Coping, attachment style and resilience: 
the mediating role of alexithymia

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Abstract

Literature shows that the presence of an insecure attachment is at the root of a difficulty in affect regulation and of the implementation of dysfunctional coping and resilience strategies. Adult attachment perspective posits that individuals with secure attachment are engaged in adaptive coping strategies, because their internal working models support a self-efficacy in achieving goals through their behaviour. The aim of the study is to evaluate the relationships between alexithymia, adult attachment styles, coping and resilience strategies, in a group of 488 subjects (M = 248; F = 240) with ages ranging from 18 to 55 years (M = 34.9, SD = 12.52). The following instruments were used: the 20-Item Toronto Alexithymia Scale (TAS-20); the Coping Orientation to Problems Experienced (COPE); the Attachment Style Questionnaire (ASQ); and the Resilience Scale for Adults (RSA). The data show that the secure adult attachment is positively associated with the ability to modulate affects, the correct use of coping strategies is correlated with resilience. The study underlines that the type of attachment styles (secure or insecure) and the ability to modulate feelings are closely associated.
Introduction

Attachment theory hypothesizes that there is continuity in the relationship between caregivers, children and the future experience of the children’s relationships in adulthood through the establishment of complex models called internal working models (IWM; Bowlby, 1973), whose functions are to lead the individuals to interpret information from the outside world and guide their behaviour in new situations (Giannini et al., 2011; Pace, Zappulla, & Di Maggio, 2016). Bowlby (1969, 1973) hypothesizes that all children internalize the working models of repeated interactions with caregivers, which serve as a cognitive map for navigating relationships in the life span. In his formulation of attachment, Bowlby describes two types of complementary yet distinct working models, abstracted from early experience: a working model of self and a working model of others (Bowlby, 1969, 1973, 1980). The working model of others refers to expectations about caregiver availability and responsiveness during times of distress; the working model of self reflects beliefs about lovability to the attachment figure. These working models serve as the basis of the attachment behavioural system, an evolutionarily-based motivational-control system designed to regulate proximity to an attachment figure (Raby, Steele, Carlson, & Sroufe, 2015; Williams & Riskind, 2004). Similarly, adults are assumed to hold working models that may be based, in part, on those developed earlier in life but that also incorporate experiences in later significant relationships. These working models are thought to shape how adults interpret and respond to their social interactions. According to this model, the literature on adult attachment indicates that people who differ in how they describe their attachment style (Bartholomew & Horowitz, 1991) and who differ in the quality of their working models also differ in their global perceptions of interpersonal experiences, themselves, and others (Pellerone, Tolini, & Polopoli, 2016; Pietromonaco & Barrett, 1997).

In particular, in the secure attachment pattern, working models are found in the representation of the caregivers to be able to respond positively and consistently to requests for help and to comfort the child. This means that the individual feels entitled to openly express his or her feelings, and he or she learns to do it properly. Children who have experienced a close relationship with a supportive parent are always ready and able to
recognize signs of distress and discomfort, and they are equally ready to respond promptly; these individuals learn to express their emotions and develop a feeling of internal security, which is essential to modulate appropriate responses to stress and situations of risk.

According to attachment perspective, interest in the bonds that the adult establishes with significant others (in both romantic attachment and parenting) has given rise to two main research lines based on different ways to conceptualize and measure individual differences in adult attachment styles (Santona & Zavattini, 2008; Rholes & Simpson, 2004; Shaver & Mikulincer, 2002): The first uses narrative interviews, such as the Adult Attachment Interview (AAI - Main & Goldwyn, 1998), which is aimed at determining the adult’s state of mind starting from child attachment (Hesse, 1999; Main, Kaplan, & Cassidy, 1985). The second develops self-describing measurement tools (self-report) to evaluate the style of attachment to partners (Feeney & Hohaus, 2001; Hazan & Shaver, 1987). These methods are based on two different research objectives: the measure of the intergenerational transmission of attachment models (in the first prospective) and the value of socio-cognitive dynamics that influence feelings and behaviour within intimate relationships (in the second prospective).

In particular, the AAI describes four attachment styles: preoccupied (E), dismissing (Ds), unresolved/disorganized (U/d), and secure/autonomous (F). Preoccupied attachment is associated with the fear of abandonment and an intense desire for interpersonal merger; conversely, the dismissive attachment style is characterized by “[restricted or limited] attention to attachment relationships and/or experiences” (Main, Goldwin, & Hesse, 2003, p. 162). The unresolved/disorganized style presents a tendency whereby an individual exhibits contradictory behaviours, thoughts, and feelings (Liotti, 2012).

