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**Mentalization, Attachment, and Quality of Emerging Adults' Relationships.**

A Thesis Submitted by

Mai K. EL Ghannam

To the Department of Psychology, American university in Cairo

In partial fulfillment of the requirements for  
the degree of Master of Arts in Counseling Psychology

Under the supervision of Dr. Irene Strasser

September 2021

### **Dedication**

This thesis is dedicated to the soul that showered me unconditional love and acceptance of my dearest uncle and second father, "**Boda**"(may Allah mercy be upon him).

## Acknowledgments

Firstly, I would like to express my gratitude to my thesis supervisor **Dr. Irene Strasser** for her dedicated support and understanding through the fantastic journey and learning experience. I would also like to thank the supportive committee members, **Dr. Heba kotb and Dr. Ulrike Sirsch**, for their time and efforts; I learned from each one of you. I want to further express my gratefulness to two professors whom without their belief in me and the ongoing support, I couldn't have reached this phase **Dr. Yasmine Saleh and Dr. Carie Forden**. I want to thank **Dr. Yasmine** further. Through her clinical supervision of my work, she brought to my attention that most clients are emerging adults, which aroused my motive and curiosity to do this research. I would also want to thank all the participants who allowed me to read about them and share their reflections and answers with me. Other thanks go to **Dr. Jaime Mendoza**, who taught me to be a reflective and observant clinician and supported me with the assessment tools.

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### **Abstract**

The emerging adulthood phase has specific characteristics related to identity formation and raising the desire for autonomy and independence. One of the exciting functioning abilities at this life stage is their interpersonal functioning abilities. The emerging adults' quality of relationships can be better understood by understanding their attachment styles and mentalization capacity. Thus, this study aimed at understanding the correlation between emerging adults' different attachment styles, mentalization capacity, and their level of interpersonal functioning. A total of 77 emerging adults participated in the study by answering questions related to their mentalization capacity, attachment style, and interpersonal functioning level. The results showed a significant correlation between mentalization capacity and bi-directional communication styles. It also showed high significance between emerging adults' attachment styles and their interpersonal functioning level. The finding shed light on the relevance of emerging adults' attachment styles and their capability to experience and express their emotions. In addition to their ability to build disclosure about themselves, share experiences, and form close interpersonal relationships.

*Keywords: Mentalization, attachment theory, attachment styles, emerging adulthood, emerging adulthood relationships, identity formation.*

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## 1. Introduction

Individuals can have many attachments relationship bonds, with some favored over others. The inter-related mechanism of proximity seeking, safe-haven, and secure base provides security in attachment relationships (Clarke et al., 2020). The quality of individuals' attachment relationships aids in the development of individuals' mentalization capacity. This capacity develops early on, during infants' interaction with their attachment figures (i.e., primary caregivers). Essential social cognition concepts like empathy, mindfulness, and theory of mind are all under the umbrella of the mentalization concept (Luyten & Fonagy, 2015).

A more straightforward understanding of mentalizing is considering it as synonymous with the capacity for empathy toward other people. A more complicated perspective for understanding mentalization would be a spectrum of capacities that critically involve the ability to see one's behavior as rationally organized by mental states and distinguish oneself psychologically from others. These capacities are absent in individuals with personality disorders (Clarke et al., 2020). Consequently, mentalization is also essential to understand self-pathology in clinical disorders like personality disorders (Zetl et al., 2019). A strong link between personally meaningful early experiences with caregivers and their representation is included in the mentalization concept. Both developmental psychologists and psychoanalysts used mentalization to refer to a core process of human social functioning and self-regulation. In its operational definition, mentalization is also understood as 'reflective functioning,' which is closely linked to attachment, suggesting that the child's mental states appear as a significant facilitator for transmission of attachment (Bouchard et al., 2008).

Additionally, young adults increased sense of independence and differentiation from their parents is a developmental process named " Separation-individuation.". It is a critical process in the transition to adulthood, associating with different essential outcomes involving psychological well-being, adjustment to

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college, and successfully establishing relationships like friendships or romantic relationships (Jiang et al., 2017).

Consequently, it is essential to assess the interpersonal relationships for emerging adults (EAs) within the mentalization and the attachment concepts. Thus, this study aims to understand better how attachment and reflective function relate to the quality of relationships in emerging adulthood and explore the correlation between relationship quality and reflective functioning capacity. Additionally, group differences between emerging adults with secure attachment styles versus insecure attachment styles are investigated.

## 2. Literature Review

### 2.1 Emerging Adulthood Phenomenon

#### 2.1.1 *Theoretical Background and Main Characteristics of Emerging Adulthood*

Developmental psychologists have gradually conceptualized the 18-25 years old age range as a separate developmental period since the ground-breaking article of Arnett, 2000 in the American psychologist journal. In this article, the emerging adults (EAs) are claimed to be obtaining greater independence and autonomy from their parents and, at the same time, invest themselves in exploring their identity, developing a career, and advancing romantic relationship skills (Holt, Mattanah & Long, 2018). A lot of theoretical constructs have been evolving around the late teens through the twenties, including the crucial approaches by Erikson (1968), Levinson (1978), and Keniston (1971). The three of them contributed to the theoretical groundwork for emerging adulthood. Arnett then developed the framework of emerging adulthood, considering the change in later decades in industrialized countries. He described that growing up takes a long time after the four revolutionary areas; the four societal changes in the 1960 & the 70s caused the emerging adulthood developmental phase. The four societal changes are the technology revolution which caused the move from a manufacturing economy to a knowledge economy. The knowledge economy is based more on information, technology and requires higher educational levels



beyond high school. This change means that most young adults need to have higher education and spend long years in education to get a stable job; consequently, everything else is pushed, like getting married or having kids. He focuses on this life stage characterized by many young people obtaining their level of education and training that can be the foundation of their occupational achievements and incomes for the remainder of their adult lives. The second revolution is the sexual revolution, which leads to not starting to commit to structured family life or getting married before the late 20s to early 30s. The third is the women's movement; in the 1960s, not many people would go to college; however, there were twice as many men as women who were college students versus today, where most university graduates are female. The fourth is the youth movement that changed the idea that adulthood is associated with social status and authority; young people are not in any hurry to reach adulthood and prefer to prolong youth as long as they could (Arnett, 2016).

Emerging adulthood is considered a period of instability and feeling "in-between" adolescence and full adulthood. Individuals often struggle with risk-taking behaviors to manage the stresses of identity formation (Ponti & Smorti, 2019). Relative independence from social roles and normative expectations are what differentiates emerging adulthood, having not yet entered the lasting responsibilities that are rational in adulthood and at the same time having left the dependency of childhood and adolescence (Arnett, 2015).

During emerging adulthood, the scope of independent exploration of different life possibilities is more significant than at any other point or stage in life, since it is this stage when little about the future has been confident, and many life directions remain possible (Arnett, 2015). Consequently, identity exploration, necessary experimentation in addition to tasks that will define adulthood, such as taking on responsibility, making autonomous decisions, and completing education, are some of the emerging adulthood characteristics. Furthermore, opportunities for identity exploration in love, work, and worldviews are crucial features of emerging adulthood (Ponti & Smorti, 2019; Sheldon et al., 2015).

According to Arnett (2007), emerging adulthood has five significant features, starting with identity exploration in which emerging adults are looking for meaning in work, relationships, and ideologies. The second feature is instability, in which emerging adults have tendencies to change jobs, relationships, and residences than at other times of life. Another critical feature is possibilities, which captures emerging adults' enthusiastic spirit, indicating the many possibilities they see before them. In addition to self-focus, which refers to the relative freedom that emerging adults get at this phase, enabling them to focus on their own lives and be free from obligations to parents, spouses, and children. The fifth feature mentioned above is feeling in-between; it indicates emerging adults' subjective experience who acknowledge that they do not feel like adolescents before or entirely like adults (Syed, 2016).

### ***2.1.2 Cultural considerations for Emerging Adults***

However, although "emerging adulthood" may be a valid synonym for the extended transition to independent adulthood, it is considered culturally constructed rather than universal or immutable. Even more so, the assumption of a new universal life stage could lead to the marginalization of those who remain to follow the traditional route to adult life. In more traditional or community-oriented contexts worldwide, individuals may enter the labor market earlier or start a family earlier. They may not be able to take advantage of the moratorium opportunities available through financial and family resources, for example, due to being unable to participate in further and higher education (Côté, 2014).

A body of recent research shows culturally determined similarities and differences in pathways to adult life. Factors like high unemployment and underemployment for Mediterranean countries family ties, local social welfare, and other financial difficulties resulted in persistent co-residence with parents and late marriage and parenthood (Galanki & Leontopoulou, 2017; Ponti & Smorti, 2019).

Accordingly, and although the emerging adulthood theory has been widely embraced, questions remain about its universality. One particular concern is whether the above-mentioned defining features of

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emerging adults apply to young people who do not pursue or have the chance to join higher education the same way as they do for college students (Côté, 2014).

### ***2.1.3 Interpersonal relationships of Emerging Adults***

Although emerging adults, as mentioned above, are seeking significant autonomy. They continue to value supportive and close relationships with their parents to manage the stressors of identity formations, even when they leave home to attend college. Many studies have shown that emerging adults with secure attachment to their parents excel more academically, socially, and emotionally. In addition, emerging adults consider their friends and romantic partners to be essential persons within their social networks (Barry et al., 2009). To better understand the quality of EAs relationships, this study will discuss EAs interpersonal relationships within the mentalization capacity and attachment context. Accordingly, the following section will further discuss the mentalization concept and its core dimensions.

## **2.2 Mentalization - Definition and Core Dimensions**

'Mentalizing' is defined as an "imaginative mental activity, namely, perceiving and interpreting human behavior in terms of intentional mental states (e.g., needs, desires, feelings, beliefs, goals, and reasons)" (Fonagy & Luyten, 20089 p. 288). More simply put, mentalization is the capacity to understand oneself and others. This understanding includes both the interpretation of others' behavior in terms of mental states and the understanding of one's mental states and the ability to differentiate between those two and distinguish mental states from external reality. Mentalization has been used as an umbrella term theoretically related to other psychological constructs like empathy, metacognition, mindfulness, and affect consciousness (Fonagy & Luyten, 2009; Cote, 2014). It is an essential capacity for social interactions and considered a fundamental capacity in the social environment, which we would be lost without in a complex

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world that has ever-changing interpersonal relationships and demands a very significant degree of collaboration and understanding (Luyten & Fonagy, 2015; Fonagy et al., 2008).

