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Exploring the Connection between Adult Playfulness and Emotional Intelligence

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ABSTRACT

This study explored the connection between adult playfulness and emotional intelligence. Participants were 325 (39 men, 286 women) primarily European American, (59%), undergraduate students attending a private, four year, liberal arts university in the northeastern United States. Participants completed two standard measures – The Schutte Self Report Emotional Intelligence Test (SSEIT) and The Adult Playfulness Trait Scale (APTS). In addition, participants completed an open ended query – "How do you define play?" to complement the correlation analyses. Correlational analyses revealed strong, positive connections between the SSEIT and APTS subscale and total scores. The Fun Seeking subscale of the APTS positively connected to all subscales of the SSEIT. Engaging in fun and having a good time was a playfulness component and temperamental disposition that helps one perceive, manage, and utilize emotions as well as manage the emotions of social others. The Uninhibited subscale of the APTS connected positively to two of the SSEIT subscales – Managing one's emotions and Utilizing emotions. Finally, individuals who scored high on the APTS also scored high on the SSEIT. This study's findings suggest that the temperamental disposition, playfulness connects to an individual's emotional intelligence. Future studies might investigate different cultural and age groups and utilize mixed method approaches to broaden our understanding of how playfulness helps people process emotional experience related to the self and social others.

Play is a pan species and most likely a human cultural activity (Lancy, 2007; 2015). Sutton-Smith suggested that although it is difficult to define play, one of its functions is that it helps the player achieve "emotional joy" (2002, p. 19). Contemporary play researchers may not agree on a precise definition of play but there is agreement on the defining characteristics of play. Play is: pleasurable or fun, freely selected, intrinsically motivated, non-literal, an activity that requires active engagement, rule-governed, and an activity that focuses upon process rather than outcomes (Sluss, 2015). Numerous studies across age and cultural communities provide evidence that individuals perceive play as fun or enjoyable (Holmes, 1999; 2001).

Much of the current play literature focuses upon Western children's play, in particular the benefits of play in shaping children's developmental outcomes. Some of these studies investigate the developmental benefits of

pretend play for creativity (Hoffman & Russ, 2012; 2016), cognitive skills and hypothetical thinking (Bergen, 2002; Ahmad et al., 2016), social skills such as negotiation and forming friendships (Whitebread et al., 2017) and emotion and self-regulation (Cabrera et al., 2017; Gaskins & Miller, 2009; Sidera et al., 2011; Vygotsky, 1978).

Although there is fairly robust literature on the activities and behaviors we refer to as play, we know comparatively less about the temperamental disposition, playfulness particularly in adults (e.g., Yue, Leung, & Hiranandani, 2016). This is interesting because in our view playfulness requires individuals to be in touch with their emotional intelligence which includes the ability to both regulate our emotions and process them for problem solving tasks (Goleman, 1995/2005). The social isolation, home/work demands, and other stressors people are experiencing due to the COVID-19 pandemic have highlighted the view of play as a coping mechanism (Brown, 2014; Dell Clark, 2003; O'Connor et al., 2016). For children, play serves as a way for them to cope with the stressors of situations that diverge from their everyday interactions and helps children process their feelings about these experiences (Burns-Nader & Hernandez-Reif, 2016; Dell Clark, 2003). We believe this presents us with an opportunity to explore the connection between adult playfulness and emotional intelligence and how adults define play.

What is Emotional Intelligence?

We employ our emotional intelligence every day in our social interactions with others (Ciarocchi et al., 2006; Goleman, 1995/2005). One general definition of emotional intelligence is the ability to recognize and regulate one's emotions (Wischerth et al., 2016). According to Goleman (1995/2005) emotional intelligence includes the skills and abilities involved in processing, understanding, interpreting, and regulating our own emotions and the emotions of social others. The five main components to one's emotional intelligence are: 1) self-awareness - evaluating and expressing emotions in oneself and others, 2) regulating these emotions in both oneself and others, 3) using internal motivation to plan and achieve certain tasks, 4) understanding and expressing empathy, and 5) possessing social skills. Because emotional intelligence improves mental processes, this can contribute to an enhancement in social outcomes, performance, and overall mental and physical well-being. These appear in Figure 1.

Figure 1: Emotional Intelligence

What is Playfulness?

