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**Psychologie**  
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# The Relationship Between Empathic Abilities and Resistance to Peer Influence in Adolescence

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## **Abstract**

Adolescence is a developmental period characterized by an increase in the complexity of group interactions and the importance given to peer relations. Previous evidence points out that during this developmental stage, individuals are more susceptible to peer pressure, which can constitute a risk factor for antisocial or deviant behaviours. However, there is still not complete clarity about why some adolescents might be more susceptible to peer influence than others. The present study investigates the relationship between the three empathic abilities (perspective taking, empathic concern and intention to comfort) and resistance to peer influence in early, mid- and late adolescence. Participants were 175 adolescents between 9 and 18 years old (175, 55.7%males). Self-reported instruments were administered for all the variables. Results of the multiple regression show that empathic abilities are not related to resistance to peer influence; only age and gender predicted levels of resistance to peer influence. Late adolescents are significantly more resistant to peer influence than early adolescents and females show higher levels than males, especially during mid-adolescence.

*Keywords:* resistance to peer influence, perspective taking, empathic concern, intention to comfort, adolescence.

## Introduction

Adolescence is the transitional period between childhood and early adulthood, which has been traditionally divided into three developmental phases: early adolescence, mid-adolescence and late adolescence (Steinberg, 2008). Adolescence is characterized by an increase in the complexity of group interactions and social behaviour (Choudhury, Blackemore & Charman, 2006). During adolescence, peer interactions expand beyond small group interactions, common during early stages of life, to larger groups, usually with similarities in behaviour and attitudes (Brown, Eicher & Petrie, 1986; Sumter, Bokhorst, Steinberg & Westenberg, 2009). These interactions are usually formed in a classroom or neighbourhood context and are referred to as 'peer groups' (Brown, Eicher & Petrie, 1986). Interaction among peers becomes more frequent during this developmental period, and social relationships are particularly important during adolescence. Early and middle adolescents report relying the most on friends as sources of support; this might be explained by the adolescents' need to decrease their emotional dependency on parents, simultaneously relying more on peers for support and guidance in times of stress (Furman & Buhrmester, 1992).

Adolescents' peer groups vary in their norms and values; the social norms can be defined as expectations about appropriate behaviour endorsed by a group (McDonald & Crandall, 2015). These characteristics affect the development of adolescents' attitudes, behaviours and achievements (Ryan, 2000; Steinberg & Monahan, 2007). These group norms and values, along with the importance given to peer interactions during this developmental period, make the adolescent more susceptible to peer pressure and contribute to changes in behaviour in order to fit with the social group (Brown, Clasen & Eicher, 1986). Susceptibility to peer pressure can encourage both harmful and healthy behaviours, depending on the group's social norms (Brown, Bakken, Ameringer & Mahon, 2008).

Susceptibility to peer pressure during adolescence varies with age. Recent evidence suggests that resistance to peer influence increases linearly between the ages of 9 and 18, with late adolescents showing less susceptibility to peer influence than early adolescents. (Steinberg & Monahan, 2007; Sumter et al., 2009). Considering the unfavourable effects that negative peer pressure can have in the adolescent's development, it is important to study

aspects that could be involved in the development of resistance to peer influence. Certain characteristics of the individual might serve as protective factors for sensitivity to peer influence, for example, the empathic abilities: perspective taking, empathic concern and intention to comfort.

### ***Relationship Between Empathic Abilities and Resistance to Peer Influence***

Empathy refers to the cognitive and affective reactions of one individual to the experiences, feelings and thoughts of another and can be best understood as a set of emotional, cognitive and support constructs that interact with each other (Davis, 1983; Shamay-Tsoory, 2011). These three aspects can be considered and measured separately; however, the most accurate way to understand the complex construct of empathy is taking the three of them into account (Gini, Albiero, Benelli & Altoè, 2007). Previous findings suggest that empathic abilities might be linked to resistance to peer influence during adolescence. Adolescents with high levels of perspective-taking abilities have been shown to have better social functioning, which might make them less prone to engage in deviant behaviours due to peer pressure (Laghi, Bianchi, Pompili, Lonigro & Baiocco, 2019; Galinsky, Qu & Wang, 2005). Likewise, adolescents with high levels of intention to comfort scored higher in self-esteem measures, which in turn predicted higher resistance to peer pressure (Salmivalli et al., 1999; Kandemir, 2014). Empathic concern has been previously linked with emotion regulation (Eisenberg, 2010), which has shown a relationship with resistance to peer influence (Pfeifer et al., 2011). Thus, the empathic abilities might be considered as a protective factor for adolescents during this developmental period when they are sensitive to peer pressure.

### **Perspective Taking and Resistance to Peer Influence**

The cognitive component of empathy, referred to as perspective-taking abilities, refers to the ability to understand the other's emotional states. For this to happen, the individual must spontaneously adopt the psychological point of view of the other, i.e., imagine oneself in the situation of the other, in order to know what the other thinks or feels (Davis, 1983; Zahn & Radke, 1990). The development of cognitive processes responsible for the ability to differentiate between oneself and others takes place at a young age; however, is not until early adolescence that the individual develops the ability to visualize a social interaction from outside and simultaneously consider both self and other perspective from a

third-person view (Selman, 1980). These perspective-taking abilities play a crucial role in social functioning, facilitating better and more rewarding interpersonal relationships (Davis, 1983).

