ARTÍCULO DE INVESTIGACIÓN

A Systematic Review Of Aggression and Empathy

Una Revisión Sistemática de la Agresión y la Empatía

Carmona-Cardona, César Andrés*[1]; Arango-Tobón, Olber Eduardo[2]; Pico-Quintero, Nindre[3]; Puerta-Lopera, Isabel Cristina[4]

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Abstract

The evidence on the relationships between aggression and empathy is unclear in the literature. A recent meta-analysis indicated that associations are limited, while repeated research in recent years has reported both positive and negative correlations. This systematic review seeks to establish the current evidence on differentstudies that have been conducted on the relationships between proactive and reactive aggressive behavior and empathy, from the cognitive and affective subdomains, in adolescents, youth and young adults. Method: Systematic review according to PRISMA guidelines. Results: 8 articles were found that met the inclusion and exclusion criteria described and discrepancies between the associations of the two variables addressed are reported. Conclusion: there seems to be a certain degree of acceptance of the inhibitory role of empathy against aggression, particularly that of affective empathy. No conclusive results were found for cognitive empathy with the different types of aggression.

Key words: affective empathy, cognitive empathy, proactive aggression, reactive aggression, adolescents,youth.

Resumen

La evidencia sobre las relaciones entre la agresión y la empatía no están claras en la literatura. Un metaanálisis reciente indicó que las asociaciones son limitadas, mientras que reiteradas investigaciones de los últimos años han

* Código Postal: 050034 Grupo de Neurociencias Básicas y Aplicadas. Universidad Católica Luis Amigó. 6044487666, cesar.carmonaca@amigo.edu.co

1 Grupo de Investigación Neurociencias Básicas y Aplicadas, Universidad Católica Luis Amigó ROR: https://ror.org/055d5bf90, Medellín-Colombia, ORCID: https://orcid.org/0000-0002-7179-2610

2 Grupo de Investigación Neurociencias Básicas y Aplicadas, Universidad Católica Luis Amigó ROR: https://ror.org/055d5bf90, Medell n-Colombia, ORCID: https://orcid.org/0000-0002-9831-5734

3 ORCID: https://orcid.org/0000-0002-6311-9274

4 Grupo de Investigación Neurociencias Básicas y Aplicadas, Universidad Católica Luis Amigó ROR: https://ror.org/055d5bf90, Medell n-Colombia, ORCID: https://orcid.org/0000-0002-3533-8015

reportado correlaciones positivas y negativas. Esta revisión sistemática busca establecer la evidencia actual sobre diferentes estudios que se han llevado a cabo sobre las relaciones entre la conducta agresiva de tipo proactivo y reactivo y la empatía, desde los subdominios cognitivo y afectivo, en adolescentes, jóvenes y adultos jóvenes. *Método:* Revisión sistemática de acuerdo con las directrices PRISMA. *Resultados:* se encontraron 8 artículos que cumplían los criterios de inclusión y exclusión descritos y se reportan las discrepancias entre las asociaciones de las dos variables abordadas. *Conclusión:* parece haber cierto grado aceptación en el papel inhibidor de la empatía frente a la agresión, de manera relevante el de la empatía afectiva. No se encontraron resultados concluyentes de la empatía cognitiva con los diferentes tipos de agresión.

Palabras clave: empatía afectiva, empatía cognitiva, agresión proactiva, agresión reactiva, adolescentes, jóvenes.

Introduction

In recent years, the study of aggression has taken on particular relevance, due to the physical consequences, mental health and behavioral problems, in sexual and reproductive health and individual and family chronic diseases (Riasat et al., 2017) and, according to the World Health Organization (2014) it is one of the most worrying and serious problems today in terms of social, damage and suffering caused to victims, due to its association with other related problems such as crime, domestic violence, gender violence, among others. It has been found that aggression encompasses behaviors that present different control mechanisms and acquire diverse manifestations due to their background and objectives (Andreu-Rodríguez et al., 2009).