Most researchers who study playfulness agree that playfulness is a multidimensional personality characteristic. Proyer (2017, p. 114) defined playfulness as "an individual differences variable that allows people to frame or reframe everyday situations in a way such that they experience them as entertaining, and/or intellectually stimulating, and/or personally interesting. Those on the high end of this dimension seek and establish situations in which they can interact playfully with others (e.g., playful teasing, shared play activities) and they are capable of using their playfulness even under difficult situations to resolve tension (e.g., in social interactions, or in work-type settings). Playfulness is also associated with a preference for complexity rather than simplicity and a preference for—and liking of—unusual activities, objects and topics, or individuals."

This definition distinguishes between the temperamental dispositional trait, playfulness and the consequences of behaving playfully. It also defines playfulness as a trait that allows people to utilize playfulness to resolve conflict and experience situations in enjoyable and cognitively stimulating ways. This function of playfulness connects to the defining characteristics of play and may connect to components of emotional intelligence including our ability to cope.

Studies on Adult Playfulness

Existing studies on adult playfulness connect this temperamental disposition to diverse skills, processes, and settings. These include coping with stress (Magnuson & Barnett, 2013), workplace performance (Yu et al., 2007), creativity (Proyer et al., 2019) and intrinsic motivation (Bateson & Martin, 2013; Proyer, 2012), choosing romantic partners (Chick et al., 2012; Proyer & Wagner, 2015; Chick et al., 2020), academic success (Proyer, 2011), and healthy aging (Waldman-Levi et al., 2015).

Some studies on adult playfulness replicate studies that explore the relationships between playfulness and behavioral and developmental qualities conducted with child participants. For example, Proyer and colleagues (2018) explored the connection between adult playfulness and health and physical activity levels expanding upon previous findings that support a connection between playfulness and physical activity in children. Their adult participants completed standardized measures of playfulness and behavioral tasks to measure physical activity and fitness.

Approaching playfulness as a multicomponent temperamental disposition, they found aspects of playfulness positively connects with higher levels of physical activity and leading an active life. The authors also note there is evidence for a positive relationship between being playful and the experience of positive emotions (e.g., joy or contentment). Working with Australian adult participants, Farley and colleagues (2021) found strong positive connections between playfulness and positive emotions, social engagement, and finding purpose in one's life. This contributed to overall well-being. These findings connect to Sutton-Smith's (2002) view that play functions to help players experience positive emotions, particularly joy.

Other studies on adult playfulness tangentially include the connection between playfulness and emotion. In their study, Proyer and Ruch (2011) investigated the connection between playfulness and positive character traits and strengths. The adult participants completed three standardized measures: The Adult Playfulness Scale (APS), the Short Measure of Adult Playfulness (SMAP), and Values in Action Inventory Strength (VIA-IS). They found strong connections between creativity, hope, and zest in playfulness. Aspects of playfulness such as the fun factor strongly connected to emotional strength. Intellectual strengths connected strongly to all aspects of playfulness. Negative connections emerged between restraint and the spontaneous, expressive, and silly-variants of playfulness. Using a Values in Action lens, the authors conclude that adult playfulness connects to psychological well-being and fulfillment. More recent studies provide evidence that connects playfulness with greater emotional stability and lower negative affect (Proyer, 2017; Proyer et al., 2019). Negative affect may induce worrying, anxiousness, and helplessness and impact a person's well-being. Being playful may protect us from these negative experiences by helping us cope and remain hopeful.

In their study Yue, Leung, and Hiranandani (2016) found that adult playfulness positively connects to one's perceived happiness and humor. These two characteristics are relevant to playfulness as a temperamental disposition and emotional intelligence as these also characterize components of our emotions. Research suggests that being playful can lead to a more positive mood which leads to better coping strategies (Quian & Yarnal, 2011). This supports Fredrickson's (2003) view that engaging in play and being playful enables our positive emotions. She draws connections between joy and playful behavior.

Playfulness and emotional intelligence may also shape our interpersonal relationships. Sidhu and colleagues (2019) found that emotional intelligence connects to greater commitment, stability, and satisfaction in romantic relationships. Playfulness also shapes our relationships. Studies on assortative mating (Chick et al., 2020; Proyer & Wagner, 2015), romantic relationships, (Proyer et al., 2019; Sidhu et al., 2019), and positive psychology (Farley et al., 2021; Proyer et al., 2018) provide evidence for a connection between playfulness among romantic partners.