Evidence suggests that perspective-taking abilities may work as a protective factor against susceptibility to peer pressure. Adolescents with higher levels of perspective-taking abilities and empathic concern are less likely to feel the need to engage in deviant behaviours or act against their beliefs for social facilitation, due to their better social functioning (Galinsky, Qu & Wang, 2005). The ability to simultaneously consider self and other perspective from a third-person view facilitates the anticipation of solutions for problems or difficulties with peers and allows the adolescent to have more awareness that he or she will not necessarily be rejected due to refusing to behave in a certain way (Rubin & Martin, 1994). For example, Laghi and colleagues (2019) investigate the role of perspective-taking abilities and empathic concern in resisting peer pressure to drink, using the two subscales from the Interpersonal Reactivity Index Scale (Davis, 1983). Results show that the perspective-taking abilities proved to be a moderator between self-efficacy in resisting peer pressure to drink (SRPPD) and binge drinking. At low levels of perspective-taking abilities, a negative relationship between SRPPD and binge drinking was found, and the relationship between SRPPD and binge drinking was not significant at higher levels of perspective-taking abilities. Hence, high levels of perspective-taking abilities appear to decrease the effect of low resistance to peer influence.

Similarly, Nguyen and colleagues (2011) examined the role of perspective-taking abilities and empathic concern in drug refusal efficacy in adolescents. Their results similarly indicate that adolescents with higher levels of perspective-taking abilities are less susceptible to peer pressure to use drugs because these abilities appear to mediate the relationship between the self-efficacy to resist peer influence and drug refusal. Based on this evidence, I hypothesized that adolescents with high perspective-taking abilities are more resistant to peer pressure.

### **Empathic Concern and Resistance to Peer Influence**

The affective component of empathy, referred to as empathic concern, is defined as the tendency of sharing an emotional concern or experience feelings of sympathy and concern for others (Davis, 1983). The empathic concern involves having a similar emotional

response to external conditions, e.g., sadness in response to an individual's sorrow (Zahn & Radke, 1990). Several empirical findings are consistent with the notion that the ability to regulate emotional responses during social interactions is important for the development of empathic concern (Eisenberg, 2010; Eisenberg et al., 1998; Davis, 1983; Davis et al., 1994). Evidence suggests that individuals sometimes experience overarousal due to an empathic response to other's feelings, leading to a sense of personal distress. When the personal arousal is high and experienced as aversive, the individual might focus on their own distress instead of focusing on the other person's distress; this can get in the way of showing empathic concern (Eisenberg & Fabes, 1992; Davis et al., 1994). Emotion regulation refers to the processes of monitoring, evaluating and modifying emotional reactions (Thompson, 1994). Individuals with a positive level of emotion regulation can maintain their emotional arousal at a level that is not experienced by themselves as aversive; and experience feelings of concern and sympathy for others (Eisenberg, 2010).

Previous research also suggests that emotion regulation is linked to higher abilities to resist peer influence (Gardner, Dishion & Connell, 2008; Massey et al., 2018). Pfeifer and colleagues (2011) conducted a study to test for differences between the emotional reactivity of early adolescents and mid-adolescents, using magnetic resonance imaging (MRI), and its relationship to resistance to peer influence, which was measured using the self-report measures for resistance to peer influence (RPI; Steinberg & Monahan, 2007). Results show that better regulation of responses to other's emotional expressions is associated with improved abilities to resist peer influence during adolescence because affective displays by peers can strongly impact behaviours and decisions. Thus, the authors suggest that better regulation of the emotions aroused by a peer's affective displays leads to less susceptibility to peer pressure. Taken together, I hypothesized that adolescents who show higher levels of empathic concern are expected to show more resistance to peer influence.

### **Intention to Comfort and Resistance to Peer Influence**

Empathy not only involves the cognitive and affective reactions evoked by others' distress but also actions toward others that follow from empathic understanding. Along this line, more recent research has included another component of empathy, the intention to comfort, which refers to the impulse to behave in supportive ways towards the affected individual, such as by helping, sharing or comforting behaviours, as a result of the empathic

abilities (Overgaauw, Rieffe, Broekhof, Crone & Güroğlu, 2017; Zahn & Radke, 1990). The concept considers the tendency to help the person in distress (Overgaauw, et al., 2017) and alleviate their suffering or discomfort (Zahn & Radke, 1990).

Several recent studies focus on the intention to comfort, as part of empathy, during bullying episodes. Both empathic concern and perspective-taking abilities were found to be related to an increase in the intention to comfort in adolescents (Caravita, Di Balsio & Salmivalli, 2009; Pöyhönen, Juvonen & Salmivalli, 2010; Espelage, Green & Polanin, 2012). Intention to comfort in adolescence, especially during bullying interactions, has been associated with higher levels of self-esteem, that is, a positive view of oneself (Salmivalli et al., 1999).

Salmivalli and colleagues (1999) study the role of self-esteem in adolescents' social behaviour in situations of bullying. The behaviour in a bullying situation was measured with the Participant Role Questionnaire (PRQ-R), consisting of five subscales: 'Describing Tendencies to Bully Others', 'Assist the Bully', 'Reinforce the Bully' and 'Defend the Victim'. The last item refers to the extent to which the individual is willing to comfort the victim during and after the bullying situation, try to make the others stop bullying or encourage the victim to tell the teacher about the bullying. Results show that higher scores in the subscale 'Defend the Victim' were common in adolescents with high self-esteem. The authors conclude that high self-esteem is needed for the adolescent to resist peer pressure and defend or comfort the victim because the social cost of behaving differently to what peers expect might be high.