In this sense, aggression has been conceptualized from two dimensions, proactive (PA) and reactive (RA), since they enable an analysis based on the trigger and the motivation and intention of the perpetrator (Penado et al., 2014). The first is characterized by being premeditated and cold (Romero et al., 2016) and makes those who manifest this type of aggression, present difficulties in social relationships (Romero et al., 2016), due to the possible propensity to recidivism in violent behaviors, which leads them to be responsible for various acts and more severe damage to the victims.

Other studies indicate (Poulin & Boivin, 2000) that they possess socio-cognitive skills that would lead them to understand the benign intentions of others during social interactions, so the difficulty would not be around understanding and attributing the mental states of others; Renouf et al. (2010) state that the skills that are part of ToM are positively related to this type of aggression.

In this way the central purpose is not to cause harm or suffering to the other (Romero et al., 2016), but to achieve a specific goal or in general a secondary gain, that is, the form of aggression is instrumental, the perpetrator values as positive his action due to the possibility he has to achieve his goal and in general to influence the behavior of others, being linked in turn with personality factors related to social dominance and the search for a status quo, which enable the construction of disruptive and antisocial behavior (Raine et al., 2006), due to the absence of activation or feelings of anger and low emotional response (Vitaro et al., 2002).

In conclusion, PA is characterized by the absence of emotion and its high character of instrumentality and premeditation (López-Romero et al., 2011), criminal behaviors, expectations of positive outcomes and higher self-efficacy over decisions against others (Blair, 2013).

On the other hand, the second type of aggression conceptualized is reactive, based on the frustration-aggression model proposed by Dollard et al. (1939), which consists of intense emotional activation, with high levels of impulsivity, linked to a low capacity for inhibitory function, self-regulation and planning (Raine et al., 2006), as a result of a reaction perceived as threatening. Low levels of social information processing (Volavka, 1995), low frustration tolerance (Vitaro et al., 2002) and the negative interpretation of others' actions, giving them a hostile connotation (Helfritz-Sinville & Stanford, 2014) have also been found.

In this sense, although several investigations have mentioned that the central character of RA is impulsivity (Peña et al., 2013), it has been found that antisocial behavior would also be a predictor of this type of behavior (Penado et al., 2014), although more linked

to the proactive type of aggression as mentioned above (Andreu et al., 2013). Thus, the central objective of this type of behavior is to harm the other (Penado, 2012) and does not seek secondary gains due to the character of spontaneous response to some type of threat or provocation that can be presented in a real or perceived way by the subject and that is accompanied by a violent manifestation (Penado et al., 2014).

Finally, for both types of aggression there are current discussions that revolve around the components that would explain why individuals act the way they do. It has been found that, along with aggression, there are several variables that could provide partial answers to these questions and that in recent years have been highlighted thanks to the findings reported. Among these functions is empathy, due to its importance in the prosocial disposition of individuals and its role in inhibiting violent behavior (Mestre et al., 2004).

In conceptual terms, empathy plays a central role in the development of adaptive thoughts and behaviors for the individual, where it is understood as a shared emotional response, product of the understanding and appreciation of the emotional state of others (Eisenberg et al., 2010), and involves both basic processes linked to sharing the affects of others, as well as complex forms of attribution of mental states (Singer, 2006).

Authors such as Decety (2010), from the neurodevelopmental perspective, state that empathy arises from the second year of life, a period in which the child begins to be aware of the experiences, intentions and emotions of others. According to the social nature of this function, it has been catalogued as a multidimensional ability that comprises affective and cognitive characteristics (Wai & Tiliopoulos, 2012); the former is defined as the ability to share emotions with other people, implies the ability to feel what the other feels and is characterized by a visceral, automatic response (De Ridder et al., 2015). Specific impairment in this domain is evidenced by low abilities to experience concern or compassion for others who have negative feelings (Anastassiou- Hadjicharalalambous & Warden, 2008). Structures such as the anterior insula, cingulate cortex and amygdala have been found to be involved in this subtype of empathy (Walter, 2012).

Due to the association between empathy and its component of interaction with others, extensive research has been developed looking for the relationship between this construct and antisocial behaviors (Arango-Tobón et al., 2014; De Ridder et al., 2015; Milone et al., 2019). It has been found that for both sexes, children and adolescents who presented high levels of psychopathy or conduct disorder had deficits in affective empathy (AE) (Anastassiou-Hadjicharalambous & Warden, 2008). Other studies (Milone et al, 2019) indicate that deficits in children with higher levels of psychopathic traits had lower levels of parent-reported AE.