Mentalizing has been defined as being organized around four dimensions or polarities. Those four dimensions are (Luyten & Fonagy, 2015):

1. Automatic versus controlled mentalizing.
2. Mentalizing about self and to others.
3. Mentalizing is based on internal or external features of self and others.
4. Cognitive versus affective mentalizing

### ***2.2.1 Automatic Versus Controlled Mentalizing***

Controlled mentalizing is more a slow process that requires attention, reflection, awareness, and effort, whereas automatic mentalizing is a much faster process that requires little or no attention, intention, awareness, or efforts (Palgi et al., 2017 Fonagy et al., 2008 Automatic mentalization tends to be rigid with biased assumptions about self and others. As stress or arousal increases, the tendency to switch from slow and reflective mentalizing to fast or automatic is the so-called pre-mentalizing mode of experiencing oneself and others. There are three critical parameters related to switching from controlled to automatic mentalizing showing the individual differences in using attachment strategies. The first parameter is how readily individuals switch to non-mentalizing modes. The second is the degree to which individuals tend to lose the capacity for more mentalizing modes, and the third is the duration of loss of controlled mentalizing.

In our daily interactions, mentalizing is predominantly automatic, as we tend to rely on automatic, unreflective assumptions about ourselves, others, and ourselves in most interpersonal situations. Individuals rely on automatic mentalization insecure attachment relationships because more reflective processing is unnecessary. Nevertheless, if necessary, the individual can flexibly shift to controlled mentalization.

### ***2.2.2 Internal and External Mentalizing***

The dimensions of internally and externally focused mentalization had been recently added to mentalization theory. Less controlled reflective mentalization processes involve more mentalizing based on external features of self and others (such as facial expressions and body posture). In contrast, more active-controlled reflection involves more internally focused mentalization (focusing on internal mental states of self and others). Internally focused mentalization refers to mental processes focusing on self and others' mental interior (i.e., thoughts, feelings, and experiences). On the contrary, externally focused mentalization refers to mental processes that rely on visible features of self and others' actions (Fonagy et al., 2008). It is stated by Fonagy et al. (2008) that infants must work out what a "marked" emotion display refers to and what the internal state underlying this emotion in the affective mirroring process is. Accordingly, the infant must rely on external cues such as the caregiver's eye gaze direction accompanying the communicative display. The infant must be capable of externally focused mentalization (i.e., respond to the caregiver's emotional expression) and internally focused mentalization of the caregiver's intentions. In other words, the mirroring process includes "continuous back and forth between external and internal features of self and others" (Liljenfors & Lundh, 2015, p.46).

### ***2.2.3 Self and Other Mentalizing***

A core network of neural systems is activated whenever individuals reflect on self and others, as identified by neuroimaging studies (Luyten & Fonagy, 2015). Typically developing children face the challenges of acquiring a sense of selfhood due to the overlapping brain circuitry used in mentalizing self and others. Thus, there are difficulties with identity integration in extreme cases and many types of psychopathology of self. Individuals with "borderline personality disorder" (BPD) seem to continually struggle to view themselves from the undue (of) influence of others' mental states (which is termed identity diffusion). Patients with severe pathology show a noticeable imbalance between self-knowing and knowing others (Luyten & Fonagy, 2015).

#### ***2.2.4 Cognitive Versus Affective Mentalization***

The integration of cognition and affect is another dimension involved in full mentalization; however, both capacities can be somehow dissociated at times. Perspective-taking and belief-desire reasoning are cognitive features. On the other hand, include affective empathy and mentalized affectivity are affective features. The perspective-taking and belief-desire overlap largely with controlled mentalizing, while affective empathy overlaps with automatic mentalization. It is of much interest to mention that mentalization is based on observing others and reflecting on their mental states. Accordingly, it includes both components; self-reflection and interpersonal one. It is also both implicit and explicit and concerning both feelings and cognitions. The coming section will further explain the core concepts of mentalization related to attachment (Fonagy et al., 2008).

#### **2.2.5 Mentalization, Reflective Function, and Affect regulation**

Both developmental psychologists and psychoanalysts use mentalization to refer to a core process of human social functioning and self-regulation. It involves the establishment of solid links between personally meaningful early experiences and their representation. Furthermore, mentalization is sometimes called "reflectiveness," which is linked to the attachment. The caregiver's mindfulness about a child's mental states appears as a critical mediator of attachment transmission. Conversely, it is known that a child's reflective capacities are impaired due to maltreatment (Zetl et al., 2019). In addition to that, mentalization is closely associated with the concept of attachment security. Mentalization is operationalized in the attachment literature as a reflective function (RF). Reflective functioning is defined as "being able to recognize and reflect upon one's (own) mental states - thoughts, feelings, intentions - and to recognize the complexity of mental states and their links to behavior" (Bouchard et al., 2008, p.48). An individual can engage in complex reasoning regarding interpersonal interactions and relationships when s/he can reflect upon the mental states of self and others. Besides, when situations evoke stressful feelings or emotions, RF promotes sensitive and effective interpersonal behavior. The most prominent measure of mentalization of

attachment-related relationships and experiences is the RF scale developed by Fonagy to be used with the adult attachment interview (AAI) (Ensink et al., 2013; Palgi et al., 2017;).

RF is strongly related to mental health and well-being in addition to conferring interpersonal benefits. RF is also considered a protective factor against developmental problems and psychopathology (Luyten & Fonagy, 2015). Emotions regarding difficult life experiences are perceived and labeled through mentalization. It also allows the engagement in a reflective process about these experiences, which will ultimately aid in reducing the negative impact of such experiences. Scholars argue that through facilitating the relationship between the individual's internal world (e.g., self) and the external world (e.g., the social), RF promotes concurrent psychological well-being.

Furthermore, in support of this, it is suggested that concurrent poor social-emotional outcomes like depression and anxiety symptoms, substance abuse, borderline personality disorder, and eating pathology result from low RF. A cross-sectional study was examining adolescents' mentalization documents associations between RF and different pathologies. Like borderline personality disorder symptoms, non-suicidal self-injury, antisocial behaviors, depressive disorder, more negative emotions during pregnancy, and eating disorders, suggested that RF is a strong concurrent correlate of a wide range of pathology (Luyten & Fonagy, 2015).

The extent to which our early and later environment cultivates a focus on internal mental states is essential for mentalization development. The concept of mentalization is better understood within the context of attachment relationships. Since the context of attachment, relationships is what acquires mentalization process development. Accordingly, the coming section discusses the literature on the relation between mentalization and attachment (Luyten & Fonagy, 2015).

### ***2.2.6 Mentalization and Individuals' Attachment Relationships***

The capacity to mentalize, which emerges in early attachment relationships, is a crucial determinant of self-organization and Affect Regulation (Bateman & Fonagy, 2016). It is suggested by research findings

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that mentalizing is a primarily developmental achievement that initially depends on the quality of individuals' attachment relationships, particularly early attachments, and is not a constitutional given. The child's ability to develop mentalizing capacity is positively associated with the degree that attachment figures can respond with prominent and contingent effective emotional display to their own experiences in response to infants' subjective experience (Luyten & Fonagy, 2015). The self-control and affective regulative processes are, in turn, positively influenced. It is a significant leap in the individual's capacity to regulate their effect due to the capacity to reflect on internal mental states. Then the exposure to the broader environment (e.g., peers, teachers, and friends) later in life raises attention on internal mental states, which are thought to strengthen the development of mentalizing. Conversely, impairment in the capacity to reflect on self happens due to failure in the process of marked mirroring from early attachment figures, leading to un-mentalized self-experiences, which are also called "align-self" experiences (Luyten & Fonagy, 2015). Failure to develop strong mentalizing skills leads to affect regulation, attentional control, and self-control stemming from dysfunctional attachment relationships (Bateman & Fonagy, 2016).

Repeated security experiences in individuals with a secure attachment history can show relative relaxation of threat processing (Luyten & Fonagy, 2015). Consequently, the development of controlled mentalization is fostered. Individuals with insecure attachment experiences develop hypersensitivity to threat to deal with experiences of perceived insecurity and the unpredictable behavior of attachment figures. Although this is understandable as a survival strategy, the price these individuals pay is that they may increasingly hold biased and schematic assumptions about themselves and others and be constantly hyper-vigilant toward others (Luyten & Fonagy, 2015). This can explain how exploring mentalization in an attachment context shows the impact on individuals' relationships. As mentioned earlier, mentalization concerns both cognitions and feelings.



Nevertheless, the attachment system is, first and foremost, a regulator of emotional experience (Luyten & Fonagy, 2015). According to Moser et al. (2015), securely attached individuals can better acknowledge and cope with negative emotions. On the contrary, insecurely attached individuals find difficulty in regulating and integrating emotions. Insecurely attached individuals can be avoidant and try to block out negative emotions and uncomfortable seeking support. They can also be anxious; (in) (which) they are highly emotional expressive but without emotional regulation. Accordingly, the coming section is going to address more the association between attachment and mentalization theory.

### **2.3 Attachment Theory**

The role of relationships in an individual's adaptation and functioning throughout life can best be understood through the attachment theory. The attachment theory is a comprehensive theory of relationships. The universal human tendency to form close relationships and the similarities and differences in affection bonds from infancy through adulthood is sufficiently explained through the attachment theory. According to the attachment system, human infants can only survive if an adult is willing to provide protection and care due to their life-threatening immaturity during infancy, which is a basic assumption of the attachment theory. Consequently, infants develop behaviors that maintain the proximity of the caregiver or protector. In other words, a complementary behavior system is what regulates adult caregiving. Babies smile, and parents find smiling rewarding. Babies cry, and parents are moved to soothe them. Parents move away, and babies follow visually or physically. That kind of relationship created by combining these two systems is what fosters an infant's survival. Attachment theory suggests that the responsiveness of the caregiving environment to the individual needs for comfort and security determines the beliefs and feelings about self, particularly social and global self-esteem (Deci & Ryan, 1985).

### ***2.3.1- The Influence of Attachment Theory on Mentalization Capacity***

One of the main influences on the theory of mentalization is attachment theory and the research on the development of attachment. Subsequent metacognitive skills, such as monitoring attachment experiences, count much on children's early development experiences. In addition to that, "quality of early attachment plays a significant role in a child's later ability to use this capacity for mindreading in coping with interpersonal interactions and relationships during childhood and adulthood." Attachment security develops the individual's ability to mentalize in emotionally stressful situations with others (Liljenfors & Lundh, 2015). According to the attachment theory, it is hypothesized that interactions with attachment figures during infancy and early childhood impact and organize humans' general approach to close relationships throughout the lifespan. It is worth mentioning that not only is RF associated with anxiety, depression, general health, and vitality, but also attachment security. The attachment theory suggests that individuals higher in attachment security have greater self-regulation at emotional and behavioral levels. Many studies have explored the link between attachment security and emotional Regulation (Zettl et al., 2019; Borelli et al., 2019). According to the mentalization concept, one's understanding of others depends on whether caring, attentive non-threatening adults adequately understood one's mental states. Failure to develop strong mentalizing skills leads to affect regulation, attentional control, and self-control problems stemming from dysfunctional attachment relationships. The mental picture of others is inferred from one's experience (Bateman & Fonagy, 2016).