For example, Garry Chick and colleagues (2012) explored the importance of playfulness in sexual selection modifying Buss and Barnes (1986) original scale by adding the qualities: playful, fun loving, and sense of humor. They asked their sample of undergraduate students to rate a list of qualities they would find desirable in long-term partners. They found that both men and women highly rated playfulness as a desirable quality in their potential long-term mates. They also did so for fun loving and having a sense of humor which are different dimensions of playfulness. In a later study on assortative mating and playfulness, Chick and colleagues (2020) found that playful individuals seek out potential mates who are also playful. One possible explanation for the high desirability of playfulness is that it may trigger positive emotions. This supports Aune and Wong's (2002) and Fredrickson's (2003) view that engaging in play and being playful enables our positive emotions.

Other studies connect adult playfulness with relationship satisfaction. For example, Proyer and colleagues (2019) provide evidence for the positive connection between playfulness and relationship satisfaction in young adults. To expand our knowledge of this relationship, Brauer and colleagues (2021) explored this connection with middle-aged, German-speakers, and opposite-sex couples. Using the OLIW playfulness questionnaire Proyer (2017) designed, they investigated how four components of playfulness ((Other-directed, Lighthearted, Intellectual, and Whimsical) connected to relationship satisfaction. They found similarities and differences between younger and older adults as well as age differences. For example, older couples were more similar along the OLIW dimensions than younger couples and similar to younger adults, playfulness was an important quality in older couples as well.

Given the connection between play, playfulness, emotional expression and regulation in children, and the connection between adult playfulness and positive emotions it makes sense to explore the relationship between adult playfulness and emotional intelligence. Although there are existing studies on playfulness and emotional intelligence, most investigations explore these topics as separate and unrelated phenomena.

The present study's primary goal is to investigate the connection between adult playfulness and emotional intelligence. A secondary goal is to investigate how different aspects of emotional intelligence and playfulness interact. Finally, we explore conceptions of play as the activity that connects to the disposition, playfulness. We frame our study using Proyer's (2017) definition of playfulness, Shen, Chick, and Zinn's (2014a) work on playfulness, Goleman's (1995/2005) framework for emotional intelligence, and contemporary defining characteristics of play (Sluss, 2015). The present study contributes to the existing literature on adult playfulness by exploring the connection between adult playfulness and emotional intelligence. Based on previous findings which report a connection between playfulness and emotion and self-regulation, we expect to find a positive relationship between adult playfulness and emotional intelligence. We also expect participants to provide definitions of play that align with contemporary literature.

Method

Participants

The participants were 325 (39 men, 286 women) undergraduate students attending a private, four year, liberal arts university in the northeastern United States. The sample was primarily European American (59%) and ages ranged from 17-43 years with a mean age of 19.96 (SD = 3.17). Participant characteristics appear in Table 1.

Table 1: Participant Characteristics

Cultural/Ethnic Heritage	Gender		Class Year			
	M	W	1st	2nd	3rd	4th
African American	2	12	5	2	3	4
Asian American	1	16	4	3	8	2
Biracial/Multiracial	4	9	2	3	5	3
European American	23	172	64	38	59	34
Hispanic	3	45	22	9	11	6
Other	6	32	16	15	4	3
Totals	39	286	113	70	90	52

The participants were part of a SONA human research participation pool and received course credit for their participation in this study. The project received IRB approval and participant treatment followed the APA guidelines for ethical principles and codes of conduct (American Psychological Association [APA], 2020).

Materials

This study utilized two standard measures - one to assess emotional intelligence; the other to assess playfulness. Qualtrics was the software program used to make these available online for participants.

Emotional intelligence. The Schutte Self Report Emotional Intelligence Test (SSEIT) is a reliable measure used to assess emotional intelligence. The authors report a reliability rating of .90 for the scale (Schutte et al., 1998, 2002, 2009).

Participants completed an online self-report survey that used a 5-point scale (Schutte et al., 1998). The SSEIT consists of 33 questions divided into four subscales. The subscales are: perception of emotions, managing emotions, managing others' emotions, and utilization of emotions. Sample questions include: "I find it hard to understand the non-verbal messages of other people ", " I am aware of my emotions as I experience them ", and "I know why my emotions change." This measure appears in Appendix A.

Playfulness. The Adult Playfulness Trait Scale (APTS) assessed adult playfulness (Shen et al., 2014a, 2014b). The authors empirically confirm the face, content, and structural validity (Shen et al, 2014a) and later extended their testing to confirm the scale's predictive, concurrent, and convergent validity (Shen et al., 2014b).

This self-report measure contains 19 questions subdivided into 3 subscales. The subscales are: Fun Seeking, Uninhibited, and Spontaneity. Sample questions based upon a 7-point Likert scale include: "I can find fun in most situations", "I understand social rules but most of the time I am not restricted by them", and "I often pursue my spur-of-the-moment thoughts". This measure appears in Appendix B.

