Detached Friendship: Examining the Associations of Friendship Quality and Quantity with Detached Personality

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Abstract

Friendships and interpersonal relationships play a significant role in adolescents' development. Individual differences, including ones relevant to personality development, may be associated with the ability to form and maintain strong relationships. The Big Five domain of extraversion is typically used to understand personality within social interactions and social settings. For my thesis, I was interested in understanding the Personality Inventory for the DSM-5 (PID-5) domain for extraversion, detachment, in terms of peer relationships during the adolescent years. I examined both associations of friendship quality and friendship quantity with detachment as well as gender differences in the associations of friendship quality and quantity with detachment. Through the use of Spearman correlations, I found some statistically significant associations with small effect sizes. Interestingly, I found different results for facets belonging to the same detachment domain. There were no gender differences. These findings expand the literature on the correlates of Detachment and Friendship.

Key Words: Detachment, Friendship Quality, Friendship Quantity, Personality

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Detached Friendship: Examining the Associations of Friendship Quality and Quantity with Detached Personality

Friendships and interpersonal relationships play a significant role in adolescents' development. A friendship is a relationship between two or more people that is long-lasting and reciprocal, meaning that individuals are invested in one another (APA Dictionary of Psychology, 2022). Why do certain individuals draw many friends while others often find themselves isolated? Even if an individual has a lot of friendships are these quality friendships? Individual differences, including ones relevant to personality development, contribute differences in how we act in peer friendships. The facets of the detached personality domain are among the most likely to be associated with friendships as they are the operationalization of interpersonal functioning and refer to a lack of attachment.

In this thesis, I will explore detached personality facets as they relate to friendships in the adolescent years. Throughout this introduction I will explore various domains of personality as well as the dimensions of friendship quality and quantity. The connection between personality and friendship is grounded in three major theories – the attachment theory (Bowlby, 1969; Ainsworth, 1978), the interpersonal theory (Sullivan, 1953), and the psychosocial theory (Erikson, 1950). The attachment theory explains how individuals first make relationships, with their caregiver, and how this can have an impact on how they make relationships in the future. Furthermore, the interpersonal theory and psychosocial theory explains that peer relationships are a major factor contributing to personality development during the adolescent years. Finally, I introduce linkages found with friendship and the various facets of the detached personality domain before introducing the current study and aim of this thesis.

Personality

Personality is the dynamic organization of characteristics and behaviors that comprises an individual's psychophysical system, adjustment to the environment, and emotional patterns (Allport, 1937). This complex system is influenced by many forces such as experiences, relationships, and environments (Bleidorn et al., 2022).

Big Five Dimensions of Personality

The Big Five Personality dimensions are openness, conscientiousness, extraversion, agreeableness, and neuroticism. This framework provided personality psychologists with a shared model of personality theory (De Raad & Mlačić, 2015). These five dimensions summarize broad individual differences that are related to a wide range of behaviors, cognitions, and emotions (Wilt & Revelle, 2015). I utilize De Raad and Mlačić (2015) definitions of these dimensions. Openness refers to experiences that include fantasy, imagination, and creativity. Extraversion relates to how an individual acts within a social setting and within the material world. Agreeableness relates to prosocial behavior and conscientiousness refers to impulse control and conformity. Neuroticism represents emotional stability and is often the basis in psychological research and clinical psychology related to personality. The Big Five Personality Dimensions are typically used for the study of personality in the general population, whereas personality can also relate to clinical syndromes – personality disorders.

