

RELATIONSHIP BETWEEN ATTACHMENT STYLES, HOARDING BEHAVIOR AND EMOTIONAL REGULATON AMONG YOUNG ADULTS



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DEPARTMENT OF PSYCHOLOGY

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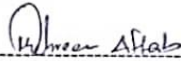
A Research Thesis submitted to the
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CERTIFICATE OF APPROVAL

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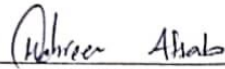
Relationship Between Attachment Styles, Hoarding Behavior and Emotional
Regulation among Young Adults

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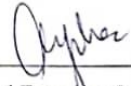
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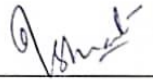
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ABSTRACT

Research shows that individuals with hoarding behavior have a positive correlation with anxious and attachment style but a negative correlation with insecure attachment and emotional regulation and individual seek comfort in possession. This study aimed to investigate the relationship between attachment styles, hoarding behavior, and emotional regulation among young adults. Furthermore, the study explored whether there were gender differences in study variables. A sample of young adults (N = 350) participated in the study, completing self-report measures assessing attachment styles, hoarding behavior, and emotional regulation difficulties. The results supported the hypotheses that anxious and avoidant attachment styles were positively correlated with hoarding behavior. Additionally, emotional regulation difficulties were positively correlated with hoarding behavior. However, the study did not find evidence to support the hypotheses of a negative correlation between secure attachment style and hoarding behavior or a gender difference in hoarding behavior. These findings contribute to the understanding of the psychological factors associated with hoarding behavior among young adults and highlight the importance of considering attachment styles and emotional regulation in interventions targeting hoarding behavior. Further research is warranted to replicate and expand upon these findings, considering the limitations of the study and exploring additional factors that may influence hoarding behavior in this population.

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LIST OF ABBREVIATIONS

AAS	Adult Attachment Scale
AAS(Av)	Avoidance subscale of Adult Attachment Scale
AAS(Ax)	Anxious subscale of Adult Attachment Scale
AAS(S)	Secure subscale of Adult Attachment Scale
SIR	Saving- Inventory Revised
DERS	Difficulties in Emotional Regulation Scale

Chapter 1**INTRODUCTION**

Emotions are universal feeling experienced by every individual. But for some people, emotional experience might feel overwhelming, like being on an uncontrollable roller coaster (Richardson, 2016). But when the negative emotions increased, the person experiences emotional dysregulation. APA states a situation-related emotional response that is out of control or inappropriate is known as emotional dysregulation (e.g., temper outbursts, deliberate self-harm). This dysregulation leads to faulty thoughts, behavior and emotions all are linked (Hilt et al., 2011). Hoarding is the recurring difficulty in disposing of it or parting with it, regardless of how little a possession actually worth. On the hoarder and their family members, the behavior often has adverse physical, emotional, financial, social and even legal consequences. The particular way that people communicate with one another in close relationships, as defined by the APA, is significantly influenced by interpersonal trust and feelings of self-worth. The strength of a person's bonds with others should theoretically correlate with how secure their attachments are as adults. So, finding the relationship between hoarding (behavior), attachment style (behavior), and emotional regulation creates the path to reverse those negative emotions and unwanted thoughts to lessen the hoarding behavior and determine the attachment style linked to this.

According to APA (2022), "Hoarding is a compulsive behavior characterized by a continual accumulation of worthless goods and a refusal to store or get rid of them. "Any attempt to discard these may cause anxiousness. "Different styles of attachment in early life predict different psychological consequences throughout childhood, adolescence and adulthood (American Psychological Association, 2022). The view is that individuals with hoarding symptoms rely on items for emotional regulation,

strengthening the notion that objects are essential for emotional health. They develop attachment to objects to fill the void that they lack during infancy.

Hoarding behavior

Furby (1978) concluded that the need for the object to satisfy some want or purpose (instrumental saving) and the perception that the possession is an extension of the self were the two motivations that stood out in the research on the reasons people possess things (sentimental saving). Furby (1978) came to the conclusion that control is essential to the definition of possession based on his research. Because people have access to or control over their usage, possessions have value. Possessions provide people the sense of control over their surroundings that they require. The instrumental motive for possession or acquisition will be strong if there is a risk that it won't be available when needed. There won't be much incentive to possess anything if it is constantly available when needed. As a result, Furby (1978) came up with the idea that individuals should own things in order to avoid the situation of ever needing them. As a result, having possessions gives people power over their surroundings. Hoarding is a special case of acquisition tendencies in which items that seems ineffective or perhaps have minimal worth are acquired and not disposed of (Frost & Gross, 1993). Thus, the collection of and refusal to abandon belongings of little worth or utility is hoarding. Hoarding severity and prevalence seem to increase with age, with issues with discarding being the main contributor (Cath et al., 2017).

According to epidemiological research, 1.5% of people have hoarding tendencies (Nordsletten et al., 2013), and up to 5.8% of people have clinically significant hoarding symptoms (Timpano et al., 2011). Although hoarding symptoms usually appear in young adulthood and adolescence (Tolin et al., 2010), symptoms that are clinically significant, especially those that include debilitating clutter, typically

don't appear until medium to late age (Dozier et al., 2016; Grisham et al., 2006). Hoarding symptoms stand out as being dimensions in the sense that they occur in a continuous manner as opposed to in a binary manner (Timpano et al., 2013). The severity of hoarding symptoms can have a significant impact on public health outcomes, even while general saving habits can be considered typical. High unemployment rates, work impairment, increased financial hardship, and impairment in daily life activities are all linked to hoarding (Tolin et al., 2008). Additionally, hoarding is also linked to higher rates of comorbid medical disorders, such as obesity and diabetes (Tolin et al., 2008). Also, those with hoarding frequently claim to have never been married or to have distanced themselves against relatives who offer to help them organize their houses, which results in isolation from society (Tolin et al., 2008; Kim et al., 2001). Severe cluttered conditions frequently lead to risks of fire, unhealthy living circumstances, a high rate of expulsion and related legal costs, and then in extreme situations, even dying (Tolin et al., 2008).

According to model of cognitive behavior of hoarding, the symptoms of hoarding are caused by a number of basic vulnerabilities (Frost & Hartl, 1996). These key vulnerabilities are influenced by predisposed, natural, neurological, and psychological features that may be impulsivity, stress, trauma, and family history (Frost & Hartl, 1996). These key vulnerableness are believed to help with processing of information impairments, false views about one own self, other people, and things, as well as dysfunctional reinforcement loops, combine to promote the emergence of hoarding disorder. Beliefs about one own self, other people, and things are at the center of hoarding's maladaptive cognitions. The main beliefs of those with hoarding are that they are undesirable, defenseless, and unworthy (Moulding et al., 2016), and they also support unfavorable opinions of other individuals, such as the notion that they cannot

be trusted or depended upon (Hartl et al., 2005; Moulding et al., 2016). Additionally, the symptoms of hoarding are positively correlated with poorly perceived emotional coping, so those who hoard have low expectations about their capacity to endure negative emotions (Shaw et al., 2015; Ayers et al., 2014; Timpano et al., 2014; Fernández de la Cruz et al., 2013). Overall, hoarding is categorized by a different range of thoughts and behaviors, and currently available therapies mostly concentrate on altering unhelpful attitudes about material goods as the primary source for adjustment (Levy et al., 2017).

Attachment styles

Person's distinctive ways of connecting with caregivers and attachment figures that are one's children parents, and intimate partners, are referred to as their attachment style. This idea came from John Bowlby's attachment theory (Levy et al., 2010). The concept comprises one's faith in the presence of the attachment figure to act as a support from which one may independently can have exploration of the world when not in distress and a shelter from which one can find protection, facilitation and help during hard times (Levy et al., 2010). Exploration of the world includes interactions with other people in addition to the surrounding environment and consideration of their experiences as well (Levy et al., 2010). Ainsworth recognized three distinct attachment styles or types (Ainsworth et al., 1978), and they have been subsequently named secured, avoidant, and anxious-resistant or ambivalent.

According to Hazan and Shaver (2004), adults have many characteristics with infants, including being securely or insecurely bonded. Importantly, it is believed that a newborn's attachment style whether secure or insecure lays the groundwork for later social and emotional development. Infants who are securely bonded later learn to modify their emotional coping mechanisms, trust others, and build their self-efficacy

and confidence. Infants with insecure attachment styles, on the other hand, could struggle to control their negative emotions, anticipate unreliable or cruel behavior from others, and harbor unfavorable views of themselves. Individuals who have secure attachments to others are more able to express and regulate their unpleasant emotions and know when to ask for help from others. Those who are insecurely attached, on the other hand, could look for attention because they feel they can't handle things on their own or they might withdraw themselves from others and try to stifle their unpleasant emotions. Furthermore, maladaptive coping mechanisms like self-blame, avoiding bad feelings, having trouble controlling their impulses, and a belief that they are unable to regulate their emotions are linked to insecure attachment. Last but not least, those who are insecurely attached also express higher levels of instability in self-esteem and self-doubt, which can be exacerbated interpersonal problems by making one more sensitive to perceived slights against one's self-image and leading to averting or escalating hatred against people (Mikulincer & Shaver, 2012).

Adult attachment is further characterized along the lines of anxiety and avoidance (Brennan et al., 1998). Negative self-evaluation and abandonment anxieties, which frequently lead to attempts to find reassurance about these fears, are characteristics of high attachment anxiety. A study in 2018 stated that early anxious attachments might result in the avoidance of social connection and the substitution of objects for real relationships. High avoidant attachment is defined by unfavorable other's perspective and an ensuing desire to stay away from close relationships and closeness. Individuals strong in attachment avoidance typically become overly dependent on oneself, which results in social isolation, as opposed to individuals with high anxious attachment who may develop an excessive dependence on attachment figures and cause problems in interpersonal relations. Additionally, those who are very

attachment anxious and avoidant are more prone to want deep relationships yet fear being rejected, which can lead to interpersonal problems and social isolation. Generally, those who score less on both anxious attachment and avoidant attachment are thought to be securely attached, while people who score more on either one or both are thought to have insecure attachment style.

Conclusively, individuals with avoidant attachment are wary of others and uncomfortable in intimate connections, those with secure attachment can build strong bonds with others and are at ease in interdependent relationships. Individuals with anxiety or ambivalence yearn for deep relationships yet believe that others do not genuinely care about them (Elzbieta, 2008).

Emotional regulation

In many ways, how much an individual can monitor, assess, and if required control their emotional arousal will determine whether or not that arousal can support or inhibit constructive functioning. In a sense, emotional arousal itself must be controlled for emotion to constructively direct competent functioning. Early in life, others play a major role in controlling an individual's emotional arousal by keeping an eye on the infant's distress, encouraging positive affect, and directing the formation of self-referent feelings like remorse and pride. However, when cognitive and linguistic skills, emotional awareness and self-awareness develop, and neurophysiological development takes place, emotional arousal becomes more and more self-regulated. As a result of these developmental changes, the child is not only better able to sustain emotionally healthy homeostasis but is also more able to successfully use emotional arousal in continuing interactions with her social and nonsocial surroundings. The intrinsic and extrinsic systems, responsible for keeping track of, assessing, and altering emotional reactions, especially their intensity and temporal characteristics are referred

to as emotional regulation. Therefore, emotional regulatory processes are essential for both giving flexibility to the behavioral processes that emotions aid in motivating and directing as well as for enabling organisms to respond quickly and effectively to changes in their environments by limiting internal arousal to levels that support performance (Thompson, 1991).

In the context of goal-directed behavior, emotion regulation is a multifaceted notion that includes emotional awareness, understanding, and acceptance as well as the capacity to control impulsive conduct when there is a negative affect present (Gratz & Roemer, 2004). Therefore, emotional regulatory processes are essential for both giving flexibility to the behavioral processes that emotions aid in motivating and directing as well as for enabling organisms to respond quickly and effectively to changes in their environments by limiting internal arousal to levels that support performance (Thompson, 1991). Gratz and Roemer's significant multidimensional definition of emotional dysregulation, which highlights problems with emotional regulation, was first put out in 2004 occur in emotional awareness and comprehension, accepting one's emotions, the capacity to control impulsive behavior and act in accordance with desired goals while one experiences negative emotions and having access to and flexibility in applying situation-appropriate, efficient emotional regulation techniques. Deficits in any of these areas are a sign of Emotional Regulation also known as emotional dysregulation.