Demographics

A demographics questionnaire recorded the participant's gender, age, ethnicity, and school year. We added an open-ended question to the playfulness measure that asked participants to define the activity, play.

Design

This project utilized a correlational design.

Procedure

We distributed and collected the survey raw material from February 2020 – February 2021. Participants signed up for this online survey through the SONA online human research participant pool website. This provided participants with a short description of the study.

Once they signed up for the study, they received a link which gave them access to the study.

Participants viewed an electronic informed consent form which they could agree to and sign electronically.

After the participants signed the informed consent, they were able to view questions from both the emotional intelligence and the playfulness scale with the emotional intelligence scale items appearing first. After completing the scales, participants received a debriefing statement that included the study's hypothesis and relevant contact information.

Coding the Open-Ended Question

We chose to analyse the open-ended query using content analysis. The Qualtrics program imported the participant responses into an Excel file. Next, we read these responses, searched for themes, and extracted our coding categories directly from the participants' responses. We content coded the verbatim text, searching for the terms that our respondents used to describe their perceptions of play. This coding approach leads to an understanding of how participants organize, categorize, and make meaning of their perceptions and experiences in their own words. Saldaña (2015) refers to this type of coding as in vivo coding.

Results

We employed Pearson-r correlations and multiple regression analyses to explore the relationship between emotional intelligence and playfulness. Alpha was set at .05. Subscale and total measure means and standard deviations appear in Table 2.

Table 2: Means and Standard Deviations for the SSEIT and APTS Subscales

Scale	Men (M/SD)	Women (M/SD)	Total (M/SD)
SSEIT Subscales			
Manage Emotions	32.16 (4.85)	32.11 (3.57)	32.17 (3.79)
Perceive Emotions	34.76 (4.08)	34.72 (3.62)	34.82 (3.75)
Utilize Emotions	22.76 (2.77)	23.06 (2.49)	23.07 (2.52)
Manage Others Emotions	29.54 (4.52)	31.64 (3.20)	31.39 (3.52)
SSEIT Total	119.22 (11.95)	121.54 (9.72)	121.43(10.28)
APTS Subscales			
Fun Seeking	36.30 (5.65)	37.06 (4.33)	36.95 (4.49)
Uninhibited	16.67 (3.67)	16.02 (3.51)	16.07 (3.49)
Spontaneity	16.24 (3.51)	16.11 (3.52)	16.17 (3.50)
APTS Total	69.22 (9.59)	69.19 (8.56)	69.17 (8.67)

After conducting a MANOVA with the SSEIT and APS total scores as the dependent variables and age and gender as the independent variables, we found a main effect for age for the SSEIT scale, $F(2, 288) = 8.1$, $p = .005$. We then computed partial correlations controlling for age for the SSEIT and APTS subscales and total scores. We found significant connections between the SSEIT and APTS subscales and total scores. These appear in Table 3. For this sample, total scores for the SSEIT and APTS produced a strong positive correlation, $r(288) = .38$, $p < .01$. The Fun Seeking subscale of the APTS positively connected to all subscales of the SSEIT. Engaging in fun and having a good time for this sample was a playfulness component and temperamental disposition that helps one perceive, manage, and utilize one's emotions as well as manage the emotions of social others. The primary response to the open-ended query "How do you define play?" was "fun" and "enjoyable" which supports the Pearson r correlations that emerged.

Table 3: Correlational Analyses Between the SSEIT and APTS subscales

	Fun Seeking	Uninhibited	Spontaneous	APTS TOTAL
Perceive Emotions	.28**	.06	-.05	.14*
Manage Emotions	.49**	.18**	-.01	.33**
Manage Others' Emotions	.52**	.05	.05	.31**
Utilize Emotions	.40**	.19*	.16**	.35**
SSEIT TOTAL	.57**	.15*	.03	.37**

Note to Table, *Alpha .05, **Alpha .01

The Uninhibited subscale of the APTS connected positively to two of the SSEIT subscales – Managing one's emotions r (288) = .17, p < .01 and Utilizing emotions r (288) = .19, p < .01. For example, individuals who scored high on not conforming or following social rules also reported an ability to manage and utilize their own emotions. The Spontaneity subscale of the APTS also revealed one positive connection with the SSEIT subscale – Utilization of emotions, r (288) = .16, p < .01. Finally, individuals who scored high on the APTS also scored high on the SSEIT, r (288) = .38, p < .01. This suggests that the temperamental disposition, playfulness is an important quality that helps individuals with components of emotional intelligence.

