International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Role of Alexithymia in Coping Strategies and Attachment Style Among Middle-Adults

Devika Girish[1], Dr. Soumya RR[2]

[1]M.Sc Student, Clinical Psychology, Christ University, Bangalore
[2]Asst.Professor, Dept. of Psychology, Christ University, Bangalore

Abstract

This study investigates the relationship between alexithymia, coping strategies, and attachment styles in middle-aged adults. Alexithymia, characterized by difficulties in identifying and expressing emotions, is often linked to maladaptive coping mechanisms and insecure attachment patterns. The study involved 207 participants aged 40-60 who completed the Toronto Alexithymia Scale (TAS-20), BRIEF Cope Scale, and Adult Attachment Scale (AAS). The analysis revealed a significant positive correlation between alexithymia and avoidant coping strategies, indicating that individuals with higher levels of alexithymia tend to avoid dealing with stress. Additionally, alexithymia was negatively correlated with secure attachment, suggesting that those with emotional processing difficulties are less likely to form secure emotional bonds. No significant gender differences were found in alexithymia, coping strategies, or attachment styles, implying that these emotional challenges are experienced similarly across genders in middle adulthood. The study underscores the importance of therapeutic interventions aimed at improving emotional awareness and expression to promote healthier coping mechanisms and stronger attachment patterns. The findings of the current study contribute to the understanding of how alexithymia impacts emotional regulation and relationships in middle adulthood and suggest pathways for future research and clinical applications.

Keywords: Alexithymia, Coping Strategies, Attachment Style, Middle Adulthood, Emotional Regulation, Avoidant Coping, Gender Differences, Emotional Awareness, Secure Attachment.

Introduction

"Unexpressed emotions will never die. They are buried alive and will come forth later in uglier ways." - Freud.

Encyclopedia of Psychopharmacology defines Alexithymia as 'Difficulty in understanding other people's emotions and expressing one's own emotions'. Alexithymia is characterized by an impaired ability to be aware of, explicitly identify, and describe one's feelings (Nemiah et al., 1976). The term "alexithymia," coined by Sifneos in 1972, is derived from Greek roots, symbolizing an absence of words for emotion. Alexithymia has been described by Sifneos as a personality trait associated with a variety of psychosomatic illnesses. The four primary characteristics of alexithymia include difficulty identifying and describing feelings; difficulty differentiating between emotional states and physical sensations; constricted imaginative activity. (Lisa Zackheim,2007). The 2 types of alexithymia include, Type I Alexithymia is characterized by a low degree of conscious awareness of emotional arousal and a low degree of emotion accompanying cognitions; Type II Alexithymia is characterized by a normal or high degree of conscious

awareness of emotional arousal together with a low degree of emotion accompanying cognitions. (R.M. Bagby, et.al., 2009). Meza-Concha (2017) provided a neurobiological perspective, highlighting alterations in brain connections, neurotransmitter dysregulation, and genetic polymorphisms as potential contributors to alexithymia. Alexithymia also seems to develop as a reaction to stressful or traumatic life events (Krystal, 1979; Zeitlin et al., 1993). Various psychosocial factors including low education, low life satisfaction (Honkalampi, 1999) can also cause alexithymia. According to a study by Y. Peng & J. Huang (2023), family dysfunction was a risk factor for alexithymia.

Coping is action directed at the resolution or mitigation of a problematic situation. (C. Ray, et.al., 2003). Coping strategies are behavioral and cognitive tactics used to manage crises, conditions, and demands that are appraised as distressing. (D. Carr, T. Pudrovska, 2007). According to APA (2018), a coping strategy is an action, a series of actions, or a thought process used in meeting a stressful or unpleasant situation or in modifying one's reaction to such a situation. Coping strategies typically involve a conscious and direct approach to problems, in contrast to defense mechanisms. Coping strategies can be categorized into two forms: problem-focused and emotion-focused (Maryam, 2017). Problem-focused strategies involve taking direct action, while emotion-focused strategies aim to alleviate distress. Active, task-oriented behavior is generally considered favorable (Heim, 1995). Later emerged Avoidance coping which is particularly distinguished from problem-focused mechanism as this is aimed at quelling the immediate experiences of distress through the utilization of both cognitive and behavioral techniques (Folkman and Moskowitz 2004). Such efforts are "oriented toward denying, minimizing, or otherwise avoiding dealing directly with stressful demands" (Holahan et al. 2005, p. 2). Sociodemographic factors of education and income (except for active-cognitive coping), personality dispositions of self-confidence and an easy-going manner, and contextual factors of negative life events and family support each made a significant incremental contribution to predicting active and avoidance coping.

The theory of attachment and the research that surfaced in the 1960s and 1970s gave rise to the idea of attachment styles. Attachment styles refer to the way primary caregivers interact with infants, and how those interactions affect relationships in adulthood. The 4 types of attachment styles include: Secure Attachment Style, Anxious Attachment Style, Avoidant Attachment Style, and Disorganised Attachment Style. Secure attachment is a healthy attachment style that enables individuals to work autonomously as well as with others when appropriate. Mikulincer (1995) found that individuals with a secure attachment style have a more positive view of themselves and are better able to regulate their emotions, which are important factors in maintaining healthy relationships and overall well-being. Anxious attachment Style have been associated with numerous unfavorable consequences, which are marked by a strong need for closeness and a fear of being abandoned. Wardecker (2016) suggests that this attachment style can lead to difficulties in regulating emotions and trusting others. Avoidant attachment style, stemming from unresponsive and insensitive parental relationships, can lead to anxiety, emotional suppression, and a reluctance to seek support (Wardecker, 2016). In adulthood, this can manifest as a fearful avoidance of intimacy, driven by a fear of social consequences, or a dismissing avoidance, where individuals deny the need for social contact (Bartholomew, 1990). Disorganized/disoriented attachment, also referred to as fearful-avoidant attachment, stems from intense fear, often as a result of childhood trauma, neglect, or abuse. This attachment style is often linked to intergenerational trauma and can lead to failures in self-coherence and healthy relationships (Carter, 2011).

The Cognitive Perspective on alexithymia posits that deficiencies in emotional processing stem from disruptions in various cognitive functions associated with recognizing, labeling, and managing emotions.

Within this framework, individuals with alexithymia may exhibit reduced emotional awareness due to cognitive biases or impairments in attention, memory, or language skills. This can manifest as difficulty accurately identifying and expressing their own emotions, resulting in a vague or incomplete comprehension of their emotional states. This challenge may arise from a limited emotional vocabulary or a tendency to prioritize concrete, observable aspects of experiences over internal feelings. Moreover, those with alexithymia may struggle to interpret bodily sensations linked to emotions, such as changes in heart rate or breathing, further hindering their ability to regulate emotions effectively.