Emotional dysregulation is said to have in which people struggle to control their emotions. Emotions interfere with effective functioning because they are perceived as overwhelming and/or disorganized (Roth et al., 2019). People who are dysregulated might be able to access some of their emotions, but unlike with integrative processing, they are not brought into any kind of calm, focused awareness. Due to their

overwhelming nature, emotions can be expressed in spontaneous or uncontrolled ways, or they might be suppressed (Roth et al., 2019). The result is that emotional dysregulation is linked to increased self-harming behavior and subjective suffering, as well as increased peer rejection often because of expressive outbursts, disruptions, or withdrawal (Emery et al., 2016). No matter whether an individual expresses or suppresses their feelings, when dysregulated, they have limited control over their actions, which is accompanied by interpersonal conflict and subjective suffering (Roth & Assor, 2012; Roth et al., 2009).

Literature Review

Mathes et al. (2019) suggested that when an attachment figure is lost, a hole is created that needs to be filled, but instead of being filled by other people, it is filled by stuff. Another study suggested that hoarders claim to have stronger attachments to their stuff and a propensity to turn to their possessions for comfort (Frost et. al., 2016). Through issues regulating emotions, attachment patterns and childhood trauma have an impact on self-harming behaviors (Ashrafi, et al., 2021). Independent of emotional attachment to possessions, when negative emotions are felt, impulsive buying or avoidance of throwing things away may occur (Moulding et al., 2015). A cross-sectional study conducted with the age range of 18-24 on both male and female participants investigating how anthropomorphism and hoarding attitudes interact to influence the connection between insecure attachments and hoarding behavior. Results suggested a positive correlation between attachment anxiety, avoidance and hoarding behavior (Liu et. al., 2022).

Another cross-sectional study conducted in non-clinical sample of 463 adults suggested that there is a strong correlation between hoarding symptoms and emotional attachment to items as well as with attachment avoidance and attachment anxiety

(Kohoe & Egan, 2019). Huang et al. (2022) has discovered that anxious attachment and avoidant attachment are both significantly positively correlated with difficulties or disorders with emotion regulation.

Past researches suggest that hoarding symptoms and attitudes, as well as difficulty in discarding acquisition were all substantially predicted by issues in emotional regulation and impulsivity (Taylor et al., 2018). Grisham (2018) concluded that people who hoard have emotional dysregulation and difficulty in connecting with others. In regard to hoarding symptoms, emotions are regulated by ideas about emotional attachment to objects. People who hoard reported significantly higher levels of negative emotions such as anxiety, disgust and fear and less of the positive emotions (Yap & Grisham, 2020). According to the model of cognitions and behavior, both processing of information issues and erroneous assumptions influence both favorable and unfavorable emotional reactions, such as pride and pleasure when thinking about how significant the object is, as well as feelings of grief, worry, and guilt when examining the possibility of losing or having to give up a priceless item (Frost & Hartl, 1996). The act of saving and/or purchasing serves to strengthen these emotional responses, which serve to reinforce the individual's perceptions of the assumed value of their significant belongings. The result is the development and maintenance of saving and acquiring behaviors, which, when combined with executive functioning issues that hinder organization, cause an excessive amount of clutter in one's house.

Additionally, Frost and Hartl (1996) emphasize the significance of ideas regarding emotional connection to goods, which are defined as comprising three linked opinions, namely that attachment with items offer convenience and safety, exhibit person like characteristics, and are a part of one's perception of themselves. The correlation between emotion regulation issues and secure attachment is positive and

insecure attachment was negative, indicating that participants with a secure connection were better able to control their emotions than those with an insecure attachment (Ozeren, 2021). A meta-analysis of 9 studies with the total data of 1595 participants conducted in 2021 reported a moderate correlation existed between hoarding symptoms and emotional dysregulation. The difference between clinical and nonclinical samples, nevertheless, was greater. Additionally, the sort of hoarding measures used in each study had a different impact on the degree of the link between hoarding and emotion control. Furthermore, there was no quantitatively significant variations were present between the hoarding and aspects of emotion dysregulation (Akbari et al., 2022).

A study on non-clinical sample of 283 participants in predicting the role of attachment in hoarding symptoms concluded that the intensity of hoarding, avoidant and anxious attachment were all significantly higher in females (Neaves et al., 2016). A meta-analysis on the prevalence of hoarding was collected data from countries such as Europe, Netherlands, Germany, Italy, Belgium, and France, etc concluded that hoarding symptoms may appear in childhood and adolescence (Grisham et al., 2006), and their intensity may rise with advancing years (Ayers et al., 2010). Hoarding severity and prevalence seem to increase with age, with issues with discarding objects being the main contributor. In a sample of 15,194 participants, Cath et al. (2017) discovered that hoarding severity rose predictably with age, starting at age 30-35, with the highest incidence rates being among people over 65.

There are gender differences in attachment styles that can be seen as early as middle childhood and can persist into adulthood. There is proof that there are gender differences in attachment, including cross-cultural variation and developmental patterns. The development of attachment styles may be influenced by prenatal and postnatal sex hormones, according to evolutionary models of sex differences. The

literature on sex differences in attachment styles currently has theoretical and empirical gaps (Giudice, 2019). Studies have shown that boys and girls in middle childhood have quite different attachment styles, with boys being higher in avoidance and girls being higher in preoccupation/ambivalence. Several nations, including Europe, North America, Israel, China and South Korea have seen this trend repeated. The author also covers the research that suggests sex hormones during and after pregnancy play a role in the formation of attachment types (Giudice, 2019). A study by Karairmak and Duran (2008) found that gender differences in attachment styles were found. Compared to female university students, male students felt more securely attached to themselves. Additionally, female college students felt more concerned about their attachments than male college students did.

Another study investigated Bartholomew's (1990) typology of four categories adult attachment styles was contrasted with Hazan & Shaver's (1987) typology of three categories. First, it was discovered that both typologies are based on the same two dimensions, and the Bartholomew and Hazan & Shaver measures matched as expected. Second, contrary to other studies, there were no gender differences on Hazan & Shaver's measure, but there were on Bartholomew's measure, particularly in her two avoidant categories. Dismissive avoiders were more likely to be men than women, while terrified avoiders were more likely to be women (Brennan et al., 1991). Kirkpatrick and Davis (1994) examined the adult attachment styles in 354 heterosexual couples in serious dating relationships and found that male and female attachment styles were not randomly paired, as no anxious-anxious or avoidant-avoidant pairs were discovered. Additionally, they found that male and female styles were connected to both partners' perceptions of their existing relationships in various, but theoretically significant, ways. Even when prior duration and commitment to the relationship were statistically

controlled, male and female styles had a substantial impact on the longitudinal prediction of relationship stability and status. They stated that the necessity to incorporate gender role issues, relational dynamics, and processes into adult attachment theory is the main topic of discussion.

A study on examining gender differences in romantic jealousy and attachment styles, 66% of women and 79% of men identified as being envious. Participants' judgements of their emotional and cognitive states were greater in women than in men. Women performed better when it came to the negative effects of jealousy. Scores on commitment were greater for women than for men. The physical, emotional, and behavioral responses to jealousy and insufficiency as a cause of jealousy were positively connected with ambivalent attachment (Guclu et al., 2017). A study reported in their analysis of the variations in attachment styles, it discovered that men and women scored significantly higher on attachment-related avoidance and anxiety, respectively. Also, this has a comparable effect on other relationships, such as peer relationships or teacher-student ties, but it represents the overall predisposition towards having close relationships. The study also discovered an intriguing correlation between marital status and attachment style, with single men considerably outperforming married men on the Experiences in Close Relationships – Revised's attachment-related anxiety scale (Gugova & Heretik, 2011).

Another study on online addiction among adolescents and young adults in Iran's findings indicate that online addictions are less common in those with secure attachment styles, and more common in people with insecure attachment styles i.e., avoidant attachment style and anxious attachment style (Salehi et al., 2023). Another study also stated that male students would exhibit higher levels of dismissive styles than

female students, and female students would exhibit higher levels of preoccupied styles than those of their male counterparts (Ardenghi et al., 2020).

Regarding the gender differences that exist in emotional regulation, a study conducted on children and adolescents found out girls feel anxiety and difficulty controlling negative emotions more than boys do, and anxiety is significantly impacted by emotion dysregulation. Emotional dysregulation is more likely to predict anxiety in girls than in boys, which has not been previously demonstrated, and distinct types of emotion regulation issues account for anxiety in both girls and boys (Bender et al., 2012). A study by Bardeen and Stevens (2015) examined sex differences processes on anxiety through emotion regulation difficulties indicate that women are more likely to up-regulate their emotional reactions to unpleasant stimuli and provides evidence how susceptible women are to developing anxiety problems. Another study stated that rumination serves as a significant mediator variable in the relationship between age, gender, and depression, with older persons and men choosing more adaptive techniques to regulate emotions than young adults and women (Trives et al., 2016). A cultural and gender based study conducted in Korea in between Korean and USA participants identified in both nations, women used both types of rumination (i.e., contemplative pondering and brooding) and anger suppression more frequently than males did (Kwon et al., 2013).

A study examining gender differences in two scales of emotional regulation i.e., Emotional Regulation Questionnaire (ERQ) and Difficulties in Emotional Regulation Scale (DERS) identified varied results. The study identified Men performed much better on expressive suppression than women, but there were no differences between the sexes on cognitive reappraisal in the ERQ. There is no sex difference in DERS scores, according to study (Stellern et al., 2023). Also, Women consistently employed

more techniques than males, and they were more adaptable in how they were put into practice (Goubet & Chrysikou, 2019). Girls overtook boys in both the general average of emotional regulation in respect to these specific emotions as well as the use of emotional regulation techniques to deal with feelings of melancholy, anxiety, and anger. The latent variable of emotion control scores were significantly influenced by age, but not by gender. The latent emotion control scores revealed an interaction impact between age and gender. Girls typically scored lower than boys when they were older and higher than boys when they were younger (Sanchis et al., 2020). A study conducted on gender differences in emotional regulation with respect to neurological basis. The study concluded several findings such as when compared to women, men showed reduced activation of ventral striatal regions linked to reward processing, greater reductions in the amygdala, linked to emotional reaction, and reduced increase in prefrontal regions linked to reappraisal. This previous study also examined two non-contradictory explanations for these variations. First, because males utilize instinctive emotion control more frequently, they might exert less effort while utilizing cognitive regulation. Second, women may employ their good emotions to a greater extent in order to reappraise their unpleasant feelings (McRae et al., 2008).

Theoretical Framework

According to Bowlby (1982), an infant is thought to establish a secure attachment to the caregiver when the caregiver gives exhibits sufficient physical and mental constancy. The infant, however, forms an uneasy relationship when the caregiver fails to accomplish this. An emotional connection to another person is called attachment. Although the study of newborns served as the foundation for attachment theory, it has now been expanded and used to analyze connections between adults. Bowlby (1982) thought that a child's early relationships with their caregivers have a

profound effect that endures throughout life. Bowlby and others proposed that children are born with an innate desire to form attachments with caregivers and if that need is not met, they turn to items instead, which leads to hoarding (Mathes et al., 2022). According to the majority of researchers (Ainsworth, 1991; Ainsworth et al., 2015; Bowlby, 1979, 1982; Hazan & Shaver, 2004), attachment refers to a relationship or link between two entities that typically takes the form of a behavioral pattern meant to increase or lessen individual's physical or emotional closeness to the other. According to theory, attachment figures have three important functions throughout a person's life: they should be someone to whom the person seeks closeness and resists being separate, a comfort zone for them to retreat to in times of need, and a solid base from which they can build their own sense of self (Ainsworth et al., 2015; Hazan & Shaver, 2004). Taking into account that interpersonal attachment desires are considered a vital component of development of human being, it is important to note that when these needs are not met, people may try to make up for it by abusing other vices like food and material possessions (Norris et al., 2012). According to the one study, material goods serve as a source of security by giving their owners a feeling of identity and are viewed as status symbols in society (Malik & Kamal, 2020). Attachment theory will provide the basis to explore the relationship among attachment styles, hoarding behavior and emotional regulations in young adults.