On the other hand, cognitive empathy (CE) is the ability to understand the mental states of others, without having emotional contagion, i.e., rationally knowing what they feel and why, but without emotional involvement (Wai & Tiliopoulos, 2012) and includes the ability to decode and label emotions (Milone et al., 2019). The structures linked to this subtype are found in prefrontal areas also involved in Theory of Mind (Walter, 2012), a function that assists the empathic capacity in the attribution of emotions and understanding of the emotional state of others (Zabala et al., 2018).

On the other hand, although it has been observed that the level of empathy increases during adolescence, the cognitive subtype is more prevalent (Allemand et al., 2015), which is in accordance with neurodevelopmental theories that refer to the maturation of the frontal lobes at this stage and into adulthood (Lozano & Ostrosky, 2011).

In this sense, empathy plays a fundamental role in the study of aggression, and specifically in the identification of the specific subtype according to its etiology and function. According to Eisenberg (2000), this skill plays an important role in the moral development of individuals, because, depending on the understanding of the other person's state or situation, it triggers an emotional response or not on the part of the subject.

In conclusion, it has been shown that individuals acting under each type of aggression function psychologically and socially differently, where each one correlates with different maladaptive behavior profiles during the life cycle (Card & Little, 2007), developing inter-

nalizing difficulties such as anxiety and depression in the case of reactive and externalizing ones such as delinquency or projective difficulties in the case of proactive ones (Vitaro et al., 2002). Failure to address these problems implies serious consequences for the life of adolescents, due to the exacerbation of symptoms according to the developmental curve.

For the case of individuals who act under the frustration-aggression principle, they tend to reflect over the years more impulsivity and emotional dysregulation, rather than skills to understand and recognize the affective states of others (Coccaro et al., 2011); on the other hand, those who act according to instrumental principles, the fact of recognizing the affective states of others, provides them with the ability to understand how to inflict harm, manipulation and extortion on others for personal gain (Bo et al., 2014). For its part, there is no consensus yet on how empathy operates as a general construct or from its dimensions in both types of aggression or which ones are present in the different types of violent behaviors.

The aim of the present study is to conduct a systematic review using the prism method on the relationships found in empirical research between aggressive behavior of proactive and reactive type and empathy, from the cognitive and affective dimensions, in adolescents, youth and young adults, also due to contradictory findings with those reported in a meta-analysis indicating that there is no or marginal correlation between the two variables under study (Vachon et al., 2014).

The importance of this review is that it allows to show and update the existing scientific knowledge from the objective integration of the results published in high impact journals, related to central topics where controversies persist, such as aggressive behavior and its relationship with empathy. Addressing these issues would allow the development of more effective prevention and intervention strategies and new lines of research, especially in stages such as adolescence, since it is there, where aggressive behaviors have their greatest expression, even before childhood (Dodge & McCourt, 2010), becoming a priority group of study, since these behaviors would predict more serious problems in adulthood (Odgers & Rusell, 2009), increasing costs and family and social wear and tear.

Method

A systematic review was carried out according to the PRISMA guidelines (Liberati et al., 2009) of the scientific literature published in databases with high impact journals in the social sciences, health and neurosciences. The following is a detailed explanation of the elaboration process in the different phases and Figure 1. *Phases of the systematic review* describes in detail what was carried out.