Accordingly, evidence suggests that during adolescence, peer opinions and social evaluation are perceived as very important; however, adolescents with consistently high levels of self-esteem have proven to stick to their values and goals more often than those who show lower levels (Kandemir, 2014; Zimmerman et al., 1997). These adolescents are also expected to be less susceptible to peer pressure and maintain their values, even if they differ from their peers' opinions or thoughts. For example, Chen and colleagues (2016) studied the relationship between self-esteem and susceptibility to peer pressure. Results suggest that adolescents with higher levels of self-esteem reported less susceptibility to peer pressure. Altogether, the intention to comfort might be positively related to high self-esteem, and self-esteem appears to influence the degree of susceptibility to peer influence.

The current study intends to explore the relationship between intention to comfort and resistance to peer influence in adolescence. Based on previous research, I hypothesized that adolescents who show higher levels of intention to comfort are more resistant to peer influence.

### **Gender Differences in Resistance to Peer Influence and Empathic Abilities**

Literature suggests that empathic abilities (empathic concern, perspective taking and intention to support) vary between boys and girls during adolescence (Van der Graaff et al., 2014). Studies indicate that females show higher levels of empathic concern and perspective-taking abilities than males (Laghi et al., 2019; Hoffman, 1977). For example, Van der Graaff and colleagues (2014) studied adolescents' gender differences in the development of empathic concern and perspective-taking abilities. Results suggest that there are significant gender differences in both perspective taking and empathic concern; females showed higher levels of empathic concern than males from early adolescence onwards, and higher perspective-taking abilities between early adolescence and mid-adolescence. Another study explored the gender differences in perspective taking and empathetic concern during adolescence in a longitudinal study (Mestre, Samper, Frias & Tur, 2009), using the Perspective-taking Subscale and the Empathic Concern Subscale of the Interpersonal Reactivity Index Scale (IRI; Davis, 1980) Results indicate that females show a greater empathic response than males of the same age, and that gender differences grow with age. The gender differences were more significant for empathic concern than perspective-taking abilities.

Previous findings suggest that females also show higher levels of intention to comfort than males. Pozzoli and Gini (2010) explored the gender differences in pro-victim attitudes, defending the victim and passive bystanding behaviour during bullying episodes. Results show that males scored higher than females in passive bystanding and bullying behaviours, while females scored higher in pro-victim attitudes and were significantly more likely to defend the victim than males, according to teacher reports. Another study explored whether adolescents' responses to bullying episodes, including defending the victim, differ between males and females (Trach, Hymel, Waterhouse & Neale, 2010). The authors found that behaviours of defending the victim during bullying episodes are more likely in females than males, attempting to stop the bullying episodes by confronting the bully or seeking help.

Due to the existence of gender stereotypes during adolescence, there is a social pressure to socialize in a gender-specific way. Females are expected to give special importance to interpersonal relationships and show more expressiveness than males (Hill & Lynch, 1983). Pettitt (2004) studied the relationship between adolescents' pubertal development and their perceptions of peers' thoughts about social domains. Results show that perceived gender stereotypes increased along with the pubertal status; both female and male adolescents perceived that their peers thought the social domain was more important for females than for males. While females are encouraged by gender stereotypes to show emotional and caring behaviours, males are taught to inhibit these behaviours (Pettitt, 2004), resulting in higher levels of empathic abilities in females than males.

Evidence suggests that resistance to peer influence varies as a function of gender during adolescence. Previous research indicates that females are more likely than boys to show resistance to peer influence; in other words, females are more likely to stand up for their beliefs rather than alter their behaviour to fit with the peer group (Steinberg & Monahan, 2007) in both antisocial and neutral situations (Steinberg & Silverberg, 1986).

Steinberg and Silverberg (1986) attributed these differences to the fact that girls showed higher levels of autonomy, from both parents and peers, and showed more self-reliance compared to males in their study. More recent studies confirmed these findings. Cauffman and Steinberg (2000) explored the gender differences in the influence of psychosocial factors, including responsibility, self-reliance, independence, autonomy and clarity of identity; on maturity judgment. Results show that females show higher levels of psychosocial maturity, including higher levels of self-reliance and autonomy. These abilities have also been proven to lessen the adolescents' susceptibility to peer pressure (Steinberg and Silverberg, 1986; Bámaca & Umaña, 2006).

Taken together, I hypothesized that a gender difference in resistance to peer influence and the three empathic abilities (perspective taking, empathic concern and intention to support) would be found in this study, in which girls are expected to be both more resistant to peer influence and more empathic than boys.

The current study will examine the relationship between the three empathic abilities (perspective taking, empathic concern and intention to comfort) and resistance to peer influence, as well as the main effects of gender in the resistance to peer influence and the empathic abilities during adolescence.

1. I will examine whether there is a relationship between perspective taking and resistance to peer influence. I hypothesized that higher levels of perspective-taking abilities would be related to higher levels of resistance to peer influence. Regarding the relationship between empathic abilities and resistance to peer influence, I expect that adolescents with higher levels of empathic concern will be more resistant to peer influence. Likewise, I hypothesized that higher levels of intention to comfort would be related to better resistance to peer influence.
2. I will examine age as a possible factor related to differences in resistance to peer influence. I expect that resistance to peer influence will increase with age.
3. I will examine the main effect of gender in resistance to peer influence and in the empathic abilities (perspective taking, empathic concern and intention to comfort). I hypothesized that both resistance to peer influence and empathic abilities would be higher in females than males. I hypothesized that the relationship would be stronger in females than in males.