The Neurobiological Perspective of alexithymia explores how brain functions relate to the emotional processing challenges seen in individuals with this condition. It suggests that alexithymia might be linked to changes in neural structures and activities involved in regulating and recognizing emotions. Through neuroimaging studies, differences have been observed in key brain regions responsible for emotional processing, like the insula, anterior cingulate cortex (ACC), and amygdala, between individuals with and without alexithymia. These differences indicate potential impairments in emotional processing mechanisms. For instance, the insula, crucial for internal emotional sensing, may show decreased activity in those with alexithymia, leading to struggles in identifying their emotional states. Similarly, alterations in the ACC, which handles cognitive and emotional tasks, might contribute to difficulties in regulating emotions and monitoring conflicts. Additionally, abnormalities in the amygdala, which manages emotional learning and responses, could lead to erratic emotional reactions and increased stress sensitivity in individuals with alexithymia. Furthermore, disruptions in the connections between these brain regions and other networks involved in emotion processing may worsen issues with emotional awareness and regulation.

John Bowlby's Theory of Attachment has substantially enhanced our comprehension of early childhood development by proposing that infants possess an intrinsic behavioral mechanism designed to seek proximity to caregivers, primarily the mother, for protection and comfort. Bowlby accentuated the pivotal significance of attachment in shaping internal cognitive frameworks, encompassing perceptions of self, others, and relationships, which develop through early life experiences. These experiences, particularly the sensitivity and responsiveness of caregivers, dictate whether infants cultivate secure or insecure attachment patterns, thereby influencing their emotional and social maturation throughout their lives. Bowlby's theory underscored the critical role of initial relationships in furnishing a secure foundation for exploration and emotional support, with enduring implications for the domains of child development, psychotherapy, and social policy.

Alexithymia

Alexithymia is a term meaning “no words for mood.” It has been applied to patients who have marked difficulty in verbal expression of emotions and limited ability to use fantasy. (Lesser, Ira M., 1981). The typical features of alexithymia (e.g., failure of cue recognition, flattened expression, inability to articulate emotional states) correspond to disruptions at the interfaces of components in emotional processing. (W. Frawley, R.N. Smith, 2001). Alexithymia, has been found to significantly predict emotion recognition and emotional regulation (Tella, 2020). Alexithymia can lead to deficits in empathy, (Yang, 2020) and has been associated with reduced perceived and network social support, potentially due to deficiencies in social skills (Lumley, 1996). This lack of social support may in turn contribute to health problems. Alexithymia has been linked to a blunted response in the brain's alarm system, the dorsal anterior cingulate cortex, which may lead to greater social rejection (Chester, 2015). Neuroimaging studies have also shown

that individuals with alexithymia exhibit reduced neural responses in emotional and social tasks (Moriguchi, 2013). The alexithymia literature was meta-analyzed to determine whether there was empirical support for gender differences and Men exhibited higher levels of alexithymia (Levant, R. F., Hall, et.al., 2009).

Coping Strategies

Coping strategies are used to help individuals manage cognitive impairments in various domains, such as attention, memory, and problem-solving (McGurk, 2006). Soares (2020) found that problem-solving skills were influenced by both social skills and coping strategies. Irion (2007) found that middle-aged adults tend to use more adaptive coping processes, such as instrumental strategies, compared to younger age groups. Contrary to the belief that emotion-focused coping is maladaptive, Austenfeld (2004) argues that coping through emotional approach, which involves acknowledging, understanding, and expressing emotions, can be adaptive in certain contexts. The effectiveness of coping strategies can also vary depending on the controllability of the stressor, with information seeking being more beneficial than wish-fulfilling fantasy (Felton, 1984). Vitulic (2016) further noted that while there are few significant differences in the use of coping strategies based on age, adults with lower levels of education tend to use more confrontive and escape-avoiding coping strategies.

Attachment Style

Securely attached parents are more likely to provide a secure base for their children, leading to positive outcomes such as greater intimacy, trust, and dependability in adult relationships (Neal, 2001). In contrast, insecurely attached parents, particularly those with avoidant or anxious-ambivalent attachment styles, may exhibit less positive behavior towards their children, leading to less secure attachment in their offspring (Jones, 2014). Miller (1996) suggests that anxious attachment may limit social flexibility, potentially exacerbating the negative effects of this attachment style. Smyth (2015) and Oskis (2011) both found that individuals with an anxious attachment style exhibit heightened cortisol reactivity, indicating a potential link between this attachment style and stress response. Ma (2017) found that avoidantly attached individuals exhibit different neural responses to body expressions in emotional scenes, while securely and anxiously attached individuals show distinct responses to angry and neutral bodies. Zilber (2007) adds that attachment-anxious individuals have stronger brain responses to negative emotional stimuli, while attachment-avoidant individuals have weaker responses. Secure attachment is positively correlated with empathy, while insecure attachment, including anxious-ambivalent and avoidant styles, is negatively correlated (Khodabakhsh, 2013). Ghorbanian (2016) found that attachment style directly and indirectly predicts social skills, with emotional intelligence acting as a mediator. Research paints a concerning picture for individuals with alexithymia, suggesting a link between this trait and maladaptive coping mechanisms (Gunderson, 2003). Faced with this emotional turmoil, individuals with alexithymia often resort to unhealthy coping strategies. Studies suggest a preference for avoidance-oriented coping, where individuals attempt to distance themselves from their emotions through suppression or substance abuse (McDougall, 1989). Miyaoka (1999) found that alexithymics are more likely to use active avoidance, passive avoidance, and inappropriate emotional release as coping strategies. M.A. Besharat (2010) conducted a study on students and found that alexithymia was positively associated with the use of emotion- and avoidance-oriented coping strategies and negatively with the use of task-oriented coping strategies. High alexithymic students scored significantly higher on the emotion- and avoidance-oriented

coping and significantly lower on the task-oriented coping than low and nonalexithymic students. A study among patients with somatoform disorder conducted by T. Tominaga, et. al, (2013) revealed that "difficulty in identifying feelings" was positively associated with an escape–avoidance strategy, "difficulty in describing feelings" was negatively associated with a seeking social support strategy, and "externally oriented thinking" was negatively associated with a confrontive coping strategy. Emotion-focused therapy, has shown effectiveness in reducing alexithymia and fostering healthier coping mechanisms (Nemiah et al., 2007). Besharat (2013) found that secure attachment was negatively correlated with alexithymia, while avoidant and ambivalent attachment styles were positively associated. This was further supported by Montebarocci (2004), who found moderate positive correlations between alexithymia and discomfort with closeness, relationships as secondary, and need for approval, and a moderate negative correlation with confidence. Wearden (2003) added to this by suggesting that alexithymia may mediate the relationship between insecure attachment and health outcomes.

