between personality traits and different types of aggression. More specifically, we expected that the associations between trait anger and aggression would be significantly weaker for those with relatively higher rather than lower levels of AEI. Furthermore, given the hypothesized buffer effect of AEI against the impact of trait anger on aggression, we also expected that the indirect associations of neuroticism and agreeableness with aggression would be weaker for those higher (vs. lower) in AEI. Figure 1 displays the conceptual model of all tested relations in the current study.

METHOD

Participants and procedure

A large sample of 665 undergraduate students (77.34% females) at a Spanish university participated in this study. The age of the participants ranged from 19 to 60 years (M = 22.48, SD = 5.01). A convenience sampling method was used to collect data. They were invited to volunteer anonymously in a study about Cognition and Emotion and received course credit for their participation. Participants' levels of emotional intelligence were assessed during a classroom session lasting for about 45 minutes. The personality traits, anger, and different types of aggression were administered individually using an online questionnaire and took approximately 15 minutes to complete.

Measures

All measures were assessed using validated Spanish versions. Personality traits were assessed using The Big-Five Inventory (BFI-44; John, 1990) consisting of 44-item measuring Neuroticism, Agreeableness, Extraversion, Openness, and Conscientiousness, rated on five-point scales (1, *strongly disagree*; 5, *strongly agree*). The psychometric properties of this scale have been well demonstrated in English and Spanish version (Benet-Martinez & John, 1998).

Aggression was measured with the Aggression Questionnaire (AQ; Buss & Perry, 1992) for physical and verbal aggression and with the Indirect Aggression Scale (IAS; Forrest, Eatough & Shevlin, 2005) for indirect aggression. The AQ measures physical (9 items) and verbal (5 items) aggression on five-point scales (1, *extremely uncharacteristic of me*; 5, *extremely characteristic of me*). The Spanish version of AQ showed a factorial structure equivalent to the original English version and good psychometric properties (Buss & Perry, 1992; Rodríguez, Peña & Graña, 2002). The IAS is a 25-item self-report measure assessing indirect aggression. There are two versions of the scale (target and aggressor). This study used the aggressor version. Participants indicated how often they have shown certain behaviors on five-point scales (1, *Never*; 5, *Regularly*). Both the original and the Spanish version showed good psychometric properties (Forrest *et al.*, 2005).The Spanish version showed a one-dimensional structure of indirect aggression (Anguiano-Carrasco & Vigil-Colet, 2011).

Trait Anger was measured using the Anger subscale (7 items) of the AQ (Buss & Perry, 1992) with the same response format as for the physical and verbal aggression subscales and with good psychometric properties (Rodríguez *et al.*, 2002).

To assess Ability Emotional Intelligence, participants completed the Mayer–Salovey–Caruso Emotional Intelligence Test Version 2.0 (MSCEIT; Mayer, Salovey, Caruso & Siratenios, 2003). The MSCEIT consists of 141 items and measures the four branches of EI (Mayer & Salovey, 1997): emotional perception, emotional facilitation, emotional understanding, and managing emotions. The MSCEIT contains eight problem-solving tasks, presented in multiple-choice format, related to emotional problems. It was scored using consensus norms, based on norm scores from a large, heterogeneous Spanish sample (Extremera, Fernandez-Berrocal & Salovey, 2006). Consistent with previous research showing the