We also performed individual multiple linear regressions for the SSEIT total score and APS total score to investigate the relationship between these scales and age and gender. There was a positive relationship between age and the SSEIT totals (p < 0.003), The R2 value .036 suggests that approximately 4% of the variation in SSEIT scores can be explained by age. These analyses also revealed no relationship between gender and the SSEIT total scores and between gender and age and the APS total scores. Coefficient tables appear in Table 4 and plots of the dependent variables and regression standard residuals appear in Figures 2 and 3.

Table 4: Coefficient Tables for the SSEIT and APS Total Scores

Model 1	(Constant)	Age	Gender
SSEIT Total Score			
B	107.66	.58	2.65
Std. Error	4.22	.19	1.78
Beta		.17	.09
t	25.49	2.98	1.49
Significance	<.001	.003	.14
95% Confidence			
Intervals – Lower Bound	99.35	.20	.96
95% Confidence Intervals –			
Upper Bound	115.97	.96	6.16
APS Total Score			
B	71.71	-.10	-.55
Std. Error	3.83	.18	1.50
Beta		-.034	-.021
t	18.75	-.58	-.36
Significance	<.001	.56	.71
95% Confidence			
Intervals – Lower Bound	64.19	-.45	-3.49
(5% Confidence Intervals –			
Upper Bound	79.24	.24	2.39

Figure 2

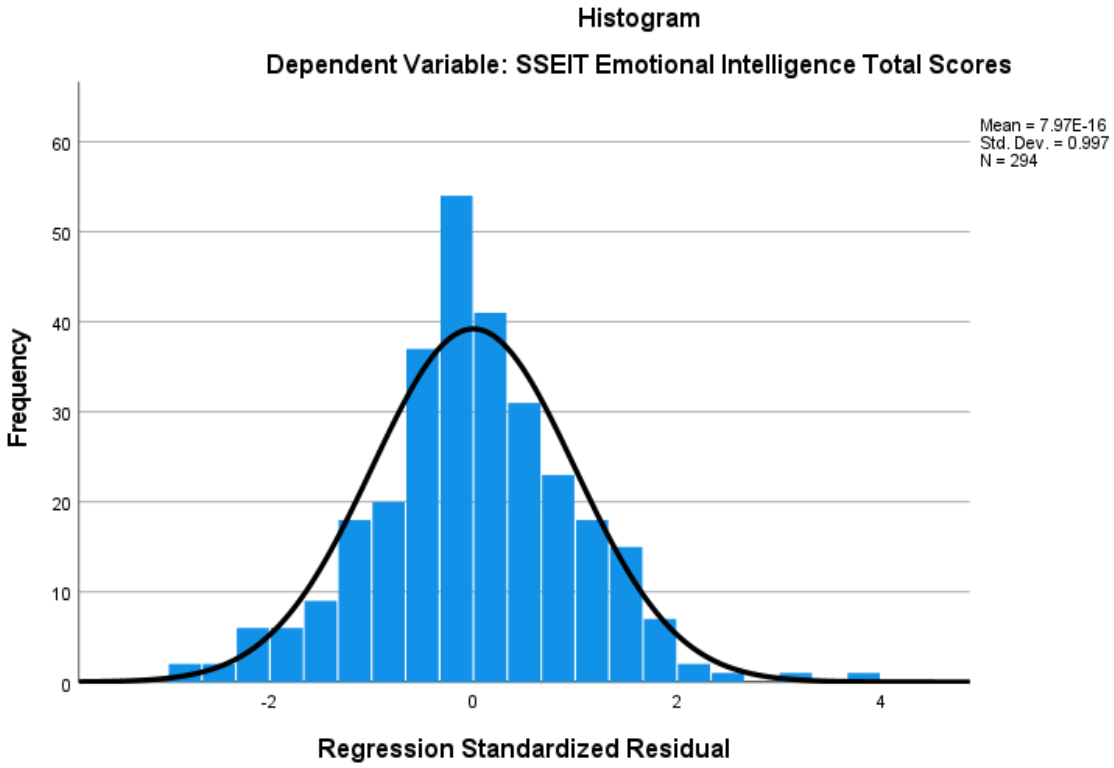
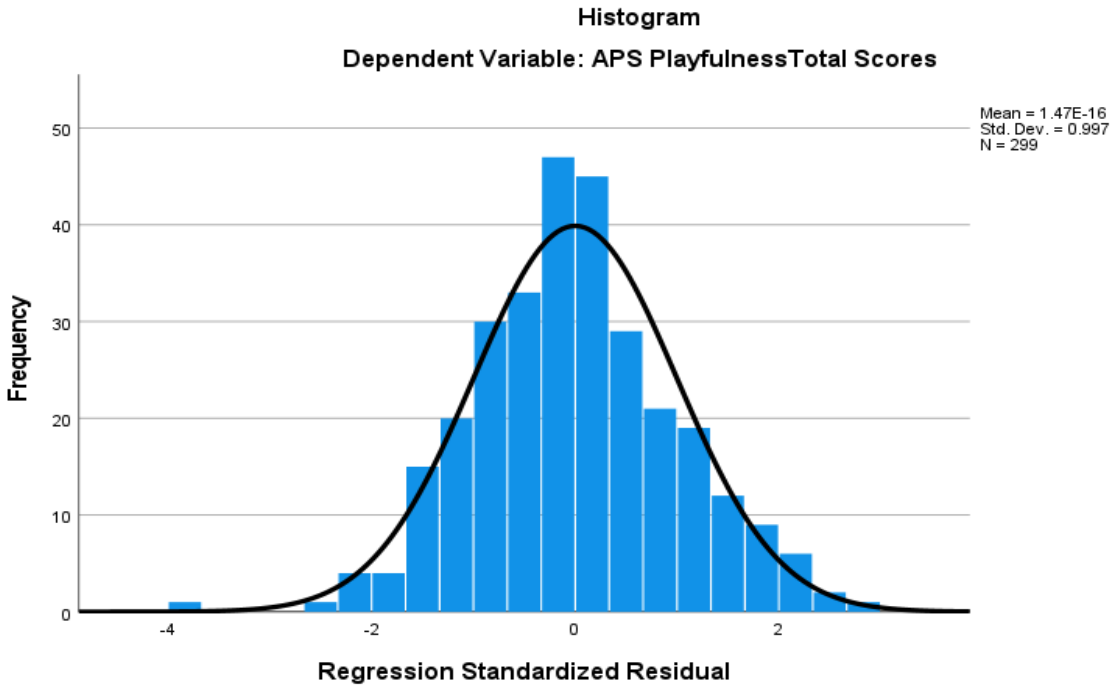