## **Method**

### **Participants and Procedure**

The current study was based on existing data from a study that examined social development across adolescence. One participant was excluded due to missing data, resulting in a total of 175 participants, 55.7% males and 44.3% females. The participants were recruited through local schools and with a participant recruitment database. The sample was divided in three different age groups: 1) early adolescents (N = 46, M = 10.55, SD = 0.69), 2) mid-adolescents (N = 69, M = 13.06, SD = 0.70), and 3) late adolescents (N= 60, M=16.25, SD = 0.56). There was no significant difference in the gender distribution across age groups  $\chi^2(2, 175) = 0.54, p = 0.76$  (see Table 1).

Table 1. Descriptive Participants Age

	<b>N</b>	<b>M</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>	<b>Males</b>
Early adolescents	47	10.57	0.69	9.17	11.83	55.3%
Mid-adolescents	68	13.08	0.69	12.00	14.50	50.0%
Late adolescents	60	16.25	0.56	15.00	17.50	48.3%

## Measures

### *Resistance to Peer Influence*

Resistance to peer influence was assessed using the Resistance to Peer Influence Scale (RPI; Steinberg & Monahan, 2007). The scale measures the construct in general terms, using a series of 10 pairs of statements. The respondents are supposed to choose the statement that is the best descriptor (for example, 'Some people would do something that they knew was wrong just to stay on their friends' good side' BUT 'Other people would not do something they knew was wrong just to stay on their friends' good side'). Once the best descriptor is indicated, the respondent is asked to choose if the descriptor is 'Really true' or 'Sort of true'. The responses are coded on a four-point scale from 1 to 4, ranging from 'Really true' for one descriptor to 'Really not true' for the other descriptor. Higher scores indicate better resistance to peer influence. The reliability analysis of the scale was sufficient, with a Chonbach's  $\alpha$  of .71.

### *Empathic Abilities*

Two different scales were used to assess the three components of empathic abilities: Interpersonal Reactivity Index (IRI) (Davis, 1983) and Empathy Questionnaire for Children and Adolescents (EmQue-CA).

To evaluate the empathetic concern and the perspective taking-abilities, two subscales of the Interpersonal Reactivity Index (IRI) (Davis, 1983) were assessed; both subscales contained six items. The Empathic Concern (EC) subscale (sample item: 'I am often quite touched by things that I see happen') is referred to as affective empathy (Cronbach's  $\alpha$  = 0.80). The perspective-taking subscale (sample item: 'I believe that there are two sides to every question, and I try to look at them both') is referred as cognitive empathy

(Cronbach's alpha = 0.80). Each item was rated on a five-point Likert scale where 0 stands for 'Completely untrue', and 4 is 'Completely true'. Mean scores were calculated per subscale, and the higher scores indicated higher empathy (Overgaauw et al., 2017). To assess intention to comfort, the Intention to Comfort Subscale of the Empathy Questionnaire for Children and Adolescents (EmQue-CA) was used (sample item: 'If a friend is sad, I want to do something to make it better'). The subscale has six items; the participants were asked to rate each one on a three-point scale: 1 is 'Not true', 2 is 'Somewhat true', and 3 is 'True' (Cronbach's alpha = 0.64). The subscale mean score was calculated, and higher scores indicate higher action or support empathy levels (Overgaauw et al., 2017; Pouw, Rieffe, Oosterveld, Huskens & Stockmann, 2013).

### **Data Analysis**

The first and second research questions were assessed with a multiple regression analysis using IBM SPSS (Statistical Package for Social Sciences) version 24. The aim of the multiple regression was to see if the independent variables predict the dependent variable. The multiple regression analysis used the stepwise method. On the first step, age and gender were selected as independent variables and resistance to peer influence as the dependent variable. During the second step, the three different empathic abilities (perspective taking, empathic concern, intention to comfort and gender) were added as independent variables. Also, a t-test was conducted to see differences in gender with regard to the three different empathic abilities and the resistance to peer influence.

## **Results**

### **Descriptive Statistics**

Table 2 presents the descriptive statistics for the measures of empathy abilities and resistance to peer influence. The mean scores were as follows: perspective taking, 2.37; empathic concern, 2.92; and action to support, 2.66; the mean score on resistance to peer influence was 2.85. The participants scored across the full range in all the four measures (see Table 2 for standard deviation, range, minimum and maximum of each scale).

Table 2. Descriptive statistics for the variables

	Perspective taking	Empathic concern	Intention to comfort	Resistance to peer influence
Mean	2.37	2.92	2.66	2.84
Standard Deviation	.61	.55	.30	.49
Range	0–4	0–4	1–3	1–4
Min	0.57	1.14	1.33	1
Max	3.86	4	3	3.8

### Gender Differences

An independent samples t-test was performed to test the gender differences in the dependent variable (resistance to peer influence) and the independent variables (perspective taking, empathic concern, intention to comfort and age of the participants). As can be seen in Table 3, females and males differed significantly on the three empathic ability measures, such that females scored higher than males on all aspects of empathic abilities: perspective taking ( $t(175) = -3.152, p < .01$ ), empathic concern ( $t(175) = -6.586, p < .001$ ) and intention to comfort ( $t(175) = -4.923, p < .001$ ). Males and females also differed significantly on the RPI mean score ( $t(175) = -2.210, p = 0.0$ ), females scored higher than males.