Human infants' tendency to form an emotional bond with a primary caregiver is an innate predisposition, according to Bowlby (1969). Infants' exploration of the environment is supported with this bond: when a threat arises, it provides a refuge of protection and comfort. The quality of ties of affection to primary caregivers differs from one child to another, though all children are predisposed to develop an attachment to caregivers. The quality of attachment, specifically the internal working model, is influenced by how the caregiver responds to the infant's needs. Furthermore, it influences the cognitive-affective

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scripts the infants develop based on their interaction with early attachment figures. Their expectations regarding attachment relationships in the future and their strategies for emotional regulation are guided by this script (Borelli et al., 2019).

Studies found that individuals' use of secure attachment strategies in response to stress typically associated with their attachment experiences leads to down-regulation of stress, so-called "broaden and build" cycles. As a result of the activation of the attachment system fosters controlled mentalizing resulting in relaxation of epistemic hypervigilance. It is claimed that there is good evidence that deactivation of arousal and affect regulation systems are associated with the intense activation of the neurobehavioral system underpinning attachment. Borelli et al.'s (2019) findings' shed more light on the neurobiology of resilience: secure attachment strategies are used by individuals when faced with adversity. They can turn to (internalized) secure attachment figures in times of need; they can keep controlled mentalizing "online" even when they face considerable stress and find interpersonal contacts rewarding. Accordingly, attachment trauma may lead to chronic activation of the attachment system. In a situation when the child is seeking proximity from a traumatizing attachment figure (abusive or neglectful parent), s/he is likely to be further traumatized (Borelli et al., 2019). In this case, increased emotional arousal results in persistent attachment system activation, causing them more difficulty. This is unsurprisingly present in many borderline personality disorder patients, given the preoccupied, disorganized attachment and severe developmental trauma in this group.

On the contrary, individuals who have anxious-avoidant attachment primarily rely on attachment deactivating strategies based on the belief that others cannot provide support and comfort (Borelli et al., 2019). They accordingly deny their own attachment needs and asserting one's autonomy, strength, and independence in an attempt to down-regulate stress. This demonstrates fast deactivation of the attachment system and social information of the threat cues (Borelli et al., 2019). Thus, the coming section will further

discuss the impact of different attachment styles on adults' capacity for mentalization, regulating stress, and creating successful interpersonal relationships.

### ***2.3.2- Different Attachment Styles and Mentalization Capacity***

Individuals with repeated experiences of security and who have secure attachment history demonstrated a relative relaxation threat processing. This allows the relaxation of interpersonal distrust and avoidance, fostering the capacity for controlled mentalizing, predominantly in an environment conducive to developing this capacity. On the other hand, individuals with repeated experiences of perceived insecurity and unpredictability of the availability and behavior of attachment figures develop hypersensitivity to stress. This may lead to a pattern of hyper-activation resulting in hypersensitivity and the automatic process it entails and associates with the externally focused mentalization and neglects the internally focused mentalization. While this is understandable as a "survival strategy," biased schematic assumptions of self and others and being hyper-vigilant toward others are the price paid by these individuals (Borelli et al., 2019).

Recent research has reformulated attachment in terms of regulatory processes. Studies have shown that key self-regulation functions, including the regulation of stress response, the regulation of attachment, and the mentalizing function regulate the pathway from infancy to adult adaptation. Reflective parenting contributes drastically to the development of attachment security since it is a form of secure attachment, enabling the child to explore the caregiver's mind and treat the child as a mental agent. Consequently, it is likely perceived by the child who learns about minds when their mind is initially perceived and understood by their caregiver (Borelli et al., 2019). Thus, the reflective function is more elaborate mentalization, linked with attachment, which suggests that a caregiver's mindfulness about a child's mental state is a key mediator of the transmission of attachment (Liljenfors & Lundh, 2015).

## **2.4 Emerging adults' Interpersonal Relationships**

### ***2.4.1- Emerging Adults and Family Relationships***

During emerging adulthood, vital changes in the parent-child relationship take place. As mentioned above, emerging adults (EAs) seek greater autonomy and independence in this developmental phase. However, it is a phase of instability and requires emotional skills to manage stresses of identity formation. Consequently, close and supportive relationships with parents are valued by EAs, even when they choose to live away from home to attend college (Holt et al., 2018). Research studies often discuss the parent-child relationship in emerging adulthood in the context of separation-individuation. It is a developmental process whereby young adults increase their sense of differentiation and independence from their parents to create a unique identity. Separation individuation has been discussed in research as a critical process in the transition to adulthood, connection to various vital outcomes, including psychological well-being, adjustment to college, and career development (Jiang et al., 2017). During late adolescence and early adulthood, separation from one's parents and individuation are essential and challenging developmental tasks. Forging an adult identity, developing self-reliance, redefining mutuality and balance of authority in the parent-child relationship, and trying to obtain a balance between distance and closeness are all involved in the separation-individuation process (Jiang et al., 2017). According to psychodynamic models of development, a crucial role is played by the process of separation-individuation in personality development during childhood, adolescence, and beyond. Profound implications can occur for adult personality and social relationships if there are any developmental process disturbances. For example, difficulties in differentiating oneself from others and intolerance for aloneness can occur from the pathology of the separation-individuation process (Kins et al., 2011).

A more detailed explanation of the difference between dysfunctional dependency and independence should be highlighted to understand the separation-individuation in emerging adulthood further. For example, from an attachment theory perspective, according to Bowlby (1969), individuals'

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reaction to a separation event depends on their attachment system and working model developed early in their lives. Individuals with secure attachment histories are prone to react positively and adapt. On the contrary, individuals with an insecure attachment history experience more threats and may not fulfill the developmental task. Attachment-related anxiety (i.e., extreme anxiety concerning separation from home and loss of close relationships) is primarily related to dysfunctional dependence. Attachment avoidance (i.e., keeping a distance from others) is primarily related to dysfunctional independence. The studies have shown that parental directiveness that is not responsive drives both dysfunctional dependence and dysfunctional independence. Dysfunctional dependence occurs due to extreme psychological control to attain family dependence and interpersonal closeness restricting the need for self-exploration and expression of individuation (Jiang et al., 2017). A study by Ponti and Smorti (2019) has shown that change in various areas of life, namely academic, social and emotional functioning, help-seeking, depressive symptoms, and loneliness, are associated with parental attachment during college years (Holt et al., 2018). This is best explained by understanding the Internal working models (IWMS). IWMS are internal relational representations of their (own) self and others, based on interactive patterns characterizing their relationships with caregivers. IWMS reflects the extent to which individuals believe that they are worthy of love and attention and that others are available to respond to them in a supportive way, as Bowlby (1969) proposed. Early repetitive interactions with parents develop the IWMS. Accordingly, the same psychological dynamics learned in the context of early relationships are repeated in other relationships. Secure attachment is associated with positive internal working models allowing healthy relationships development. On the other hand, insecure attachment is associated with negative news, fostering insecure relationships (Chui & Leung, 2016; Ponti & Smorti, 2019; Kvitkovicova, Macek & Umemura, 2017).

Another study (Holt et al., 2018) has shown that enhanced social skills and competencies during college years are associated with secure relationships with parents. The findings suggest that students can

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be enacting social competencies modeled by their parents and ask their parents for advice on how to handle their relationships with their peers. On the contrary, it was found that students whose relationships with their parents deteriorated between freshman and senior years showed a decline in their instrumental competencies over this period (Holt et al., 2018). Furthermore, best overall academic, social and emotional functioning is evidenced by students with secure parental attachment. The study showed that participants with secure parental attachment reported a significant increase in their academic, emotional functioning, and (their) social competencies. On the other hand, students showing a decline in their emotional functioning have consistently insecure parental attachment. In addition to that, participants with secure parental attachment also interestingly reported lower overall levels of depression and loneliness, better social competence, and a more favorable attitude about help-seeking (Holt et al., 2018; Zorotovich&Johnson,2019).

Another critical theory worth mentioning when speaking about emerging adults' desire for autonomy is the self-determination theory (SDT). SDT suggests that a variety of motivations varying along the continuum of autonomy is what drives health behaviors. Intrinsic motivation (acting for the inbuilt pleasure of the activity involved) is the most autonomous motivation. Conversely, one can act through integrated regulation (e.g., acting per one's own goals and values) and still be autonomously motivated, which can happen even when the health behaviors are not enjoyable, similarly, with identified regulation (e.g., acting to obtain personally valued outcomes).

On the other hand, when behavior is not autonomous or is driven by external forces, the health behavior is unlikely to change in the long run. External forces are like avoiding guilt or shame or in response to reward and punishment through external regulation. (Deci & Ryan, 1985).

#### **2.4.2- Emerging Adults and Social Relationships**

Another critical source of influence and support for emerging adults, in addition to parents, are peers. As shown in Barry et al. (2009) study, most academic and psychological outcomes are linked to the

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quality of friendships. A study has shown that stable peer attachment evidenced the best academic, social, and emotional functioning during the college years (Holt et al., 2018). Emerging adults spend in this phase of life considerable amounts with their friends and romantic partners. Accordingly, their friends and romantic partners seem to be essential persons within their social networks. Studies have shown that the quality of both relationships has been associated with happiness (Barry et al., 2009).

Furthermore, emerging adulthood is a transition period where the primary attachment figure shifts from parents and peers to romantic relationships. However, most studies focused on the parent-child relationship, and few documented the association between parental attachment in emerging adulthood and adults' romantic relationships quality (Li et al., 2020). Internal working models (IWM) of interpersonal relationships are shaped by early experience of attachment. Thus, romantic love is conceptualized as an adult attachment process that differs by the individual's history of attachment (Hazan & Shaver, 1994).

IWM of interpersonal relationships refers to the representational translation of attachment patterns. In addition to playing the role of guiding individuals' interaction patterns in their romantic relationships (Li et al., 2020). A model of harmonious and respectful relationship behaviors is provided by parents who foster secure attachment relationships with their offspring. This lays the foundation for emerging adults to develop high-quality romantic relationships, whereas hostile relationship behavior and negative emotions in adult romantic relationships were associated with parental attachment insecurity (Li et al., 2020). In addition, in collectivistic societies, the essential factor that helps emerging adults adjust is the dependency between friends and younger and senior family members (Boonyarit, 2017).

A study has shown (Li et al., 2020) that an immediate impact on emerging adults' relationships with romantic partners is placed by emerging adults' attachment to parents. A recent study has found that the length of romantic relationships was positively related to the emerging adults' preferences for mothers, which reveals that close relationships with parents help them keep romantic relationships longer (Li et al., 2020). Accordingly, it is suggested that both early and immediate attachment experiences with parents



shape emerging adults' romantic relationship quality. This further extends the attachment theory taken together with the transmission from adults' attachment with parents to attachment with romantic partners (Li et al., 2020).