Personality Disorder Symptoms

Previously conceptualizations of personality disorders took a deficit approach, placing stigma on the individual as their personality being problematic at their core. This approach is outdated, and the academic and professional community have been shifting towards a more strength based and dimensional model (Widiger & Costa, 2012). The dimensional approach suggests that personality disorders are not qualitatively different from personality variation in the

general population, but that they are on the same continuum. Taking a dimensional approach to personality disorders allows for many advantages including improvements to previous nomenclature, more individualized and precise descriptions, and the inclusion of normal and adaptive personality dimensions. Additionally, personality disorders have high comorbidities (Krueger et al., 2010). The dimensional approach utilizes current personality disorders features, but approaches them as ordinal dimensions (Krueger et al., 2010). This allows for comorbidities and overlaps within the groups. The facet approach provided with the Big Five Personality model allows for a more informative facet level profile of personality disorder symptoms, rather than placing an individual within a specific category that may not provide a fully adequate description (Widiger & Costa, 2012). While the Big Five model turned out to be useful, it was not specifically developed to operationalize a dimensional approach to personality disorders.

The Personality Inventory for the DSM-5

The personality inventory for the DSM-5 (PID-5) is the operationalization of the dimensional approach to personality disorders. The Pathological Five Model (PFM) is a dimensional approach with five different domains which can be viewed as the maladaptive version of the Big Five Personality traits (Krueger et al., 2010). The PFM was the first attempt at a dimensional model specifically developed for personality pathology and is an early version of the PID-5, which the present study utilizes.

The PID-5 domains are antagonism, detachment, disinhibition, negative affectivity, and psychoticism (See et al., 2020). I follow Hopwood and colleagues (2012) definitions for the five domains. Antagonism is representative of low agreeableness and is defined as an individual having some antisocial characteristics as well as being grandiose and attention seeking. Detachment relates to low extraversion, and involves depressive affect and interpersonal

withdrawal. Disinhibition is associated with low conscientiousness, meaning irresponsibility, impulsivity and risk taking behaviors. Negative affectivity is indicative of neuroticism and involves the frequent experience of negative and unpleasant feelings of anger or anxiety as well as hostile interpersonal behavior and restricted emotions. Lastly, psychoticism, related to openness to experience, includes eccentricity, perceptual problems, and strange behavior.

Moreover, each domain covers several facets, with the PID-5 acting as a hierarchical tree structure with domains at a higher level and the facets branching out from the domains (Wright et al., 2012). Each facet plays a distinct role within the domain and trait network. For example, the disinhibition domain consists of the following facets: distractibility, impulsivity, irresponsibility, lack of rigid perfectionism, and risk taking (See et al., 2020). This will provide a better overall understanding of an individual's distinct personality.

Detached Personality

The focus of the current study is the detached personality domain and its various facets. I selected detachment as the focus of this thesis as the PID-5 domain of detachment is related to the Big Five domain of extraversion. The domain of extraversion is typically used to understand personality within social interactions and social settings (De Raad & Mlačić, 2015). Therefore, it will be interesting to understand detached personality in terms of peer relationships. Peer relationships are important during the adolescent years and the facets of detached personality may hinder adolescents' abilities to make close peer relationships highlighting a connection of attachment and detached personality. Detached personality is the focus of the present study as I am interested to learn if these personality facets are related to adolescent friendships.

There are multiple ways to operationalize the various aspects of detached personality, however the facets utilized in this study are distinguished in the PID-5. The facets of the

detachment domain are depressivity, anhedonia, intimacy avoidance, withdrawal, and suspiciousness (See et al., 2020). Depressivity is related to feelings of sadness and inability to involve in social settings. Anhedonia is the inability to feel pleasure, while intimacy avoidance is an individual's likeliness to evade close relationships. Withdrawal relates to individuals with a detached personality's inclination to remove themselves from peer situations and feel distanced in peer settings. Suspiciousness, or paranoia is the general tendency to mistrust others in a variety of settings, such as at home or within peer settings.

Adolescent Friendships

Friendships are a critical part of an adolescent's adjustment and personality development. Adolescence is typically the time when individuals are beginning to spend more time with peers and less time with family, making these relationships particularly important to the adolescents. A long standing debate regarding this time is what is more important – having a lot of friends or having a few, strong quality friendships (Nangle et al., 2003)? This section will explore literature relating to adolescent friendship quantity and friendship quality, as well as gender differences in adolescent friendships.