The second perspective distinguishes between different attachment styles based on two empirically validated dimensions: anxiety and avoidance (Esbjørn, Breinholst, Kriss, Hald, & Steele, 2015; Hazan & Shaver 1987; Main & Goldwyn, 1998; Main, Goldwyn, & Hesse, 2003). In particular, avoidant individuals find discomfort with intimacy and seek independence, whereas anxious individuals tend to fear rejection and abandonment. This model, which represents the earliest self-report measure of adult attachment, distinguishes three attachment styles that characterize personal.
general orientation toward romantic involvements. Avoidantly attached people are uncomfortable being close to others, find it difficult to completely trust and depend on others, and are nervous when anyone gets too close. Anxiously/ambivalently attached people perceive that others are reluctant to get as close as they would like, frequently worry that their romantic partners don’t really love them or won’t remain with them, and often want to become extremely close to their partners. Securely attached people find it relatively easy to get close to others, are comfortable depending on others and having others depend on them, and don’t worry about being abandoned.

Likewise, Bartholomew, and Horowitz (1991) identify four types of adult attachment styles. Secure involves a positive view of the self and others. Preoccupied (or anxious/ambivalent) exhibits a negative view of the self and a positive view of others. Fearful avoidant shows a negative view of both self and others. Dismissive avoidant involves a positive view of the self and a negative view of others. The analysis of these attachment styles according to the anxiety and avoidance dimensions shows that secure attachment seems to be characterized by a low level of anxiety and avoidance, preoccupied involves a high level of anxiety and low level of avoidance, fearful avoidant involves a high level of anxiety and avoidance, and dismissive avoidant is characterized by a low level of anxiety and high level of avoidance (Marganska, Gallagher, & Miranda, 2013).

Therefore, according to the psychosocial perspective, through the self-assessment tools and self-description, it is possible to delineate the affect-regulation strategies and the central aspects of cognitive functioning that characterize the different attachment styles. Thus, the present study, moving within a psycho-social perspective, has favored the use of self-report in order to measure adult attachment styles.