Rationale of Study

The idea that objects are necessary for emotional well-being is supported by the theory that individuals who display hoarding symptoms rely on goods for emotional regulation (Phung et al., 2015). People develop close relationships with their things in an effort to compensate for their unfulfilled interpersonal demands. The inability of possessions to reciprocate caring in the same manner that humans can, however,

prevents them from genuinely satisfying an individual's interpersonal desires. Actually, they simply serve to impede humans by intervene with the development and conservation of personal connections. In order to understand how one's relationship with their possessions works, this study posits that attachment encompasses link to both things and people. The study hypothesized that this relationship serves to make up for unsatisfactory interpersonal connections. Studies show that both anxious attachment and avoidant attachment are substantially directly correlated to problems or irregularities with emotional regulation. However, some studies suggest that those with high levels of attachment avoidance may not have problems with emotion control (Huang et al., 2022). According to this perspective, the role that emotional regulation plays in determining the connection between attachment styles and hoarding was investigated. Additionally, it was examined which attachment style is beneficial in identifying the disturbance that causes trouble with emotional regulation in those who display hoarding symptoms. Hence, this study examined the dynamics of hoarding behavior, attachment to items, and emotional regulation and how the hoarding behavior is used as a coping mechanism in different attachment styles and emotional regulation. Moreover, the recent studies conducted reported higher females than males displayed hoarding behavior, predicted disturbed attachment styles and dysregulation in emotions (Neave et al., 2016; Crone et al., 2019; Danet & Secouet 2018; Liu & Ma, 2019). All the recent studies which reported higher severity or occurrence in females has more ratio of them in sample than males. To determine if males or females are more likely to develop hoarding, this study included an equal number of both sexes.

Past research studies suggests that little work is done on relationship between hoarding, attachment styles and emotional regulations. This study provided the novelty in developing country like Pakistan, the statistical information in young adults.

A better understanding of the relationship between attachment styles, hoarding behaviors, and emotional regulation in the Pakistani context is made possible by the fact that the relationship between hoarding, attachment styles, and emotional regulation is not yet researched cohesively in developing nations like Pakistan.

Objectives

The objectives of this research are:

1. To examine the relationship between attachment styles, hoarding behavior and emotional regulation.
2. To examine the gender differences that exist in study variables.

Research hypotheses

The following are the hypotheses

1. Anxious attachment style is positively correlated with hoarding behavior.
2. Avoidant attachment style has a positive correlation with hoarding behavior.
3. Secure attachment style has a negative correlation with hoarding behavior.
4. Emotional regulation difficulties is positively correlated with hoarding behavior.
5. Emotional regulation difficulties is negatively correlated with secure attachment style whereas it is positively correlated with anxious and avoidant attachment styles.
6. Females are more likely to hoard than males.
7. There is a significant difference exist between males and females in three attachment styles.
8. Males and females also differ in displaying emotional regulation difficulties and strategies.

Chapter 2**METHOD****Research Design**

The current work used correlational research design to examine the relation in between attachment styles, hoarding behavior and emotional regulation.

Ethical considerations

The researcher ensured that the subjects don't suffer any sort of damage. The dignity of study participants will always come first. Prior to the study, participants were asked for their full consent. Participants in the research had their privacy protected. The research data was kept in a sufficiently secret manner. It was avoided to deceive or exaggerate the study's aims and objectives. Honesty and transparency would be used in all communications on the project. Research topic, strategies and method were approved by Head of Department, Psychology, Capital University of Science and Technology.

Sample

The population was young adults (18-24 yrs) of Pakistan as the prevalent mean age of showing hoarding symptoms or hoarding behavior is 20 and symptoms increase overtime. The minimum sample size required was (N= 174). To account for possible missing data (N= 350) was recruited from different universities fall under the criterion population age. The minimum required sample was calculated using G power analysis. Equal ratio of males and females was devised in order to study gender differences.

Sampling procedures/Technique

The participants were selected through convenient sampling method using inclusion and exclusion criteria.

Inclusion criteria

Only university students were included to participate in the study. Participants having an age range 18 to 24 were included. Participants who can understand English. Equal ratio of both males and females falling in the criteria was included in the study.

Exclusion criteria

The participants above or below the criterion age or person with any physical or mental disability was excluded.

Measures/Instruments

The following instruments were used in this research study

Demographic Sheet

Demographic Sheet was prepared for measuring the influencing demographic variables and information regarding age, gender, and marital status, level of education, monthly family income, birth order, and family system.

Saving Inventory-Revised (Frost, 2004)

Hoarding was measured through Saving Inventory-Revised (SI-R) Modified format (Frost et al., 2004). It is a 23-item self-report questionnaire and Likert type 5 point scale with 0 measuring 'Not at all/None' response up to 4 measuring 'Almost all/extreme' with a Cronbach alpha of .93. It measures the three important characteristics: difficulty discarding, excessive acquisition and clutter. Clutter sub-scale has 9 items (1, 3, 5, 8, 10, 12, 15, 20, 22), Acquisition sub-scale also consists of 7 items (2R, 9, 11, 14, 16, 18, 21) and Difficulty discarding/Saving sub-scale has 7 items (4R, 6, 7, 13, 17, 19, 23). R indicates items are scored reverse prior to the computation of mean. The common scores for individuals with hoarding issues are Difficulty Discarding Score greater than 13, Acquisition Score greater than 13, Clutter Score

greater than 15 and the overall score higher than 40 was considered as clinical samples of hoarding.

Adult Attachment Scale (Collins & Read, 1990)

Attachment style was measured through the Adult Attachment Scale (Collins & Read, 1990) adapted from (Hazan & Shaver, 1987). It is an 18-item scale and Likert-type 5 point scale with 1 presenting 'Not at all characteristic of me' and the 5 measuring 'Very characteristic of me'. This scale contains three subdivided scales, each consists of six items. The three subscales are depend, close and anxiety. Using the Depend scale, one may measure how much they can rely on people to be there for them when they need them. The close scale determines how at ease a person is with intimacy and proximity. The anxiety subscale measures a person's level of anxiety over being rejected or unloved. High score on anxiety subscale and moderate scores on close and depend subscales measures anxious attachment style, high scores on close and depend subscales and low score on anxiety subscale measures secure attachment style whereas, low scores on depend, close and anxiety subscales measures avoidant attachment style. The Cronbach's alphas for the depend is .78, for close is .81 and for anxiety subscale is .85. The scoring for close subscale six items are (1, 6, 8R, 12, 13R, 17R for depend subscale are (2R, 5, 7R, 14, 16R, 18R) whereas anxiety subscale are (3, 4, 9, 10, 11, 15). 'R' indicates items were reverse scored before the computation of the mean.

Difficulties in Emotional Regulation (Gratz & Roemer, 2004)

Emotional regulation was measured through the Difficulties in Emotional Regulation Scale (Gratz & Roemer, 2004). It is a 36-item and 5 point Likert type scale with 1 'almost never' and 5 'almost always' with a Cronbach's alpha of .90. It measures six major features: No acceptance of emotional responses, Limited access to emotion regulation strategies, Difficulty engaging in Goal-directed behavior, Lack of emotional

awareness, Impulse control difficulties, and Lack of emotional clarity. Difficulties in Emotional Regulation Scale (DERS) yields a total score (sum) as well as scores on six sub-scales. The 'Nonacceptance of emotional responses' (nonaccept) are measured by items 11, 12, 21, 23, 25, 2, 'Difficulty engaging in Goal-directed behavior' (goals) by item 13, 18, 20*, 26, 33, 'Impulse control difficulties' (impulse) through 3, 14, 19, 24R, 27, 32, 'Lack of emotional awareness' (awareness) through 2R, 6R, 8*, 10*, 17*, 34*, 'Limited access to emotion regulation strategies' (strategies) by 15, 16, 22*, 28, 30, 31, 35, 36 and 'Lack of emotional clarity' (clarity) through 1R, 4, 5, 7*, 9. Asterick items was reverse scored reverse scored item. The overall score was sum of all subscales. Higher scores suggests greater difficulty in emotional regulation.

Procedure

Permission from the authorities were acquired prior to data collection. The data was collected from universities of Rawalpindi and Islamabad. The objective of research was explained. Participants was provided with Informed consent for voluntary participation. They were also instructed that there is no correct or incorrect answer in the given questionnaires and they have to respond to each item given on the scales. Any opportunity was given to all the participants to ask any questions. The general testing conditions was satisfactory and the procedure was uniform throughout. The demographic data was obtained and avoid obtaining any information that hinders the anonymity of participants.

Questionnaires of Saving Inventory-Revised (SI-R), Adult Attachment Scale (AAS) and Difficulties in Emotional Regulation Scale (DERS) were provided to solve them. It took about 15 – 20 minutes for each participant to fill all three questionnaires. Data was entered and analyzed by IBM SPSS statistics, followed by discussion and recommendations.

Proposed data analyses procedure

Results were analyzed through IBM SPSS Statistical Package. The correlational analysis was conducted to examine the relationship between attachment styles, hoarding and emotional regulation. t-test analysis was conducted to compare means of demographic variables such as gender.

Chapter 3

RESULTS

In order to achieve the objective of the present study, appropriate statistical analyses were used to analyze the data. Results were analyzed through IBM SPSS Statistics version 21. Kolmogorov-Smirnov test was conducted to identify the normal distribution of data among sample of the study. Socio-demographic characteristics were analyzed through frequencies. Descriptive statistics were computed for all the measures in the study to examine the overall trend of the data. The internal consistency of the scales was determined with the help of Cronbach's alpha reliability coefficient. Spearman's Correlation was used to determine the relationship between variables of the study. Mann Whitney U test was computed to ascertain group differences of gender with hoarding behavior.

Socio-demographic Characteristics of Sample

Different demographic variables such as age, gender, marital status, employment status, and education system and birth order were calculated through frequencies in order to find the frequent amount of demographics spread across the data.

Table 1*Socio-demographic Characteristics of Sample(N=350)*

Characteristics	f	%
Age		
18	19	5.4
19	37	10.6
20	58	16.6

21	86	24.6
22	81	23.1
23	46	13.1
24	23	6.6
Gender		
Male	175	50
Female	175	50
Marital Status		
Single	285	81.4
Married	16	4.6
Engaged	18	5.1
In a relationship	28	8
Divorced	3	0.9
Education System		
Private	184	52.6
Public/Government	39	11.1
Semi government	127	36.3
Family Monthly income		
Below 35,000	22	6
35,000-70,000	44	12.6
70,000-100,000	87	24.9
Above 100,000	198	56.5
Employment status		
Full time	12	3.4
Part time	20	5.7
Self employed	16	4.6
Unemployed	22	6.3
Student	280	80
Family system		
Joint	127	36.3
Nuclear	185	52.9
Single Parent	38	10.8
Birth order		

Eldest	100	28.6
Middle	185	52.9
Youngest	65	18.6

Note: f = frequencies of sample, % = Percentage of sample

Table 1 shows that sample collected of N= 350 participants, all of them were between age of 18 – 24 (100%) years. The highest frequency exist was of the ages 21 (24.6%) and 22 (23.1%) years which shows that most of the participants of these ages were participated in the study. Nearly 285 (81.4%) participants marked their marital status as single and 184 (52.6%) participants belongs to private education system. About half of the participants (56.5%) had monthly family income above 100,000. The study also showed that more than half of the participants are Students (80%). Also, nearly half of the participants of study belong to Nuclear Family system (52.9%) and were Middle child (52.9%).

Psychometric Properties of Scales

Alpha reliability coefficients and descriptive statistics of (N= 350) of the subscales (Avoidant, Anxious and Secure) of Adult Attachment Scale, Saving-Inventory Revised and Difficulties in Emotional Regulation Scale was computed. Kolmogorov-Smirnov (K-S) test was also computed in order to interpret the normal distribution of data across sample in which K-S and p value significance is interpreted.

Table 2*Psychometric Properties of Scales used in the current study (N=350)*

Scale	N	α	M	SD	Range		Skew	Kurt	K-S	P
					Potential	Actual				
AAS(Av)	6	.66	16.4	5.07	6-30	6-30	.24	-.54	.08	.00
AAS(Ax)	6	.65	14.81	4.78	6-30	6-30	.35	-.05	.08	.00
AAS(S)	6	.53	15.41	4.34	6-30	6-30	.28	-.16	.08	.00
SIR	23	.83	35.03	12.80	0-92	1-72	.24	-.10	.07	.00
DERS	36	.82	100.21	17.34	36-180	45-142	-.40	.35	.05	.01

Note: N= Items, α = Cronbach's alpha value, M= Mean, SD= Standard Deviation, K-S= Kolmogorov Smirnov normality test, p= Significant level, AAS(Av)= Avoidant subscale of Adult Attachment Scale, AAS(Ax)= Anxious subscale of Adult Attachment Scale, AAS(S)= Secure subscale of Adult Attachment Scale, SIR= Saving Inventory Revised for hoarding, DERS= Difficulties in Emotional Regulation Scale.