Friendship Quality

Quality friendships are shown to be important and salient to adolescents. Throughout the adolescent years, even having a strong and supportive friendship with just one peer can be impactful and beneficial for the individual (Nangle et al., 2003). A study conducted by Barzeva and colleagues (2021) found a transactional model between friendship quality and withdrawal, with reduced quality of friendship predicting future withdrawal. While the friendship was still present, the quality worsened with time. Therefore, these findings suggested that individuals benefit more from meaningful relationships than having many surface level relationships with

peers (Barzeva et al., 2021). A quality friendship can help an adolescent feel socially accepted and supported (Nangle et al., 2003).

The Network of Relationship Inventory provides one operationalization for a dimensional system for relationship quality. The Network of Relationship Inventory assesses friendships along several dimensions including positive indicators of a quality relationship such as providing/seeking a safe haven, providing/seeking a secure base, companionship, as well as negative indicators of quality relationship such as conflict and antagonism (Furman & Buhrmester, 2009). There are two broad key dimensions of friendship quality – support and negative interactions (See et al., 2021). Strong, good quality friendships are characterized by high levels of positive features and low levels of negative features (Furman & Buhrmester, 1985). Relationships that are high quality are typically reliable, affectionate, and high on disclosure (Furman & Buhrmester, 1985). Additionally, quality relationships provide an enhanced sense of worth and feeling of safety (Furman & Buhrmester, 1985). Quality friendships provides adolescents with support and a deeper level of connection. During the adolescent years, high quality friendships become more salient to individuals on various dimensions, such as companionship and support, highlighting their importance.

Friendship Quantity

Friendship quantity relates to the number of friendships a person has. Is it important to have many friends during adolescents? Individuals that are seen as popular or as high status have many friends. Cillessen and Rose (2005) separated these high status youth into two categories. While there are individuals who are genuinely liked by peers and typically engage in prosocial behavior, there are also individuals who are seen as popular by peers but not well liked (Cillessen & Rose, 2005). These categories of popularity are classified as sociometric popularity

and perceived popularity. Sociometric popularity is assessed with peer-nominations, where classmates write down the names of the people who are most liked and least liked in their class (Cillessen & Rose, 2005). This use of peer-nominations to measure friendship quantity is similar to the one used in the present study. However the present study is not looking at popularity specifically, but rather if they are nominated as friends. Popularity is about an individual's perception of how popular a classmate is in general regardless of whether they consider them to be their friends, and this thesis is examining whether someone sees the person as their friend.

Interestingly, there are disagreements in the literature about the impact of quantity of friends in adolescents. As previously mentioned, Barzeva and colleagues (2021) found the transactional relationship with withdrawal and friendship quantity to be less impactful when compared to the transactional relationship with withdrawal and friendship quality. This supports that adolescent's number of friends may be less important than quality of friendships.

Gender Differences

Historically, gender differences have been found in adolescent friendships. On average girls perceive their own same-sex friendships to be more supportive than boys perceive their own same-sex friendships (Furman & Buhrmester, 1992). Additionally, female interactions are seen as more intimate than males. As girls and boys move into their adolescent years, gender differences in friendship values become more different (Rudolph & Dodson, 2022).

There are two groups of value provisions from friendships that adolescents seek – psychological provisions and recreational provisions. Girls are more likely to seek out psychological provisions, such as the emotional aspects of friendships, intimacy, and support. Moreover, psychological provisions relate to a sense of closeness, positive regard, empathetic understanding, emotional availability, and validation (Rudolph & Dodson, 2022). Alternatively,

boys are more likely to seek out recreational provisions in their friends. Recreational provisions fulfill more tangible needs such as companionship and enjoyment. These needs are typically met by spending time together through a shared hobby or interest (Rudolph & Dodson, 2022). This indicates that boys may be more likely to have fewer quality friendships and are more likely to have a greater number of friends.