Research on alexithymia suggests that alexithymia can lead to maladaptive coping strategies, as individuals with alexithymic traits may struggle to process emotional distress effectively. This difficulty often results in avoidant or suppressive coping, as opposed to adaptive strategies, which are linked to greater resilience and psychological well-being. Studies in Western populations have repeatedly highlighted the connection between alexithymia and maladaptive coping, emphasizing the psychological toll that ineffective coping can take. However, this association has yet to be thoroughly explored within the Indian context, leaving a gap in understanding culturally specific implications of alexithymic tendencies on coping styles in this population. Attachment theory, which explains how early relationships shape one's interpersonal dynamics and emotional responses, has also seen substantial research linking attachment styles to alexithymia and coping patterns. People with secure attachments tend to engage in adaptive coping strategies, while those with insecure attachments, particularly anxious and avoidant types, are more prone to maladaptive approaches. Given the complex interplay between attachment style and coping mechanisms, this relationship provides a critical lens for examining the influence of alexithymia on how individuals respond to stress.

In middle adulthood—a developmental stage typically marked by significant role transitions, life changes, and increased stressors—these coping strategies and attachment styles become particularly relevant. Middle adults face unique stressors related to work, family, and health that may heighten the impact of alexithymic tendencies on their ability to cope. Notably, despite the unique stress profile of middle-aged adults, limited research has focused on this demographic in the Indian context, particularly in examining gender-specific coping mechanisms and attachment styles. Understanding these nuances could shed light on the distinct ways in which men and women in middle adulthood experience and respond to emotional challenges.

Significance of the study

The study focuses on middle adults who are between the age group of 40-60. Several studies have identified a range of disorders associated with middle adulthood. Johnson (2006) found that personality disorder traits evident by early adulthood were linked to an increased risk of anxiety disorders in middle adulthood. This was further supported by Johnson (2005), who found that these traits were also associated with a higher risk of unipolar depressive disorders. Research has consistently shown a relationship between alexithymia and age, with higher alexithymia scores reported in older adults (Onor, 2010). In a study conducted by A.K. Mattila et.al, (2006), the prevalence of alexithymia was 9.9%. Men (11.9%) were

more commonly alexithymic than women (8.1%). Alexithymia was associated with male gender, increasing age, low educational level, poor perceived health, and depression. The risk of developing a variety of diseases grows with age, which may worsen the condition of someone with alexithymia. The risk is also seen to be more for men than women. There is currently no effective treatment for alexithymia. However, individuals can participate in programs to learn how to manage their emotions and function effectively in daily life.

Research Question

How does alexithymia affect the coping strategies and attachment styles of male and female middle adults?

Research Objective

1. To analyze the relationship between alexithymia and coping strategies among male and female middle adults.
2. To analyze the relationship between alexithymia and attachment style among male and female middle adults.
3. To compare and contrast alexithymia among male and female middle adults.
4. To compare and contrast coping strategies among male and female adults
5. To compare and contrast Attachment Style among male and female adults

Hypothesis

H1: There will be a significant correlation between alexithymia and coping strategy in middle-aged adults.
H2: There will be a significant correlation between alexithymia and attachment style in middle-aged adults.
H3: There will be significant gender differences in the level of alexithymia.
H4: There will be significant gender differences in the level of coping strategies.
H5: There will be significant gender differences in the level of attachment style.

Methodology

Aim of the Study

The aim of the research is to investigate the relationship between and prevalence of alexithymia, coping strategies, and attachment style among both middle-aged male and female adults.

Sample

The study recruited a sample of middle-aged adults who are between 40 to 60 using convenient sampling. The sample will comprise both males and females. A sample size of is 207 is selected for the research.

Inclusion criteria

Individuals aged between 40-60 years.
Individuals who belong to either the male or female gender category.

Exclusion criteria

Individuals dealing with other mental health conditions.
Individuals without a formal educational background..

Research design

A correlational research design is employed in the current study to investigate the relationships between alexithymia, coping strategies, and attachment styles among male and female middle-aged adults. The

research design is chosen for its ability to analyze the associations between variables without manipulating them directly, allowing for an exploration of natural relationships that occur within the population. Through correlational analysis, the strength and direction of relationships between alexithymia and coping strategies, as well as between alexithymia and attachment styles, can be assessed. Moreover, this design facilitates the examination of gender differences in alexithymia levels and coping strategies within the middle adult cohort. By employing a correlational approach, this study aims to provide valuable insights into the interplay between alexithymia, coping strategies, attachment styles, and gender among middle-aged adults.

Data collection Tools

- Socio-demographic deatils - The age, gender, employment status, and marital status of the participants are collected using a socio-demographic sheet.
- Toronto Alexithymia Scale (TAS-20) - The TAS-20, a widely used 20-item tool, serves as a prominent measure of alexithymia. Comprising three distinct subscales, it assesses various facets of this construct: Difficulty Describing Feelings, Difficulty Identifying Feelings, and Externally-Oriented Thinking. Each subscale comprises a specific number of items aimed at gauging the individual's ability to articulate emotions, recognize emotions, and their tendency to focus outwardly, respectively. Responses to all items are rated on a 5-point Likert scale ranging from strongly disagree to strongly agree, with five negatively keyed items to counteract response bias. The total alexithymia score is derived from the sum of responses to all items, while each subscale's score is calculated similarly. Interpretation of TAS-20 scores suggests non-alexithymia for scores equal to or below 51, possible alexithymia for scores ranging from 52 to 60, and alexithymia for scores equal to or above 61. Reliability analyses indicate strong internal consistency (Cronbach's alpha = .81) and test-retest reliability ($r = .77$, $p<.01$). Furthermore, research supports the TAS-20's validity, demonstrating satisfactory levels of convergent and concurrent validity, with its three-factor structure aligning well with the theoretical underpinnings of alexithymia. This instrument's stability and replicability across diverse populations underscore its utility in both clinical and nonclinical settings.
- BRIEF Cope Scale: The Brief-COPE is a 28-item questionnaire designed to assess various coping strategies employed by individuals in response to stressful life events. It encompasses three distinct subscales: Problem-Focused Coping, Emotion-Focused Coping, and Avoidant Coping, each reflecting different approaches to handling stress. Problem-Focused Coping, indicated by active problem-solving, planning, and positive reframing, aims to address the stressor directly. Emotion-Focused Coping, characterized by venting, seeking emotional support, and acceptance, focuses on managing the emotional aspects of stress. Conversely, Avoidant Coping involves self-distraction, denial, and substance use as means of disengaging from the stressor. Scores for each subscale are computed as averages, reflecting the degree of engagement in each coping style. Notably, high scores in Problem-Focused Coping are associated with resilience and positive outcomes, while high scores in Emotion-Focused Coping indicate emotional regulation efforts, and high scores in Avoidant Coping suggest avoidance of the stressor. Individual item analysis allows for the identification of adaptive and maladaptive coping styles. Research by Dias et al. (2012) categorized the Brief-COPE into three factors: Problem-focused coping, Emotion-focused coping, and Avoidant coping. Poulus et al. (2020) validated the scale in 316 esports athletes, reporting means and standard deviations for each subscale:

Problem-focused (M = 2.47, SD = 0.63), Emotional-focused (M = 2.23, SD = 0.49), and Avoidant coping (M = 1.64, SD = 0.45).

- Adult Attachment Style (AAS): The Adult Attachment Style (AAS) is assessed through an 18-item questionnaire scored on a 5-point Likert-type scale, measuring three distinct attachment styles: Secure, Anxious, and Avoidant. The Secure attachment style is characterized by high scores on the Close and Depend subscales and a low score on the Anxiety subscale, reflecting comfort with closeness and intimacy and a belief in the availability of others when needed. Conversely, the Anxious attachment style is marked by a high score on the Anxiety subscale and moderate scores on the Close and Depend subscales, indicating worry about abandonment or lack of love. The Avoidant attachment style is identified by low scores across all three subscales, indicating a discomfort with closeness, dependence, and anxiety regarding attachment. The Close subscale gauges comfort with intimacy, while the Depend subscale assesses reliance on others' availability. The Anxiety subscale measures concerns about abandonment or lack of affection. Items marked with an asterisk (*) require reverse scoring before calculating subscale means. Cronbach's alpha coefficients reported by Collins & Read (1990) indicate acceptable internal consistency, with coefficients of .69 for Close, .75 for Depend, and .72 for Anxiety. Test-retest correlations over 2 months were .68 for Close, .71 for Depend, and .52 for Anxiety, indicating reasonable stability over time.

Data collection Process

After obtaining informed consent, the data collection tools are provided to middle-aged males and females to assess their Alexithymia, Coping Strategies, and Alexithymia. The data collected are then analyzed using various statistical tools.

Ethical considerations

- Information about the research purpose, expected duration, and procedures will be provided to participants to obtain their informed consent. They will also be informed about their right to decline participation and withdraw from the study once it has begun, as well as the consequences of doing so.
- Anonymity and confidentiality will be maintained.
- There will be precautions made to safeguard potential participants from negative outcomes should they choose not to participate in the research, whether they are clients/patients, students, or subordinates.
- This study will not involve any kind of deception of the research participants.
- In addition to the providing relevant information on the objectives, outcomes, and conclusions of the study, appropriate steps will be taken to clarify any misconceptions that participants may have had.
- Even if the other work or data source is occasionally mentioned, portions of that other person's work or data will not be presented as an original creation.
- Information will not be falsified.
- Full responsibility and credit, including authorship credit, for work they have completed or to which they have made a significant contribution, will be undertaken.

Result

Table 1: Shows the Descriptives of the data.

	Total Alexithymia	Coping Strategies	Attachment Style
N	204	204	204
Missing	0	0	0
Mean	49.7	49.8	48.8
Median	49.0	51.0	48.0
Standard deviation	11.3	9.78	5.37
Minimum	25.0	28.0	38.0
Maximum	78.0	83.0	69.0
Shapiro-Wilk W	0.991	0.979	0.957
Shapiro-Wilk p	0.264	0.003	< .001

The table provides key insights into the distribution of Alexithymia, Coping Strategies, and Attachment Style among a sample of 208 participants. The mean scores for all three variables are close to their respective medians, suggesting a generally symmetrical distribution. However, the variability differs across the variables, with Total Alexithymia showing the most variation (standard deviation of 11.3) and Attachment Style the least (standard deviation of 5.37).The Shapiro-Wilk test results indicate that while Alexithymia follows a normal distribution (p = 0.264), both Coping Strategies (p = 0.003) and Attachment Style (p < .001) do not. This non-normality suggests that analyses involving these two variables may require non-parametric methods.

Table 2: Correlation Matrix between Alexithymia and Coping Strategies

		Total Alexithymia		Coping Strategies	
Total Alexithymia	Spearman's rho	—			
	df	—			
	p-value	—			
Coping Strategies	Spearman's rho	0.264	***	—	
	df	202		—	
	p-value	< .001		—	

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

Table 1 shows the relationship between Alexithymia and Coping Strategies using Spearman's rho (non-parametric measure). The results indicate a statistically significant positive correlation (Spearman's rho = 0.264, p < .001) between the two variables. This suggests that as levels of alexithymia increase, so do the use of certain coping strategies, though the relationship is modest in strength. Alexithymia, characterized by difficulties in identifying and describing emotions, is associated with maladaptive coping strategies and emotion regulation. Individuals with high alexithymia tend to use more suppressive and fewer reappraisal strategies (Swart et al., 2009). Alexithymia correlates positively with avoidance coping strategies and negatively with problem-focused and social support-seeking strategies (Messedi et al., 2017; Tominaga et al., 2013).

The significant p-value (< .001) confirms that this correlation is unlikely to be due to chance, making it a meaningful finding in the context of the study. Thus as per the finding, the null hypothesis is accepted.

Table 3: Correlation Matrix between Alexithymia and Attachment Style

				Total Alexithymia		Attachment Style	
Total Alexithymia		Spearman's rho		—			
		df		—			
		p-value		—			
Attachment Style		Spearman's rho		-0.216	**	—	
		df		202		—	
		p-value		0.002		—	

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

Table 2 reveals a statistically significant negative correlation between Total Alexithymia and Attachment Style, as measured by Spearman's rho (rho = -0.216, p = 0.002). This indicates that higher levels of alexithymia are associated with less secure attachment styles. Interestingly, Anxious Attachment does not show significant correlations with any alexithymia dimension, suggesting that emotional processing difficulties do not contribute directly to anxious attachment styles. However, Avoidant Attachment exhibits weak but significant negative correlations with alexithymia dimensions, suggesting that individuals with alexithymia are somewhat less likely to develop avoidant attachment patterns, although the relationship is weaker compared to secure attachment.