Figure 3



Open Ended Query - The Defining Criteria for Play

To complement the playfulness survey responses, we asked respondents the open-ended query, "How do you define play?" Responses appear in Table 5. For this participant sample, one criterion necessary for an activity to

be play was that it should be fun, pleasurable, or enjoyable. This appeared in 35% of all responses. For example, one bi-ethnic participant stated, "doing this for the purpose of fun." Another European American participant reported, "I would define play as fun activities that allow you to do what you want."

Table 5: Participant Responses to the Open-Ended Query – How do you define play?

Categories	Raw Frequencies
Fun/Enjoyable /Pleasurable	227
Active Engagement/Interacting/Experiencing Play	92
Happiness/Joy (Emotion)	54
Coping/Cathartic/Stress Reliever/No worries	51
Social Activity (group/others/friends/family	51
Solitary Activity	23
Something to do when bored	22
Childish/Childhood/Children's activities	20
Positive	18
Mental/Physical Activity	17
Takes place outside of work or school/free time	14
Stimulating	13
Imagination/Creative	13
Entertainment/Amusement	12
Expressive	6
Involves Toys or Objects	3
Educational	2
Love	1
Exploration	1
Intimate	1
Sharing	1
Can Take Place Anywhere	1

Acting Playful	1
Manipulative	1
Total	651

Active engagement and experiencing play accounted for 14% of all responses. This criterion often appeared in combination with other criteria such as fun or creativity. For example, one European American participant reported, "I define play as engaging in something that brings joy or happiness to me and/or others." Another European American participant defined play as "engaging in fun activities that involve imagination and creativity". Emotional experiences such as eliciting happiness and joy accounted for 8% of all responses. One European American respondent noted, "I define play as having fun, whether it be with other people (in person or online/internet), or even by yourself if it brings you joy."

The next most mentioned criteria was play's function as a cathartic activity. It accounted for 9% of all responses and included play as a coping mechanism that helped relieve stress. One participant who ethnically identified as 'other' combined coping with the element of fun, "I define this as something that is considered fun and carefree, stress-relieving and easy to do." Another European American participant responded, "Doing something fun that makes you feel good, relaxed and relieves stress."