Table 3. Testing for gender differences in the main variables

	Mean (male)	SD (male)	Mean (female)	SD (female)	t
Perspective taking	2.23	0.64	2.51	0.53	-3.15**
Empathic concern	2.67	0.50	3.17	0.49	-6.58***
Intention to comfort	2.56	0.34	2.77	0.19	-4.92***
RPI	2.76	0.48	2.92	0.49	-2.21*

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

### Correlations Between Variables

As can be seen in Table 4, all three empathic ability measures were correlated positively. Age only correlates positively with resistance to peer influence ( $p = .038$ ).

	Perspective taking	Empathetic concern	Intention to comfort	RPI
Age	0.12	0.06	-0.04	0.23**
Perspective taking		0.50**	0.49**	0.05
Empathetic concern			0.59**	0.14
Intention to comfort				-0.02

Note. \*\*. Correlation is significant at the 0.01 level (2-tailed).

### Multiple Regression

To examine whether resistance to peer influence can be predicted by the three different types of empathic abilities, I conducted a multiple regression analysis with two steps. On the first step, age and gender were selected as independent variables and the resistance to peer influence scores as the dependent variable. Subsequently, the IRI subscales perspective taking and empathic concern and the EmQue-CA subscale for intention to comfort were selected as independent variables. No multicollinearity was found, as can be seen in Table 3, the variance influence factors (VIF) are below 10, and there is not a high correlation between variables (see Table 4). The tested model was significant ( $p = .001$ ); age ( $\beta = 0.04$ ,  $p < .01$ ) and gender ( $\beta = 0.14$ ,  $p < .05$ ) were the only variables that were significant predictors of resistance to peer influence. Based on this model, the hypothesis that empathic abilities are related to resistance to peer influence was rejected.

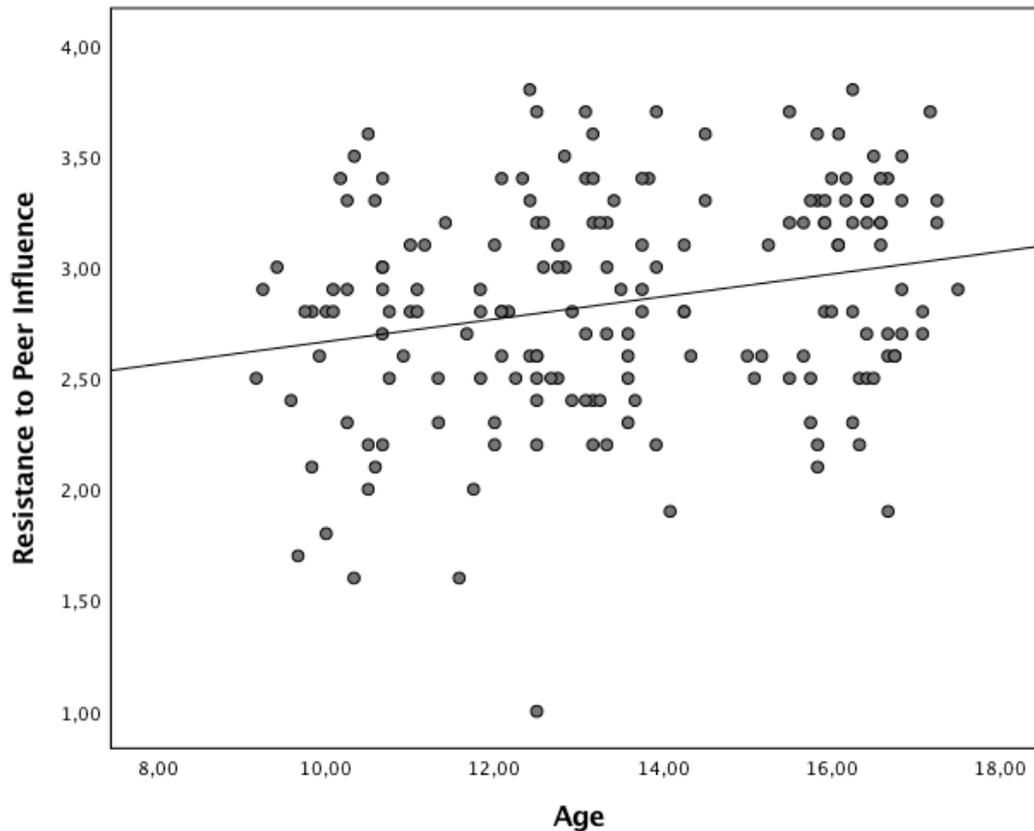
Table 5. Multiple regression predicting resistance to peer influence

	Beta	T	Sig	VIF
Age	0.04	3.07	0.002	1.007
Gender	0.14	1.99	0.047	1.007
Perspective taking	-0.01	-0.20	0.84	1.07
Empathetic concern	0.07	0.89	0.37	1.25
Intention to comfort	-0.07	-0.95	0.34	1.14