There are three defining features of attachment and the functions of an attachment relationship as defined by Bowlby (1969). These features are proximity seeking (including proximity seeking and separation protests), safe haven, and secure base (Li et al., 2020). From an attachment perspective, needs for emotional support, care, and sexual gratification are examples of basic needs possessed by humans and are naturally satisfied by social relationships (Deci & Ryan, 2017). Theoretically, a distinct behavioral system regulates each need responding to specific social cues. Therefore, we should be attracted to people who display these cues. The most basic need (security) is regulated by the attachment system, which is expected to function regularly across the life span. Thus, it is assumed that the essential characteristics are shown to be centrally significant in an attachment figure during infancy and childhood. Specifically, responsiveness and familiarity become the essential characteristics of a potential partner. However, it is expected not to see the same behaviors in partners as attachment figures but rather the same basic strategies to maintain felt security (Li et al., 2020; Barry et al., 2009). Consequently, as stated in the above sections, mentalization theory is best understood in attachment relationships concepts, which are impacted by adults' attachment styles and interpersonal relationships.

### 3. Research Questions

This study aimed to understand better how attachment and reflective function is related to the quality of relationships in emerging adulthood. Additionally, group differences between emerging adults with secure attachment styles versus insecure attachment styles will be investigated through the following research questions.

1. What is the correlation between relationships quality and reflective functioning as part of mentalization in emerging adults?

As discussed above in the literature by Holt and colleagues (2018), it is assumed that higher RF results in a higher quality of relationships and that low RF of emerging adults will lead to lower quality of relationships. In this study, RF is measured using the reflective function scale (Rf Scale). The questionnaire consists of two subscales: The *certainty* subscale measures the degree to which a person is certain about mental states. The *uncertainty* subscale measures the degree to which a person is uncertain about mental states. The quality of relationships was assessed using the FIAT-Q questionnaire, which assesses interpersonal functioning by assessing five different factors (*assertion of needs, bidirectional communication, conflict resolution, Self-disclosure of self to others, and emotional experiencing and expression*). It is assumed to find in the data correlation between the score of RF and the score of the five interpersonal functioning factors.

2. How is reflective functioning related to attachment style?

According to studies by Zettel et al. (2019), one can assume that emerging adults with secure attachment styles show high reflective functioning ability and emerging adults with insecure attachment styles show low reflective functioning ability. The attachment style will be assessed through the attachment style questionnaire short form (ASQ-SF). It has four subscales, which will measure four attachment styles:

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*secure, fearful, dismissal and preoccupied*. The reflective function capacity will be measured by using the reflective function capacity (RF Scale). It is assumed in the data that securely attached individuals will report high reflective function capacity and vice versa.

3. What is the correlation between relationships quality and different attachment styles?

The different attachment styles are assessed using the attachment style questionnaire in its short form. The ASQ-SF has four subscales, which will measure four attachment styles: secure, fearful, dismissal and preoccupied. The relationship quality is measured using the FIAT-Q, questionnaire which assesses the interpersonal functioning through assessing five different factors (*assertion of needs, bidirectional communication, conflict resolution, Disclosure of self to others, and emotional experiencing and expression*). In addition, the quality of attachment to others will be assessed, using the *Relationship Structures Questionnaire* (EC-RS, Fraley, et al., 2006, 2011) to assess attachment patterns in close relationships. The questionnaire consists of 9 items, in 4 sets, targeting relationships with mother, father, romantic partner, and best friend. It is assumed to find in the data that individuals with secure attachment styles report a higher quality of relationships. In comparison, individuals with insecure attachment styles can have a lower quality of relationships. (Borelli et al., 2019).

#### 4. Study Design

The present study is considered a correlational study, exploring the relationship between Reflective Function and quality of relationships. It also explored group differences between emerging adults with secure versus insecure attachment styles. Due to the spread of COVID-19, the data was collected through an online survey. The questionnaire was shared among young participants, mainly through accessing

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different universities and through social media mediums. The data were collected after obtaining IRB approval and getting informed consent from the participants.

#### 4.1 Sample

To achieve the aim of the study mentioned above and explore the level of interpersonal functioning for emerging adults based on mentalization and attachment concepts. The targeted sample was 18-25 years old who were easily accessed through various universities. They were targeted through sharing the online questionnaire links with instructors and professors in universities, and they shared it with their students. The below 18 years old were disabled from continuing the questionnaire. Firstly, this is not the target sample; secondly, the obtained informed consent needs the participants to be 18 years old and above. In addition, the above 26 years old participants were allowed to take the questionnaire but were excluded from the analysis of the results. The total number of respondents through convenience sampling was 95. After excluding the below 18 years old and the above 26, the total valid number was 77 participants.

#### 4.2 Assessment tools

The assessment tools used to measure reflective function capacity, attachment style, and quality of relationships will be explained in more detail in the following paragraph. Additionally, demographical data was collected, like the age, gender, college year, status, graduates or undergraduates, the university enrolled in, and if the participants had any previous work experience. At the end of the questionnaire, few open-ended questions were exploring further participants' understanding of relationships.

The Reflective Function Questionnaire was used (RFQ, Fonagy, et al., 2016) to measure reflective functioning capacity. The questionnaire used is the most recent and, at the same time, a brief version of the original, namely an 8 item self-report scale. A 7-point Likert scale has been used, ranging from 1 (strongly disagree) to 7 (strongly agree). The questionnaire consists of two subscales: The *certainty* subscale measures the degree to which a person is certain about mental states (for example, People's *thoughts are a*

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*mystery to me.*). The *uncertainty* subscale measures the degree to which a person is uncertain about mental states and (for example, Sometimes *I do things without really knowing why*). The RFQ shows good reliability and validity ( Anis et al., 2020).

In its short form, the Attachment Styles Questionnaire (ASQ-SF, Van Oudenhoven, Hofstra, & Bakker, 2003) was used to measure the emerging adults' attachment styles. It is a 15 item self-report questionnaire that was developed by Van Oudenhoven, Hofstra and Bakker (2003; see also Van Oudenhoven, & Hofstra, 2005; Hofstra, Van Oudenhoven, & Buunk, 2005; Hofstra, 2009). Participants were asked to report their answers on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The ASQ-SF is used to measure the internal working model of self and others, which are discussed as relevant in facilitating the relationship between attachment style and intimate or interpersonal relationships. The ASQ-SF has four subscales, which will measure four attachment styles: secure, fearful, dismissal and preoccupied. The *secure subscale* measures the extent to which this person had a secure attachment style (for example, I trust other people and like it when others can rely on me). The *fearful subscale* shows if the respondent is afraid of getting attached to others (for example, I would like to have close relationships with other people, but I find it difficult to trust them fully). The *dismissal subscale* shows if the respondent avoids attachment or close relationships (for example, I do not worry about being alone, I do not need other people that strongly). The *preoccupied subscale* measures to which extent the respondent often doubts their relationships (for example, I often wonder whether people like me). Good external and internal validity and reliability were demonstrated ( Mosterman & Hofstra, 2015).

The Functional Idiographic Assessment Template questionnaire (FIAT-Q) was developed by Callaghan (2006) to measure the quality of relationships for emerging adults by assessing their interpersonal functioning level. It is a self-report measure that allows assessing interpersonal functioning. The FIAT-Q has five subscales divided into five classes. The first one (Class A) is the *assertion of needs and values*, which is measuring if the respondent has difficulty in communicating their needs, standing for anything

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s/he wants, including making requests for social support, or other needs that may be more practical (for example, I do not know how to put my needs into words). Then, *bidirectional feedback*, which assesses giving and receiving feedback from others (Class B) (for example, *responding to conflict in social interactions* (Class C), which assesses the capability to resolve conflict when it occurs with another person. Then the fourth subscale is the *Disclosure or interpersonal intimacy* (Class D), which measures if the respondent has difficulty disclosing, talking about themselves with others, sharing their experiences. It includes statements that describe the respondents' feelings about interpersonal closeness (for example, when friends ask me how I am doing, I choose not to tell them). The fifth subscale is *the experience and expression of emotions* (Class E), which measures to what extent the respondent has difficulty getting in touch with their emotions and expressing it, either emotions like sadness, anxiety, and loneliness or emotions like love; pride, and humor. Participants will be asked to use a 6-point scale from 1 (strongly disagree) to 6 (strongly agree). Reliable and valid measures of the quality of interpersonal relationships in young adults were reported for the interpersonal-relationships scales and subscales in the past (Darrow et al., 2014). Additionally, the *Relationship Structures Questionnaire* (EC-RS, Fraley, et al., 2006, 2011) was used to assess attachment patterns in close relationships. The questionnaire consists of 9 items, in 4 sets, targeting relationships with mother, father, romantic partner, and best friend.

To get some more detailed understanding of how the participants themselves describe relationship quality and emerging adulthood, the following open-ended questions were included in the questionnaire:

- To what extent do you feel you have reached adulthood? On a scale of 0-100%
- Please describe what type of friend you are?
- What is a characteristic of you as a friend? Please, provide some descriptions and examples.
- How would you describe your relationships with your family?

### **4.3 Data Analysis and Statistical Methods**

Data was collected through an online survey. The online survey was available through a link shared with participants who were able to access the questionnaire from mid-June 2021 till beginning of July 2021. Numerical data were tested for the normal assumption using the Kolmogorov Smirnov test. Comparison of numerical variables between the study groups was made using a one-way analysis of variance (ANOVA) test for comparing normally distributed data and the Kruskal Wallis test for comparing not-normal data. Correlation between various variables was done using Pearson moment correlation equation for linear relation of normally distributed variables and Spearman rank correlation equation for non-normal variables/non-linear monotonic relation. Two-sided p-values less than 0.05 were considered statistically significant. All statistical calculations were done using the computer program Statistical Package for the Social Science (IBM SPSS) - IBM Corp, Armonk, NY, USA, release 22 for Microsoft Windows.

## 5. Results

As mentioned earlier, the total number of respondents was 77. Most of the participants, which constitutes 45%, were between 18-20 years old, 23% were in the age bracket from 21-22 years old, and 26% were between 23-25 years old. Most of the respondents were females; they represented 70% of the total sample (N=77), 57 were females, and 20 were males. The undergraduates represented 74% of the sample, and the remaining were graduates or alumni. Almost 64% of the sample were either first-year, sophomore, or junior university students. The senior students represented 16% of the sample, while graduates or alumni represented 18% of the total sample. The sample represented diverse universities; most were private universities: 64% were mainly from the American University in Cairo, the German University in Cairo, and Misr International University. The remaining 36% were from other universities, like Cairo University, Ain Shams University, Helwan University, the British University in Cairo, the Arab Academy for Science and Technology, the Canadian International College, and other universities. Also, 48% of the sample is working or have previous working experience, and 44% are neither working nor do have previous working experience.

The coming three sub-sections show the results by answering the three research questions mentioned above. Additionally, more exploratory results give a general idea of each primary variable's descriptive (i.e., mean scores and standard deviation).

### 5.1 Correlation Between Reflective Function and Relationship Quality

The reflective function capacity and the interpersonal functioning variables were measured to answer the first research question exploring the correlation between the reflective function capacity and interpersonal functioning. The reflective function capacity was measured using the *Reflective Function Questionnaire*, and the relationship quality was measured by assessing interpersonal functioning using



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the *Functional Idiographic Assessment Template questionnaire (FIAT-Q)*. First, exploratory analyses were conducted using descriptive statistics. The results showed that the mean score of the reflective function scale was ( $m=3.71$ ), given that all participants responded ( $N=77$ ) to the RF questionnaire with no missing values. The results showed that 48% of the participants were below the mean score, representing lower reflective function capacity.