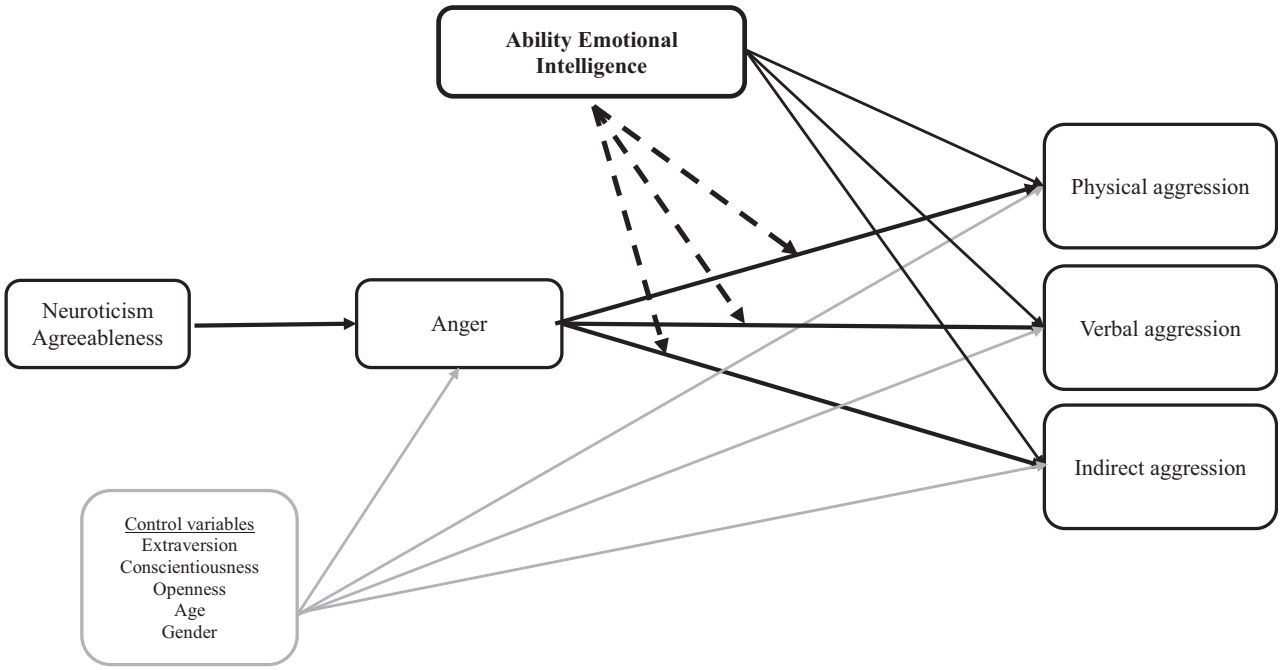


Fig. 1. Conceptual mediation model of the relationships between neuroticism and aggression via trait anger, and the moderating role of emotional intelligence (dashed arrows).

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validity of the EI construct as one factor, which is broader than any one of its subcomponents (MacCann, Joseph, Newman & Roberts, 2014), we used the global AEI score, composed of the four branch scores. The Spanish version of this instrument has shown good psychometric properties and a similar factorial structure than original version (Extremera *et al.*, 2006).

RESULTS

Preliminary analyses

The descriptive statistics and scale reliabilities (Cronbach's alpha) for all measures and the correlations between all variable are presented in Table 1. As expected, the correlations between neuroticism, trait anger, and physical, verbal and indirect aggression were positive and significant. Furthermore, agreeableness was significantly negatively related to anger and the aggression variables. Other personality traits showed relatively weak or non-significant correlations with anger or aggression. AEI was significantly negatively associated with anger and the three types of aggression.

MEDIATION MODEL

We tested our hypotheses using path analysis in Mplus (version 7.2, Muthén & Muthén, 1998–2014). First, we tested the proposed mediation in which neuroticism and agreeableness were entered as predictor variables, followed by anger (i.e., the hypothesized mediator), while physical aggression, verbal aggression, and indirect aggression were entered as the criterion variables. While our mediation hypothesis focused on the predictive role of neuroticism and agreeableness, we also included the other three personality traits (i.e., extraversion, conscientiousness, and openness) as predictor variables, allowing us to test the unique predictive value of neuroticism and agreeableness over and beyond any possible effects of the other personality traits. Furthermore, age and gender were included as control variables. All relations between predictor and control variables were included in this model, as well as all possible paths from the predictor and control variables to the mediator and criterion variables (i.e., $df = 0$), resulting in saturated models.

Confirming our mediation hypothesis, neuroticism was significantly positively ($\beta = 0.50$, $p < 0.001$) and agreeableness was significantly negatively ($\beta = -0.29$, $p < 0.001$) related to anger. Anger was, in turn, significantly positively related to physical ($\beta = 0.35$, $p < 0.001$), verbal ($\beta = 0.42$, $p < 0.001$), and indirect aggression ($\beta = 0.20$, $p < 0.001$) (see Fig. 2). We estimated the indirect effects of neuroticism and agreeableness on aggression through anger using bootstrap analysis based on 10,000 samples.

This analysis confirmed that neuroticism was significantly indirectly related to physical aggression (standardized indirect effect = 0.17, 95% bias-corrected confidence intervals (BCIs): 0.123, 0.223); to verbal aggression, (standardized indirect effect = 0.21, 95% BCIs: 0.157, 0.264), and to indirect aggression (standardized indirect effect = 0.10, 95% BCIs: 0.052, 0.146). Importantly, in the mediation model, the direct paths from neuroticism to all three aggression variables were non-significant ($\beta = 0.01$, $p = 0.895$; $\beta = -0.06$, $p = 0.172$; $\beta = 0.01$, $p = 0.846$,