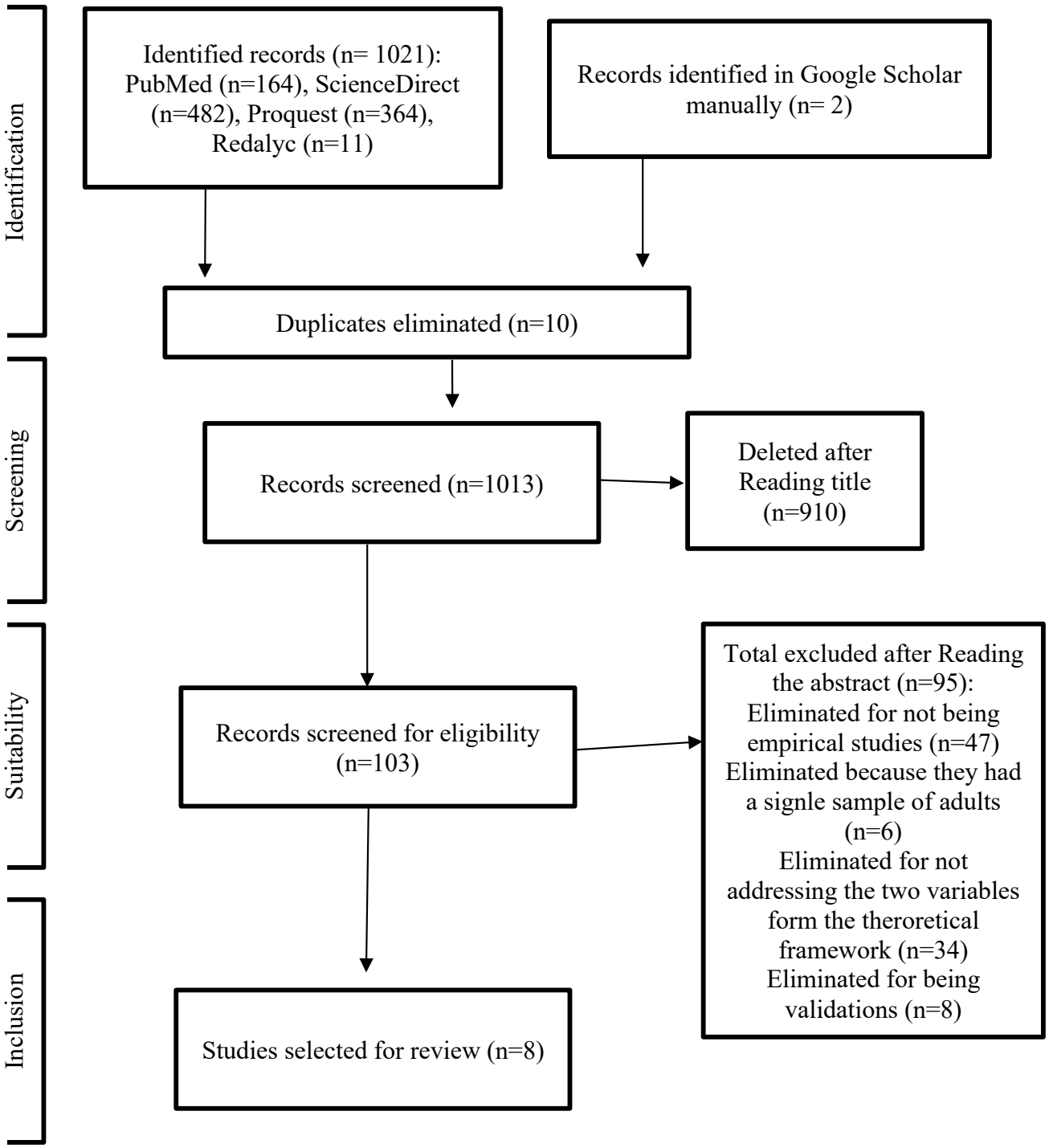
The terms "reactive aggression", "proactive aggression", "empathy" and "empathic" were used in the databases PubMed, ScienceDirect, Proquest and, due to the importance of the Latin American context, it was decided to include Redalyc and Scielo, with Boolean operators such as AND, OR or NOT, as appropriate withthe terms "adolescents", "young", "conduct disorder" and "aggressive", between 2016 and 2020. These searches resulted in a considerable number of articles, most of which were of little use to the research becausethey were duplicated or were far from the purposes of the present study. Since the results from Scielo were the scarcest and were included in the other journals, it was decided to eliminate them from the registry.

The guide with the best results was (((reactive aggression) OR (proactive aggression)) OR (aggression)) AND (empathy), filtered by the age group of "adolescents" OR "young adults" AND "empirical study" OR "research article". It was also screened by subject areas such as Psychology, Social Sciences and Neurosciences.