Note. Dependent variable: Resistance to peer influence

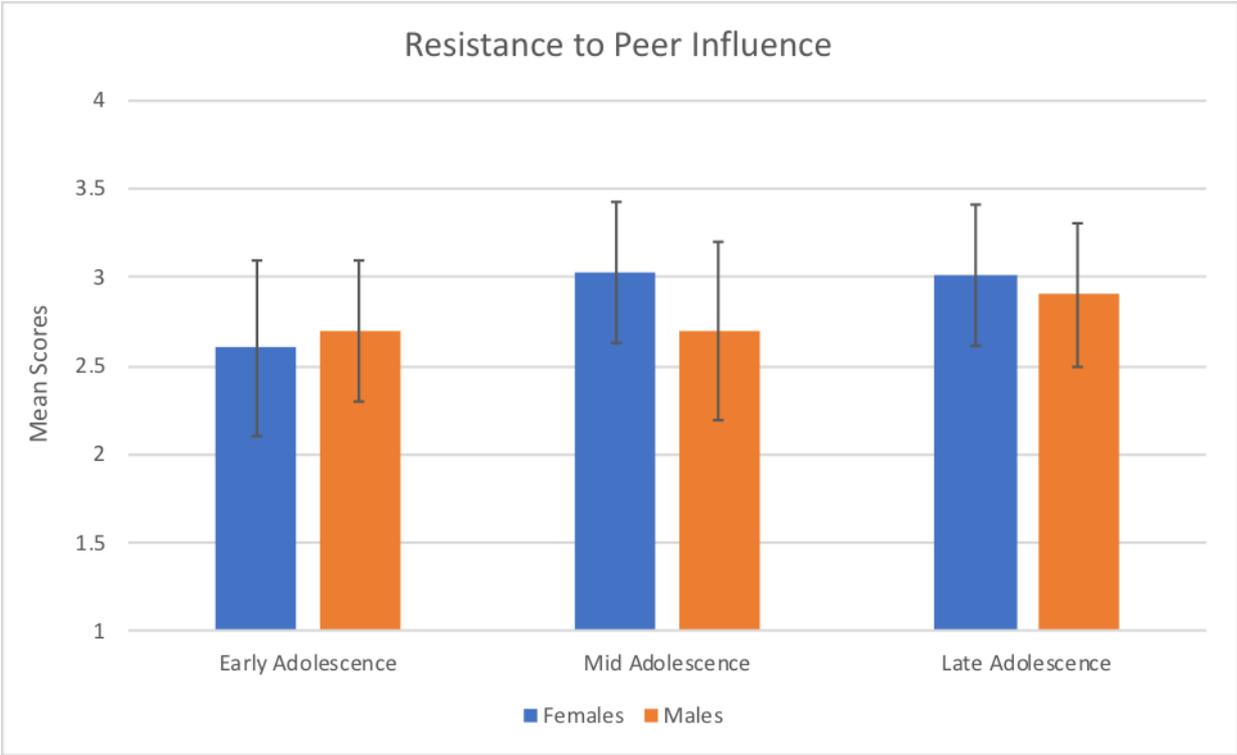
A simple scatterplot graph was created to examine the relationship between age and resistance to peer influence further. As can be seen in Figure 1, adolescents report higher resistance to peer influence with increasing age.

Figure 1. Simple scatterplot for age and resistance to peer influence



A one-way ANOVA analysis was conducted to look for a significant difference in the mean scores of resistance to peer influence between the three age groups. A significant difference was found,  $F(4.867) = 4.867, p = 0.009$ . The Tukey post hoc comparison showed that the mean resistance to peer influence score of early adolescents ( $M = 2.7$ ) was significantly lower than the late adolescence mean score ( $M = 3; p = 0.006$ ). No significant difference was found between the resistance to peer influence mean scores of early adolescence and mid-adolescence ( $M = 2.9; p = 0.133$ ) or between the mean scores of mid-adolescence and late adolescence ( $p = 0.36$ ). Furthermore, an Independent Sample t-test was performed to test the gender differences within each age group. Results show that the difference was significant in mid-adolescence ( $t(66) = -3.203, p < .01$ ), but no differences were found during early ( $t(45) = 0.778, ns$ ) and late adolescence ( $t(58) = -0.942, ns$ ).

Figure 2. Resistance to peer influence mean scores with error bars for standard deviation



**Discussion**

The aim of the present study was to examine the relationship between empathic abilities and the resistance to peer influence in early, mid- and late adolescents, focusing on three specific aspects of empathic abilities, namely perspective taking, empathic concern and intention to comfort. The results of this study did not show a significant relationship between any of the empathic abilities subscales with resistance to peer influence. Only age and gender were significant predictors of resistance to peer influence. Females showed significantly higher levels of resistance to peer influence than males during mid-adolescence. Adolescents reported higher resistance to peer influence with increasing age. This age-related change was gradual, as the group of early adolescents showed significantly lower levels of resistance to peer influence than late adolescents, but mid-adolescents did not differ significantly from either early or late adolescents.

### **Relationship Between Empathic Abilities and Resistance to Peer Influence**

Contrary to what was hypothesized and suggested from prior research, the results of the regression analyses show that the three empathic abilities—perspective-taking abilities (related to the cognitive form of empathy), empathic concern (related to affective empathy) and intention to comfort (relates to prosocial actions as result of empathy)—are unrelated to resistance to peer influence. Prior studies found a positive relationship between the perspective abilities and empathic concern with resistance to peer influence during adolescence. Those findings suggested that adolescents with higher levels of empathic concern and perspective-taking abilities were more likely to show resistance to peer pressure (Laghi et al., 2019).