The way girls tend to engage in same-sex friendships tends to be more in line with what is described in the literature as "high quality" friendships. So, if we follow the operationalization of what a high-quality friendship would look like, girls will likely score higher on such indicators when compared to boys. Alternatively the way that boys engage in group activities with a shared interest is what is described in the literature as related to having a large quantity of friends. Following this operationalization of what boys' friendship would look like, boys will likely score higher on friendship quantity when compared to girls. Girls are more likely to seek intimate and supportive relationships, whereas boys value companionship and enjoyment in group activities.

Furthermore, previous research has explored gender differences within the Big Five domains of personality. Weisberg and colleagues (2011) found small but significant gender differences within the domain of extraversion, with women having a higher score than men. It is informative that there are level differences of personality for the two gender groups. Detachment may have a similar function in predicting friendship indicators and will be explored later in this thesis. These gender differences in friendships are well established. Based on this, detachment may predict friendship quality and quantity slightly differently in boys versus girls as they might have slightly different ideas about what a quality friendship is and what counts as a friendship.

Theoretical Frameworks Linking Personality and Relationships

Now that these foundational ideas have been introduced, this section will explore theoretical frameworks relevant to personality and relationships to understand how these concepts are related. Back and colleagues (2011) propose the PERSOC framework for understanding and interpreting the complex systems of personality and social relationships. This framework emphasizes the important roles of social connections and interpersonal processes as they relate to social interactions. This deepens the understanding of the how personality and social relationships are influencing one another as an individual develops. However, the PERSOC framework is a broad framework. Therefore, I will discuss more specific theories that link personality more generally and detached personality in particular, and relationships throughout the remainder of this section.

Attachment Theory

The attachment theory provides a theoretical framework of the mechanisms underlying individuals' abilities to make relationships throughout their life. Developed by John Bowlby (1950), attachment theory states that everyone is born with the innate need to build attachments to our caregivers. These early relationships determine our future outlook and ability to create other relationships, such as friendships, later in life. Mary Ainsworth (1978) expanded on Bowlby's theory with her strange situation research, which determined that different attachment styles exist. The strange situation was a laboratory study in which Ainsworth observed infants' abilities to use their caregivers as a secure base when introduced to a stranger and a new setting (Ainsworth, 1978). These attachment styles are observable with children in an unfamiliar environment as well as with new people.

The distinct types of attachment are secure, insecure-avoidant, insecure-ambivalent, and insecure-disorganized (Ainsworth, 1978). The secure attachment type is when a child has a

secure base at their caregiver. These children can explore a new environment. They become distressed when the caregiver leaves and is happy when the caregiver returns. Insecure attachment styles occur when the child does not have a secure base in their caregiver. Insecure-avoidant children display no distress when the caregiver leaves and does not seek the caregiver when they return. Insecure-ambivalent attachment occurs when the caregiver responds to the child's needs inconsistently. Finally, insecure-disorganized attachment is when the child displays no attaching behaviors and appears apprehensive around caregivers.

These early attachment experiences and the associated attachment styles have been shown to affect an individual's emotional and interpersonal development throughout their adolescence and adulthood. Adult attachment theory explains the individual differences in feelings and behaviors within the context of close adolescent and adult relationships (Fraley & Shaver, 2000). Adult attachment utilizes three types of attachment, similar to those included in attachment theory, to explain adult relationships: secure, anxious, and avoidant (Hazan & Shaver, 1990). There is an association between adult attachment style and personality qualities, and their ability to predict relationship quality (Noftle & Shaver, 2006). Both an anxious and avoidant attachment are positively correlated with insecurity in relationships (Noftle & Shaver, 2006). Avoidant personality characteristics are the strongest predictors of relationship quality (Noftle & Shaver, 2006). Attachment may have a strong influence on how these individuals seek out relationships because of how their personalities developed through their inner working model, and viewing both the world and different relationships in a stable way. Thus, based on attachment theory, there should be a strong relationship between personality and relationship quality.

The Interpersonal Theory

The second framework that grounds relationship development and personality is the interpersonal theory. The interpersonal theory of personality is based on the belief that people's relationships and interactions with others determine their identity as well as their sense of security and self (Sullivan, 1953). Karen Horney (1945) introduced a tripartite theory in which there are three types of personalities associated with the interpersonal theory: compliant, aggressive, and detached. As mentioned earlier, a categorical approach may not provide an accurate depiction of an individual's personality.