A total of 1021 articles were found, of which 482 were found in ScienceDirect, 364 in Proquest, 164 in PubMed and 11 in Redalyc. To corroborate that no important article was left out, Google Scholar was used with different combinations of the aforementioned search terms. These searches yielded two articles that had not been found in the aforementioned databases. The inclusion criteria were as follows: empirical research, addressing the variables of empathy (cognitive and affective) and aggression (proactive and reactive), published between 2016 and 2020, and that the population under study were adolescents, youth and young adults. The exclusion criteria were: non-empirical studies, doctoral theses or reviews, those conducted with non-human samples, those addressing the variables from other theoretical perspectives and languages other than English or Spanish.

Figure 1.

Phases of the systematic review



In this sense, studies with different methods of measuring aggressive behavior and empathy were included,including self-reports, third-party reports and behavioral measures. All studies independent of sample size were also included.

Results

In accordance with the aforementioned criteria and with the reading of the titles, 103 articles were considered after eliminating duplicates from the databases

(n=10). After reading the abstract, 95 were discarded for not being empirical studies 47, for having a single sample in adults 6, for not addressing both variables 34 and for being validations of instruments 8. In summary, 8 articles met the inclusion criteria described in Table 1, *Matrix of the research included in the systematic review.*

Table 1

*Matrix of the research included in the systematic review**

Authors, Country, Design	Sample characteristics	Variables and instruments	Main results
Stranger et al. (2016). United Kingdom. Transversal. Experimental.	n= 80 Age $\tilde{x}$=19.49 years University students playing team sports	*Variables:* General Empathy, CE (perspective taking), AE (empathic concern), PA and RA. *Instruments:* Interpersonal Reactivity Index (IRI), Taylor's Paradigm (TAP).	Empathy inhibits aggression in women without influencing the level of provocation, while in men only at low levels of provocation. Guilt mediates the effect of empathy with aggression in men with low provocation.
Van Hazebroek et al. (2016). The Netherlands. Cross-sectional Non-experimental	n= 550 Age: 11-14 years (=12.9 years) Students	*Variables:* CE, AE, PA and RA *Instruments:* IRI, Reactive and Proactive Aggression (IRPA)	Negative correlation between RA and lack of perspective taking and empathic concern. Lack of empathic concern enables RA prediction . No association between PA and perspective taking. Lack of empathic concern is related to PA although supported by the desire to be dominant.
Euler et al. (2017). Switzerland. Transversal Non-experimental	n= 241 Age 12-18 years old 168 forensic sample 73 community sample	*Variables: CE, AE, PA, RA* *Instruments:* Basic Empathy Scale (BES), Reactive and Proactive Questionnaire (RPQ).	Negative association between CE, AE total empathy, with PA. Non-significance between RA, CE, AE and total empathy. Three clusters were identified: 1. high scores in RA and PA; 2. high scores in RA; 3. low aggression. Group 1. Had significantly lower CE and AE than the other two groups. Differences in AE between groups 1 and 2 Groups 2 and 3 did not differ in CE, AE and total empathy. Marginal relationship between A, CE and AE.
Riasat et al. (2017). Pakistan. Transversal Non-experimental	n= 372 Age: 8 to 18 years old. 186 forensic sample and 186 community sample	*Variables: AE, PA, RA.* *Instruments:* RPQ, Emotional Empathy Scale	Negative correlation between empathy and aggression. Negative correlation of AE with RA Negative correlation between both RA, PA and AE. Offenders had significantly lower scores on empathy and higher levels of AR
Song et al. (2018). China. Experimental cross-sectional	n= 50 University students Age: 18- 25 years ($\tilde{x}$=22.6 years)	*Variables:* AE, CE, RA, total aggression *Instruments:* IRI China version, Aggression Questionnaire (AQ), TAP.	Empathy plays an inhibitory role with aggression except for RA. Negative correlation between perspective taking (CE) and aggression. Positive correlation between empathy and aggression.