Secure attachment is negatively correlated with alexithymia, while insecure attachment styles (avoidant and ambivalent) show positive associations (Besharat & Rizi, 2014; Ali, 2014; Usaci & Puşcaşu, 2015).

The significance of this finding (p = 0.002) confirms that the relationship is statistically meaningful. However, the correlation coefficient is moderate. Thus as per the finding, the null hypothesis is accepted.

Table 4: Correlation between Subscales of Alexithymia, Coping Strategies and Attachment Style

Correlation Matrix

		DIF	DDF	EOT	Problem Focused Coping	Emotion Focused Coping	Avoidant Coping	Secure	Anxious	Avoidant
DIF	Spearman's rho	—								
	df	—								
	p-value	—								
DDF	Spearman's rho	0.770 ***	—							
	df	205	—							
	p-value	< .001	—							
EOT	Spearman's rho	0.383 ***	0.413 ***	—						
	df	205	205	—						
	p-value	< .001	< .001	—						
Problem Focused Coping	Spearman's rho	0.173 *	0.104	0.073	—					
	df	205	205	205	—					
	p-value	0.013	0.135	0.295	—					
Emotion Focused Coping	Spearman's rho	0.044	0.048	0.028	0.572 ***	—				
	df	205	205	205	205	—				
	p-value	0.527	0.494	0.686	< .001	—				
Avoidant Coping	Spearman's rho	0.410 ***	0.477 ***	0.289 ***	0.414 ***	0.446 ***	—			
	df	205	205	205	205	205	—			
	p-value	< .001	< .001	< .001	< .001	< .001	—			
Secure	Spearman's rho	-0.315 ***	-0.335 ***	-0.102	-0.110	-0.042	-0.162 *	—		
	df	205	205	205	205	205	205	—		
	p-value	< .001	< .001	0.143	0.113	0.551	0.019	—		
Anxious	Spearman's rho	-0.091	-0.131	0.077	0.014	0.051	-0.045	0.409 ***	—	
	df	205	205	205	205	205	205	205	—	
	p-value	0.194	0.060	0.272	0.844	0.463	0.520	< .001	—	
Avoidant	Spearman's rho	-0.168 *	-0.175 *	-0.143 *	-0.072	0.035	-0.092	0.270 ***	0.210 **	—
	df	205	205	205	205	205	205	205	205	—
	p-value	0.015	0.012	0.039	0.300	0.614	0.189	< .001	0.002	—

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

Coping Strategies:

Problem-Focused Coping:

- DIF (r = 0.152, p = 0.029): A weak but significant positive correlation suggests that individuals who have difficulty identifying their feelings may engage more in problem-focused coping, potentially as a way to compensate for their emotional struggles by focusing on problem-solving or action-oriented solutions.
- DDF (r = 0.109, p = 0.116) and EOT (r = 0.025, p = 0.722): Neither is significantly correlated with problem-focused coping, suggesting that these emotional difficulties do not strongly influence the likelihood of using this coping strategy.

Emotion-Focused Coping:

- DIF (r = 0.075, p = 0.282), DDF (r = 0.076, p = 0.275), and EOT (r = 0.002, p = 0.977): None of the alexithymia subscales show a significant relationship with emotion-focused coping. This suggests that difficulties in emotional awareness and processing do not lead individuals to rely on strategies aimed at addressing emotional distress directly.

Avoidant Coping:

- DIF (r = 0.363, p < .001), DDF (r = 0.440, p < .001), EOT (r = 0.247, p < .001): All three alexithymia dimensions show significant positive correlations with avoidant coping, with the strongest correlation between DDF and avoidant coping (r = 0.440). This suggests that individuals who struggle to describe their emotions are more likely to avoid dealing with stress altogether. The positive relationship with EOT also indicates that individuals who focus on external tasks or thoughts tend to use avoidance as a coping strategy, likely because they struggle to engage with their internal emotional states.

Alexithymia is prevalent among medical students and correlates with emotion-focused coping (Messedi et al., 2017). In alcohol-dependent individuals, alexithymia mediates the relationship between avoidance coping and alcohol abuse severity (Coriale et al., 2012).

Attachment Styles

Secure Attachment:

- DIF (r = -0.309, p < .001) and DDF (r = -0.358, p < .001): Both dimensions of emotional difficulty are significantly negatively correlated with secure attachment, indicating that individuals who struggle with identifying and describing feelings are less likely to exhibit secure attachment patterns. A secure attachment style is typically characterized by comfort with emotional intimacy and reliance on close relationships, which may be harder for people with alexithymia due to their limited emotional awareness.
- EOT (r = -0.192, p = 0.006): EOT is also negatively correlated with secure attachment, though to a lesser extent. This suggests that individuals who focus more on external, non-emotional cues may struggle with forming secure attachments, possibly because of difficulty in emotional engagement in relationships.

  Summary: Individuals with high alexithymia are less likely to experience secure attachment, possibly due to their inability to properly recognize and communicate their emotional needs.

Anxious Attachment:

- DIF (r = -0.045, p = 0.524), DDF (r = -0.098, p = 0.161), EOT (r = 0.051, p = 0.462): None of the alexithymia dimensions show significant correlations with anxious attachment. This indicates that individuals who experience emotional difficulties, such as identifying or describing feelings, do not necessarily exhibit anxiety in their relationships. Anxious attachment typically involves preoccupation with relationships and fear of abandonment, but these traits do not appear to be strongly linked with alexithymia.

  Summary: Emotional processing difficulties (DIF, DDF, and EOT) do not have a strong relationship with Anxious Attachment, suggesting that this attachment style may be influenced by other factors not captured by alexithymia dimensions.

Avoidant Attachment:

- DIF (r = -0.142, p = 0.041), DDF (r = -0.182, p = 0.009), EOT (r = -0.163, p = 0.019): All three alexithymia dimensions show weak but significant negative correlations with avoidant attachment.

This suggests that individuals who struggle to recognize and describe their feelings are also somewhat less likely to develop avoidant attachment. Avoidant attachment typically involves a reluctance to depend on others or engage in emotional intimacy, but individuals with higher alexithymia may struggle to avoid relationships entirely, possibly because they lack the emotional awareness needed to actively distance themselves from others.