Although Horney's work is categorical, it provides a good framework for the detached personality characteristics. The focus of this present study will be a dimensional approach of detached personality. Individuals classified in the detached type would still be individuals scoring high on detached personality dimensions, so the literature on the detached type is still informative even though I am utilizing a dimensional approach. Coolidge and colleagues (2001) reexamined Karen Horney's model as they hypothesized that this theory may be useful in understanding the diagnosis of personality disorder features. Horney's interpersonal theory bridges the gap in understanding the variation of normal personality development and personality psychopathology (Coolidge et al., 2001). The detached personality type was positively correlated with several personality disorders such as antisocial, avoidant, and schizotypal personality (Coolidge et al., 2001). The detached type is characterized by moving away from people and not having a sense of belonging among others (Coolidge et al., 2001). Additionally these individuals' distance themselves from others and have relatively numb emotional experiences. When interacting with peers, individuals with detached personality type will avoid emotional involvement in fear of feelings not being reciprocated (Coolidge et al., 2001). Based on the

specificity of the detachment within the interpersonal theory, detachment may be a good predictor of relationship quality and potentially quantity.

The Psychosocial Developmental Theory

Erikson's psychosocial developmental theory highlights the importance of social relationships and how these social interactions are driving forces in development (Erikson, 1950). This is a stage theory, with each stage having a crucial conflict that impacts functioning and progression with relationship development. "Trust versus mistrust" could be viewed as a crucial period where one could be forming a strong attachment or be in the process of detachment. The stage of "Industry versus Inferiority" includes increase in peer influence and reinforcement as well as changes in self-esteem. Moreover, "Identity versus Role Confusion" is the stage in which adolescents are beginning to understand their identity and trying to determine where they fit in within society (Erikson, 1950). Additionally, the stage "Intimacy versus Isolation" is a very relational stage and suggests that relationship quality builds on attachment. These various stages, and the others introduced in Erikson's psychosocial developmental theory, emphasize the role that adolescent relationships play in personality development as well as that personality will also affect the way relationships are formed in adolescence.

Relationships and Personality Dimensions

These theories broadly introduce how detached personality and relationship features could be related, but they are not always specific about particular dimensions or facets. This next section explores the empirical linkages between relationships and personality dimensions, specifically the various facets of detached personality, as shown in the literature. This facet approach breaks down the basic concepts of detached personality domain and depicts how

specific aspects within the broader detached personality domain is associated with friendship quality and quantity.

Anhedonia

A characteristic within the detached personality domain is anhedonia which is an individual's inability to feel pleasure (Gooding et al., 2016). This can have an impact on adolescents' ability to have a desire for quality friendships. Individuals with anhedonic symptoms experienced lower quality friendships (Bastin et al., 2017). Anhedonic individuals' distance themselves from peers, resulting in lower quality of friendship and less friendships overall.

Depressivity

Another facet of the detached personality dimension as it relates to friendship is depressivity. Adolescents typically feel isolated when they have a detached personality. A 2016 study conducted by Spithoven and colleagues examined the relationship between loneliness and depressive symptoms as clusters through latent profile analysis. The four clusters identified were low on loneliness and depressive symptoms, low on loneliness and high on depressive symptoms, high on loneliness and low on depressive symptoms, and high on loneliness and depressive symptoms (Spithoven et al., 2016). This feeling of loneliness does not mean the adolescent is physically alone, but rather has a feeling of being alone regardless of number of peers. Loneliness can be overwhelming for anyone, especially adolescents, and is an indicator of friendship quality. Depressivity may indicate lower quality and quantity of friendships.