Table 1. *Descriptive statistics and correlations between variables*

	M	SD	α	2	3	4	5	6	7	8	9	10
1. Neuroticism	2.89	0.87	0.87	–0.33***	–0.20***	–0.15***	–0.13***	0.57***	–0.06	0.24***	0.24***	0.19***
2. Agreeableness	3.83	0.55	0.67		0.31***	0.14***	0.14***	–0.38***	0.16***	–0.43***	–0.39***	–0.40***
3. Extraversion	3.48	0.84	0.86			0.13***	0.32***	0.03	0.10**	–0.05	0.03	0.01
4. Conscientiousness	3.53	0.64	0.79				0.06	–0.11**	0.11**	–0.18***	–0.13***	–0.16***
5. Openness	3.82	0.67	0.84					–0.10*	0.03	0.01	0.04	0.02
6. Anger	2.60	0.70	0.74						–0.12**	0.43***	0.48***	0.32***
7. Ability Emotional Intelligence	100.39	14.21	0.88							–0.22***	–0.11**	–0.18***
8. Physical Aggression	1.81	0.59	0.78								0.35***	0.37***
9. Verbal Aggression	2.78	0.66	0.69									0.37***
10. Indirect Aggression	1.57	0.39	0.88									

Note: *$p = 0.05$; **$p < 0.01$; ***$p < 0.001$.

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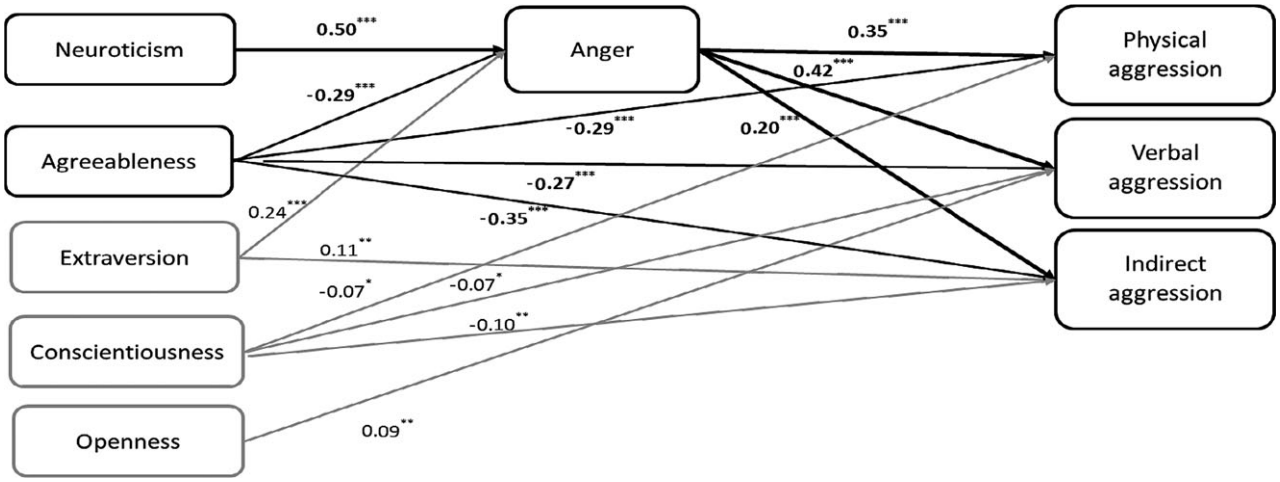


Fig. 2. Results of mediation model (showing significant standardized estimates) of the relationship of neuroticism and agreeableness with different types of aggression through trait anger, controlling for other personality traits. Age and gender were also included as controls (not shown), with significant paths from gender to physical ($\beta = 0.22$, $p < 0.001$) and indirect ($\beta = 0.10$, $p < 0.01$) aggression. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

for physical, verbal, and indirect aggression, respectively). The absence of direct effects of neuroticism on the aggression variables indicates that higher levels of anger largely account for why those higher in neuroticism tend to be more aggressive (i.e., higher scores on physical, verbal, and indirect aggression).

Also agreeableness was significantly indirectly related to the three aggression variables, with indirect effects on physical (standardized indirect effect = –0.10, 95% BCIs: –0.128, –0.069), verbal (standardized indirect effect = –0.12, 95% BCIs: –0.154, –0.086), and indirect aggression (standardized indirect effect = –0.06, 95% BCIs: –0.085, –0.029). However, the direct paths from agreeableness to the three aggression variables were still significant ($\beta = -0.29$, $p < 0.001$; $\beta = -0.27$, $p < 0.001$; $\beta = -0.35$, $p < 0.001$, for physical, verbal, and indirect aggression, respectively, see Fig. 2). These results confirm the mediating role of anger in the relations between agreeableness and all three aggression variables, yet these mediating effects seemed less pronounced than for neuroticism.