The result found that secure attachment is moderately negatively correlated with the alexithymic trait, on the other hand, ambivalent and avoidant attachment styles are highly significant and positively correlated with alexithymic traits. (A. Karmakar et.al, 2024)

Table 5: Independent Samples T-Test of Alexithymia

		Statistic	df	p
Total Alexithymia	Student's t	1.47	202	0.144

Note. $H_a\ \mu_0 \neq \mu_1$

Table 4 shows the independent sample t-test between the males and females. The test statistic (Student's t = 1.47) with a degree of freedom (df) of 202 yields a p-value of 0.144.

This p-value is greater than the conventional significance level of 0.05, indicating no statistically significant difference in Alexithymia scores between the male and female participants. This suggests that both males and females in the sample experience similar challenges in identifying and describing their emotions, indicating that emotional processing difficulties associated with alexithymia are not significantly influenced by gender. Studies have found that men experience higher levels of alexithymia compared to women (Muhammad Imran et al., 2015; Priyanka Soni et al., 2018). However, in a large sample study of Chinese patients with chronic schizophrenia, no significant gender difference was observed in the prevalence of alexithymia (Zhaoxuan Shang et al., 2023). Thus from the findings, the null hypothesis is rejected.

Table 6: Independent Samples T-Test of Coping Strategies

		Statistic	p
Coping Strategies	Mann-Whitney U	4503	0.170

Note. $H_a\ \mu_0 \neq \mu_1$

Table 5 presents the results of a Mann-Whitney U test, used to compare differences in Coping Strategies between males and female participants. The Mann-Whitney U statistic is 4503, with a p-value of 0.170. The result is not statistically significant since the p-value is greater than the standard significance level of 0.05. This implies that both genders employ coping mechanisms in similar ways, with no notable variation in the methods used to manage stress or emotional distress. Women tend to employ more emotion-focused

coping, including seeking social support, venting, self-distraction, and religious coping. Men, on the other hand, are more likely to use problem-focused coping, humor, and substance use (Oppegaard et al., 2020; Vingerhoets & Heck, 1990; Ptacek et al., 1992). Another study revealed that both genders rate problem-focused coping as more effective than seeking social support or emotion-focused strategies (Ptacek et al., 1992). On the contrary a study by Blake & Courts (1996) found no significant differences between genders in coping strategies among hemodialysis patients. Thus from the findings, the null hypothesis is rejected.

Table 7: Independent Samples T-Test of Attachment Style

		Statistic	p
Attachment Style	Mann-Whitney U	4876	0.634

Note. $H_a\ \mu_0 \neq \mu_1$

Table 6 compares the difference in Attachment Style between males and females. With a Mann-Whitney U statistic of 4876 and a p-value of 0.634, the result is not statistically significant.

The high p-value indicates no significant difference in Attachment Style between males and females. This finding indicates that relational patterns, such as those related to secure, anxious, or avoidant attachment, are consistent across genders in the sample, suggesting that these attachment-related dynamics are not significantly affected by gender. While one study found no association between gender and attachment style (Gleeson & Fitzgerald, 2014), another study identified Men to exhibit avoidant-fearful styles, while women show both avoidant-fearful and secure styles (Gleeson & Fitzgerald, 2014). Another study revealed that gender differences in attachment styles with women showing more anxiety and men exhibiting more avoidance in romantic attachments (Han, 2024). Thus from the findings, the null hypothesis is rejected.

Conclusion

The findings underscore the complex relationships between emotional awareness, coping mechanisms, and attachment styles. Individuals with higher levels of alexithymia, particularly those who struggle to describe or identify their feelings, tend to rely on avoidant coping strategies and are less likely to form secure attachments. The absence of gender differences suggests that these emotional processing difficulties and their impacts on coping and relationships affect both males and females similarly.

Implications

- The study highlights the need for emotion-focused therapies to help individuals with alexithymia improve emotional awareness and expression, leading to more adaptive coping strategies and healthier attachment styles.
- The lack of significant gender differences in alexithymia suggests that interventions should focus on individual emotional processing difficulties rather than relying on gender-based assumptions.
- Psychosocial interventions targeting middle-aged adults should prioritize addressing maladaptive coping strategies and insecure attachment patterns to improve emotional well-being and prevent negative outcomes in this population.

Limitations

Despite the implication several limitations should be noted. Firstly, the reliance on self-report measures for alexithymia and coping strategies introduces the potential for response bias, including social desirability bias, as participants may not fully or accurately convey their emotional experiences and coping methods. Secondly, the cross-sectional design of this study limits the ability to infer causality among alexithymia, coping strategies, and attachment styles, thereby restricting insights into how these variables may interact over time. Additionally, the study's focus on a specific cultural and geographical sample of middle-aged adults constrains the generalizability of findings, as the results may not be applicable to other age groups or cultural contexts. Future research could address these limitations by adopting longitudinal designs, incorporating more diverse samples, and utilizing alternative methods to reduce response biases.

Scope of Future Research

- Future studies should employ longitudinal designs to explore the development of alexithymia and its long-term effects on coping strategies and attachment styles.
- Experimental or intervention-based studies are needed to examine the effectiveness of emotional awareness training or similar interventions in reducing the impact of alexithymia.
- Future studies could focus on comparing alexithymia, coping strategies, and attachment styles across different cultural contexts. This would help understand the influence of cultural norms on emotional awareness and relationship dynamics, and whether certain cultures are more prone to specific coping mechanisms or attachment styles.
- Mixed-method approaches (qualitative and quantitative) could provide a deeper understanding of the lived experiences of individuals with alexithymia, enriching the research in this area.