Table 2 shows that internal consistency of all the measures is in the acceptable range of study variable. Reliability of Avoidant subscale of AAS, Anxious subscale of AAS and Secure subscale of AAS are .66, .65 and .53 respectively which is comparatively low to moderate but acceptable. Saving Inventory Revised and Difficulties in Emotional Regulation scale had alpha reliabilities of .83 and .82 respectively which are considered as strong reliabilities.

The value of skewness and kurtosis lie between -2 and +2 that are considered acceptable in order to prove the normal distribution of data. As far as, this study is concerned with the sample size greater than 30, the acceptable range is closer to 0. The

p value of all the variables is less than .05 indicates that data is not normally distributed ($p > 0.05$).

Figure 1
Histogram of Avoidant Subscale of Adult Attachment Scale

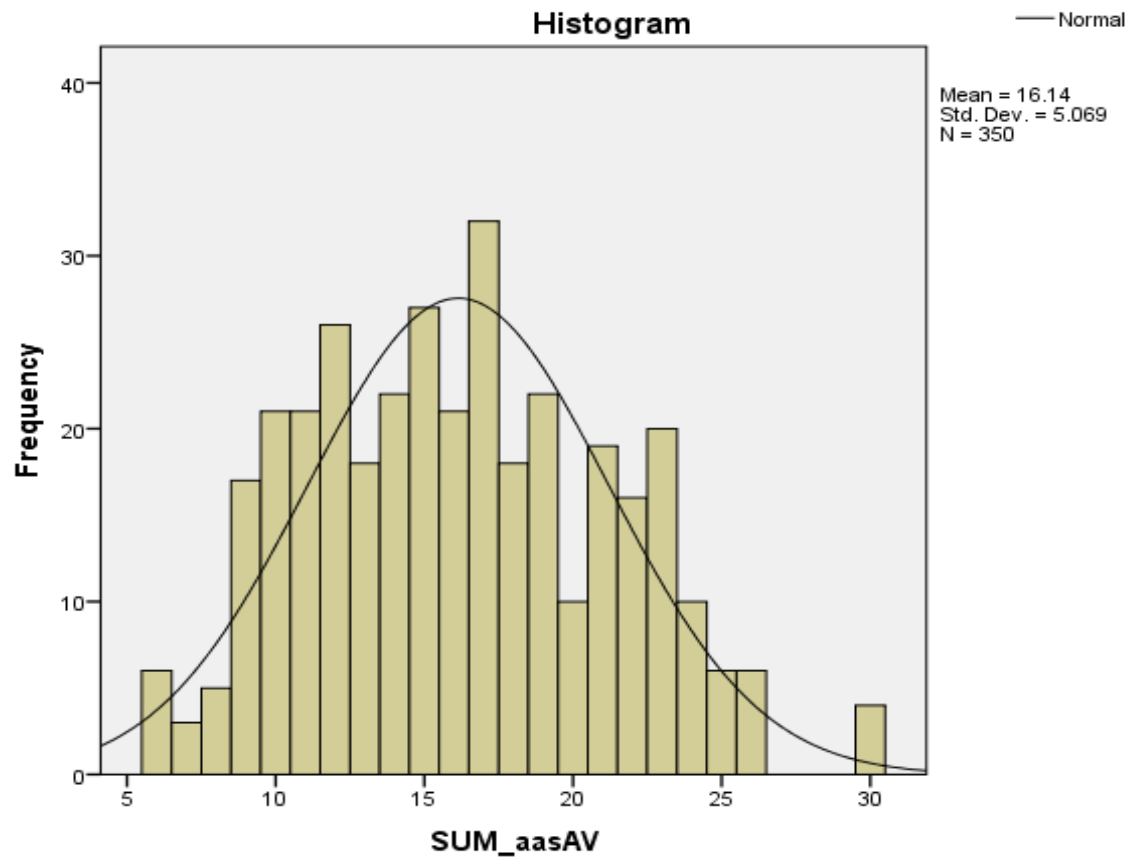


Figure 2
Histogram of Anxious Subscale of Adult Attachment Scale

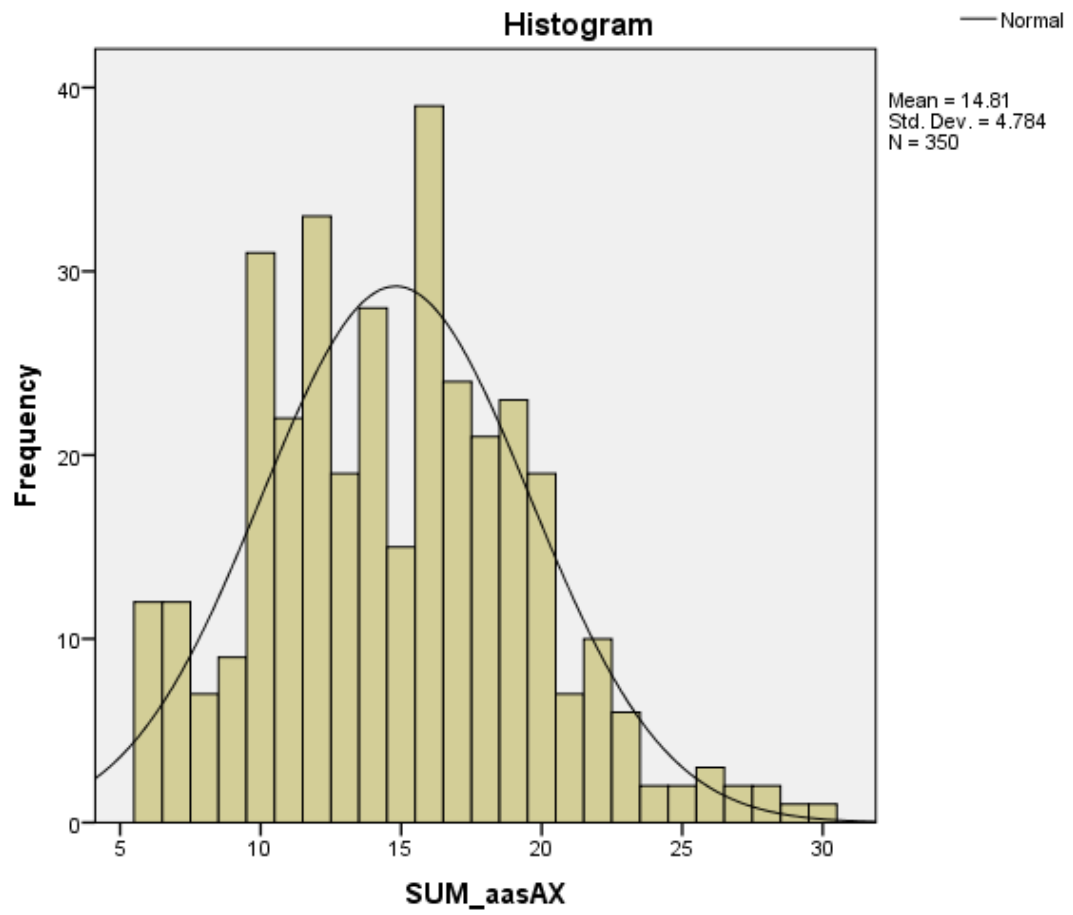


Figure 3
Histogram of Secure subscale of Adult Attachment Scale

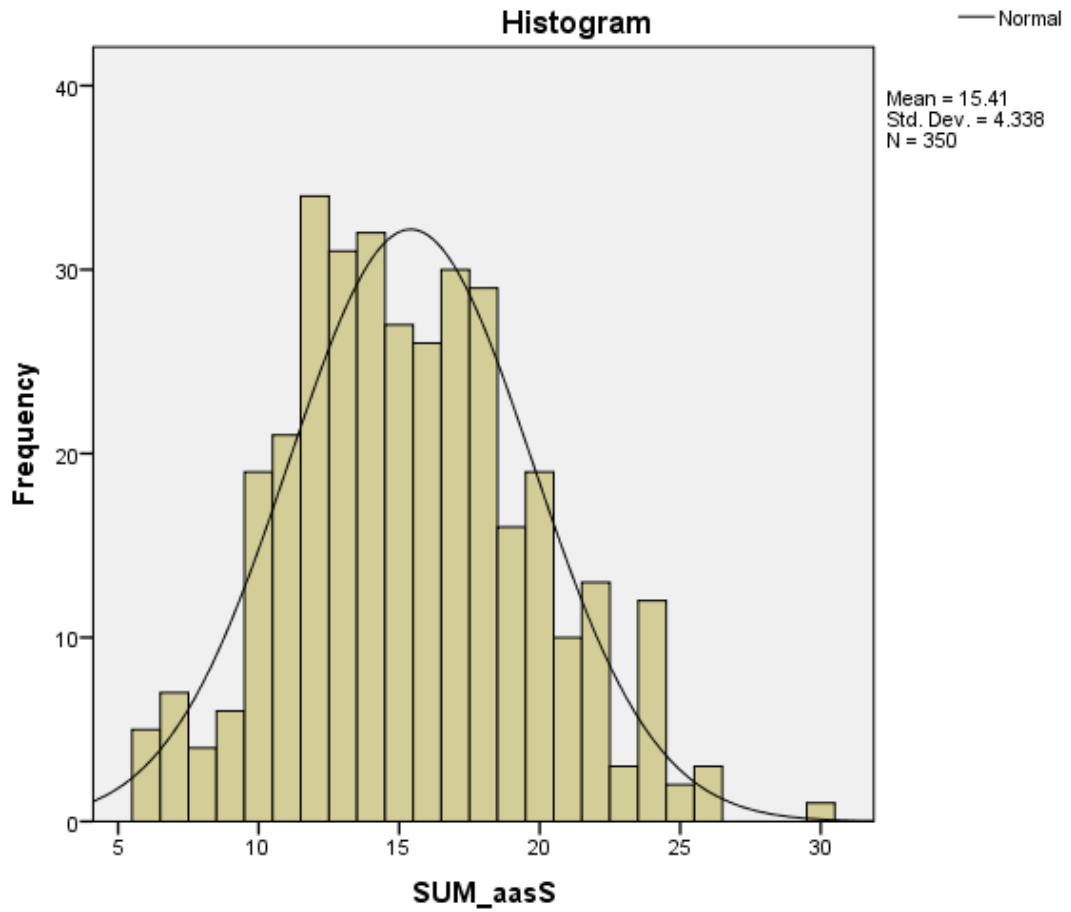


Figure 4
Histogram of Saving Inventory-Revised

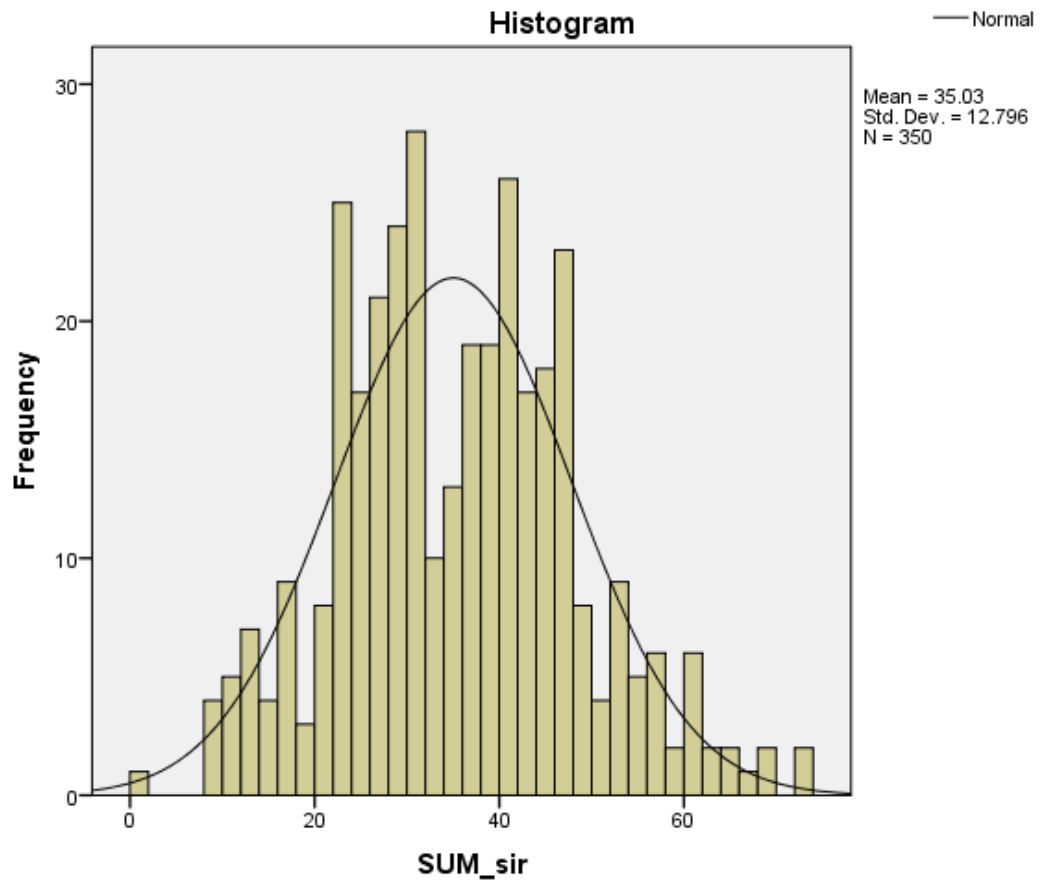
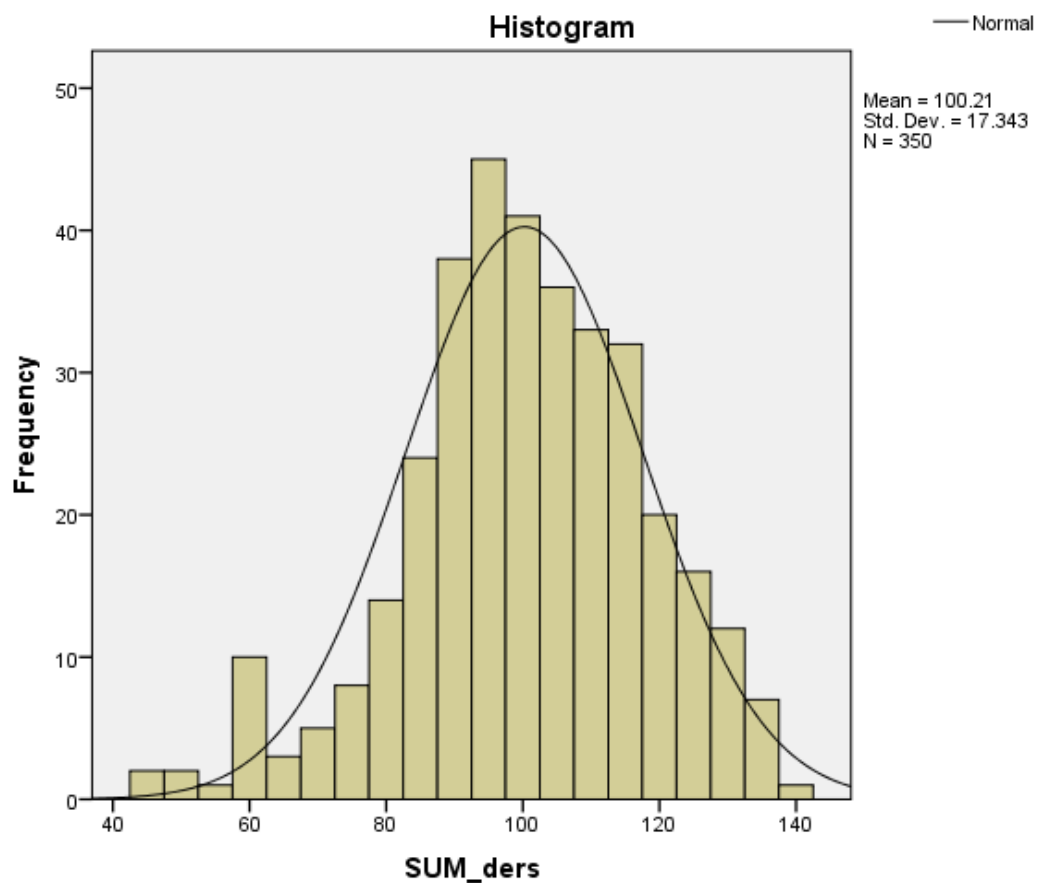


Figure 5
Histogram of Difficulties in Emotional Regulation Scale



The mean score indicates that the participants comparatively score high on Difficulties in Emotional Regulation Scale. This indicates that the participants have high difficulties in emotional regulation. The mean on the Saving-Inventory Revised is moderate to high which indicated that the participants experience hoarding behavior. The SD of Saving Inventory-Revised and Difficulties in Emotional Regulation is also high as compared to the rest of the measures indicating variability among responses.

Correlation between Study Variables

To study the relationship between attachment styles (Avoidant, Anxious and Secure), hoarding behavior and emotional regulation, Spearman's Correlation was computed (Table 3).

Table 3

Correlation between Three Types of Attachment Styles, Hoarding Behavior and Emotional Regulation (N= 350)

	Variables	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5
1.	AAS (Av)	350	16.14	5.07	-				
2.	AAS (Ax)	350	14.81	4.78	.47**	-			
3.	AAS (S)	350	15.41	4.34	.38**	.48**	-		
4.	SIR	350	35.03	12.80	.44**	.55**	.44**	-	
5.	DERS	350	100.21	17.34	.41**	.51**	.27**	.55**	-

Note: **Correlation is significant at the 0.01 level (1-tailed)

Table 3 shows that Avoidant subscale of Adult Attachment Scale is significantly positively correlated with Anxious subscale ($r = .47, p < 0.01$) and Secure subscale ($r = .38, p < 0.01$) which means that if avoidant attachment increases anxious and secure attachment also increases. Also, Anxious subscale of Adult Attachment Scale has a significant positive correlation with Secure subscale ($r = .48, p < 0.01$). This suggests that if anxious attachment increases, secure attachment also increases.

Avoidant subscale of Adult Attachment Scale has a moderate positive significant correlation with Saving-Inventory Revised ($r = .44, p < 0.01$). This suggests that as the avoidant attachment increases, the tendency of hoarding behavior also increases. Anxious subscale of Adult Attachment Scale is significantly positively

correlated with Saving-Inventory Revised ($r = .55, p < 0.01$). This suggests that as the anxious attachment increases, the tendency of hoarding behavior also increases. Secure subscale of Adult Attachment Scale is significantly positively correlated Saving-Inventory Revised ($r = .44, p < 0.01$) which suggests that as the secure attachment increases, the tendency of hoarding behavior also increases.

Difficulties in Emotional Regulation Scale has a moderate level of significant positive correlation with Avoidant subscale ($r = .41, p < 0.01$) and Anxious subscale ($r = .51, p < 0.01$) of Adult Attachment Scale whereas low to moderate significant positive correlation with secure subscale of Adult Attachment Scale ($r = .27, p < 0.01$). This indicates that as difficulties in emotional regulation increases, avoidant, anxious and secure attachment also increases. There is also significant positive correlation between Saving-Inventory Revised and Difficulties in Emotional Regulation Scale ($r = .55, p < 0.01$) which indicates that as hoarding tendencies increases difficulties in emotional regulation also increases.

Gender Differences across Study Variables

To compare male participants ($n = 175$) and female participants ($n = 175$) on hoarding behavior, Mann Whitney U test was computed.

Table 4

Difference of Attachment styles, Hoarding Behavior and Emotional regulation Scores in Male and Female (N=350)

	Male		Females		<i>U</i>	<i>z</i>	<i>r</i>	<i>P</i>
	<i>M</i>	<i>Md</i>	<i>M</i>	<i>Md</i>				
AAS(Av)	145.61	14.00	205.39	18.00	10081.50	-5.54	.28	.00
AAS(Ax)	164.41	14.00	186.59	16.00	13371.00	-2.06	.13	.04