Alexithymia, coping, and resilience

Recent literature has investigated the role of adult attachment on specific patterns of interpersonal behaviour and the capacity to identify feelings but above all the relationship between attachment styles, alexithymia, and the ability to cope with stressful situations (Fasihi, Hassanzadeh, & Mahmoudi, 2013; Pellerone, Craparo, & Tornabuoni, 2016). Alexithymia is characterized by difficulty in identifying and describing subjective feelings, a restricted fantasy life, and an externally oriented thinking style. The construct was originally introduced as a specific characteristic
exhibited by individuals with classic psychosomatic diseases (Taylor & Bagby, 2013), but its characteristics were later associated with a variety of interpersonal problems, including social isolation (Craparo et al., 2014a), early trauma (Kokkonen et al., 2001), and maladaptive behaviors (Montebarocci et al., 2004). Indeed, etiological theories have identified alexithymia as a consequence of environmental influences (Gundel et al., 2002). In particular, the literature has underlined that traumatic events could interfere with a child’s normal growth, damaging his or her ability to identify and verbalize feelings, including externally oriented thinking (Caretti & La Barbera, 2005; Craparo, Magnano, & Faraci, 2014; Gori et al., 2014; Ledouc, 2002). Alexithymia could be an attempt to block negative emotions associated to stress (Eizaguirre et al., 2004), or it may develop in response to extreme trauma to protect individuals from experiencing extremely painful affections (Krystal, 1982). In this circumstance, alexithymia could represent a defense mechanism against emotions associated with experiences that were too severe and traumatic (Kooiman et al., 2004; Kooiman, Spinhoven, & Daijer, 2004). Moreover, alexithymia contributes to various physical and mental health problems, including undifferentiated negative moods (such as depression and anxiety), compulsive or addictive behaviours, heightened or prolonged physiological arousal, physical symptoms, and potentially somatic diseases (Caretti & La Barbera, 2005; Honkalampi et al., 2009; Lumley et al., 2007). Aside from traditional approaches, which privilege the influence of adult attachment on specific patterns of interpersonal behaviour, few authors have undertaken in-depth examinations the influence of adult attachment styles on alexithymia, coping strategies, and resilience to cope with environmental situations. Coping is defined as the efforts used to manage the internal or external demands that are appraised as potentially harmful and stressful to the individual (Pellerone, 2013a, 2015). Coping is a process that progresses through several stages, which Lazarus and Folkman (1984) have defined as primary and secondary appraisal. Primary appraisal is the initial decision used to assess whether an event is harmful and controllable; secondary appraisal regards the perception of one’s abilities to cope with the stressful event. These cognitive appraisal processes facilitate the ability to predict the type of coping strategy that one will use: preventive measures or regulation of emotional distress. Consequently, coping strategies are behaviours adopted by the individual in response to reducing the adverse effects of the appraised stressor.
Additionally, resilience, like coping strategies, plays the important role of a protective factor, protecting the individual’s psychological being and increasing positive changes when coping with stressful situations (Dolbier, Jaggars, & Steinhardt, 2010; Kinman & Grant, 2011). Resilience can promote and maintain health and prevent illness (Muller, 2009). Resilience is considered a skill that is used to deal with and overcome stressful events, increasing one’s resources with a consequent positive reorganization of one’s life (Luthar & Ziegler, 1991). Therefore, those who do not develop maladaptive behaviours despite living with risk factors will be considered resilient (Mancini & Bonanno, 2008). Specific variables and individual differences seem to be associated with resilience, such as beliefs and identity characteristics (Pellerone, Passanisi, & Bellomo, 2015), sense of empowerment, attachment styles, coping styles, and the presence of positive feelings (Bonanno et al., 2002). In particular, the broaden-and-build theory of positive emotions suggests that positive emotions can widen the range of potential coping strategies that come to mind and subsequently enhance one’s resilience against stress (Fredrickson, 2004). In particular, recent studies have shown that high stress, especially chronic levels of stress, strongly contributes to the development of anxiety and depressive symptoms. However, if individuals possess high levels of resilience, they are protected from stress and thus report lower levels of anxiety and depressive symptoms (Gloria & Steinhardt, 2014). Thus, positive emotions may enhance resilience directly and indirectly through the mediating role of coping strategies, particularly via adaptive coping.

The role of alexithymia in the relationship between attachment styles, coping, and resilience

From the above review and discussion, it is clear that there are well-established links among attachment, alexithymia, coping strategies, and resilience, although few studies have tested a meditational model to explore how alexithymia might mediate the link between attachment and ability to cope with stressful situations.

Several studies have shown that individuals with secure attachment styles are able to engage in adaptive coping strategies because their internal working models support a level of self-efficacy that facilitates the achievement of goals through their behaviour. People with a secure attachment style report lower levels of negative emotions and high levels of resilience (Fasihi, Hassanzadeh, & Mahmoudi, 2013) because their
emotional intelligence (i.e., understanding and expressing emotions, knowing the advantage of emotion and managing emotions) has a positive correlation with resiliency, and it has high capability to predict resiliency. In contrast, individuals with avoidant attachment styles seem to engage in high levels of distancing behaviour (Vetere & Myers, 2002) and tend to use deactivating strategies, which involve denial of fear and avoidance of closeness and intimacy (Marganska, Gallagher, & Miranda, 2013). Furthermore, they engage in low levels of support seeking (Feeney & Hohaus, 2001) and have low resilience (Akbari et al., 2009) when they have to cope with stress (Besharat, 2010). Individuals with anxious-ambivalent attachment tend to use hyper-activating strategies, characterized by a proximity-seeking efforts to elicit support, care, and attention, along with involving and controlling behaviours (Marganska, Gallagher, & Miranda, 2013). They also manifest a negative self-view, which is related to their attempts to win others’ compassion and affection. This negative self-evaluation is strengthened by a high level of distress arousal and weakened by factors that inhibit the activation of regulatory mechanisms (Mikulincer, 1998; Mikulincer et al., 2003). Finally, the literature agrees that individuals with insecure attachment exhibit lower self-esteem and social competence (Sroufe, 2005) and increased loneliness and interpersonal problems (Wei et al., 2005). The presence of an insecure attachment style is at the root of difficulty in identifying and describing subjective feelings and of the implementation of dysfunctional coping and resilience strategies (Tait et al., 2004).