Intimacy Avoidance

Furthermore, another aspect of the detached personality domain is intimacy avoidance. An individual will avoid intimate or close friendships as a result of their own negative view of

themself (Gabriel et al., 2005). Social contrast plays a role in intimacy avoidance in friendships (Gabriel et al., 2008). When seeking social support, detached individuals with intimacy avoidance are more likely to see their peers as better than themselves and therefore distance themselves in the relationship. Intimacy avoidance may also indicate lower quality and quantity in romantic and close familial relationships as well (Gabriel et al., 2008).

Withdrawal

Withdrawal relates to individuals with a detached personality's inclination to remove themselves from peer situations and feel distanced from peer settings. Adolescents with detached personality type may have the tendency to withdraw from peers due to feeling self-conscious and having fears about acceptance (Rubin et al., 2009). Markovic and Bowker (2017) found anxious withdrawal from peers associated with greater loneliness and depression at several time points during early adolescence. Different indices of friendship adjustment, such as friendship quality, could reduce the negative psychological impact on the adolescent (Markovic & Bowker, 2017). Withdrawal is not necessarily related to reduced friendship quality however, withdrawal will likely lower the quantity of friendships, as individuals are actively removing themselves from peer interactions.

Suspiciousness

The last facet of detached personality this thesis is exploring is suspiciousness. Suspiciousness, or paranoia is the general tendency to mistrust others in a variety of settings, such as at home or within peer settings. Extreme suspiciousness has been found to have a negative impact on both clinical and nonclinical populations (Wong & Raine, 2018). Suspiciousness is related to interpersonal deficits as well as negative psychosocial functioning (Wong & Raine, 2018). In a study conducted by Wong et al. (2014), children with higher levels

of mistrust were found to have higher rates of anxiety, lower levels of self-esteem as well as callous-unemotional traits. Suspiciousness may impact both the number of peers and the quality of these interactions, as paranoid individuals may deem their relationships as insincere and unauthentic.

The Present Study

The present study seeks to understand if there is an association between detached personality and adolescent friendship. I plan to examine if quality of friendship is associated with detached personality. Moreover, I hope to understand if quantity of friendship is associated with detached personality. I expect individuals with higher levels of detached personality to have both lower quality friendships as well as lower quantity friendships. Additionally, I will explore whether different facets are differentially associated with friendship quality and quantity. I do not have specific hypotheses about which facets are going to be related to friendship quality and friendship quantity, and which are not going to be related. Lastly, the present study will examine gender as a moderator between the associations of detachment and adolescent friendships. I expect the correlations between friendship quality and detachment as well as friendship quantity and detachment to be different for males and females. There typically are gender differences in social support, with females generally scoring higher. I am interested in whether the association with detachment is also different, as that is unclear from the literature. I expect a negative association of detachment and high quality of friendship in females and no significant association in males. I will also explore whether different facets are differentially associated with friendship quality and quantity by gender. Findings may provide a deeper understanding of how personality traits and friendships are related during adolescence.

Method

Participants and Procedure

To examine the relationship between adolescent friendship and detached personality, I will be using data from the first wave of the Project-Me study. The total number of participants is 1,941. I removed 641 participants as they did not respond to the measure of friendship quality. This left 1,300 participants who completed all of the measures. A large number of high schools in the south of The Netherlands were contacted by phone, e-mail, and other means such as personal connection. Out of this larger number of schools, seven agreed to participate in the study. Parents provided passive consent, meaning that they were given a letter and had two weeks to return the letter if they did not want their child to participate in the Project-Me study. Participants then completed the questionnaire with graduate students present to provide instructions. Adolescents did not receive incentives for their participation.

The distribution from grades was relatively equal, with 41.8% of the participants from grade 2, which typically is ages 13-14, and 58.2% of the participants from grade 3, which is typically ages 14-15. The average age of participants is 14.71, with a standard deviation of 0.77 (10.48 – 17.62). Additionally, 47.3% of the participants are male while 52.7% of participants are female. Ethnicity was not recorded during the first wave of this study however based on the demographics of the area we can conclude that the majority of the participants identified as Dutch.