In comparison, 52% described above mean score, which is higher reflective function capacity. The (FIAT-Q) questionnaire assessed the interpersonal functioning of the participants according to five subscales (Factor A= assertion of needs, B=bidirectional communication, C=conflict resolution, D=disclosure, and interpersonal relationship & E=emotional expression). The higher the score of the FIAT-Q indicates having difficulty and struggling with interpersonal functioning. The total number of respondents was 77 for the five subscales; the highest mean score was Factor E ( $m=3.25$ ), representing having difficulty with emotional expression and experience. The second highest mean score was Factor D( $m=3.19$ ), representing Disclosure and interpersonal closeness. Then the mean score of Factor A ( $m=3.13$ ), which represents having a problem in the assertion of needs, is followed by the mean score of Factor C( $m=3.02$ ), which represents having difficulty resolving conflicts. The least mean score was Factor B( $m=2.9$ ), which is the bidirectional communication and the capacity to receive and give feedback to others.

Second, *Pearson* moment and Spearman rank equation were used to conducting a correlational analysis test. A Pearson moment correlation test showed no statistically significant correlation ( $P=0.47$ ) between the overall reflective function capacity and the overall interpersonal functioning level (See Table 1). However, the results showed in the below table that there was a statistically significant negative correlation ( $p=0.04$ ,  $r=-0.22$ ) between the reflective function capacity and only one interpersonal functioning factor. The one factor is bidirectional communication (*Factor B*) which is related to giving and receiving feedback from others. This means that there is a correlation between the reflective function

capacity level and the ability to have bidirectional communication, including giving and receiving feedback from others. (See Table 1)

In addition, a one-way analysis of variance test was conducted to show the high versus low reflective function capacity groups and the interpersonal functioning, and it indicates non statistically significant variance ( $p=0.6$ ).

**Table 1**

*Correlation between interpersonal functioning and Reflective function capacity (RF)*

		RF
<b>Factor A</b> <i>Assertion of needs</i>	Pearson Correlation	0.084
	p-value	0.469
	N	77
<b>Factor B</b> <i>Bidirectional communication</i>	Pearson Correlation	-0.228
	p-value	0.046
	N	77
<b>Factor C</b> <i>Conflict resolution</i>	Pearson Correlation	-0.156
	p-value	0.174
	N	77
<b>Factor D</b> <i>Disclosure and interpersonal closeness</i>	Pearson Correlation	-0.057
	p-value	0.623
	N	77
<b>Factor E</b> <i>Emotional experience &amp; expression</i>	Pearson Correlation	0.035
	p-value	0.764
	N	77
<b>Interpersonal functioning</b> <i>(All factors combined)</i>	Pearson Correlation	-0.083
	p-value	0.474
	N	77

## 5.2 Correlation between reflective function and attachment style

To answer the second research question, exploring the correlation between the reflective function capacity and attachment style. The reflective function capacity was measured using the *Reflective Function Questionnaire*, and the attachment styles were measured using the attachment Styles Questionnaire in its short form (ASQ-SF). The attachment styles were grouped into two groups securely attached and insecurely attached. According to Mosterman & Hofstra (2015), the cut-off score is ( $m=3.94$ ), which means that individuals who scored below this score were grouped as insecurely attached individuals. Individuals who

got this cut-off score or above are grouped as securely attached individuals. One-way analysis of variance in addition to Spearman correlation analysis was conducted. The spearman's rank correlation has shown no statistically significant correlation ( $P = 0.91$ ) between the attachment styles and the reflective function ability (See Appendix B). The one-way analysis of variance also showed no statistical significance variance ( $p=0.589$ ) between the reflective function capacity and the securely versus insecurely attached emerging adults. As for the attachment styles, almost 45% of the total sample size ( $N=36$ ) scored below the mean score of securely attachment style, which is ( $m=3.94$ ). In contrast, the remaining 55% ( $N=41$ ) scored above the mean score of securely attached individuals.

Additionally, the *Relationship Structures Questionnaire* was used to assess attachment patterns in close relationships. A person correlational analysis was used to explore the correlation between attachment to others and reflective function capacity. The results showed no significant correlation between both variables ( $p=0.9$ ). This means there is no significant correlation between the reflective function capacity and being attached to significant others, like mother, father, best friend, or partner.

It is worth reporting that the highest mean score of attachment to others was to the mother, followed by the best friend, the romantic partner, then the father. Around 57% of the sample reported a below-mean attachment score to the father, and 43% reported an above-average attachment to the father. On the other hand, 37% of the sample reported below-average attachment to the mother, and 63% reported above-average attachment. The mean scores presented below show how strong the attachment is between the respondent and each significant person in their lives. (See Table 2).

**Table 2**

*Mean and Standard Deviation of Attachment to Others*

	Mean	Std. Deviation
Mother attachment	4.6205	1.08438
Best friend attachment	4.9639	1.19159
Partner attachment	4.1746	.91134
Father attachment	4.1082	1.16227

### **5.3 Correlation Between Interpersonal Relationships and Attachment Styles**

The significance level of the correlation between attachment styles and interpersonal functioning was assessed to answer the third research question. The attachment styles were measured using the *attachment Styles Questionnaire in its short form (ASQ-SF)*. The relationship quality was measured by assessing interpersonal functioning using the *Functional Idiographic Assessment Template questionnaire (FIAT-Q)*. A Pearson and Spearman correlational analysis was used to explore the correlation between both variables. The results showed a strong association between the different attachment styles and the interpersonal functioning level. The interpersonal functioning level is assessed using five subscales (factor A=assertion of needs, factor B=bidirectional communication, factor C=conflict resolution, Factor D= disclosure, and interpersonal closeness, and Factor E= emotional expression). The higher the mean score in the FIAT-Q indicates having difficulty in interpersonal functioning, and the lower the score indicates better and less struggle with interpersonal functioning. The results showed a statistically significant negative correlation between emerging adults who reported secure attachment and struggling with interpersonal functioning ( $p=0.001$ ,  $r=-.02$ ). On the contrary, it showed a statically significant

positive correlation between emerging adults who reported insecure attachment and struggling with interpersonal functioning ( $p=0.000$ ,  $r=0.4$ ).

Furthermore, A Pearson moment and spearman's rho correlation test were conducted for each factor of the five factors to explore its correlation with attachment styles. It showed a statistically significant correlation ( $p=0.01$ , and  $r=-0.27$ ) between (*Factor B*), which represents having difficulty with bidirectional communication and is also related to the capacity to receive and give feedback, and (*Factor S*), which is Secure attachment style. This means that when (*Factor S*) increases, (*Factor B*) decreases, and vice versa. It also showed that (*Factor B*) is positively correlated with (*Factor I*), the insecure attachment styles ( $p<0.001$ ,  $r= 0.48$ ). Another factor is (*Factor E*), which represents struggling with emotional experience and expression; it was negatively correlated with secure attachment style ( $p=0.006$ ,  $r=-.310$ ) and positively correlated with insecure attachment style ( $p<0.001$ ,  $r=0.423$ ). The results also showed that there was a statically significant positive correlation ( $p<.001$ ,  $r=0.386$ ) between (*Factor I*) insecure attachment style and (*Factor C*), which represents the ability to identify and deal with conflict when it occurs with another person (See Table 3).

**Table 3**

*Correlation between the Different attachment styles (Factor I&S) and the interpersonal functioning*

		<b>Correlations</b>		
		Factor S	Factor I	Attachment style
<b>Factor A</b> <i>Assertion of needs</i>	Pearson Correlation	-0.202	0.437	0.096
	p value	0.079	0.000	0.405
	N	77	77	77
<b>Factor B</b> <i>Bidirectional communication</i>	Pearson Correlation	-0.276	0.484	0.060
	p value	0.015	0.000	0.605
	N	77	77	77
<b>Factor C</b> <i>Conflict resolution</i>	Pearson Correlation	-0.204	0.377	0.057
	p value	0.075	0.001	0.625
	N	77	77	77
<b>Factor D</b> <i>Disclosure and interpersonal closeness</i>	Pearson Correlation	-0.144	0.275	0.046
	p value	0.212	0.016	0.694
	N	77	77	77
<b>Factor E</b> <i>Emotional experience &amp; expression</i>	Pearson Correlation	-0.310	0.423	-0.008
	p value	0.006	0.000	0.946
	N	77	77	77
<b>Interpersonal functioning</b> <i>(All factors combine)</i>	Pearson Correlation	-0.287	0.496	0.058
	p value	0.011	0.000	0.619
	N	77	77	

Since peers and romantic partners' attachment is vital as a parental attachment during emerging adulthood, a further exploratory analysis was conducted to study the correlation between attachment to a romantic partner and a best friend and certain factors of interpersonal functioning. The attachment to a romantic partner (*Factor P*) and best friend (*Factor BF*) was measured using the *Relationship Structures Questionnaire* to assess attachment patterns in close relationships. The interpersonal functioning factors were chosen based on the assumption that those factors may be intensely used and essential in social relationships with peers or romantic partners. A Pearson's correlational analysis was conducted between attachment to a best friend (*Factor BF*) and bidirectional communication (*Factor B*), conflict resolution

(Factor C), and Disclosure and interpersonal closeness (Factor D). It was also conducted between the attachment to a romantic partner (Factor P) and assertion of needs (Factor A) and Disclosure and interpersonal closeness (Factor D), and emotional experience and expression (Factor E). The results showed that there was no statistically significant correlation ( $p=0.5$ ,  $P=0.7$ ,  $P=0.6$ ) between attachment to romantic partner (Factor P) and (factors A, B&D).

In contrast, it showed a statistically significant correlation between the attachment to a best friend (Factor BF) and two factors in the interpersonal relationship scale (Factors C and D). It showed a statistically significant negative correlation ( $p=0.003$  and  $r=-0.33$ ) between having difficulty resolving conflicts (Factor C) and the attachment to a best friend (Factor BF). It also showed a statistically significant negative correlation ( $p=0.02$ ,  $r=-0.26$ ) between the ability to disclose or talk about yourself and experiences with other people (Factor D) and being highly attached to a best friend (Factor BF). (See Table 4)

**Table 4**

*Correlation between the attachment to best friend and interpersonal functioning*

Correlations		Factor BF
Factor B <i>Bidirectional communication</i>	Pearson Correlation	-0.118
	p-value	0.306
	N	77
Factor C <i>Conflict resolution</i>	Pearson Correlation	-0.330
	p-value	0.003
	N	77
Factor D <i>Disclosure and interpersonal closeness</i>	Pearson Correlation	-0.263
	p-value	0.021
	N	77

After answering the three research questions and assessing the three variables of reflective function, attachment, and interpersonal functioning, participants were asked about their feeling toward adulthood. Only 74 emerging adults responded to the question "Do you feel you reached adulthood?", the participants were to choose either yes, no, or maybe. Eighteen participants reported not to have reached adulthood, 29 answered with maybe, and 30 responded that they feel they have reached adulthood. Group differences for reflective functioning turned out to be non-statistically significant ( $m_{no}=3.75$ ,  $SD_{no}=0.43$ ,  $m_{maybe}=3.67$ ,  $SD_{maybe}=0.65$ ,  $m_{yes}=3.71$ ,  $SD_{yes}=0.57$ ,  $p=0.84$ ), which means there are no differences in reflective function capacity between emerging adults who would consider themselves have reached adulthood or not and those who are not yet decided. Similarly, group differences for interpersonal functioning also turned out to be non-statistically significant ( $m_{no}=15.9$ ,  $SD_{no}=2.05$ ,  $m_{maybe}=15.67$ ,  $SD_{maybe}=2.26$ ,  $m_{yes}=15.31$ ,  $SD_{yes}=2.62$ ,  $p=0.66$ ), which means no significant differences in the interpersonal functioning of emerging adults who would consider themselves have reached adulthood or not and those who are not yet decided.