The present study

In view of the recent literature, the research presented here had three principal aims:

(a) To measure, in a group of adult subjects, relationships between alexithymia, coping, resilience, and attachment styles. According to the literature, we hypothesized the presence of the following correlations: a positive relation between alexithymia and dysfunctional attachment style (Tait et al., 2004); a positive correlation between attachment style characterized by discomfort with closeness and a tendency to use deactivating coping strategies, avoidance of closeness and intimacy, and low levels of support seeking (Marganska, Gallagher, & Miranda, 2013; Vetere & Myers, 2002); and a positive association between confidence attachment style and resilience (Fasihi, Hassanzadeh, & Mahmoudi, 2013).
(b) To evaluate predictive variables regarding the ability to cope with stressful situations, hypothesizing that the attachment style was a predictor of both coping strategies and resilience (Fasihi, Hassanzadeh, & Mahmoudi, 2013).

c) To assess the role of alexithymia in the relationship between attachment, coping styles, and resilience.

Specifically, analyzing the literature previously presented, in a first model, we hypothesized that (1) discomfort with closeness can influence avoidance strategies, (2) discomfort with closeness is correlated to alexithymia, and (3) alexithymia can be associated with avoidance strategies. In other words, we hypothesized the following:

Step 1: Discomfort with closeness is correlated with avoidance strategies (estimating path c in Figure 1) when establishing whether there is the possibility of a mediated effect.

Step 2: Discomfort with closeness is correlated with alexithymia, the mediator variable (estimating and testing path a in Figure 1).

Step 3: Alexithymia affects avoidance strategies. This hypothesis is evaluated by using discomfort with closeness and alexithymia as predictors to analyze whether alexithymia mediates the relationship between discomfort with closeness and avoidance strategies. This hypothesis can be verified by analyzing the effect of discomfort with closeness on avoidance strategies, controlling for alexithymia (path c’ in Figure 1).

Then, in a second, third, and fourth mediation model with the same structures, we changed the variables under investigation to assess the mediating role of alexithymia (Figure 1) on the different constructs of insecure attachment (Figure 1).

Methods

Participants and procedure

The group of participants was formed by 488 subjects (M = 248; F = 240), living in Sicily, with ages ranging from 18 to 55 years (M = 34.9, SD = 12.52). The mean age in the two groups was not significantly different (t = -1.423, df = 486, p = .155).

With reference to the varying gender, the participants were subsequently divided into:
a) A group of 248 males aged between 18 and 55 (M = 34.11; SD = 12.35) with the following educational levels: 73.7% had a middle school diploma, 14.4% had a high school diploma, only 1.7% had a bachelor’s degree, and 10.2% did not report their education;

b) A group of 240 females with the same age (M = 35.72; SD = 12.72), with the following educational levels: 59.3% had a middle school diploma, 20.9% had a high school diploma, 15.4% had a bachelor’s degree, and 4.4% did not report their education.

The subjects’ participation was completely voluntary; respondents were not paid for their participation, and they could deny their participation in the study at any time. The instructions stated that the administration of the questionnaires was voluntary and that the participants’ responses were anonymous and confidential. The sample was obtained with a snowballing sampling design; people were approached through advertising or with direct contact among students of “Kore” University of Enna, and they were asked to help identify other subjects. Participation was secured through an informed consent procedure, which required that the participants provided active consent. The research lasted for one year. This survey was reviewed and approved by the Ethics Commission of Kore University.

Measures

Participants completed: the 20-Item Toronto Alexithymia Scale (TAS-20) that is one of the most commonly used measures of alexithymia; the Coping Orientation to Problems Experienced (COPE) to measure three coping styles, that is the problem-focused coping, emotion focused coping and dysfunctional coping; the Attachment Style Questionnaire (ASQ) to measure the adult attachment styles, based on the Bartholomew’s model (1990); the Resilience Scale for Adults (RSA), evaluated as one of the best self-report (with regard to psychometric ratings) in order to measure the level of resilience (Windle, Bennett, & Noyes, 2011).

The TAS-20 (Bagby, Parker, & Taylor, 1994; Italian validation by Bressi et al., 1996) is a 20-item self-report with a three-factor structure:

a. Difficulty Identifying Feelings – DIF (a simple item is: I am often confused about what emotion I am feeling);

b. Difficulty Communicating Feelings – DDF: (a simple item is: It is difficult for me to find the right words for my feelings);
c. Externally Oriented Thinking – EOT: (a simple item is: I prefer just to let things happen rather than to understand why they turned out that way).