Authors, Country, Design	Sample characteristics	Variables and instruments	Main results
Chen et al. (2019). China. Transversal. Non-experimental	n= 4767 Age: 8 to 18 years ($\bar{x}$=11.80 years) Students	*Variables: CE, AE, PA, RA* *Instruments:* RPQ, Cognitive, Affective and Somatic Empathy Scale (CASES).	Negative relationship between empathy and rule breaking. Negative association between empathy and self-reported and hetero informed PA. No association between empathy and RA in the hetero informed version and positive for the informed version.
Dryburgh & Vachon (2019). United States. Cross-sectional, Non-experimental	n= 369 University students	*Variables*: CE, AE (Resonance and affective dissonance), RA, PA *Instruments:* Affective and Cognitive Measure of Empathy (ACME), RPQ, AQ	Negative correlation between AE and aggression. CE significantly predicts PA
Tampke et al. (2020). United States. Longitudinal, non-experimental	n= 294 Age $\tilde{x}$=9.25 years Primary school students	*Variables:* AE, PA, RA *Instruments:* IRI (Empathic Concern Subscale) adapted for children. Proactive/Reactive Aggression Scale (hetero informed version).	Time 1 AE was negatively associated with time 2 PA. Time 1 RA was negatively associated with time 2 AE. AE and PA were negatively correlated at Time 2. AE and PA were not associated at time 1. Time 1 AE was not associated with time 2 RA

*Only the information relevant to this review is reported.

According to the table, research was conducted in countries such as China (n=2) and the United States (n=2) and the Netherlands, Pakistan, United Kingdom and Switzerland, each with one publication. No research relating both variables was found in Latin America, although we searched databases with articles in Spanish language. The years of publication were 2016 (n=2), 2017 (n=2), 2018 (n=1), 2019 (n=2) and 2020 (n=1) asdescribed in the inclusion criteria.

Seventy-five percent of the studies (n=6) were conducted under a non-experimental research design, compared to 25% (n=2) that were conducted with an experimental one. Cross-sectional studies accounted for 87.5% (n=7), while one study was conducted with a longitudinal design (12.5%) where the sample was evaluated over a range of 6 months.

The samples vary between n=50 and n=4767 with a median of 331.5 subjects and an age range between 8 and25 years old. The samples are divided between students -community sample- with 94.4% (n=6369) and forensic with 354 subjects, i.e. 5.6%.

The instrument most commonly used to assess PA and RA was the Reactive and Proactive Aggression Questionnaire (RPQ) (Raine et al., 2006), while in the experimental investigations they used the TAP (Taylor,1967) to measure the former, through the shock intensity selected by the participant in the first trial and the shock intensity in the following trials to determine the measure of RA (Taylor, 1967). To assess the multidimensionality of empathy they employed the IRI (Davis, 1980; Zhang et al., 2010).

Regarding the results of the variables of interest, a diversity of findings were found; there seems to be some degree of acceptance that empathy inhibits aggression in men exposed to low levels of provocation, and the role played by guilt as a mediating variable is also observed (Stranger et al., 2016); on the other hand, it was found that in women the level of provocation does not significantly influence this relationship (Stranger et al., 2016), contrary to this, Song et al. (2018) have found the inhibitory role independent of gender and level of provocation.

Research has agreed that empathy and general aggression correlate negatively (Riasat et al., 2017), an aspect found by Euler et al. (2017) in one of the clusters identified in their study, where they identified that the aboveis evidenced, but only for those who presented high RA and PA, but not for the other clusters. For its part, the research conducted by Song et al. (2018) contrary to expectations, found a positive association in the self- report measures, but not in the behavioral tests.

On the other hand, among the relationships of empathy as a general construct, diverse results were found, one of them is the one reported by Chen et al. (2019) where negative correlation was found regarding norm breaking, i.e., the lower the general empathy the higher the disposition to norm breaking; the same as with PA (Euler et al., 2017; Chen et al., 2019), contrary to what was reported with RA where no association was found (Euler et al. ,2017) and the inhibitory role was limited (Raine & Chen, 2018; Song et al., 2018); however, Chen et al. (2019) indicated that only the null relationship was observed with hetero informed test scores, but for self-reported, it was positive.

Regarding empathy dimensions, some authors indicate that between CE and PA the correlation is negative (Euler et al., 2017; Dryburgh et al., 2019), while Van Hazebroek et al. (2016) in the analysis of Perspective Taking scales corresponding to CE, found no association with it, but a negative one with RA and with totalaggression; contrary to the result, Euler et al. (2017) found no associations between CE and RA.