However, compared to the present study, which used a broad sample of adolescents from 9 to 18 years old, the study by Laghi and colleagues (2019) measured the moderating role of perspective-taking abilities and empathic concern in resistance to peer influence in a sample of adolescents within an age range from 15 to 19. This could be an explanation for the lack of relationship between the variables found in the current study. The results of this study show that early adolescents are significantly more susceptible to peer pressure than mid- and late adolescents. Thus, due to the generally lower levels of resistance to peer influence in early adolescents, it might be that the relationship between empathic abilities and resistance to peer influence is only significant in late adolescents, as shown in Laghi and colleagues' study (2019). Evidence suggests that early adolescents are not as developed as late adolescents regarding identity development; therefore, while late adolescent show a higher need to stick to their own values regardless of peer pressure, early adolescents might be developing more autonomy from parents, but show a stronger dependence from peers (Steinberg, 1990).

Contrary to the present study, Laghi and colleagues used measures to assess resistance to peer influence that were oriented to deviant or antisocial behaviours (e.g., self-efficacy in resisting peer pressure to drink). In contrast, the scale used to assess resistance to peer influence in the current study assesses this construct in general terms, rather than making specific reference to resistance to antisocial or prosocial peer influence (Steinberg & Monahan, 2007): for example, 'some people go along with their friends just to keep their friends happy' BUT 'other people refuse to go along with what their friends want to do, even though they know it will make their friends unhappy'. Using a questionnaire that measures

the construct in general terms can have some disadvantages in a study that aims to interpret the results in light of the negative effects peer influence can have. The relationship between perspective-taking abilities and empathic concern with resistance to peer influence might vary depending on the domain of behaviour studied. Based on previous literature (Laghi et al., 2019; Lodge & Frydenberg, 2005; Pfeifer et al., 2011), finding that no relationship between the variables exists is an unexpected result. An explanation could be that the link might only be significant when deviant or antisocial behaviours are involved and not neutral contexts. Extensive literature suggests that adolescents are susceptible to antisocial peer pressure (Gardner & Steinberg, 2005; Chassin et al., 2004); however, recent studies have also shown that adolescents are susceptible to prosocial peer pressure (Van Hoorn, Van Dijk, Meuwese, Rieffe & Crone, 2016). In contrast to antisocial behaviours, the adolescent might think that there is no need to resist prosocial behaviours when peers socially accept these, due to the constant reinforcement around prosocial behaviours. Therefore, it could be that the link between empathic abilities and resistance to peer influence might exist only regarding antisocial behaviours.

In future research, it would be interesting to assess resistance to peer influence with two different scales, one for prosocial behaviours and the other for antisocial behaviour. A study looking at both types of behaviour would allow results to be compared, and the link between the three empathic abilities and resistance to peer influence could be better explored.

Empathic concern and perspective-taking abilities have been associated in the past with defending behaviours in the context of bullying, which can be considered as a proxy of intention to comfort (Lodge & Frydenberg, 2005; Caravita et al., 2009; Pöyhönen et al., 2010). In these contexts, sharing other's emotions and understanding other's psychological points of view can encourage the individual to act in a prosocial way, such as defending and comforting the victims who are faced with bullying behaviours. However, contrary to what was expected, the findings of the current study show a lack of relationship between the two variables.

Therefore, the result of this study showing a lack of relationship between the two variables was unexpected. An alternative explanation for this could be that whereas the motivation to act prosocially depends on internal factors, such as empathy, important contextual factors might also play a fundamental role in the extent to which adolescents are

willing to resist peer pressure and comfort a person in distress, even in those who show empathic concern and perspective-taking abilities (Ruggieri, Friemel, Sticca, Perren & Alsaker, 2007) especially in the school climate, taking into account that school is one of the main contexts for peer socialization during adolescence (Eder & Nenga, 2006). Gini and colleagues (2008) found that students were more willing to comfort bullying victims when the comforters perceived the school climate as positive, because they were more likely to expect support when showing comforting behaviours. Ruggieri and colleagues (2013) also show that adolescents are less likely to show an intention to comfort toward peers in distress in school if they perceive a lack of self-efficacy in the teacher with respect to bullying behaviours, suggesting that adolescents are more likely to resist peer pressure and show defending or comforting behaviours if they perceived support from the teacher.

The current study only assessed internal states (empathic concern, perspective-taking abilities and intention to comfort) but did not consider contextual factors. Due to previous evidence, future research may need to consider contextual factors as moderators in the relationship between intention to comfort and resistance to peer influence. A positive relationship would be expected when the contextual factors (e.g. school climate) are perceived as positive.

### **Gender Differences in the Empathic Abilities**

A secondary goal of this study was to explore gender differences in the relationship between empathic abilities and resistance to peer influence. As expected, the t-test results show significant differences between males and females on the three empathic abilities measures, and females scored higher than males. These results fit with previous studies on gender differences in perspective taking, empathic concern (Mestre et al., 2009; Van der Graaff et al., 2014) and intention to comfort (Espelage et al., 2012), showing that males are generally less empathic than females during adolescence.

An intensification of the gender roles in adolescence could explain these differences. The gender intensification hypothesis states that during this developmental period, due to the importance given to social interactions, there is an increase of gender differential socialization, mainly because of social stereotypes, where girls are expected to behave in a more caring and emotional way, while boys are expected to inhibit these behaviours (Hill & Lynch, 1983). These differences could also be explained by Hermans and colleagues (2006)

results; the authors found that higher levels of testosterone were related to lower empathic abilities. Males' increase in testosterone levels during adolescence might be an explanation for the lower scores in males regarding the three empathic abilities.