The cut-off scores to categorize individuals are: alexithymia ($^\geq 61$), borderline (52-60), and non-alexithymia ($^< 51$). The TAS-20 shows adequate validity and reliability ($\alpha = .81$; $r = .77$). The Italian version also demonstrates good internal consistency (Cronbach’s alpha of 0.75 and 0.82 in normal and clinical groups, respectively). The COPE (Carver, Scheier, & Weintraub, 1989; Italian validation by Sica et al., 2008) is a self-report, composed of 60 items which are used to evaluate the use of skills and strategies adopted in order to face stressful and difficult events. This instrument explores 15 different types of coping strategies, grouped into five larges, and essentially independent, dimensions: Social Support (SS), Avoidance Strategies (AS), Positive Attitude (PA), Problem Solving (PS), and Transcendent Orientation (TO). Alpha reliabilities are reported as $\geq 0.60$ for all scales except mental disengagement .45 (Carver et al., 1989).

The ASQ (Feeney, Noller, & Hanrahan, 1994; Italian validation by Fossati et al., 2003) is 40-item self-report scale, based on the major features included in both three (avoidant, anxious /ambivalent ad secure) and four (secure, preoccupied, fearful avoidant and dismissive avoidant) category models of adult attachment, together with the basic themes and issues identified in infant attachment research. Such construct includes for examples: self-esteem, comfort with closeness, trust, healthy independence, avoidance of intimacy, lack of anxiety, aloneness, desire of approval, lack of confidence, preoccupation with relationships, lack of trust. The form factor analyses identify five factors: Confidence, Discomfort with Closeness, Need for Approval, Preoccupation with Relationships, and Relationships as Secondary. A validation study (Feeney et al., 1994) shows that the ASQ demonstrates high levels of internal consistency (Cronbach’s alpha = .80) and test–retest reliability over a ten-week period ($r = .76$).

The RSA (Friborg et al., 2005; Italian validation by Laudadio et al., 2011) is a self-report composed of 29 items grouped into six factors: Perception of Self - PoS (Cronbach’s $\alpha = .74$), Perception of Future - PoF ($\alpha = .73$), Structured Style - SST ($\alpha = .80$), Social Competence - SC ($\alpha = .83$), Familial Cohesion - FC ($\alpha = .80$), and Social Resources - SC ($\alpha = .74$).

Statistical analysis
SPSS for Windows version 19.0 was used.

In reference to preliminary data the following analyses were performed: descriptive statistics, including means and measures of dispersion (standard deviations and ranges) also in the reason to test the possibility of performing a mediation analysis study.

The Rho Pearson’s correlation was conducted in order to investigate the relation between variables.

To explore the predictive variables of both alexithymia, coping strategies and resilience, linear regression analyses were used.

In order to perform mediation analysis we followed the Baron and Kenny approach (1986), and after each mediation analysis we tested the significance of the indirect effect and a Sobel test was performed.

Results

Preliminary analyses

In reference to preliminary data, table 1 shows the mean scores for all variables. The mean scores between the two groups (male and female) were not significantly different.

Table 1. Means and standard deviation for scores of TAS-20, COPE, ASQ and RSA scales

<table>
<thead>
<tr>
<th>Variables</th>
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<td>TAS-DIF</td>
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Abbreviations:  
C = Confidence; DS = Discomfort with Closeness; NA = Need for Approval; PR = Preoccupation with Relationships; 
RS = Relationships as Secondary; DIF = Difficulty Identifying Feelings; DDF = Difficulty Describing Feelings; 
EOT = Externally-Oriented Thinking; TAS-T = Toronto Alexithymia Scale-Total Score; 
SS = Social Support; 
AS = Avoidance Strategies; PA = Positive Attitude; PS = Problem Solving; TO = Transcendental Orientation; 
SR = Social Resources; PoF = Perception of Future; FC = Familiar Cohesion; PoS = Perception of Self; SC = Social Competence; SST = Structured

Correlations between attachment styles and alexithymia

Pearson’s index (Table 2) underlines significant and negative correlations on the Confidence subscale with Difficulty Identifying Feelings (r = −.23, p < .001), Difficulty Describing Feelings (r = −.21, p < .001), and the TAS-20 total score (r = −.21, p < .001). Data also show significant and positive correlations between alexithymia and the subscales linked to insecure attachment styles.