With respect to the other three personality traits, included as controls, the results showed that conscientiousness was negatively and directly, yet weakly, related to the aggression variables, while openness had a weak positive effect on physical aggression (see Fig. 2). Finally, extraversion was positively related to anger and positively, indirectly related to physical (standardized estimate = 0.08, 95% BCIs: 0.052, 0.115), verbal (standardized estimate = 0.10, 95% BCIs: 0.066, 0.137), and indirect aggression (standardized estimate = 0.5, 95% BCIs: 0.022, 0.074). Also the direct path from extraversion to indirect aggression, but not to physical and verbal aggression, was significant.

THE BUFFERING ROLE OF ABILITY EMOTIONAL INTELLIGENCE

Having established the mediating role of trait anger in the association of both neuroticism and agreeableness with the three types of aggression, we then tested the buffer hypothesis stating that high levels of AEI attenuates the effects of trait anger on aggression. Furthermore, we expected that the indirect effects of neuroticism and agreeableness on aggression via anger would be weaker among those with higher, relative to lower, AEI.

To test the hypothesized moderating role of AEI we tested the same mediation model, but additionally included AEI as well as the interaction term between AEI and anger predicting physical, verbal, and indirect aggression (see Fig. 1 for a conceptual representation of the moderated mediation model). As with the previous model test, we controlled for extraversion, conscientiousness, and openness, as well as age and gender. The results of this model test revealed a virtually identical pattern of relationships for all paths in the mediation model. In addition to these paths, AEI was found to be significantly negatively related to physical aggression ($\beta = -0.10$, $p = 0.002$) and indirect aggression ($\beta = -0.08$, $p = 0.019$), but was not significantly related to verbal aggression ($\beta = -0.02$, $p = 0.613$). Furthermore, in line with our hypothesis, we found a significant interaction effect between AEI and anger on physical aggression, ($\beta = -0.08$, $p = 0.008$). This interaction effect was, however, not significant for verbal ($\beta = -0.02$, $p = 0.600$) and indirect aggression ($\beta = -0.02$, $p = 0.642$).

The significant interaction effect is plotted in Fig. 3 depicting the relationships between anger and physical aggression at high and low levels of AEI (1 SD above and below the mean). Simple slope analyses revealed that anger was more strongly related to physical aggression among those scoring low on AEI ($\beta = 0.42$, $p < 0.001$) than among those high in AEI ($\beta = 0.26$, $p < 0.001$).

Computing the conditional indirect effect of neuroticism on physical aggression at high and low levels of AEI via anger, showed a stronger indirect effect for those lower as compared to those higher in AEI (indirect effect = 0.14, SE = 0.022, 95% BCIs: 0.103, 0.191, and indirect effect = 0.09, SE = 0.045, 95% BCIs: 0.050, 0.128, respectively). Similarly, the negative indirect effect of agreeableness on physical aggression via anger was stronger for those lower as compared to those higher in AEI (indirect effect = –0.13, SE = 0.022, 95% BCIs: –0.175, –0.091, and indirect effect = –0.08, SE = 0.018, 95% BCIs: –0.117, –0.047, respectively). We additionally tested whether AEI moderated the paths from neuroticism and agreeableness to anger.

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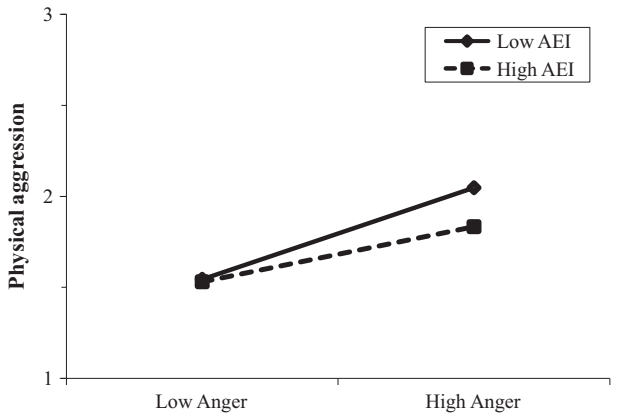


Fig. 3. Interaction between anger and Ability Emotional Intelligence (AEI) on physical aggression.

Neither the interaction between AEI and agreeableness, nor the interaction between AEI and neuroticism was significant, $\beta = 0.02$, $p = 0.526$, and $\beta = -0.02$, $p = 0.435$.