Additionally, 74 out of 77 emerging adults responded to the question "To what extent from 0-100 you feel you reached adulthood?" with a mean score ( $m=61$ ,  $SD=21$ ). A Pearson correlational analysis was conducted to explore the correlation between the reflective function capacity and emerging adult numerical value toward reaching adulthood. The results showed that there is no statically significant correlation between both variables ( $p=0.79$ ,  $r=-0.31$ ), which means that there is no correlation between emerging adult feeling toward reaching adulthood and the reflective function capacity.



## 6. Discussion and Findings

The present study explored the relationship between three variables: interpersonal functioning in relationships, reflective function ability, and attachment styles. The results have shown significant correlations between two of the three variables: attachment styles and interpersonal functioning, and a non-statistically significant correlation between the reflective function and the overall interpersonal functioning. However, one of the interpersonal functioning items had a significant negative correlation with reflective function ability, bidirectional communication. This indicates that the higher the reflective function capacity of the emerging adult, the lower the difficulty in bidirectional communication, the more the acceptance of receiving feedback from others and ability to give feedback to others. This complies with the study mentioned above by (Luyten and Fonagy, 2015) that the RF is strongly related to mental health and psychological well-being in addition to interpersonal benefits. Another interesting finding is the significance of attachment to others and its impact on interpersonal functioning in emerging adulthood. This study showed that the mother attachment got the highest score followed by the best friend, then the romantic partner and the father got the least score. The attachment to the father may have got the lowest mean score because of the culture in Egypt where the mothers are more involved in their kids and young adults' daily lives than the fathers.

It was interesting to examine that the strong attachment to a best friend leads to less struggling with conflicts, Disclosure, and interpersonal closeness and leads to higher interpersonal functioning. It also reflects that having a solid friendship aid to be able to resolve conflicts and function better on the interpersonal level. This also indicated that the stronger the attachment to a best friend, the more capable of disclosing experiences and talking about oneself on an interpersonal functioning level. This is consistent with the separation-individuation theory and the idea that emerging adults may consider peer attachment as necessary as a parental attachment in the emerging adulthood phase of life.

On the demographical level, it was unexpected to find out that around 43% of the sample reported working already or having previous work experience. However, most of the sample, around 74%, are undergraduates.

Furthermore, one of the foremost exciting findings of this study was the significant correlation and the differences between the securely versus insecurely attached emerging adults. It was shown in the results that emerging adults with secure attachment styles had fewer interpersonal struggles and better interpersonal functioning levels. More specifically, they reported lower bidirectional communication problems with others and lower problems in expressing and experiencing their emotions and understanding them. On the contrary, emerging adults with insecure attachment styles reported having difficulty with bidirectional communication, emotional expression and experience, and dealing with conflicts when it occurs with another person. This is a significant finding to attend to, primarily that insecurely attached emerging adults represented 40% of the total sample. This is a relatively high percentage in a non-clinical sample. These findings are inconsistent with previous studies, which suggest that emerging adults with secure attachment to their parents excel more academically, socially, and emotionally. The finding related to the emotional expression and experience and its correlation with attachment style is also in compliance with Luyten and Fonagy (2015) finding that attachment is at first and foremost a regulator of emotional experience. It also confirms that the decline in emotional functioning is caused by insecure parental attachment. It is also interesting to find from the results that emerging adults who scored high in having problems with Disclosure and closeness with others reported also struggling with emotional expression and experiencing their emotions. This finding shows the impact of low reflective function and the impact of insecure attachment style in emerging adults' interpersonal functioning levels.

## 7. Limitations and Future Suggestions

Despite the interesting findings of the present study, it had some limitations.

Firstly, convenience sampling was used for surveying the participants. This is likely to impact the degree to which the survey results can be generalized to emerging adults in Egypt. In addition, the dominant number of female participants represented 70%, and the number of male participants was 30%. A sample including more male participants would be more representative of the emerging adults' community. Furthermore, the emerging adults' response to the *attachment to others* questionnaire online might have not accurately presented the levels of attachment. For example, some participants who had no romantic partner might have found it difficult to imagine their level of attachment to a future fictitious partner. Another example, some participants might have considered their mother as their best friend, so they reported their attachment for one person in both sections. One more challenge for the present study is that all the data were collected through online self-reported surveys due to Covid-19. On-ground interviewing for participants might have been of more accuracy for the data.

Future research could examine more the impact of mentalization and reflective function capacity and attachment styles on other aspects of emerging adults' psychological issues or disorders. For example, disorders indirectly related to interpersonal issues like depression and anxiety disorders can be further examined in future studies. The aspects of interpersonal functioning that proved to be from the present study problematic for emerging adults are worth further investigation in future studies. This is namely the emotional expression and experience and the Disclosure and interpersonal closeness to others. Additionally, going beyond the interpersonal struggles and exploring their correlation with other pathology is worth future investigation.

## **8. Conclusion and Implications for Counselling**

To our knowledge, this is the first study in Egypt to explore the mentalization, attachment, and interpersonal relationships for emerging adults. It was tough to find literature for middle eastern countries that are targeting this population. In addition, the attachment theory was explored in many studies for infants and parents and not for emerging or young adults. This research study helps to understand more how the reflective function capacity and the attachment styles of emerging adults impact their interpersonal level of functioning and communication with others. It also shows how theories like separation-individuation and desire to explore their own identities apply to emerging Egyptian adults. The stress of identity formation and instability requires emotional skills to handle. Working with emerging adults who struggle with interpersonal relationships and have difficulty expressing their emotions in counseling, touching base on the clients' attachment history is essential. The strength of this study lies in connecting both cognitions and emotions in the exploration. Cognitions can be addressed through touching base on the reflective function capacity and ability to empathize and take another perspective, as discussed above. This is one direction in counseling that can be done through Mentalization-based treatment "MBT" (Bateman & Fonagy, 2016). The emotional struggles can be addressed through assessing the attachments styles and the attachment to significant others as the base. It is then focusing on expressing emotions and processing the clients' emotions. This is another direction in therapy that can be done using Emotional-focused therapy "EFT" (Greenberg, Dillon, & Timulak, 2018).

## 9. References

- Anis, L., Perez, G., Benzies, K. M., Ewashen, C., Hart, M., & Letourneau, N. (2020). Convergent Validity of Three Measures of Reflective Function: Parent Development Interview, Parental Reflective Function Questionnaire, and Reflective Function Questionnaire. *Frontiers in Psychology*, 14.
- Arnett, J. J. (2000). Emerging adulthood. A theory of development from the late teens through the twenties. *American Psychologist*, 55.
- Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, 6.
- Arnett, J. J. (2016). *The Oxford Handbook of Emerging adulthood*. Oxford University Press.
- Barry, C. M., Madsen, S., Nelson, L., Carroll, J., & Badger, S. (2009). Friendship and Romantic Relationship Qualities in Emerging Adulthood: Differential Associations with Identity Development and Achieved Adulthood Criteria. *Journal of Adult Development*, 16(4), 209.
- Bateman, A., & Fonagy, P. (2016). Mentalization-based treatment for personality disorders: A practical guide. In A. Bateman, & P. Fonagy, *Mentalization-based treatment for personality disorders* (pp. 1-147). Oxford: Oxford university press.
- Boonyarit, I. (2017). Assessing Forgiveness in Interpersonal Conflict Among Thai Emerging Adults: Development and Psychometric Properties of the Peer Forgiveness Scale (PFS). *The Journal of Behavioral Science*, 12(2), 1-18.

Running head: Mentalization, Attachment, and Quality of Emerging Adults' Relationships.

Bouchard, M. A., Target, M., Lecours, S., Fonagy, P., Tremblay, L. M., Schachter, A., & Stein, H. (2008).

Mentalization in adult attachment narratives: Reflective functioning, mental states, and affect elaboration compared. *Psychoanalytic Psychology*, 25(1), 47.

Borelli, J. L., Brugnera, A., Zarbo, C., Rabboni, M., Bondi, E., Tasca, G. A., & Compare, A. (2019).

Attachment comes of age: adolescents' narrative coherence and reflective functioning predict well-being in emerging adulthood. *Attachment & human development*, 21(4), 332-351.

Moser, M., Johnson, S. M., Dalgleish, T. L., Lafontaine, M. F., Wiebe, S. A., & Tasca, G. A. (2016).

Changes in relationship-specific attachment in emotionally focused couple therapy. *Journal of marital and family therapy*, 42(2), 231-245.

Chui, W. Y., & Leung, M. T. (2016). Adult attachment internal working model of self and other in

Chinese culture: measured by the attachment style questionnaire—short form (ASQ-SF) by confirmatory factor analysis (CFA) and item response theory (IRT). *Personality and Individual Differences*, 96, 55-64.

Clarke, A., Meredith, P. J., & Rose, T. A. (2020). Exploring mentalization, trust, communication quality, and alienation in adolescents. *PloS one*, 15(6), e0234662.

Côté, J. E. (2014). The dangerous myth of emerging adulthood: An evidence-based critique of a flawed developmental theory. *Applied Developmental Science*, 18(4), 177-188.

Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-termination in human behavior. New

York: Plenum. Frey, B. S. (1994)

Ensink, K., Maheux, J., Normandin, L., Sabourin, S., Diguier, L., Berthelot, N., & Parent, K. (2013). The

impact of mentalization training on the reflective function of novice therapists: A randomized controlled trial. *Psychotherapy Research*, 23(5), 526-538.

Fonagy,P.,&Luyten,P.(2009).A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and psychopathology*,21(4),1355-1381.

Fraley, R., Heffernan, M.V.,&Vicary,A.M.(2011).The experiences in close relationships-Relationship Structures Questionnaire; A Method for Assessing Attachment Orientations Across Relationships. *Psychological Assessment*,23(3),615-625.

Galanaki, E., & Leontopoulou, S. (2017). Criteria for the transition to adulthood, developmental features of emerging adulthood, and views of the future among Greek studying youth. *Europe's journal of psychology*, 13(3), 417.