Correlations between attachment styles and coping
The data shows a correlation between Confidence and Positive Attitude ($r = .24, p < .001$), Problem Solving ($r = .19, p < .001$), and Avoidance Strategies ($r = .15, p < .001$). Need for Approval correlates with Avoidance Strategies; Preoccupation with Relationships is associated with both Social Support ($r = -.21, p < .001$) and Avoidance Strategies ($r = .27, p < .001$). Relationships as Secondary showed an correlation with Avoidance Strategies ($r = .36, p < .001$).

IV.3 Correlations between attachment styles and resilience

The results regarding the association between confidence and resilience (see Table 2) shows positive and significant correlations between all variables ($p<0.01$); indeed, the other ASQ subscales (Discomfort with Closeness, Need for Approval, Preoccupation with Relationships and Relationships as Secondary) are negatively correlated with all of the RSA subscales, except for Structured Style ($p>0.05$).
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</table>
COPING, ATTACHMENT AND RESILIENCE: ROLE OF ALEXITHYMIA

Table 2. Pearson’s correlation for scores of TAS-20, COPE, ASQ and RSA scales.

Note: ** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.5 level (2-tailed).

Abbreviations: C = Confidence; DS = Discomfort with Closeness; NA = Need for Approval; PR = Preoccupation with Relationships; RS = Relationships as Secondary; DIF = Difficulty to describe one’s feelings to others; DDF =
Difficulty in communicating emotions verbally; EOT = Externally-oriented thinking; TAS-20 = Toronto Alexithymia Scales-Total score; SS = Social Support; AS = Avoidance Strategies; PA = Positive Attitude; PS = Problem Solving; TO = Transcendent Orientation; SR = Social Resources; PoF = Perception of Future; FC = Familiar Cohesion; PoS = Perception of Self; SC = Social Competence; SST = Structured Style.
The predictive role of attachment styles on coping, alexithymia, and resilience. As previously specified, linear regression analyses are used to detect the role and the effect of all attachment styles (Confidence, Discomfort with Closeness, Need for Approval, Preoccupation with Relationships and Relationships as Secondary) on coping strategies, resilience and alexithymia. In reference to coping, all attachment styles except for Confidence are predictive variables of Social Support (see table 3), in particular: a high level of Social Resources ($\beta = .38, p <0.001$), Perception of Future ($\beta = .25, p <0.001$), Familiar Cohesion ($\beta = .32, p <0.001$), Perception of Self ($\beta = .37, p <0.001$), Social Competence ($\beta = .35, p <0.001$), and Structured Style ($\beta = .11, p <0.05$).

Table 3. Summary of Linear Regression Analyses with Confidence as Predictor

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>B</th>
<th>$F(1,486)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Resources</td>
<td>.141</td>
<td>.140</td>
<td>.38</td>
<td>79.997</td>
<td>.000</td>
</tr>
<tr>
<td>Perception of Future</td>
<td>.063</td>
<td>.061</td>
<td>.25</td>
<td>32.694</td>
<td>.000</td>
</tr>
<tr>
<td>Familiar Cohesion</td>
<td>.103</td>
<td>.101</td>
<td>.32</td>
<td>55.910</td>
<td>.000</td>
</tr>
<tr>
<td>Perception of Self</td>
<td>.138</td>
<td>.136</td>
<td>.37</td>
<td>77.695</td>
<td>.000</td>
</tr>
<tr>
<td>Social Competence</td>
<td>.121</td>
<td>.119</td>
<td>.35</td>
<td>66.630</td>
<td>.000</td>
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<tr>
<td>Structured Style</td>
<td>.013</td>
<td>.011</td>
<td>.11</td>
<td>6.270</td>
<td>.013</td>
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</table>

Note: Regression coefficients are standardized. $N = 488, p<.001$.

Abbreviation: $\beta =$ beta standardized coefficients.

Similarly, all attachment styles except for Discomfort with Closeness are predictors of Avoidance Strategies (see table 4).
Table 4. Summary of Linear Regression Analyses with Confidence as Predictor