AAS(S)	153.53	14.00	197.47	16.00	11467.50	-4.07	.22	.00
SIR	167.14	32.00	183.86	37.00	13850.00	-1.55	.08	.12
DEERS	163.17	98.00	187.83	104.00	13155.00	-2.28	.06	.02

Note: M= Mean, Md= Median, U= Mann-Whitney, z=z score, r= correlation coefficient, p = significant level

Table 4 illustrates that there is no significant differences exist between males and females of hoarding behavior. Cohen's effect size value ($r = .08$) indicates that the significance of difference is of low level. Also, it identifies that there is a significant difference exist between all three attachment styles i.e., Avoidant attachment style, anxious attachment style and secure attachment style with gender ($p < .05$). Females score higher on all three attachment styles. Cohen's effect size value of avoidant attachment style ($r = .28$), anxious attachment style ($r = .13$) and secure attachment style ($r = .22$) indicates low to moderate significance level. The table also illustrates the gender differences in Difficulties in Emotional Regulation Scale showing females with

greater emotional difficulties. Cohen's effect size ($r = .06$) indicates low level of significant difference.

Chapter 4**DISCUSSION**

The main objective of the present study was to explore the relationship between attachment styles, hoarding behavior and emotional regulation among young adults. The second objective of the study was to examine the gender differences between that exist in hoarding behavior.

In the present study, attachment styles were measured by using Adult Attachment Scale (Original Version) developed by Collins & Read (1990) adopted from Hazen & Shaver (1987) and measures three attachment styles, avoidant, anxious and secure with alpha reliability of .66, .65, and .53 respectively (Table 2). Hoarding behavior was measured using Saving Inventory-Revised developed by Randy O Frost (2004). This scale measures certain tendencies of hoarding such as difficulty discarding, excessive acquisition and clutter. The alpha reliability of the scale is .83 which is considered as strong reliability of scale (Table 2). Emotional Regulation was measured by using Difficulties in Emotional Regulation developed by Gratz & Roemer (2004) with alpha reliability of .82 which is also a strong reliability (Table 2).

Current study was completed in phase of data collection, analysis and then documenting results and then followed by discussion and then future implications. In the first step, after not having permission from some universities and collecting data from the universities that allow the study reaches its end. Participants responded well in solving the questionnaire. Since it was a self-reported questionnaire, participants reported it to be lengthy.

In the next step, they study (N=350) was analyzed. During this step, frequencies and percentages for demographic variables for whole sample were obtained to better

understand the sample characteristics (Table 1). Skewness and Kurtosis of the variables were also calculated, results showed acceptable range (+2 to -2) of skewness and Kurtosis of all the measures. (Table 2).

The psychometric properties were checked through descriptive. Spearman's correlation is computed to analyze the relationship between study variables (Table 3). Mann Whitney U test has been performed to check the gender differences (Table 4). Different hypotheses were tested in relation to hoarding behavior.

Regarding hypothesis testing, the hypothesis no. 1 i.e., anxious attachment style is positively correlated with hoarding behavior has been accepted. This indicates that there is evidence from the study to suggest a link between hoarding behavior and an anxious attachment style. Results of the present study are consistent with the previous literature (Kehoe & Egan, 2019; Neave et al., 2016; Liu et al., 2022). The statement implies that there is already research that has looked at the connection between an anxious attachment style and hoarding behavior by making reference to earlier work. The current study's findings add to this body of research by supporting the hypothesis that hoarding behavior is more prevalent in people who have anxious attachment styles.

Moreover, the literature also suggested that early anxious attachments leads to avoidance of human interaction and replace it with establishing a relationship with objects (Grishm et al., 2018). It implies that people with an anxious attachment style may engage in hoarding as a coping mechanism for their anxieties and insecurities. In the event of possible loss or abandonment, hoarding possessions may give people a sense of comfort and security.

Literature also suggests that increase in anxious attachment, increase the inverse relationship between hoarding and perceived social support (Medard & Kellet, 2014).

This means that a decline in perceived social support is therefore more likely to occur in those who have higher degrees of anxious attachment, which may in turn help to either develop or maintain hoarding behavior.