Gillison, F. B., Rouse, P., Standage, M., Sebire, S. J., & Ryan, R. M. (2019). A meta-analysis of techniques to promote motivation for health behavior change from a self-determination theory perspective. *Health Psychology Review*, 13(1), 110-130.

Hazan, C., & Shaver, P. (1994). Attachment as an Organizational Framework for Research on Close Relationships. *Psychological Inquiry*, 5(1), 1-22.

Greenberg, L., Dillon, A., & Timulak, L. (2018). Transforming core emotional pain in the course of emotion-focused therapy for depression: A case study. *Psychotherapy Research*28(3),406-422.

Holt, L. J., Mattanah, J. F., & Long, M. W. (2018). Change in parental and peer relationship quality during emerging adulthood: Implications for academic, social, and emotional functioning. *Journal of Social and Personal Relationships*, 35(5), 743-769.

Running head: Mentalization, Attachment, and Quality of Emerging Adults' Relationships.

- Jiang, L. C., Yang, I. M., & Wang, C. (2017). Self-disclosure to parents in emerging adulthood: Examining the roles of perceived parental responsiveness and separation-individuation. *Journal of Social and Personal Relationships, 34*(4), 425-445.
- Kins, E., Soenens, B., & Beyers, W. (2011). "Why do they have to grow up so fast?" Parental separation anxiety and emerging adults' pathology of separation-individuation. *Journal of Clinical Psychology, 67*(7), 647-664.
- Kvitkovičová, L., Umemura, T., & Macek, P. (2017). Roles of attachment relationships in emerging adults' career decision-making process: A two-year longitudinal research design. *Journal of Vocational Behavior, 101*, 119-132.
- Li, D., Li, D., & Yang, K. (2020). Interparental conflict and Chinese emerging adults' romantic relationship quality: Indirect pathways through attachment to parents and interpersonal security. *Journal of Social and Personal Relationships, 37*(2), 414-431.
- Liljenfors, R., & Lundh, L. G. (2015). Mentalization and intersubjectivity towards a theoretical integration. *Psychoanalytic Psychology, 32*(1), 36.
- Luyten, P., & Fonagy, P. (2015). The neurobiology of mentalizing. *Personality Disorders: Theory, Research, and Treatment, 6*(4), 366.
- Mosterman, R. M., & Hofstra, J. (2015). Clinical Validation of the Restructured Attachment Styles Questionnaire. *Niet-gepubliceerd manuscript*.
- Palgi, Y., Bensimon, M., & Bodner, E. (2017). Motives of mentalization among older adults exposed in adulthood to potentially traumatic life events: A qualitative exploration. *Traumatology, 23*(4), 273.
- Ponti, L., & Smorti, M. (2019). The roles of parental attachment and sibling relationships on life satisfaction in emerging adults. *Journal of Social and Personal Relationships, 36*(6), 1747-1763.



Running head: Mentalization, Attachment, and Quality of Emerging Adults' Relationships.

Sheldon, J. P., Oliver, D. G., & Balaghi, D. (2015). Arab American emerging adults' ethnic identity and its relation to psychological well-being. *Emerging Adulthood, 3*(5), 340-352.

Syed, M. (2016). Emerging adulthood: Developmental stage, theory, or nonsense. *The Oxford handbook of emerging adulthood, 11-25*.

Van Oudenhoven, J. P. L. M., Hofstra, J., & Bakker, W. (2003). Ontwikkeling en evaluatie van de Hechtingstijlijst [Development and evaluation of the Attachment Styles Questionnaire]. *Nederlands Tijdschrift voor de Psychologie en haar Grensgebieden, 58*, 95-102.

Van Oudenhoven, J. P. L. M., & Hofstra, J. (2005). De Hechtingsstijlijst (HSL): Handleiding [The Attachment Styles Questionnaire (ASQ): Manual]. Unpublished manuscript, University of Groningen, the Netherlands. Electronic version: [http://www.intercultureelcontact.nl/pdf/handleiding\\_hechtingsstijlijst.pdf](http://www.intercultureelcontact.nl/pdf/handleiding_hechtingsstijlijst.pdf)

Zettl, M., Volkert, J., Vögele, C., Herpertz, S. C., Kubera, K. M., & Taubner, S. (2019). Mentalization and criterion of the alternative model for personality disorders: Results from a clinical and non-clinical sample. *Personality Disorders: Theory, Research, and Treatment, 11*(3), 191.

Zorotovich, J., & Johnson, E. I. (2019). Five dimensions of emerging adulthood: A comparison between college students, nonstudents, and graduates. *College Student Journal, 53*(3), 376-384.

## Appendix A

### The Reflective Functioning Questionnaire

Please work through the next 8 statements. For each statement, choose a number between 1 and 7 to say how much you disagree or agree with the statement, and write it beside the statement. Do not think too much about it – your initial responses are usually the best. Thank you.

Use the following scale from 1 to 7:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
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1. \_\_\_ People's thoughts are a mystery to me (**original item 1**)
2. \_\_\_ I don't always know why I do what I do (**original item 17**)
3. \_\_\_ When I get angry I say things without really knowing why I am saying them (**original item 22**)
4. \_\_\_ When I get angry I say things that I later regret (**original item 29**)
5. \_\_\_ If I feel insecure I can behave in ways that put others' backs up (**original item 35**)
6. \_\_\_ Sometimes I do things without really knowing why (**original item 36**)
7. \_\_\_ I always know what I feel (**original item 8**)
8. \_\_\_ Strong feelings often cloud my thinking (**original item 27**)

## The Attachment Style Questionnaire

### The Attachment Style Questionnaire – Short Form

#### Secure

8. I trust other people and I like it when other people can rely on me.
9. I feel at ease in intimate relationships
10. I think it is important that people can rely on each other.

#### Fearful-avoidant

6. I would like to be open to others, but I feel I can't trust other people.
7. I would like to have close relationships with other people, but I find it difficult to fully trust them.
8. I'm afraid that my hopes will be deceived when I get too closely related to others.
9. I am wary to get engaged in close relationships because I'm afraid to get hurt.
10. I feel uncomfortable when relationships with other people become close.

#### Preoccupied

8. I often wonder whether people like me.
9. I am often afraid that other people don't like me.
10. I don't worry whether people like me or not.

#### Dismissing

6. It is important to me to be independent.
7. I prefer that others are independent of me, and that I am independent of others.
8. I like to be self-sufficient.
9. I don't worry about being alone: I don't need other people that strongly.

## Interpersonal Relationships Questionnaire

Name (code): \_\_\_\_\_

**FIAT – Q**  
**Interpersonal Relationships Questionnaire**

This questionnaire will ask you to respond to a number of statements. You are asked to read each statement carefully, and then think about whether the statement applies to you or does not apply to you. Then circle the number that best describes how much you agree with the statement.

**CLASS A: ASSERTION OF NEEDS (IDENTIFICATION & EXPRESSION)**

	Disagree			Agree		
	Strongly	Moderately	Mildly	Mildly	Moderately	Strongly
1. I have problems getting my needs met.	1	2	3	4	5	6
2. I get my needs met as soon as I ask.	6	5	4	3	2	1
3. I know when I need help or support from other people.	6	5	4	3	2	1
4. I realize that I need help in a particular situation <u>after</u> the situation has passed.	1	2	3	4	5	6
5. I do not know how to put my needs into words.	1	2	3	4	5	6
6. I am able to identify the kind of help or social support I need from other people.	6	5	4	3	2	1
7. I have trouble recognizing when I can ask another person for something.	1	2	3	4	5	6
8. When I need something, I ask for it as soon as I need it.	6	5	4	3	2	1
9. I can identify people who are willing and able to help me with my needs.	6	5	4	3	2	1
10. When I need help or social support, I will ask a close friend or family member.	6	5	4	3	2	1
11. I will ask a stranger or casual acquaintance for advice about a personal situation.	1	2	3	4	5	6
12. I avoid asking people for help in meeting my needs.	1	2	3	4	5	6
13. I start to ask another person for something, then withdraw my request.	1	2	3	4	5	6
14. I am willing to accept assistance from someone once the person has agreed to help me.	6	5	4	3	2	1
15. When someone notices that I need assistance, I deny that I need any help.	1	2	3	4	5	6
16. People do not respond when I ask for help or social support.	1	2	3	4	5	6
17. I express my needs subtly, for example, by hinting at what I need.	1	2	3	4	5	6
18. When I ask for assistance, people understand what I need.	6	5	4	3	2	1
19. In a relationship, I give a lot of emotional support, but do not get much support from the other person.	1	2	3	4	5	6
20. People tell me that I ask for things too often.	1	2	3	4	5	6
21. People don't like the way I ask for things.	1	2	3	4	5	6

**CLASS B: BIDIRECTIONAL COMMUNICATION (IMPACT and FEEDBACK)**

These statements describe how you impact or affect other people, how you give and respond to feedback. *Feedback* refers to the responses and reactions to your behavior or the behavior of others. *Feedback* is not just information provided in formal evaluations (i.e., in a work setting), it is the information from others that lets us know how we are doing. It may be verbal (expressed in words) or nonverbal (e.g., facial expressions).

	Strongly	Moderately	Mildly	Mildly	Moderately	Strongly
	Disagree			Agree		
1. I have problems receiving feedback from other people.	1	2	3	4	5	6
2. I have problems giving feedback to other people.	1	2	3	4	5	6
3. It is hard for me to identify when people are giving me feedback about my behavior.	1	2	3	4	5	6
4. When I am interacting with another person, I am not sure how I affect them.	1	2	3	4	5	6
5. I know when I am having an unpleasant impact on others.	6	5	4	3	2	1
6. I carefully consider the source of feedback before changing my behavior.	6	5	4	3	2	1
7. I am able to identify situations when it would be constructive to provide feedback to another person.	6	5	4	3	2	1
8. I avoid situations when I might be provided with feedback, e.g., speaking up in class or at a meeting.	1	2	3	4	5	6
9. If I am not certain about the impact I am having on a close friend, I will ask the friend to give me feedback.	6	5	4	3	2	1
10. When someone is giving me negative feedback, I shut down.	1	2	3	4	5	6
11. I am easily hurt or upset when negative feedback is given to me.	1	2	3	4	5	6
12. Regardless of whether feedback is positive or negative, I don't know how to respond to it.	1	2	3	4	5	6
13. If someone gives me feedback, I believe it is <u>that</u> person's problem, not my problem.						
14. When I realize I am having an unpleasant impact on someone, I try to ignore the person's discomfort.	1	2	3	4	5	6
15. If someone gives me feedback that I don't like, I do the opposite of what the person wants.	1	2	3	4	5	6
16. When people give me unfavorable feedback, I argue with them.	1	2	3	4	5	6
17. I do not provide feedback to another person if they are having an unpleasant impact on me.	1	2	3	4	5	6
18. When I tell people that their behavior is having a negative effect on me, they do not change what they are doing.	1	2	3	4	5	6
19. I am told that the feedback I give is excessive and too detailed.	1	2	3	4	5	6
20. When providing feedback to others, I respond in a way that is brief and specific.	1	2	3	4	5	6
21. I am told that when I provide feedback, I am too critical of the other person.	6	5	4	3	2	1
22. When I give feedback, I repeat my position several times.	1	2	3	4	5	6

**CLASS C: CONFLICT**

These statements describe how you identify and then deal with conflict that occurs between you and another person. Here, *conflict* refers to having disagreement, or an uncomfortable interaction with someone else. Although conflict can sometimes come before violence, in these questions *conflict* does NOT refer to violence. It is very important to avoid and stop violent interactions with others.