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>$F$ (5,480)</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
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</thead>
<tbody>
<tr>
<td><strong>TAS-20 Total Score</strong></td>
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<tr>
<td>ASQ-C</td>
<td>.19</td>
<td>22.182</td>
<td>-.14</td>
<td>-3.362</td>
<td>.001</td>
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<tr>
<td>ASQ-DS</td>
<td>.10</td>
<td>2.295</td>
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<td>2.295</td>
<td>.022</td>
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<tr>
<td>ASQ-NA</td>
<td>.18</td>
<td>3.252</td>
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<td>3.252</td>
<td>.001</td>
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<tr>
<td>ASQ-PR</td>
<td>.07</td>
<td>1.359</td>
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<td>1.359</td>
<td>.175</td>
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<td>ASQ-RS</td>
<td>.17</td>
<td>3.640</td>
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<td>3.640</td>
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<tr>
<td><strong>Difficulty describing feelings (DDF)</strong></td>
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<tr>
<td>ASQ-C</td>
<td>.16</td>
<td>18.185</td>
<td>-.150</td>
<td>-3.490</td>
<td>.001</td>
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<tr>
<td>ASQ-DS</td>
<td>.197</td>
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<td>ASQ-NA</td>
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<td>ASQ-PR</td>
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<td>ASQ-RS</td>
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<td>.796</td>
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<td><strong>Externally oriented thinking (EOT)</strong></td>
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<tr>
<td>ASQ-C</td>
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<td>.942</td>
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<tr>
<td>ASQ-DS</td>
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<td>.035</td>
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<td>ASQ-NA</td>
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<td>1.344</td>
<td>.179</td>
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<td>ASQ-PR</td>
<td>-.026</td>
<td>-.486</td>
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<td>.627</td>
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<td>ASQ-RS</td>
<td>.173</td>
<td>3.374</td>
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<td>3.374</td>
<td>.001</td>
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</tbody>
</table>

Abbreviation: $\beta = \text{beta standardized coefficients}$

A high level of Confidence ($\beta = .24$, $p <0.001$), Discomfort ($\beta = .16$, $p <0.01$), and high level of Relationships as Secondary ($\beta = -.14$, $p <0.01$) are predictors of Positive Attitude (0.9% of the overall variance explained). In reference to resilience, high Confidence, and low Discomfort with Closeness and Relationships as Secondary are predictors of Social Resources (see table 5).
Table 5. Summary of Simple Mediation Model

<table>
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<tr>
<th>Dependent variables</th>
<th>B</th>
<th>SE</th>
<th>p</th>
<th>95% CI</th>
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<td>Social Resources</td>
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<td>.029</td>
<td>&lt;.001</td>
<td>-.210/-0.095</td>
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<tr>
<td>Perception of Future</td>
<td>-.121</td>
<td>.024</td>
<td>&lt;.001</td>
<td>-.167/-0.075</td>
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<tr>
<td>Familiar Cohesion</td>
<td>-.081</td>
<td>.028</td>
<td>.001</td>
<td>-.236/-0.130</td>
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<tr>
<td>Perception of Self</td>
<td>-.157</td>
<td>.026</td>
<td>&lt;.001</td>
<td>-.209/-0.105</td>
</tr>
<tr>
<td>Social Competence</td>
<td>-.194</td>
<td>.025</td>
<td>.001</td>
<td>-.248/-0.137</td>
</tr>
<tr>
<td>Structured Style</td>
<td>-.035</td>
<td>.016</td>
<td>.023</td>
<td>-.065/.006</td>
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</table>

Note: Avoidance Strategies as mediator of the influence of Relationships as Secondary and DIF on all RSA variables

Yet, high level of Confidence ($\beta = .22$, $p <0.001$), and low level of Need for Approval ($\beta = -.16$, $p <0.01$), are predictive variables of Perception of Future Attitude (11.3% of the overall variance explained). The only predictor of Familiar Cohesion ($\beta = .29$, $p <0.001$) is Confidence attachment style (12.6% of the variance). High Confidence, and low Need for Approval and Preoccupation with Relationships are predictors of Perception of Self (see table 6). Yet, high level of Confidence ($\beta = .30$, $p <0.001$), and low level of Need for Approval ($\beta = -.12$, $p <0.05$) and Relationships as Secondary ($\beta = -.20$, $p <0.001$) are predictive variables of Social Competence (21.5% of the overall variance explained).

Mediation effects

The mediation analyses were conducted following the Baron and Kenny (1986) procedure. As regard to the first mediation we hypothesized that Discomfort with Closeness would be correlated with Avoidance Strategies (estimating the path c in the figure 1) for establishing if there is the possibility of a mediated effect; results supported this first hypothesis ($\beta = .153$, $p < .001$). The second step showed that Discomfort with Closeness was positively related to Alexithymia supporting the second hypothesis ($\beta = .245$, $p < .001$). The third step of this simple mediation indicated that the effect of Discomfort with Closeness on Avoidance Strategies was reduced after controlling Alexithymia (path c’ in the figure 1) and no significant ($\beta$
The indirect effect was significant ($z = 4.21, p = .001$). The other three mediation analyses indicated that there are some effects of the different variables of insecure attachment on Avoidance Strategies are reduced after controlling Alexithymia but still significant (Figure 1).