References

1. Buchanan, D. C., Waterhouse, G. J., & West, S. C. (1980). A proposed neurophysiological basis of alexithymia. *Psychotherapy and Psychosomatics*, *34*(4), 248–255. https://doi.org/10.1159/000287465
2. Chester, D. S., Pond, R. S., & DeWall, C. N. (2014). Alexithymia is associated with blunted anterior cingulate response to social rejection: implications for daily rejection. *Social Cognitive and Affective Neuroscience*, *10*(4), 517–522. https://doi.org/10.1093/scan/nsu082
3. Honkalampi, K., Saarinen, P., Hintikka, J., Virtanen, V., & Viinamäki, H. (1999). Factors Associated with Alexithymia in Patients Suffering from Depression. *Psychotherapy and Psychosomatics*, *68*(5), 270–275. https://doi.org/10.1159/000012343
4. Zackheim, L. (2007). Alexithymia: The expanding realm of research. *Journal of Psychosomatic Research*, *63*(4), 345–347. https://doi.org/10.1016/j.jpsychores.2007.08.011
5. (2015). Alexithymia. In: Stolerman, I.P., Price, L.H. (eds) Encyclopedia of Psychopharmacology. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-36172-2_200817
6. Blake, C., & Courts, N. (1996). *Coping strategies and styles of hemodialysis patients by gender*. https://www.semanticscholar.org/paper/Coping-strategies-and-styles-of-hemodialysis-by-Blake-Courts/3dda257bcbe3c22534e14ed7bb161881226c0b0b
7. Cui, R. J. (2022). An Examination of the Relationship between Gender and Coping Mechanisms. *Advances in Social Science, Education and Humanities Research/Advances in Social Science, Education and Humanities Research*. https://doi.org/10.2991/assehr.k.220401.135

8. Han, X. (2024). The Influence of Different Gender Roles on the Formation of Attachment Types--An Analysis from an Evolutionary Psychology Perspective. *Lecture Notes in Education Psychology and Public Media*, *48*(1), 106–113. https://doi.org/10.54254/2753-7048/48/20231549
9. Krystal, H. (1979). Alexithymia and psychotherapy. American Journal of Psychotherapy, 1, 17–31.
10. Gunderson, D. I. (2003). Borderline personality disorder. Current Opinion in Psychiatry, 16(3), 303-309.
11. Barry, J., Seager, M., & Brown, B. (2015). *Gender differences in the association between attachment style and adulthood relationship satisfaction (brief report)*. https://www.semanticscholar.org/paper/Gender-differences-in-the-association-between-style-Barry-Seager/3ade82c41cd29cf76e308a70605e1551bebb100b
12. Coriale, G., Bilotta, E., Leone, L., Cosimi, F., Porrari, R., De Rosa, F., & Ceccanti, M. (2012). Avoidance coping strategies, alexithymia and alcohol abuse: A mediation analysis. *Addictive Behaviors*, *37*(11), 1224–1229. https://doi.org/10.1016/j.addbeh.2012.05.018
13. Messedi, N., Feki, I., Saguem, B., Masmoudi, R., & Masmoudi, J. (2017). Alexithymia and coping strategies among medical students. *European Psychiatry*, *41*(S1), S695. https://doi.org/10.1016/j.eurpsy.2017.01.1223
14. Imran, M., Zaidi, H., Arshad, M., & Yaqoob, N. (2015). *GENDER DISTINCTION IN ALEXITHYMIA AMONG GRADUATION STUDENTS OF PAKISTAN*. https://www.semanticscholar.org/paper/GENDER-DISTINCTION-IN-ALEXITHYMIA-AMONG-GRADUATION-Imran-Zaidi/d8619f8f15c60a833e8d6c568e9b37ae1ccffcf2
15. Soni, N. P., Rajput, N. U., & Rajput, N. U. (2018). Gender differences in Alexithymia. International Journal of Indian Psychology, 6(2). https://doi.org/10.25215/0602.114
16. Ptacek, J. T., Smith, R. E., & Zanas, J. (1992). Gender, Appraisal, and Coping: A Longitudinal analysis. *Journal of Personality*, *60*(4), 747–770. https://doi.org/10.1111/j.1467-6494.1992.tb00272.x
17. *A review of the Alexithymia concept : Psychosomatic Medicine*. (n.d.). LWW.
18. https://journals.lww.com/psychosomaticmedicine/Abstract/1981/12000/A_Review_of_the_Alexithymia_Concept.9.aspx
19. Peng, Y., & Huang, J. (2023). The effects of family functioning on alexithymia among adolescents: The roles of friendship quality and school connectedness. *Current Psychology*. https://doi.org/10.1007/s12144-023-05357-8
20. Lane, R. D., Sechrest, L., & Riedel, R. G. (1998). Sociodemographic correlates of alexithymia. *Comprehensive Psychiatry*, *39*(6), 377–385. https://doi.org/10.1016/s0010-440x(98)90051-7
21. Mattila, A. K., Salminen, J. K., Nummi, T., & Joukamaa, M. (2006). Age is strongly associated with alexithymia in the general population. *Journal of Psychosomatic Research*, *61*(5), 629–635. https://doi.org/10.1016/j.jpsychores.2006.04.013
22. Usaci, D., & Puşcaşu, A. (2015). *THE QUALITY OF ATTACHMENT RELATIONSHIPS AND ALEXITHYMIA*. https://www.semanticscholar.org/paper/THE-QUALITY-OF-ATTACHMENT-RELATIONSHIPS-AND-Usaci-Pu%C5%9Fca%C5%9Fu/c901dd73073bed90dc0d48f97278a892d922a4aa
23. Darrow, S. M., & Follette, W. C. (2014). A behavior analytic interpretation of alexithymia. *Journal of Contextual Behavioral Science*, *3*(2), 98–108. https://doi.org/10.1016/j.jcbs.2014.03.002
24. Buchanan, B. (2023, March 1). *Coping orientation to problems experienced inventory (Brief-COPE)*. NovoPsych. https://novopsych.com.au/assessments/formulation/brief-cope/

25. Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219–239.
26. Holahan, C. J., Moos, R. H., & Bonin, L. (2004). Social context and depression: An integrative stress and coping framework. In *American Psychological Association eBooks* (pp. 39–63). https://doi.org/10.1037/10311-002
27. Irion, J. C., & Blanchard-Fields, F. (1987). A Cross-Sectional Comparison of Adaptive Coping in Adulthood. *Journal of Gerontology*, *42*(5), 502–504. https://doi.org/10.1093/geronj/42.5.502
28. Wood, R. L., & Doughty, C. (2013). Alexithymia and avoidance coping following traumatic brain injury. *The Journal of Head Trauma Rehabilitation*, *28*(2), 98–105. https://doi.org/10.1097/htr.0b013e3182426029
29. Beshārat, M. A. (2010b). Relationship of alexithymia with coping styles and interpersonal problems. *Procedia - Social and Behavioral Sciences*, *5*, 614–618. https://doi.org/10.1016/j.sbspro.2010.07.152
30. Tominaga, T., Choi, H., Nagoshi, Y., Wada, Y., & Fukui, K. (2013). Relationship between alexithymia and coping strategies in patients with somatoform disorder. *Neuropsychiatric Disease and Treatment*, 55. https://doi.org/10.2147/ndt.s55956
31. Polloni, L., DunnGalvin, A., Ferruzza, E., Bonaguro, R., Lazzarotto, F., Toniolo, A., Celegato, N., & Muraro, A. (2017). Coping strategies, alexithymia and anxiety in young patients with food allergy. *Allergy*, *72*(7), 1054–1060. https://doi.org/10.1111/all.13097
32. Yılmaz, F. T., Sabancıoğulları, S., & Sevimligul, G. (2022). Alexithymia and coping with stress in patients with multiple sclerosis: a comparative study. *Journal of Neuroscience Nursing*, *55*(1), 24–29. https://doi.org/10.1097/jnn.0000000000000684
33. Nemiah, J. T., Freyberger, H. J., Sifneos, P. E., & Sifneos, A. (1976). Alexithymia: Psychological and biological correlates. American Journal of Psychiatry, 133(8), 930-938.
34. McDougall, J. (1989). Theatres of the mind: Architectures of the inner world. Basic Books.
35. *Toronto Alexithymia Scale (TAS-20) | Association for Contextual Behavioral Science*. (n.d.-b). https://contextualscience.org/TAS_Measure
36. Robinson, L. (2024, March 7). *Attachment styles and how they affect adult relationships*. HelpGuide.org. https://www.helpguide.org/articles/relationships-communication/attachment-and-adult-relationships.html
37. Smyth, N., Thorn, L., Oskis, A., Hucklebridge, F., Evans, P. D., & Clow, A. (2015). Anxious attachment style predicts an enhanced cortisol response to group psychosocial stress. *Stress*, *18*(2), 143–148. https://doi.org/10.3109/10253890.2015.1021676
38. Bartholomew, K. (1990). Avoidance of Intimacy: an attachment perspective. *Journal of Social and Personal Relationships*, *7*(2), 147–178. https://doi.org/10.1177/0265407590072001
39. Beshārat, M. A., & Khajavi, Z. (2013). The relationship between attachment styles and alexithymia: Mediating role of defense mechanisms. *Asian Journal of Psychiatry*, *6*(6), 571–576. https://doi.org/10.1016/j.ajp.2013.09.003
40. Ghorbanian, E., Mohammadloo, H., Asgarabad, M. H., & Hasanabadi, F. (2016). *Attachment style and social skills of children: The function of mediator Emotional intelligence*. https://www.semanticscholar.org/paper/Attachment-Style-and-Social-Skills-of-Children%3A-The-Ghorbanian-Mohammadloo/f966d33b789e7dc4eb5c58fa2854b0a68bb7434b
41. Jose, J., Benny, S., Philip, S., Prakash, S., Vijayan, V., & Jyothilekshmi, J. (2022a). A descriptive study to assess the emotional problems among elderly people residing in selected areas in Kerala.

Asian Journal of Nursing Education and Research, 132–134. https://doi.org/10.52711/2349-2996.2022.00028

42. Jose, J., Benny, S., Philip, S., Prakash, S., Vijayan, V., & Jyothilekshmi, J. (2022b). A descriptive study to assess the emotional problems among elderly people residing in selected areas in Kerala. *Asian Journal of Nursing Education and Research*, 132–134. https://doi.org/10.52711/2349-2996.2022.00028
43. Khodabakhsh, M. (2013). *Relationship of attachment styles with empathy and interpersonal problems*. https://semanticscholar.org/paper/Relationship-of-Attachment-Styles-With-Empathy-and-Khodabakhsh/7f9d10759085300b2f18da839c7705e48bad3ee
44. Ma, Y., Chen, X., Ran, G., Ma, H., Zhang, X., & Liu, G. (2017). The processing of body expressions during emotional scenes: the modulation role of attachment styles. *Scientific Reports*, *7*(1). https://doi.org/10.1038/srep44740
45. Miyaoka, H., Muramatsu, K., Miyaoka, Y., & Kamijima, K. (1999). The characteristics of coping behaviors in Alexithymics. *The Showa University Journal of Medical Sciences*, *11*(1), 37–40. https://doi.org/10.15369/sujms1989.11.37
46. Montebarocci, O., Codispoti, M., Baldaro, B., & Rossi, N. C. F. (2004). Adult attachment style and alexithymia. *Personality and Individual Differences*, *36*(3), 499–507. https://doi.org/10.1016/s0191-8869(03)00110-7
47. Robinson, L. (2024, March 7). *Attachment styles and how they affect adult relationships*. HelpGuide.org. https://www.helpguide.org/articles/relationships-communication/attachment-and-adult-relationships.htm#:~:text=Disorganized%2Fdisoriented%20attachment%2C%20also%20referred,or%20closeness%20in%20a%20relationship.
48. Victor, R. A., & Anilkumar, A. S. (2019). Emotional intelligence of agricultural officers of Kerala State Department of Agriculture. *Journal of Extension Education*, *31*(4), 6391. https://doi.org/10.26725/jee.2019.4.31.6391-6395
49. Wardecker, B. M., Chopik, W. J., Moors, A. C., & Edelstein, R. S. (2016). Avoidant attachment style. In *Springer eBooks* (pp. 1–7). https://doi.org/10.1007/978-3-319-28099-8_2015-2
50. Zilber, A., Goldstein, A., & Mikulincer, M. (2007). Adult attachment orientations and the processing of emotional pictures – ERP correlates. *Personality and Individual Differences*, *43*(7), 1898–1907. https://doi.org/10.1016/j.paid.2007.06.015
51. Wearden, A., Cook, L., & Vaughan-Jones, J. (2003). Adult attachment, alexithymia, symptom reporting, and health-related coping. *Journal of Psychosomatic Research*, *55*(4), 341–347. https://doi.org/10.1016/s0022-3999(02)00635-9
52. Lawrence, J., Ashford, K. J., & Dent, P. E. (2006). Gender differences in coping strategies of undergraduate students and their impact on self-esteem and attainment. *Active Learning in Higher Education*, *7*(3), 273–281. https://doi.org/10.1177/1469787406069058
53. Levant, R. F., Hall, R. J., Williams, C. M., & Hasan, N. T. (2009). Gender differences in alexithymia. *Psychology of Men and Masculinity*, *10*(3), 190–203. https://doi.org/10.1037/a0015652
54. Onor, M. L., Trevisiol, M., Spano, M., Aguglia, E., & Paradiso, S. (2010). Alexithymia and aging. *The Journal of Nervous and Mental Disease*, *198*(12), 891–895. https://doi.org/10.1097/nmd.0b013e3181fe743e