However, these findings could also be related to the way empathic abilities are measured in this study. The three subscales used to assess the different empathic abilities are self-reported measures. One limitation of self-report tests is that individuals can choose the answer that they think is more socially acceptable (McDonald, 2008). Considering that gender differences in the empathic abilities during adolescence have been explained in the past by the adolescent's perception about gender socialization stereotypes, it is important to question if the items about empathic abilities might elicit more positive responses from females than males. The questions regarding the tendency to experience feelings of compassion and warmth for others (Empathic Concern Subscale) and the extent in which the individual is willing to comfort a person in need (Intention to Comfort Subscale) are especially likely to be at risk for answers that skew along gender, due to the gender stereotype that females behave in a more caring and warm way towards others than males.

Previous experimental studies that included both self-report and neuropsychological measures of empathic arousal during adolescence have found a dissociation between explicit ratings of empathy and the results of neurophysiological measures, in which females show significantly more empathic abilities than males in the self-report, but not on the neuropsychological measures (Michalska, Kinzler & Decety, 2013). The authors highlight the possible role of gender stereotypes in those differences. Therefore, future empathy studies using self-reported measures can benefit from including an instrument to measure gender stereotypes, taking into account the evidence that suggests its influence in empathy self-reported measures. In this way, gender differences in empathic abilities could be better explored.

### **Relationship Between Age, Gender and Resistance to Peer Influence**

In concordance with previous findings (Steinberg & Monahan, 2007) and as expected, the results of the current study show that age and gender are significant predictors of resistance to peer influence. A significant difference was found between early and late adolescence, which shows that adolescents developed more resistance to peer influence

with age. Females reported less susceptibility to peer pressure in this study, especially during mid-adolescence.

Literature suggests that early adolescents might be more susceptible to peer influence than mid- and late adolescents. Due to the development of emotional autonomy from parents, the adolescent's dependence on parents during early adolescence is replaced by dependence on peers; therefore the individual is more prone to change a belief in order to fit with the social group norms (Steinberg, 1990). Steinberg and Monahan (2007) also point out that psychosocial development during late adolescence could be an explanation for the increase in resistance to peer influence. because unlike early adolescents, late adolescents shift their psychosocial attention toward identity development, and, therefore, are more likely to develop the emotional wherewithal to stick to their values and stand up to the influence of peers (Steinberg & Monahan, 2007). Another explanation for the differences in resistance to peer influence between age groups could be related to the control of impulsive behaviour. Grosbras and colleagues (2007) suggest that better abilities to control impulsive behaviour in a social context are fundamental for developing resistance to peer influence. These abilities become more developed during late adolescence.

The results of the current study also show a significant gender difference in resistance to peer influence during mid-adolescence; females reported more resistance to peer influence than males in every age group. However, only during mid-adolescence was the difference significant. These results are in line with previous findings (e.g. Sumter et al., 2009).

Previous literature suggests that gender differences in resistance to peer influence could be explained by a higher psychosocial maturation during mid-adolescence in females compared to males (Sumter et al., 2009). Evidence shows that females present higher levels of psychosocial maturity than males during adolescence, including self-reliance, autonomy and the ability to evaluate situations before acting (Cauffman & Steinberg, 2000, Steinberg & Silverberg, 1986). These abilities lessen the adolescents' susceptibility to peer pressure and help them maintain their autonomy in a group of peers (Bámaca & Umaña, 2006).

The findings of the present study expand and confirm the existing evidence regarding the differences in resistance to peer influence during adolescence. This is important in two different ways. First, being aware of a more significant susceptibility in adolescents aged 11–14 allows professionals such as psychologists, teachers or social workers to pay special

attention to this developmental period and strengthen skills and abilities that might help the adolescent to resist negative peer influence and avoid engaging in deviant behaviour because of social pressure. This appears to be more important to consider during early adolescence than in late adolescence and especially in males. Second, being susceptible to peer pressure does not necessarily mean something negative. Previous findings have pointed out that feedback provided by peers is fundamental for prosocial behaviour (van Hoorn et al., 2016). Therefore, the low levels of resistance to peer influence during early adolescence can also be a protective factor, if the peer group norms are oriented towards prosocial behaviours.

This knowledge could be put into practice through school-based interventions to promote prosocial behaviours during early adolescence that include a social reward. Previous studies have pointed out the efficacy of these interventions in early and mid-adolescents. For example, in Caprara and colleagues' school-based intervention (2014), a sensitization to prosocial values, development of emotional regulation and perspective-taking skills and the improvement of communication skills was carried out through a program that aimed to promote prosocial behaviours during early adolescence. The results yielded a decrease in physical and verbal aggression due to immediate rewards from peers and an increase in helping behaviours (Caprara et al., 2014). Putting into practice an intervention like this during early adolescence could help to take positive advantage of the lower levels of peer susceptibility during this developmental period to increase prosocial behaviours.

### **Limitations and Future Directions**

Current results did not show a predictive relationship between the three variables of empathic abilities and the resistance to peer influence; only the age of the participants was significantly related. However, age does not explain all the variance in resistance to peer influence during adolescence. Therefore, an interesting direction for future research is to introduce other cognitive and affective abilities besides empathy, such as self-esteem, social skills and emotion regulation, due to the extensive evidence that supports their significant role in the relationship between empathy and susceptibility to peer influence (Laghi et al., 2019; Lodge & Frydenberg, 2005; Pfeifer et al., 2011).

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