As for AE, more congruent results were found with each other. Research (Euler et al., 2017; Riasat et al., 2017: Tampke et al., 2020, Dryburgh, 2019) reports a negative correlation with PA, supported by the only longitudinal research conducted on 294 subjects that observed that lower levels of AE assessed at the first moment predict higher levels in this type of aggression at time 2, evidencing temporal stability. For its part in the subscale of empathic concern used by Van Hazebroek et al. (2016) to measure AE, a negative relationshipwas also observed and also a moderation by the desire to be dominant in social relationships.

Likewise, a similar behavior was observed regarding the relationship between AE and RA, where at low levels of the former, higher levels of the latter are presented (Riasat et al, 2017; Dryburgh, 2019; Van Hazebroek; 2016), accepted by the research conducted by Tampke et al. (2020) where he found negative correlation between time 2 AE with time 1 RA. Particularly, it is reported that the Empathic Concern scale measuring the AE domain allows predicting this type of aggression (Van Hazebroek, 2016), although contraryto this, Euler et al. (2017) found no association in any of the three clusters for this empathy dimension with RA.

As for the most recurrent limitations found were in cross-sectional investigations, because their design prevents the establishment of causal inferences and the effective temporal stability of the associations between aggression and empathy, as well as self-report or third-party report instruments, because they present more biases.

Discussion

In accordance with the work done in the present investigation and in response to the proposed objectives, the growing interest and the need to expand the information that accounts for the causes of aggression, while identifying the variables involved in the relationship with social cognition and especially with empathy, stand out; although for the case of Latin America it is necessary to expand the study in this regard, since no article was found that reported these associations, being of particular relevance due to the characteristics of the population that presents sociodemographic characteristics and is exposed to social and economic situations different from the countries that were reported.

A lack of instruments other than self-reports and experimental and longitudinal research was observed, making it impossible to increase the reliability and validity indexes of the reported data; it is observed that the TAP (Taylor, 1967) was the most used for the assessment of aggression in research with experimental design,while the IRI (Davis, 1980; Zhang et al., 2010) for the assessment of empathy and the RPQ (Raine et al., 2006) for PA and RA was the most used in research with different designs and cutoffs.

With respect to the samples studied, a generalized lack was identified; the community or school sample is represented by about 94% and only a percentage lower

than 6% corresponds to adolescents and young people who are presumed to be more violent due to being a forensic sample; this aspect may explain the diverse results in the relationship of empathy with aggression and each of the subdomains so it has even allowed to bethe subject of analysis for works where clusters that present diverse levels of aggression are analyzed with dissimilar associations for the case of empathy (Euler et al., 2017).

In this sense, the present review allows a clear observation of the various findings where it is possible to affirm that empathy acts as an inhibitor of aggression in men who are exposed to low levels of provocation, while what still does not seem to be agreed upon is whether in the case of women, provocation determines animportant inhibitory function of the former with respect to the latter (Phipllips & Giancola, 2007; Stranger et al., 2016; Song et al., 2018); this discrepancy could be explained by the characteristics of the samples. In the case of Stranger et al. (2016), students who practiced team sports were evaluated, where they could legitimizethe attack and defense against possible situations of aggression, while in Song et al. (2018), the sample consisted of university students who did not necessarily practice team sports and where this legitimacy was not considered as an option.

Thus, studies also found that not only empathy inhibited aggression, but that these were negatively related in forensic samples (Riasat et al., 2017), and particularly in the high reactive-proactive aggression cluster (Euler et al., 2017), being congruent with previous research indicating that adolescents with lower levels of empathy present higher levels of aggression (Jolliffe & Farrington, 2006).

For their part, the positive associations (Song et al., 2018), can be explained by several reasons: the first of them is related to the sample, due to the fact that it was not particularly violent but characterized by being and on the other hand, it seems that one of the scales of the IRI called Interpersonal Distress belonging to the affective component of empathy and the Fantasy scale, of the cognitive component, present a high correlationwith aggression, which would indicate that a subject with high distress (distress) tends to be more aggressive or hostile, and this would be the motivation to decrease own suffering, seeking to escape or help others. The results of these two subscales would be decreasing the correlation coefficient that would be significant according to the scores obtained in the other two subscales.