The hypothesis no. 2 i.e., avoidant attachment style has a positive correlation with hoarding behavior showed significant results. The results of the present study are supported by the previous literature that avoidant attachment was positively correlated with hoarding symptoms (Kohoe & Egan, 2019; Liu et al., 2022). People who have an avoidant attachment style may find it difficult to establish and sustain strong relationships, which makes them more dependent on material possessions for security and comfort. The emotional void left by a lack of secure attachments may be filled by hoarding behavior. In a previous study, people with hoarding behavior outlined greater level of avoidant and anxious attachment (Medard & Kellet, 2014). Both types of attachment are seen as insecure since they might make it difficult to establish and maintain wholesome relationships. According to the study, people who hoard are more likely to have higher degrees of both avoidant and anxious attachment. There could be a number of causes for this connection. An overwhelming need to keep things for emotional reasons and trouble letting go of possessions are frequently linked to hoarding behavior. These problems with letting go and the attachment to objects may be symptoms of deeper attachment-related problems.

Also, literature also suggested that measure of adult attachment and object attachment was significantly related to hoarding behaviors and cognitive activities (Neave et al., 2016). The results suggest that hoarding behaviors may be more common in people with insecure or problematic adult attachment patterns, such as anxious or avoidant attachment. For instance, people with anxious attachment may hoard things because they use their possessions as a form of emotional security and reassurance.

Similar to those with avoidant attachment, those who struggle to build deep relationships may replace their things for social interactions.

Particularly object attachment demonstrates the emotional significance people have to their possessions. Strong emotional bonds with their possessions may be felt by those with stronger object attachment, who may give them personal significance and purpose. People may find it difficult for them to let go of objects because of their emotional connection, which can lead to hoarding tendencies (Yap & Grisham, 2020). Furthermore, literature indicates a connection between cognitive processes including decision-making and possessions-related attitudes and hoarding behaviors (Neave et al., 2016) Hoarding behaviors may be influenced by cognitive variables such excessive acquisition beliefs, perfectionism, and erroneous ideas about the utility or sentimental value of goods. Individuals with particular attachment patterns may be more likely to display maladaptive cognitive processes connected to hoarding, which can affect these cognitive tasks.

These findings emphasize the significance of taking into account the psychological and emotional components that underlie hoarding behavior. Hoarding may be influenced by internal elements as well, such as attachment styles and emotional regulation strategies, in addition to external factors like excessive acquisition of objects or difficulties discarding those objects.

Regarding hypothesis no.3 i.e., secure attachment style is negatively correlated with hoarding behavior, the study did not find evidence to support the hypothesized negative correlation between secure attachment and hoarding behavior (Medard & Kellet, 2014; Huang et al., 2022). The possible explanations could be the characteristics of sample or methodological limitations. There's a chance that the study participants

didn't exhibit an adequate representation of secure attachment styles. The results could have been influenced by the sample's increased proportion of those with insecure attachment styles, such as anxious or avoidant attachment. Finding a significant negative connection between hoarding behavior and secure attachment types would be difficult if there were few participants with this attachment style.

However, there are certain studies that revealed the inconsistency of relationship such as a study confirms that material possessions are the source of security and individuals show secure attachment with hoarding (Malik & Kamal, 2020). These people might find comfort, security, and emotional support in their possessions, similar to what secure attachment relationships typically offer. As a result, people with hoarding tendencies may develop an attachment to their possessions as a way to compensate for perceived interpersonal deficits or insecurities. This viewpoint challenges the conventional understanding that a secure attachment is solely linked to emotionally stable relationships.

It's important to keep in mind that the relationship between attachment style and hoarding behavior is complicated and multifaceted, even though Malik and Kamal's (2020) study's findings offer an alternative viewpoint. The inconsistent findings across studies may be attributed to a number of variables, such as individual differences, cultural influences, and psychological processes.

The hypothesis no. 4 i.e., Emotional regulation difficulties is positively correlated with hoarding behavior has been supported by the existing evidence (Taylor et al., 2018; Grisham et al., 2018). The literature also outlined the moderate relationship of emotional dysregulation with hoarding symptoms with $r = 0.43$ (Akbari et al., 2022) which finds the exact similarity with the present study findings with $r = .55$ (Table 3).

It implies that people who have trouble controlling their emotions may be more prone to engage in hoarding behavior as a maladaptive coping method. Possession hoarding may offer a sense of stability and comfort, acting as a way to control intense emotions. Previous study also finds out that strength of the association between hoarding and emotional regulation differed by the type of hoarding scale used in the study (Akbari et al., 2022).

Previous literature also suggested that individuals with hoarding behavior depends on objects for emotional regulation and attachment (Phung et al., 2015). The Phung et al. (2015) study adds validity to the idea that people with hoarding tendencies may rely on objects for emotional regulation and attachment. Their research demonstrates the importance of possessions as a source of emotional support and the use of objects as a coping strategy to manage negative emotions. To better understand the mechanisms and underlying causes of this relationship and to create interventions that target the emotional regulation skills of people who exhibit hoarding behavior, more research is necessary.

Regarding the hypothesis no.5 i.e., Emotional regulation difficulties is negatively correlated with Secure attachment style and positively correlated with Avoidant and Anxious attachment styles is partially in lined with literature that higher attachment anxiety and attachment avoidance are related with lower emotional regulation (Huang et al., 2022; Kehoe & Egan, 2019). These results suggest that emotional regulation difficulties may serve as a common underlying factor contributing to the development and maintenance of both anxious and avoidant attachment styles. Current study also find out the positive correlation of secure attachment style with emotional regulation difficulties which is inconsistent with literature findings. The

possible explanation could be sample characteristics and cultural diversity (Huang et al., 2022; Ashrafi et al., 2021; Malik & Kamal, 2022; Polek, 2008).

These previous studies also explored the relationship between secure attachment style and emotional regulation and driving varying results that may be due to sample characteristics and varied culture.

The relationship between attachment style and emotional regulation difficulties can be significantly impacted by sample characteristics like age, gender, and clinical status. It's possible that the participants in this study had special traits or life experiences that affected the positive correlation that was found. They might, for instance, have belonged to a distinct demographic or clinical group from those in earlier studies.

The importance of cultural diversity should also be taken into account. Different cultural contexts can influence how people form attachments and develop coping mechanisms. A particular culture's societal interaction customs, norms, and values may have an impact on how people with secure attachment styles manage their emotions. Therefore, the discrepancy between the study findings and earlier literature could be explained by cultural differences in the study sample.

This also suggests that any factor that moderate or mediate this association. The relationship between attachment style and emotional regulation difficulties may be moderated or mediated by other variables, such as personality traits, coping mechanisms, or social support. These variables may have interacted with attachment style and influenced the observed positive correlation with emotional regulation difficulties in the present study.

The testing of hypothesis no.6 i.e., Females are more likely to hoard than males was based on the fact that this hypothesis was made on the basis of existing literature

that suggested females have higher hoarding tendencies (Liu & Ma, 2019; Neave et al., 2016; Prosen & Vitulic, 2016) took sample of female ratio more than males i.e., 95% females (Prosen & Vitulic, 2016). A study by Neave and his colleagues in 2016 has total sample of 283 participants out of which 210 were females. Also, the study by Liu and Ma in 2019 took sample of 463 college students out of which 344 were female participants. There also exists some previous literature that suggests there is no significant gender differences exist in the displaying of hoarding behavior (Levy et al., 2010; Cath et al., 2017). This study suggest that both gender may exhibit hoarding tendencies to an equal extent, indicating that gender may not be a reliable predictor of hoarding behavior inclined with previous literature. These results cast doubt on the idea that gender-related factors are the significant factors of hoarding behavior.

Previous literature also reported higher tendencies of hoarding in men (Dozier et al., 2015). It is important to note that while the data implies that men have stronger hoarding tendencies, it does not necessarily follow that hoarding is a trait that only exists in one gender. Both men and women can exhibit hoarding behavior, and each gender exhibits it differently. Social and cultural variables, diagnostic biases, reporting and help-seeking behaviors, as well as sampling and research biases, are all potential causes for this difference in gender. In order to fully understand the complicated nature of gender differences in hoarding tendencies, it is critical to understand that these explanations are based on broad patterns.

Regarding hypothesis no. 7 i.e., there is a significant difference exist between males and females in three attachment styles is partially consistent with the previous literature as it states that there are gender differences in attachment styles that can be seen as early as middle childhood and can persist into adulthood. There is proof that there are gender differences in attachment, including cross-cultural variation and

developmental patterns. Previous studies also showed that boys and girls in middle childhood have quite different attachment styles, with boys being higher in avoidance and girls being higher in preoccupation/ambivalence (Giudice, 2019). Literature also suggest that dismissive avoiders were more likely to be men than women, while terrified avoiders were more likely to be women but suggested no gender differences on Hazan and Shaver's measure (Brennan et al., 1991) which is inconsistent with present study findings as the study suggests females rather than males being higher in avoidant, anxious and secure attachment style.

Regarding hypothesis no. 8 i.e., males and females also differ in displaying emotional regulation difficulties and strategies which is in lined with the previous literature (McRae et al., 2008; Sanchis et al., 2020; Trives et al., 2016; Kwon et al., 2013). Previous literature also points out that Emotion dysregulation is more likely to predict anxiety in girls than in boys, which has not been previously demonstrated, and distinct types of emotion regulation issues account for anxiety in both girls and boys. Also, women are more likely to up-regulate their emotional reactions to unpleasant stimuli and provides evidence how susceptible women are to developing anxiety problems (Bender et al., 2012; Bardeen & Stevens, 2015). This finding suggest that women as compare to men might have higher tendency to intensify their emotional responses in situations that they perceived as negative or aversive. However, it may be the case that individual differences within the genders are significant and not all males and females conform to this typical pattern. Emotional regulation is a complex multifaceted process which might get affected by various biological, social and psychological factors.

The present study highlighted that Females face more issues with emotional regulation strategies using Difficulties in Emotional Regulation Scale which is

inconsistent with previous findings as they identified men performed much better on expressive suppression than women, but there were no differences between the sexes on cognitive reappraisal in the Emotional Regulation Questionnaire but there is no sex difference in Difficulties in Emotional Regulation Scale scores (Stellern et al., 2023).

Conclusion

The present study indicates that individuals with anxious and avoidant attachment styles may rely on material possessions for emotional comfort and use hoarding as a coping mechanism. Also, individuals who struggle to control their emotions engage in hoarding which serves as a sense of stability and comfort, a way to manage the intense emotions and develop secure attachment to their possessions finding comfort and emotional support to their belongings. This study challenges the assumption that gender is a significant predictor of hoarding behavior, as it found no significance difference between males and females. However, gender differences were observed in attachment styles and emotional regulation difficulties suggesting variations in attachment patterns and emotional regulation difficulties between males and females.

Limitations and Suggestions

The sample of the study was relatively small and was not the representative of the whole population. This study also lack the factor of generalizability as the sample was taken from universities of twin cities of Pakistan. The data was collected through self-report which may result in social desirability. The present study employed a cross-sectional design, limiting the ability to establish causality or temporal precedence of attachment style, hoarding behavior and emotional regulation difficulties.

This study only determined the role that emotional regulation plays between attachment styles and hoarding but that would not be able to identify the root cause of the developed attachment in early childhood and how the particular attachment style leads towards hoarding. Any experience or life stressors that cause people to hoard and then developed a disruption in emotional regulation will be unidentified. This research haven't identified prevalence of hoarding among indigenous culture, the comorbidities that exist and affecting the behavior. Any maladaptive behavior that lead to disorder may have a biological cause (either physical or inherited). This study won't be able to identify any kind of heritability of hoarding behavior. This study also did not able to find any other variable that play mediating role in defining the relationship between the study variables. Cath and his colleagues in 2017 found that hoarding severity was predictably rise with age in a sample of 15,194 persons, starting around the age of 30-35, with people over 65 having the greatest prevalence rates. As the study aims to find the relationship of hoarding behavior not the hoarding disorder. The study did not include vast age range to identify the difference between the demographics of age in identifying the relationship between attachment styles, hoarding and difficulties in emotional regulation.