Participants also viewed play as a social and solitary activity. This accounted respectively for 9% and 4% of all responses. One European American participant combined both variants in her response, "Play incorporates some sort of enjoyable activity- whether on an individual or group level."

Finally, for this sample play connected to childhood or childish behavior. This appeared in 3% of all responses. One European American participant responded, "I define play by anything that is enjoyable and fun for me. I think back to when I was a kid and playing outside with my neighbors, I had fun and enjoyed myself and others." Another Asian American participant reported, "Play is a way for children to express their emotions and feelings."

Discussion

This study explored the connection between adult playfulness and emotional intelligence. For this sample, there was a strong, positive relationship between the temperamental disposition, playfulness and emotional intelligence. For example, we found that higher scores on emotional intelligence connected to higher scores on playfulness. We also believe it is important to note that these findings also support those reported for children. For example, Lindsey and Colwell (2013) found that children who engage in pretend play are more in touch

with their emotional expression and regulation. It is plausible to suggest from the present study's findings that playful behaviors in adults also help improve their abilities to manage, express, and regulate their emotions, which are components of emotional intelligence.

Our findings support Guitard, Ferland, and Dutil's (2005) findings that particular aspects of playfulness such as curiosity, creativeness , pleasure in activities, and rule following also exhibit similar qualities found in emotion regulation such as being able to assess and judge situations and approach them in an appropriate way. Proyer and Ruch's (2011) work provides additional evidence for the connection between playfulness and emotional strength and playfulness and emotional stability (Proyer, 2017; Proyer et al., 2019).

Our findings may also provide support for the connection between playfulness and adult romantic relationships. For example, Chick and colleagues (2020) and Brauer and colleagues (2021) provide evidence for playfulness as a desirable characteristic in assortative mating. It may also be possible that the connection between emotional stability and playfulness may contribute to relationship satisfaction (Proyer, 2017; Proyer et al., 2019). For example, our findings revealed the Fun Seeking subscale of the APS strongly connected to all the SSEIT subscale and total scores. It may be that fun seeking individuals are able to manage, perceive, and utilize their emotions and experience emotional stability which leads them to maintain stable, satisfying romantic relationships (Sidhu et al., 2019). Relatedly, for these participants, the Uninhibited Subscale of the APS positively connected to the Manage and Utilize emotions subscales of the SSEIT. These emotional abilities may also contribute to relationship satisfaction.

Our findings also suggest a connection between playfulness and positive affect. This supports Proyer and colleagues' (2018) position that playfulness connects to one's ability to experience joy and contentment. In our sample, participant responses revealed a strong, positive connection between having a good time, making an activity enjoyable, initiating fun activities, and seeking out activities that make one happy. Yue and colleagues (2016) also reported a connection between playfulness, happiness, and humor. Although we did not collect information on playfulness as a coping strategy, this positive activity seeking behavior could be a response to the social isolation and lack of peer interaction our college sample may be experiencing because of the COVID-19 social distancing protocols and many universities' decision to move to remote learning.

For example, Qian and Yarnal's (2011) research connected playfulness to positive moods and the ability to cope. In their work Magnunson and Barnett (2013) concluded that playfulness connects to coping with stress. We believe our findings also support this position. For example, when asked how they defined play, our respondents' most frequent responses included Fun/Enjoyable, Happiness/Joy, and Coping/Cathartic/Stress reliever. This connects to Sutton-Smith's (2002) view that one function of play is to help players achieve "emotional joy" (2002, p. 19). It also may be that this view of play as coping was a direct response to the fact that we collected our raw material during the COVID-19 virus pandemic. As Sutton-Smith (1997) suggested, the adaptive variability of play provides those who engage in it the cognitive and emotional flexibility to adapt

to changing environments which might include unique stressors associated with the pandemic.

Limitations and Challenges

We acknowledge several challenges to external validity. First, our sample was relatively homogeneous with respect to cultural heritage and socioeconomic status. We also had a gender imbalance as women comprised approximately 88 percent of the sample. Second, our participants were college students who are often overrepresented in research and comprise a convenience sample. Third, we had only one source of raw material – self-report measures. Fourth, participants were only given an online version of the study making it mandatory to complete the survey on their personal time and in their personal environment which the researchers could not control. In addition, this was an online study available to participants through a SONA platform. Although students received an invitation link we still cannot be sure who completed the study. Finally, we focused our analysis on cross-sectional data and were unable to confirm our findings in existing studies with independent samples.