DISCUSSION

The main objectives of the current study were to test whether trait anger mediates the effect of neuroticism and agreeableness on different forms of aggressive behavior and to investigate whether AEI attenuates the effects of trait anger on these types of aggression.

With respect to the first goal, the results showed, in line with our expectations, that trait anger mediated the relationship between neuroticism and agreeableness and all three types of aggression (physical, verbal, and indirect). These results are consistent with previous research conducted in the US by Barlett and Anderson (2012) showing the mediator role of trait anger between these personality traits and physical aggression. We extended these findings by demonstrating similar mediation patterns in a large Spanish sample. More importantly, the results demonstrated that the mediating role of trait anger also hold for the associations of neuroticism and agreeableness with both verbal aggression and indirect aggression. Noteworthy, the effect of neuroticism on all three types was fully explained by anger. These findings suggest that the tendency of emotionally unstable individuals to be more aggressive, whether this is physically, verbally, or indirectly, is largely due to their chronic accessibility of feelings of anger.

Agreeableness also showed indirect relationships with all three types of aggression through trait anger. Disagreeable individuals pay more attention to negative signals and are more suspicious in interpersonal interactions, increasing the chronic tendency to feel angry, and to elicit aggressive reactions (Barlett & Anderson, 2012). However no full mediation was found, suggesting that other psychological mechanisms are also involved in the relationship between agreeableness and aggression.

Concerning our second objective, the results demonstrated significant negative correlations between AEI with physical, verbal, and indirect aggression, which corroborates previous findings showing similar magnitude of correlations, with higher associations between AEI and physical and indirect than verbal aggression (García-Sancho *et al.*, 2016, 2017). Moving beyond previous research, our results revealed that high AEI can also buffer against the effects of anger on aggression. Indeed, such moderation pattern was found for physical aggression indicating that highly neurotic or disagreeable individuals' tendency to engage in aggressive behavior is significantly attenuated when having high emotional abilities. In other words, these findings suggest that having high emotional skills can reduce the risk of being physically aggressive and explain why not all individuals with higher levels trait anger engage frequently in physical aggression.

This buffering role of AEI could not be confirmed for the effects of trait anger on verbal and indirect aggression. Findings of other studies (García-Sancho *et al.*, 2016; 2017; Gardner & Qualter, 2010) seem to suggest that the relationship between AEI and physical aggression is stronger than the relationship between AEI and verbal aggression. Given the immediate, potential negative consequences of physical aggression, it can be argued that it is more necessary to regulate emotional responses in order to avoid a physical attack than to inhibit verbal or indirect aggression. Indeed, research has shown that verbal aggression is considered more justifiable than physical aggression (Fujihara, Kohyama, Andreu & Ramirez; 1999; Ramirez, 2007). Hence, individuals may consider it less necessary to use their emotional abilities to inhibit verbal or indirect aggression than physically harming behavior. However, more research is needed to explicitly test this idea.

Our findings can be integrated into the GAM (Anderson & Bushman, 2002). High neuroticism and low agreeableness may lead to a stronger accessibility to anger facilitating aggressive behavioral tendencies. However, the appraisal and decision-making processes play important roles in determining behavior. People appraise the situation, their resources, the potential consequences, and then make a decision. Our results suggest that AEI is likely involved in these processes by attenuating the effect of anger in the decision to physically aggress or not.

Before closing some limitations of this study should be noted. First, the different types of aggression were assessed via self-reports, which are prone to social desirability bias, possibly underestimating the levels of aggression. Future studies using experimental aggression paradigms (Denson, Pedersen, Friese, Hahm & Roberts, 2011) could induce anger to investigate the combined effects of emotional abilities with both trait anger (self-report) and state anger (experimentally elicited) on aggressive behavior in response to a provocation. Second, the present sample was composed of undergraduate students with relatively low levels of aggression. Future research could explore the relations between these variables in clinical and forensic samples focusing on more severe forms of aggression. Third, we used a cross-sectional design which does not allow us to infer causal relations. Longitudinal designs are needed to investigate the dynamic relations between personality traits, trait anger, AEI, and aggression over time and would provide some indication for the causal direction of the relations.

In conclusion, this study highlights the importance of trait anger in the associations between personality traits and aggression as well as the protective role of emotional abilities decreasing the risk to act physically aggressive. These are important findings to

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take into account when developing prevention/interventions programs aiming to reduce aggression. Emotional intelligence trainings (e.g. Castillo, Salguero, Fernández-Berrocal & Balluerka, 2013; Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011) might be especially effective in reducing aggressive behavior, precisely because of the buffering effect against anger. Interventions should focus on anger management training in order to reduce the incidence of physical aggression in the population.

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