The future researcher should work on identifying the root cause of the attachment style and hoarding behavior. There is a need to assess the degree to which the attachment styles are linked and the level of emotional regulation difficulties in non-clinical samples. Future studies should add variables like social support, self-discrepancy and identify the relationship of these variables with hoarding. They can also assess how low social support may play role in hoarders. Future studies can examine which attachment style is helpful and will play a role to determine the adaptive strategy of emotional regulation will be used by an individual. As recent literature

suggest that anthropomorphism acts as a mediating factor in hoarding behavior and its association with attachment anxiety. Future studies should be conducted in need to examine the other possible mediating factors in the association of hoarding behavior and attachment styles. Future studies could consider investigating other factors, such as personality traits, cognitive processes, or cultural influences that may interact with gender to influence hoarding behavior using larger or more diverse samples. Longitudinal studies could also provide insights into the stability of gender differences over time and shed light on possible life-course and developmental factors that affect hoarding tendencies, attachment styles and emotional regulation in particular genders. Subscale level gender differences could be examined in future studies which provide greater insight into the patterns of gender among hoarding behavior, attachment styles and emotional regulation.

For the future research, sample size should be increased or to replicate the findings in more diverse samples to ensure generalizability. Experimental study can also be designed to study the effect of attachment styles and emotional regulation difficulties on increasing or decreasing hoarding tendencies. Longitudinal studies that track individuals over time could provide more insight into the directionality of the relationship. Other socio-demographic characteristics such as monthly family income, socioeconomic status, family system, birth order, comparison across urban and rural strata should be incorporated in future studies. Future study can more fully explain hoarding behavior and its relationships with numerous individual, familial, and environmental aspects by taking these socio-demographic traits into account. This larger perspective can aid in the creation of more thorough theories and focused interventions for those who have hoarding tendencies.

Implications of the Study

This study identified the particular attachment style linked with hoarding and what kind of significant relationship exist between the two. The role emotional regulation can have between attachment styles and hoarding is explored. Most studies suggest that females reported higher level of hoarding during early adulthood stage but in some studies for all symptoms, initially males said there was more clutter, and hoarding intensity increased more slowly for men. (Dozier et. al., 2015). This study identified the gender difference that exist in exhibiting hoarding behavior, possessing attachment styles and facing emotional regulation difficulties. It found that if the sample of both males and females are equal, females might score high on the tendencies but there is no significant differences exist between the hoarding behaviors, but in case of attachment styles and emotional regulation difficulties, there exist a significant difference which along with personality traits, cultural variations and development patterns may have an impact on intervention and treatment plans that target attachment-related issues and enhance emotion regulation abilities. The majority of studies have discovered a strong positive association between avoidant attachment and anxious attachment and problems or disorders related to emotion regulation. However, some researches have revealed that people who exhibit greater levels of avoidant attachment may not have issues with emotion regulation (Huang et. al., 2022). This studied identified that both avoidant and anxious attachment has a significant link positive relation to emotional regulation difficulties in the indigenous culture.

Understanding the role of attachment styles in hoarding behavior may have an impact on intervention and treatment plans that target attachment-related issues and enhance emotion regulation abilities. These results highlight the significance of taking emotional regulation issues into account when assessing and treating hoarding

behavior. Interventions that put an emphasis on developing emotional regulation abilities and offering different coping mechanisms may be helpful in lowering hoarding tendencies and enhancing general wellbeing.

References

- Akbari, M., Seydavi, M., Mohammadkhani, S., Turchmanovych, N., Chasson, G. S., Majlesi, N., & Askari, T. (2022). Emotion dysregulation and hoarding symptoms: A systematic review and meta-analysis. *Journal of Clinical Psychology, 78*(7), 1341-1353.
- Akıncı, M. A., Turan, B., Esin, İ. S., & Dursun, O. B. (2022). Prevalence and correlates of hoarding behavior and hoarding disorder in children and adolescents. *European Child & Adolescent Psychiatry, 31*(10), 1623-1634.
- Ardenghi, S., Rampoldi, G., Bani, M., & Strepparava, M. G. (2020). Attachment styles as predictors of self-reported empathy in medical students during pre-clinical years. *Patient education and counseling, 103*(5), 965-970.
- Ashrafi, E., Karami, J., & Nasori, M. (2021). The Mediating Role of Difficulties in Emotion Regulation in the Correlation between Attachment Styles and Childhood Trauma With Self-Harming Behaviors in Adolescents. *Journal of Kermanshah University of Medical Sciences, 25*(4).
- Bardeen, J. R., & Stevens, E. N. (2015). Sex differences in the indirect effects of cognitive processes on anxiety through emotion regulation difficulties. *Personality and individual differences, 81*, 180-187.
- Bender, P. K., Reinholdt-Dunne, M. L., Esbjørn, B. H., & Pons, F. (2012). Emotion dysregulation and anxiety in children and adolescents: Gender differences. *Personality and Individual Differences, 53*(3), 284-288.
- Brennan, K. A., Shaver, P. R., & Tobey, A. E. (1991). Attachment styles, gender and parental problem drinking. *Journal of social and personal relationships, 8*(4), 451-466.

- Burgess, A. M., Graves, L. M., & Frost, R. O. (2018). My possessions need me: Anthropomorphism and hoarding. *Scandinavian Journal of Psychology, 59*(3), 340-348.
- Cann, A., Norman, M. A., Welbourne, J. L., & Calhoun, L. G. (2008). Attachment styles, conflict styles and humour styles: Interrelationships and associations with relationship satisfaction. *European Journal of Personality: Published for the European Association of Personality Psychology, 22*(2), 131-146.
- Cath, D. C., Nizar, K., Boomsma, D., & Mathews, C. A. (2017). Age-specific prevalence of hoarding and obsessive compulsive disorder: a population-based study. *The American Journal of Geriatric Psychiatry, 25*(3), 245-255.
- Cherrier, H., & Ponnor, T. (2010). A study of hoarding behavior and attachment to material possessions. *Qualitative Market Research: An International Journal*.
- Coles, M. E., Frost, R. O., Heimberg, R. G., & Steketee, G. (2003). Hoarding behaviors in a large college sample. *Behaviour research and therapy, 41*(2), 179-194.
- Crone, C., Kwok, C., Chau, V., & Norberg, M. M. (2019). Applying attachment theory to indecisiveness in hoarding disorder. *Psychiatry research, 273*, 318-324.
- Danet, M., & Secouet, D. (2018). Insecure attachment as a factor in hoarding behaviors in a non-clinical sample of women. *Psychiatry Research, 270*, 286-292.
- De la Cruz, L. F., Landau, D., Iervolino, A. C., Santo, S., Pertusa, A., Singh, S., & Mataix-Cols, D. (2013). Experiential avoidance and emotion regulation difficulties in hoarding disorder. *Journal of anxiety disorders, 27*(2), 204-209.
- Del Giudice, M. (2019). Sex differences in attachment styles. *Current Opinion in Psychology, 25*, 1-5.

- Dozier, M. E., Porter, B., & Ayers, C. R. (2016). Age of onset and progression of hoarding symptoms in older adults with hoarding disorder. *Aging & mental health, 20*(7), 736-742.
- Emran, A., Iqbal, N., & Dar, K. A. (2023). Attachment orientation and depression: A moderated mediation model of self-silencing and gender differences. *International Journal of Social Psychiatry, 69*(1), 173-181..
- Ford, B. Q., & Gross, J. J. (2019). Why beliefs about emotion matter: An emotion-regulation perspective. *Current Directions in Psychological Science, 28*(1), 74-81.
- Frost, R. O., & Gross, R. C. (1993). The hoarding of possessions. *Behaviour research and therapy, 31*(4), 367-381.
- Frost, R. O., Ong, C., Steketee, G., & Tolin, D. F. (2016). Behavioral and emotional consequences of thought listing versus cognitive restructuring during discarding decisions in hoarding disorder. *Behaviour Research and Therapy, 85*, 13-22.
- Furby, L. (1978). Possessions: Toward a theory of their meaning and function throughout the life cycle. *Life-span development and behavior*.
- Givon, E., Berkovich, R., Oz-Cohen, E., Rubinstein, K., Singer-Landau, E., Udelsman-Danieli, G., & Meiran, N. (2023). Are women truly “more emotional” than men? Sex differences in an indirect model-based measure of emotional feelings. *Current Psychology, 1-14*.
- Goubet, K. E., & Chrysikou, E. G. (2019). Emotion regulation flexibility: Gender differences in context sensitivity and repertoire. *Frontiers in psychology, 10*, 935.
- Grisham, J. R., Martyn, C., Kerin, F., Baldwin, P. A., & Norberg, M. M. (2018). Interpersonal functioning in hoarding disorder: An examination of attachment

- styles and emotion regulation in response to interpersonal stress. *Journal of obsessive-compulsive and related disorders*, 16, 43-49.
- Güçlü, O., Şenormancı, Ö., Şenormancı, G., & Köktürk, F. (2017). Gender differences in romantic jealousy and attachment styles. *Psychiatry and Clinical Psychopharmacology*, 27(4), 359-365.
- Gugová, G. R., & Heretik, A. (2011). Gender differences in attachment styles using Slovak version of the Experiences in Close Relationships–Revised (ECR-R). *Acta Educationis Generalis*, 1(2), 29-36.
- Harley, J. M., Pekrun, R., Taxer, J. L., & Gross, J. J. (2019). Emotion regulation in achievement situations: An integrated model. *Educational Psychologist*, 54(2), 106-126.
- HUANG, Y., SHI, P., & CHEN, X. (2022). The effect of attachment on the process of emotional regulation. *Advances in Psychological Science*, 30(1), 77.
- Inam, A., Akhtar, Z., Kashif, A., & Nadeem, H. (2021). Estimates and demographic correlates of hoarding disorder in non-clinical sample in Pakistan. *Age*, 42, 13-007.
- Kararımkak, Ö., & Duran, N. O. (2008). Gender differences in attachment styles regarding conflict handling behaviors among Turkish late adolescents. *International Journal for the Advancement of Counselling*, 30, 220-234.
- Kehoe, E., & Egan, J. (2019). Interpersonal attachment insecurity and emotional attachment to possessions partly mediate the relationship between childhood trauma and hoarding symptoms in a non-clinical sample. *Journal of Obsessive-Compulsive and Related Disorders*, 21, 37-45.

- Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment style, gender, and relationship stability: a longitudinal analysis. *Journal of personality and social psychology, 66*(3), 502.
- Kwon, H., Yoon, K. L., Joormann, J., & Kwon, J. H. (2013). Cultural and gender differences in emotion regulation: Relation to depression. *Cognition & Emotion, 27*(5), 769-782.
- Levy, K. N., Ellison, W. D., Scott, L. N., & Bernecker, S. L. (2011). Attachment style. *Journal of clinical psychology, 67*(2), 193-203.
- Liu, C., & Ma, J. L. (2019). Adult attachment style, emotion regulation, and social networking sites addiction. *Frontiers in psychology, 10*, 2352. Liu, C., & Ma, J. L. (2019). Adult attachment style, emotion regulation, and social networking sites addiction. *Frontiers in psychology, 10*, 2352.
- Liu, X., Cai, Y., Tao, Y., Hou, W., Niu, H., Liu, X., & Li, Y. (2023). Association between attachment and hoarding behavior: Mediation of anthropomorphism and moderation of hoarding beliefs among Chinese adolescents. *Psych Journal, 12*(1), 128-136.
- Malik, F., & Kamal, A. (2020). Perception of Hoarding Behavior Among General Population of Rawalpindi and Islamabad Cities Of Pakistan: An Exploratory Qualitative Inquiry. *Gomal Journal of Medical Sciences, 18*(3).
- Mathes, B. M., Timpano, K. R., Raines, A. M., & Schmidt, N. B. (2020). Attachment theory and hoarding disorder: A review and theoretical integration. *Behaviour research and therapy, 125*, 103549.
- Matsuoka, N., Uji, M., Hiramura, H., Chen, Z., Shikai, N., Kishida, Y., & Kitamura, T. (2006). Adolescents' attachment style and early experiences: A gender difference. *Archives of women's mental health, 9*, 23-29.