Directions for Future Research

In our study, we explored the relationship between playfulness and emotional intelligence in adults. Our findings for this sample suggest there is a strong, positive connection between the temperamental disposition, playfulness, and emotional intelligence. We found that for these respondents, playfulness connected to one's ability to experience and seek out positive emotional experiences. We did not unpack the individual components of emotional intelligence or the categories for adult playfulness in our study. Future research may wish to explore the individual components of emotional intelligence and playfulness, this relationship with more diverse samples with respect to age, socioeconomic status, and cultural heritage, broaden the scope of this connection to romantic relationships and relationship satisfaction, and utilize different measures or mixed methods approaches. We believe there is much more research needed to broaden our understanding of how playfulness connects to our emotional intelligence and its value in understanding the function of play for those who engage in this ludic activity.

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Appendix A
The Schutte Self Report Emotional Intelligence Test (SSEIT)

I know when to speak about my personal problems to others

1 2 3 4 5

When I am faced with obstacles, I remember times I faced similar obstacles and overcame them

1 2 3 4 5

I expect that I will do well on most things I try

1 2 3 4 5

Other people find it easy to confide in me

1 2 3 4 5

I find it hard to understand the non-verbal messages of other people

1 2 3 4 5

Some of the major events of my life have led me to re-evaluate what is important and not important

1 2 3 4 5

When my mood changes, I see new possibilities

1 2 3 4 5

Emotions are one of the things that make my life worth living

1 2 3 4 5

I am aware of my emotions as I experience them

1 2 3 4 5

I expect good things to happen

1 2 3 4 5

I like to share my emotions with others

1 2 3 4 5

When I experience a positive emotion, I know how to make it last

1 2 3 4 5

I arrange events others enjoy

1 2 3 4 5

I seek out activities that make me happy

1 2 3 4 5

I am aware of the non-verbal messages I send to others

1 2 3 4 5

I present myself in a way that makes a good impression on others

1 2 3 4 5

When I am in a positive mood, solving problems is easy for me

1 2 3 4 5

By looking at their facial expressions, I recognize the emotions people are experiencing

1 2 3 4 5

I know why my emotions change

1 2 3 4 5

When I am in a positive mood, I am able to come up with new ideas

1 2 3 4 5

I have control over my emotions

1 2 3 4 5

I easily recognize my emotions as I experience them

1 2 3 4 5

I motivate myself by imagining a good outcome to tasks I take on

1 2 3 4 5

I compliment others when they have done something well

1 2 3 4 5

I am aware of the non-verbal messages other people send

1 2 3 4 5

When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself

1 2 3 4 5

When I feel a change in emotions, I tend to come up with new ideas

1 2 3 4 5

When I am faced with a challenge, I give up because I believe I will fail

1 2 3 4 5

I know what other people are feeling just by looking at them

1 2 3 4 5

I help other people feel better when they are down

1 2 3 4 5

I use good moods to help myself keep trying in the face of obstacles

1 2 3 4 5

I can tell how people are feeling by listening to the tone of their voice

1 2 3 4 5

It is difficult for me to understand why people feel the way they do

1 2 3 4 5

Appendix B

Adult Playfulness Trait Scale

Rate the following statements with 1 being "Strongly Disagree", 4 being "Neutral", and 7 being "Strongly Agree"

I believe in having a good time

1 2 3 4 5 6 7

I think fun is a very important part in life

1 2 3 4 5 6 7

I try to have fun no matter what I am doing

1 2 3 4 5 6 7

I am often the person who starts fun things in a situation

1 2 3 4 5 6 7

I can make almost any activity fun for me to do

1 2 3 4 5 6 7

I can find fun in most situations

1 2 3 4 5 6 7

I appreciate fun things started by others

1 2 3 4 5 6 7

When someone else starts something that is fun, I'm happy to follow along

1 2 3 4 5 6 7

I enjoy fun activities that others initiate

1 2 3 4 5 6 7

I understand social rules but most of the time I am not restricted by them

1 2 3 4 5 6 7

I don't always follow rules

1 2 3 4 5 6 7

Sometimes I can do things without worrying about consequences

1 2 3 4 5 6 7

If I want to do something, I usually don't let what other people may think stop me

1 2 3 4 5 6 7

I don't fear losing anything by being silly

1 2 3 4 5 6 7

I often do things on the spur of the moment

1 2 3 4 5 6 7

I often do unplanned things

1 2 3 4 5 6 7

I often act upon my impulses

1 2 3 4 5 6 7

I often pursue my spur-of-the-moment THOUGHTS

1 2 3 4 5 6 7

I often follow my spur-of-the-moment FEELINGS

1 2 3 4 5 6 7