The data of the study demonstrate that the nature of attachment styles (secure or insecure) and the ability to identify and discuss emotions are closely associated. Specifically, the results confirm the presence of a negative correlation between secure attachment style (see the confidence subscale) and alexithymia (Montebarocci et al., 2004).
On the other hand, positive associations were found between the TAS-20 total score and its corresponding factors, as well as with an insecure attachment style.

Regression analyses confirmed the predictive role of attachment styles on alexithymia and, in particular, on the first factor (difficulty identifying feelings) of the TAS-20. In accordance with several authors (Schore & Schore, 2008; Taylor & Bagby, 2013), the insecure attachment style can be considered strictly linked with alexithymia. From this point of view, attachment patterns (secure versus insecure) may facilitate or disrupt the development of mental competence and ability in identifying and describing feelings (Craparo, 2014).

The study also showed that attachment styles in relationships and alexithymia predicted coping strategies and resilience. Specifically, attachment security was indirectly linked to positive coping and resilience strategies through alexithymia; conversely, alexithymia mediated the relationships between insecure attachment styles and inadequate coping. In fact, in the first mediation analysis, alexithymia mediates the relationship between discomfort with closeness and avoidance strategies, producing a significant reduction in the relationship between these two constructs.

However, in the other three mediation analyses, this work partially confirmed the role of alexithymia in contributing to avoidance strategies respect to the other variables under investigation (need for approval, preoccupation with relationships, relationships as secondary). Although this construct seems directly connected to avoidance strategies, its role as a mediator between these aspects of insecure attachment (need for approval, preoccupation with relationships, relationships as secondary) and avoidance strategies seems to be only partial, because it produces a little reduction of the relationship between the other two aforementioned variables (Baron & Kenny, 1986) in each mediation analysis.

An interesting fact is that alexithymia totally mediates the discomfort factor for intimacy and partially mediates the other three aspects of insecure attachment. These data confirm the literature that emphasizes the role of mediator variables such personality characteristics, availability of social support, and the possible presence of alexithymia, which would represent a “buffer” with respect to the effects of stressful events. The relational mode, as the eventual detachment and avoidance of intimacy
(typical of dismissing subject) or the amplification of their own painful experiences (typical of preoccupied subjects), also could affect the use of different strategies for the management of problematic situations.

Given the association between attachment styles and coping found in this study, it may be helpful for promoting insight (Gori et al., 2015) and for increasing a person’s coping effectiveness in order to decrease his or her distress. This association could help individuals make connections related to how their attachment patterns may be associated with inadequate coping patterns and absence of resilience. In particular, for persons with avoidant attachment, a practitioner might help them understand that they expect others to be unresponsive and that they may have protected themselves against others’ rejection through an ineffective way of coping, which in turn contributes to their psychological distress. Our results suggest such individuals might be helped if they could gain higher levels of perceived coping effectiveness and resilience.

Based on the results described herein, it is appropriate to emphasize the limits of this work. First, the use of self-report measures is a limitation, because it is possible that response bias and mood effects affected the results. For example, persons with anxious attachment would be likely to view their attachment negatively, their coping as ineffective, and their distress as high.

Furthermore, the absence of a sampling method, which prevents the presence of a representative sample, the generalization of the results and external validity, and the absence of a longitudinal-type study design, which is more suitable for research involving adults in relation to their attachment styles and the development of their ability to coping and resilience were limits of the study.

The use of a cross-sectional survey method also makes it difficult to determine whether the perception of adverse attachment styles are antecedents, links, or consequences of alexithymia.

Finally, the results of analyses based on cross-sectional data are unlikely to accurately reflect longitudinal mediation effects.

The results expanded the notion of attachment to explicitly include the way people cope with stressful problems. The results strongly suggest that it may be helpful for people with either anxious or avoidant attachment styles and difficulty in describing feelings, through counseling
interventions, to enhance their coping effectiveness and resilience to decrease psychological distress, even though inadequate attachment contributes to their distress.

References