- McRae, K., Ochsner, K. N., Mauss, I. B., Gabrieli, J. J., & Gross, J. J. (2008). Gender differences in emotion regulation: An fMRI study of cognitive reappraisal. *Group processes & intergroup relations, 11*(2), 143-162.
- Medard, E., & Kellett, S. (2014). The role of adult attachment and social support in hoarding disorder. *Behavioural and cognitive psychotherapy, 42*(5), 629-633.
- Mikulincer, M., & Shaver, P. R. (2019). Attachment orientations and emotion regulation. *Current opinion in psychology, 25*, 6-10.
- Muroff, J., Bratitotis, C., & Steketee, G. (2011). Treatment for hoarding behaviors: A review of the evidence. *Clinical Social Work Journal, 39*, 406-423.
- Neave, N., Tyson, H., McInnes, L., & Hamilton, C. (2016). The role of attachment style and anthropomorphism in predicting hoarding behaviors in a non-clinical sample. *Personality and Individual Differences, 99*, 33-37.
- Neumann, A., van Lier, P. A., Gratz, K. L., & Koot, H. M. (2010). Multidimensional assessment of emotion regulation difficulties in adolescents using the difficulties in emotion regulation scale. *Assessment, 17*(1), 138-149.
- Partido, B. B., & Owen, J. (2020). Relationship between emotional intelligence, stress, and burnout among dental hygiene students. *Journal of dental education, 84*(8), 864-870.
- Phung, P. J., Moulding, R., Taylor, J. K., & Nedeljkovic, M. (2015). Emotional regulation, attachment to possessions and hoarding symptoms. *Scandinavian Journal of Psychology, 56*(5), 573-581.
- Polek, E. (2007). Attachment in cultural context. *Nederland. Ubbo-Emmius Foundation of the University Groningen [PhD Thesis]*.

- Postlethwaite, A., Kellett, S., & Mataix-Cols, D. (2019). Prevalence of hoarding disorder: A systematic review and meta-analysis. *Journal of affective disorders, 256*, 309-316.
- Prosen, S., & Vitulić, H. S. (2016). Emotion regulation and coping strategies in pedagogical students with different attachment styles. *Japanese Psychological Research, 58*(4), 355-366.
- Ridge, S. R., & Feeney, J. A. (1998). Relationship history and relationship attitudes in gay males and lesbians: Attachment style and gender differences. *Australian and New Zealand journal of psychiatry, 32*(6), 848-859.
- Romer, N., Ravitch, N. K., Tom, K., Merrell, K. W., & Wesley, K. L. (2011). Gender differences in positive social–emotional functioning. *Psychology in the Schools, 48*(10), 958-970.
- Salehi, E., Fallahchai, R., & Griffiths, M. (2023). Online addictions among adolescents and young adults in Iran: The role of attachment styles and gender. *Social Science Computer Review, 41*(2), 554-572
- Sanchis-Sanchis, A., Grau, M. D., Moliner, A. R., & Morales-Murillo, C. P. (2020). Effects of age and gender in emotion regulation of children and adolescents. *Frontiers in psychology, 11*, 946.
- Spencer, C. M., Keilholtz, B. M., & Stith, S. M. (2021). The association between attachment styles and physical intimate partner violence perpetration and victimization: A meta-analysis. *Family process, 60*(1), 270-284.
- Stellern, J., Xiao, K. B., Grennell, E., Sanches, M., Gowin, J. L., & Sloan, M. E. (2023). Emotion regulation in substance use disorders: a systematic review and meta-analysis. *Addiction, 118*(1), 30-47.

- Taylor, J. K., Moulding, R., & Nedeljkovic, M. (2018). Emotion regulation and hoarding symptoms. *Journal of Obsessive-Compulsive and Related Disorders, 18*, 86-97.
- Tekin, M. S., Özdemir, N., & Şahin, Ş. K. (2021). Effect of attachment styles, emotional regulation difficulty and mindful attention levels on treatment motivation in patients with substance use disorder. *Journal of Substance Use, 26*(4), 441-448.
- Thompson, R. A. (1991). Emotional regulation and emotional development. *Educational psychology review, 3*, 269-307.
- Trives, J. J. R., Bravo, B. N., Postigo, J. M. L., Segura, L. R., & Watkins, E. (2016). Age and gender differences in emotion regulation strategies: Autobiographical memory, rumination, problem solving and distraction. *The Spanish journal of psychology, 19*, E43.
- Weinberg, M. K., Tronick, E. Z., Cohn, J. F., & Olson, K. L. (1999). Gender differences in emotional expressivity and self-regulation during early infancy. *Developmental psychology, 35*(1), 175.
- Yap, K., & Grisham, J. R. (2020). Object attachment and emotions in hoarding disorder. *Comprehensive Psychiatry, 100*, 152179.
- Zakhour, M., Haddad, C., Salameh, P., Sacre, H., Hallit, R., Akel, M., & Obeid, S. (2021). Association Between Adult Attachment Styles and Disordered Eating Among a Sample of Lebanese Adults.
- Zhao, X., Li, X., Song, Y., Li, C., & Shi, W. (2020). Autistic traits and emotional experiences in Chinese college students: Mediating role of emotional regulation and sex differences. *Research in Autism Spectrum Disorders, 77*, 101607.

Appendices

Support Letter



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Ref. CUST/IBD/PSY/Thesis-381

February 21, 2023

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Mouj-e-Sehar, registration number **BSP193044** is a bona fide student in BS Psychology program at this University from Fall 2019 till date. In partial fulfillment of the degree, she is conducting research on "Relationship between attachment styles, hoarding behavior and emotional regulation among young adults". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani
Head, Department of Psychology
Ph No. 111-555-666 Ext: 178
sabahat.haqqani@cust.edu.pk

Consent form

I am Mouj-e-Sehar, a student of BS Psychology at Capital University of Science and Technology, Islamabad. I'm currently researching "The Relationship between attachment styles, hoarding behavior, and emotional regulation among young adults". Your generous participation in this study is required. You will be asked to fill out the Questionnaires provided to you. Your identity will be kept confidential and personal information will not be shared in the report. Your participation will be voluntary and you can withdraw at any time. If you have decided to take part in this study, kindly sign the consent form.

Signature of the Participant: _____ Date: _____

Please feel free to contact me if you have questions about the study

Email at: bsp193044@cust.pk

Thank you

Mouj-e-Sehar

Demographic Sheet

Gender

Male Female

Age in years (18-24)* _____

Education System

(1) Private (2) Public/Government (3) Semi-government

Marital Status

(1) Single (2) Married (3) Engaged (4) In a relationship (5)
Divorced

Monthly family income in PKR (approx.)

(1) Below 35,000 (2) 35,000-70,000 (3) 70,000-100,000 (4)
Above 100,000

Employment status

(1) Full-time (2) Part-time (3) Self-employed (4) Unemployed (5)
Student

Father Alive Yes/No

Father's Occupation: _____

Mother Alive Yes/No

Mother's Occupation: _____

Family System

- Joint
- Nuclear
- Single Parent

No. of Siblings (except you): _____

Your Birth order: _____

Hoarding Behavior Questionnaire

For each question below, circle the number that corresponds most closely to your experience DURING THE PAST WEEK

0 **1** **2** **3** **4**
 None A little A moderate amount Most/ Much Almost All/Complete

#	Questions	0	1	2	3	4
1	How much of the living area in your home is cluttered with possessions? (Consider the amount of clutter in your kitchen, living room, dining room, hallways, bedrooms, bathrooms, or other rooms).					
2	How much control do you have over your urges to acquire possessions?					
3	How much of your home does clutter prevent you from using?					
4	How much control do you have over your urges to save possessions?					
5	How much of your home is difficult to walk through because of clutter?					
6	To what extent do you have difficulty throwing things away?					
7	How distressing do you find the task of throwing things away?					
8	To what extent do you have so many things that your room(s) are cluttered?					
9	How distressed or uncomfortable would you feel if you could not acquire something you wanted?					
10	How much does clutter in your home interfere with your social work or everyday functioning? Think about things that you don't do because of clutter.					
11	How strong is your urge to buy or acquire free things for which you have no immediate use?					

For each question below, circle the number that corresponds most closely to your experience DURING THE PAST WEEK

0 **1** **2** **3** **4**
 None A little A moderate amount Most/ Much Almost All/Complete

#	Questions	0	1	2	3	4
12	To what extent does clutter in your home cause you distress?					
13	How strong is your urge to save something you know you may never use?					
14	How upset or distressed do you feel about your acquiring habits?					
15	To what extent do you feel unable to control the clutter in your home?					
16	To what extent has your saving or compulsive buying resulted in financial difficulties for you?					
17	How often do you avoid trying to discard possessions because it is too stressful or time-consuming?					
18	How often do you feel compelled to acquire something you see? e.g., when shopping or offered free things?					
19	How often do you decide to keep things you do not need and have little space for?					
20	How frequently does clutter in your home prevent you from inviting people to visit?					
21	How often do you actually buy (or acquire for free) things for which you have no immediate use or need?					
22	To what extent does the clutter in your home prevent you from using parts of your home for their intended purpose? For example, cooking, using furniture, washing dishes, cleaning, etc.					
23	How often are you unable to discard a possession you would like to get rid of?					



Request permission for using Saving Inventory-Revised(SI-R)



BSP193044 - M... Sun 11/13/2022 9:29 PM
Respected Mr. Randy O. Frost I am an und...



You forwarded this message on Mon
12/5/2022 12:30 AM



Randy Frost



To: BSP193044 - MOUJ-E- SEHAR
Sun 11/13/2022 10:33 PM

Dear Mouj-e-Sehar,

You may have my permission to use the Saving Inventory Revised for your research. Good luck with your project.

Sincerely,
Randy Frost



Reply




Request permission for using Revised Adult Attachment Scale



BSP193044 - ... Mon 3/27/2023 10:40 PM
Respected Mr. Stephen J. Read, I am an u...



Stephen Read 

To: BSP193044 - MOUJ-E- SEHAR

Tue 3/28/2023 5:10 AM



Adult Attachment Scale
DOC - 58 KB

You have my permission to use the scale. I have attached the most recent version of it that I have.
Best, Dr. Read

Stephen J. Read, Mendel B. Silberberg Professor of
Social Psychology
Department of Psychology
University of Southern California
Los Angeles, CA 90089-1061



Reply

Difficulties in Emotional Regulation Questionnaire

Please indicate how often the following statements apply to you by writing the appropriate number from the scale below on the line beside each item:

1-----2-----3-----4-----5
 almost never sometimes about half the time most of the time almost always
 (0-10%) (11-35%) (36-65%) (66-90%) (91-100%)

#	Questions	1	2	3	4	5
1	I am clear about my feelings.					
2	I pay attention to how I feel.					
3	I experience my emotions as overwhelming and out of control.					
4	I have no idea how I am feeling.					
5	I have difficulty making sense out of my feelings.					
6	I am attentive to my feelings.					
7	I know exactly how I am feeling.					
8	I care about what I am feeling.					
9	I am confused about how I feel.					
10	When I'm upset, I acknowledge my emotions.					
11	When I'm upset, I become angry with myself for feeling that way.					
12	When I'm upset, I become embarrassed for feeling that way.					
13	When I'm upset, I have difficulty getting work done.					
14	When I'm upset, I become out of control.					
15	When I'm upset, I believe that I will remain that way for a long time.					
16	When I'm upset, I believe that I'll end up feeling very depressed.					
17	When I'm upset, I believe that my feelings are valid and important.					
18	When I'm upset, I have difficulty focusing on other things.					

1-----2-----3-----4-----5
almost never sometimes about half the time most of the time almost always
(0-10%) (11-35%) (36-65%) (66-90%) (91-100%)

#	Questions	1	2	3	4	5
19	When I'm upset, I feel out of control.					
20	When I'm upset, I can still get things done.					
21	When I'm upset, I feel ashamed with myself for feeling that way.					
22	When I'm upset, I know that I can find a way to eventually feel better.					
23	When I'm upset, I feel like I am weak.					
24	When I'm upset, I feel like I can remain in control of my behaviors.					
25	When I'm upset, I feel guilty for feeling that way.					
26	When I'm upset, I have difficulty concentrating.					
27	When I'm upset, I have difficulty controlling my behaviors.					
28	When I'm upset, I believe that there is nothing I can do to make myself feel better.					
29	When I'm upset, I become irritated with myself for feeling that way.					
30	When I'm upset, I start to feel very bad about myself.					
31	When I'm upset, I believe that wallowing in it is all I can do.					
32	When I'm upset, I lose control over my behaviors.					
33	When I'm upset, I have difficulty thinking about anything else.					
34	When I'm upset, I take time to figure out what I'm really feeling.					
35	When I'm upset, it takes me a long time to feel better.					
36	When I'm upset, my emotions feel overwhelming.					



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Best,

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