	Strongly Moderately	Mildly	Mildly Moderately	Strongly	
	Disagree			Agree	
1. I have problems with conflict in my relationships.	1	2	3	4	5 6
2. I feel uncomfortable when I experience disagreement with another person.	1	2	3	4	5 6
3. I am aware when there is conflict with me and another person.	6	5	4	3	2 1
4. When another person is angry with me, I do not understand the problem between us.	1	2	3	4	5 6
5. I feel that there are times when it is beneficial to express disagreement in a relationship.	6	5	4	3	2 1
6. I get into conflict with others over things that do not seem to matter to them.	1	2	3	4	5 6
7. People tell me that I want to discuss conflict at inconvenient or inappropriate times.	1	2	3	4	5 6
8. I will engage in conflict with another person without considering who they are.	1	2	3	4	5 6
9. I <u>avoid</u> conflict at all costs.	1	2	3	4	5 6
10. In order to avoid conflict, I try to anticipate what the other person wants me to do.	1	2	3	4	5 6
11. I <u>withdraw</u> in the face of conflict, regardless of the circumstances.	1	2	3	4	5 6
12. After I voice a disagreement with another person, I immediately apologize for bringing up the issue.	1	2	3	4	5 6
13. I am successful at resolving conflict with others.	6	5	4	3	2 1
14. When I have a disagreement with another person, I explain repeatedly why I think I am right.	1	2	3	4	5 6
15. I approach solutions to conflict directly, clearly communicating what can be done to resolve our differences.	6	5	4	3	2 1
16. I express anger indirectly, for example, by not speaking to the other person.	1	2	3	4	5 6
17. People say I am not willing to compromise when there is a conflict.	1	2	3	4	5 6
18. When I am arguing with someone, the argument goes on for a long time.	1	2	3	4	5 6
19. During an argument, I feel more connected and close to the other person.	1	2	3	4	5 6
20. When I am arguing with someone, the argument becomes more intense as time goes on.	1	2	3	4	5 6
21. I deliberately upset the other person during an argument.	1	2	3	4	5 6

**CLASS D: DISCLOSURE and INTERPERSONAL CLOSENESS**

These statements describe how you may disclose, or talk about, yourself or your experiences with other people. Statements also describe your feelings about interpersonal closeness. Interpersonal closeness simply refers to being “connected to,” “close with,” or “good friends with” another person. This kind of closeness may occur with friends, family, or romantic partners, but typically does not occur with casual acquaintances, such as neighbors or classmates that you seldom encounter. Interpersonally close relationships are those that involve telling others how we feel, being understood by another person, and appreciating others and their needs

	Strongly Moderately Mildly				Mildly Moderately Strongly	
	Disagree			Agree		
1. I have problems being close with others.	1	2	3	4	5	6
2. I have had one or more close relationships.	6	5	4	3	2	1
3. I am not able to identify when it would benefit me to share my experiences with another person.	1	2	3	4	5	6
4. I am aware when it is appropriate to ask people about their experiences.	6	5	4	3	2	1
5. I will share personal information with a stranger or casual acquaintance.	1	2	3	4	5	6
6. I will talk about myself and my experiences with only a small and select group of people.	1	2	3	4	5	6
7. When friends ask me about how I am doing, I choose not to tell them.	1	2	3	4	5	6
8. I feel the need to keep secrets from people who are close to me.	1	2	3	4	5	6
9. I talk about myself and my experiences with other people.	6	5	4	3	2	1
10. I feel it is best <u>not</u> to talk about my own experiences with anyone.	1	2	3	4	5	6
11. I start to talk about what I am going through, and then decide it is better to keep my feelings to myself.	1	2	3	4	5	6
12. I have told people about my problems, and then wished that I hadn't.	1	2	3	4	5	6
13. Close relationships are important to me.	6	5	4	3	2	1
14. I do not want to share things about myself with others.	1	2	3	4	5	6
15. I ask other people to tell me about their feelings and their experiences.	6	5	4	3	2	1
16. I have difficulty making conversation with people.	1	2	3	4	5	6
17. When I talk about my experiences, people clearly understand what I am telling them.	6	5	4	3	2	1
18. After I share something personal about myself, I downplay the importance of what I've disclosed.	1	2	3	4	5	6
19. I exaggerate my good points and brag about my skills and abilities.	1	2	3	4	5	6
20. People say that I talk about myself in a way that downplays my good qualities.	1	2	3	4	5	6
21. I am told that I talk too much about myself.	1	2	3	4	5	6
22. People tell me that when I talk about my own experience, I share information that is too personal.	1	2	3	4	5	6
23. I listen to others and offer them support.	6	5	4	3	2	1
24. I am told that in relationships, I ask for a lot of emotional support, but provide little support to the other person.	1	2	3	4	5	6

**CLASS E: EMOTIONAL EXPERIENCE and EXPRESSION**

The following statements describe how you identify and then express your feelings. The term "emotional experience" means all types of emotions or feelings that you have, not just the "negative" feelings like sadness, anxiety, loneliness, etc. These feelings also include love, pride, joy, humor, etc. Feelings may occur in the moment as you experience an event or interaction, or they may occur afterwards, like when you remember something.

	Strongly	Moderately	Mildly	Mildly	Moderately	Strongly
	Disagree			Agree		
1. I have problems with my emotions.	1	2	3	4	5	6
2. I have problems identifying what I am feeling.	1	2	3	4	5	6
3. I am aware of my feelings and emotional experiences as they are happening.	6	5	4	3	2	1
4. I fail to notice my emotions during an experience, but become aware of them when I look back at the event.	1	2	3	4	5	6
5. I can tell the difference between one emotion and another.	6	5	4	3	2	1
6. My emotional responses make sense to me when I consider the circumstances.	6	5	4	3	2	1
7. I express my emotions at appropriate times and places.	6	5	4	3	2	1
8. I intentionally hide my feelings.	1	2	3	4	5	6
9. I try not to feel certain emotions.	1	2	3	4	5	6
10. I avoid situations that might bring out strong feelings.	1	2	3	4	5	6
11. I allow myself to feel all emotions, even strong ones.	6	5	4	3	2	1
12. When I have an unpleasant emotion, I take immediate action to stop feeling it.	1	2	3	4	5	6
13. I am able to put a name to what I am feeling.	6	5	4	3	2	1
14. I tell people that I am feeling one way, when I am actually feeling another way.	1	2	3	4	5	6
15. People tell me that my emotional expression is flat.	1	2	3	4	5	6
16. When I talk about how I am feeling, I use the same few words to describe my feelings.	1	2	3	4	5	6
17. People tell me that they want me to express my feelings more openly.	1	2	3	4	5	6
18. When I share my feelings with others, they do not react in the way that I expect.	1	2	3	4	5	6
19. I clearly communicate my emotions to people so that they know exactly how I feel.	6	5	4	3	2	1
20. People say that I talk about my feelings too much.	1	2	3	4	5	6
21. I express my emotions in an overly intense manner.	1	2	3	4	5	6
22. People don't like it when I talk about my emotions.	1	2	3	4	5	6
23. People are annoyed by the way that I express my emotions.	1	2	3	4	5	6



## Relationship Structures Questionnaire

This questionnaire is designed to assess the way in which you mentally represent important people in your life. You'll be asked to answer questions

-----  
Please answer the following questions about your mother or a mother-like figure  
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1. It helps to turn to this person in times of need.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
2. I usually discuss my problems and concerns with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
3. I talk things over with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
4. I find it easy to depend on this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
5. I don't feel comfortable opening up to this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
6. I prefer not to show this person how I feel deep down.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
7. I often worry that this person doesn't really care for me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
8. I'm afraid that this person may abandon me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
9. I worry that this person won't care about me as much as I care about him or her.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

-----  
Please answer the following questions about your father or a father-like figure  
-----

1. It helps to turn to this person in times of need.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
2. I usually discuss my problems and concerns with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
3. I talk things over with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
4. I find it easy to depend on this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
5. I don't feel comfortable opening up to this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
6. I prefer not to show this person how I feel deep down.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

## Running head: Mentalization, Attachment, and Quality of Emerging Adults' Relationships.

7. I often worry that this person doesn't really care for me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

8. I'm afraid that this person may abandon me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

9. I worry that this person won't care about me as much as I care about him or her.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

-----  
Please answer the following questions about your dating or marital partner.

Note: If you are not currently in a dating or marital relationship with someone, answer these questions with respect to a former partner or a relative.  
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1. It helps to turn to this person in times of need.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

2. I usually discuss my problems and concerns with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

3. I talk things over with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

4. I find it easy to depend on this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

5. I don't feel comfortable opening up to this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

6. I prefer not to show this person how I feel deep down.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

7. I often worry that this person doesn't really care for me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

8. I'm afraid that this person may abandon me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

9. I worry that this person won't care about me as much as I care about him or her.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

-----  
Please answer the following questions about your best friend  
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1. It helps to turn to this person in times of need.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

2. I usually discuss my problems and concerns with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

3. I talk things over with this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

4. I find it easy to depend on this person.

Running head: Mentalization, Attachment, and Quality of Emerging Adults' Relationships.

strongly disagree 1 2 3 4 5 6 7 strongly agree

5. I don't feel comfortable opening up to this person.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

6. I prefer not to show this person how I feel deep down.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

7. I often worry that this person doesn't really care for me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

8. I'm afraid that this person may abandon me.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

9. I worry that this person won't care about me as much as I care about him or her.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

## Appendix B

### *Group differences of different attachment styles and interpersonal functioning*

		<b>Correlations</b>			
			Factor S	Factor I	Attachment style
<b>Spearman's rho</b>	Factor A	Correlation Coefficient	-0.217	0.407	0.096
		p value	0.057	0.000	0.404
		N	77	77	77
	Factor B	Correlation Coefficient	-0.313	0.472	0.005
		p value	0.006	0.000	0.967
		N	77	77	77
	Factor C	Correlation Coefficient	-0.199	0.386	0.071
		p value	0.083	0.001	0.542
		N	77	77	77
	Factor D	Correlation Coefficient	-0.122	0.230	0.039
		p value	0.289	0.044	0.738
		N	77	77	77
	Factor E	Correlation Coefficient	-0.282	0.391	-0.033
		p value	0.013	0.000	0.774
		N	77	77	77
	Interpersonal relationship	Correlation Coefficient	-0.319	0.471	0.013
		p value	0.005	0.000	0.912
		N	77	77	77