The relationship of empathy with rule breaking or offending and PA does seem to be clear (Euler et al., 2017; Chen et al., 2019), because the more one can understand the perspectives of others (Davis, 1980) or identify with the emotion of the other (Davis, 1994), the lower the level of aggression. These findings are congruent with that found by Blair (2018), where it is observed that the deficit in empathy plays a more preponderant role on this type of aggression than on RA.

Between CE and PA, the results are diverse because some indicate that the relationship is negative (Euler et al., 2017; Dryburgh et al., 2019), and others found no association (Van Hazebroek et al., 2016), explaining the discrepancy in the high levels of aggression, where from there and coupled with the understanding of the emotional state of the other, the control over the situation for the subsequent search for a secondary gain will be greater (Eisenberg et al., 2010). Likewise, some research (Eisenberg et al., 2010) indicates that the marginal or positive associations between CE and aggression can be attributed to lying or simulation in the face of empathy evaluations, where due to the conceptual understanding of the items, one responds in accordance with what is expected, but not to caring about how the other feels.

According to what has been reported by the research included in the present review, the higher the levels of AE, the lower the levels of PA (Van Hazebroek et al., 2016; Euler et al., 2017; Riasat et al., 2017; Tampke etal., 2020; Dryburgh, 2019), i.e., when a child, adolescent or young person takes on the suffering of others as their own or experiences negative emotions from others they are less likely to seek to hurt or assault them forindividual gain, being in line with previous research (Jolliffe & Farrington, 2006; Fesbach et al., 2009) that indicate that when this type of empathy is present, aspects such as delinquency are diminished, because this would be a legitimate way of aggression for the pursuit of a secondary gain, and the deficit in affective congruence towards the victim would not be noticeable, due to the effective sensation of the achievement of the reward. Similar results have been found even in samples of children aged 2 to 11 years, where it has beenindicated that, at lower levels of AE, higher levels of PA (Deschamps et al., 2018). Likewi-

se, evidence has found that affective empathy is likely to be lacking only for victims for the case of adolescents who present high levels of PA and that this furthermore does not influence the overall empathy level (Brown et al., 2013).

In the same way, low levels in AE allow predicting higher levels of RA (Riasat et al., 2017; Dryburgh, 2019; Van Hazebroek, 2016), being more consistent these results in the versions reported by third parties due to factors such as social desirability (Tampke et al., 2020). Other research on the contrary establishes results between these two of marginal type and it is observed that it varies according to age and characteristics for example in the development of emotional self-regulation skills; for the specific case in the research conducted by Euler et al., (2017) did not find that AE was associated with RA in the group of adolescents who presented high reactive and proactive aggression, evidencing that empathy fails to function as internal control, so that neither punishment can fulfill the role of external control. In this sense, the inhibitory mechanisms triggered by empathy are disturbed by emotional overexcitement, which increases the likelihood that young people engage in reactive aggression (Lovett & Sheffield, 2007).

It is suggested for future studies to carry out research with longitudinal designs, since these allow the establishment of causal inferences and make it possible to observe the temporal stability of the associationsbetween aggression from its different motivators and multidimensional empathy.

In relation to the characteristics of the sample, it is important to increase the size of the n and to treat with care the results of the community and forensic samples, especially in the latter, which, as evidenced in this review, was very low and the results do not allow clear conclusions to be drawn in this regard.

On the other hand, because there may be variables that interfere (mediate and moderate) the relationship between these two, it is important to include variables such as aggression from social, online, and relational subtypes (Dryburgh & Vachon, 2019), empathy from other theoretical frameworks (Euler et al., 2017), guilt (Stranger et al., 2016), community and agency goals, personality and specifically social desirability (Riasat etal., 2017) and Callous Unemotional traits [emotional harshness and insensitivity], due to the fact that adolescents or young adults with this characteristic present higher levels of aggressiveness and social information processing skills (Van Hazebroek et al., 2016). For its part, the application of self-reports and reports made by third parties is suggested, since biases of this type of instruments can be eliminated or reduced, allowing conclusions based on objectivity.

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