Measures

Detached Personality Domain. In order to measure detachment, I will be utilizing the Personality Inventory for the DSM-5 Short Form (PID-5-SF). The 100-item version of PID-5 is used to measure pathological personality traits along the domains of antagonism, disinhibition,

detachment, negative affectivity, and psychoticism (Krueger et al., 2012). I will be utilizing the 19 items of the Personality Inventory for the DSM-5 Short Form (PID-5-SF) that represent the detachment domain and its facets. The PID-5 has been found to have adequate internal consistency, with an alpha of 0.96 for the detached domain (Krueger et al., 2012). Additionally, the facets of the detached domain have been found to have adequate internal consistency in previous studies utilizing the same sample as this thesis, with an alpha of 0.71 for anhedonia, an alpha of 0.77 for depressivity, an alpha of 0.60 for suspiciousness, an alpha of 0.71 for intimacy avoidance, and an alpha of 0.63 for withdrawal (See et al., 2020). Participants will respond to the items on a scale of 0 – 3, with "0" meaning not at all true, "1" meaning rather not true, "2" meaning rather true, and "3" meaning completely true. There are 19-items representing the detachment domain. The different facets of detached personality are "anhedonia" (4 items; "Nothing seems to interest me very much"), "depressivity" (3 items; "Everything seems pointless to me"), "intimacy avoidance" (4 items; "I prefer being alone to having a close romantic partner"), "suspiciousness" (4 items; "I'm always on my guard for someone trying to trick or harm me"), and "withdrawal" (4 items; "I don't like spending time with others").

Friendship Quality. I will utilize the Network of Relationships Inventory (NRI) to measure friendship quality. This questionnaire is used to capture the relationship with a best friend. This measure has 24-items that measure various aspects of friendship quality (Furman & Buhrmester, 2009). The different aspects of friendship quality that are measured include "seeks safe haven" (3 items; "How much do you seek out this person when you're upset?"), "seeks secure base" (3 items; "How much does this person encourage you to try new things that you'd like to do but are nervous about?"), "provides safe haven" (3 items; "How much does this person turn to you when s/he is worried about something"), "provides secure base" (3 items; "How

much do you encourage this person to pursue his/her goals and future plans?"), "companionship" (3 items; "How much do you and this person play around and have fun?"), "conflict" (3 items; "How much do you and this person argue with each other?"), "criticism" (3 items; "How much do you and this person criticize each other?"), and "antagonism" (3 items; "How much do you and this person get annoyed with each other's behavior?"). Previous studies that have utilized the same sample have summarized these items in two-higher order factors: social support (15 items; seeks safe haven, seeks secure base, provides safe haven, provides secure base, and companionship) and negative interactions (9 items; conflict, criticism, and antagonism) (See et al., 2021). The present study will utilize these two-higher factors for the analysis. Participants will respond to an item on a scale of 1-5, with "1" representing little or none, "2" representing somewhat, "3" representing very much, "4" representing extremely much and "5" representing almost always. See and colleagues (2021) found adequate internal consistency for the NRI with the two-higher order factors within the sample the present thesis will utilize, with an alpha of 0.85 for social support and an alpha of 0.91 for negative interactions.

Friendship Quantity. I will utilize peer nominations to measure friendship quantity. Peer relations were measured in classes by using the following question: who is/are your best friend(s). Participants were given a roster with the names of all their classmates and then they could check the classmates who they considered to be their friends. Additionally, participants could not nominate people who were not in their own class, and they were not able to nominate themselves. Responses were standardized and made proportional based on the number of students in each class as well as the number of students who filled out the questionnaire. Therefore, a proportion score of 0.40 in a classroom of 15 students would mean that someone was nominated as a friend by 6 classmates. In a classroom with 20 students, they would have to

be nominated by 8 students to reach the same score. This procedure makes comparisons between classes fairer and more accurate. For this thesis, I will be looking at number of friendship nominations received to get an impression of how others perceive the individual who provided personality self-ratings (Thissen & Bendermacher, 2012).

Plan of Analysis

I plan to use a correlational model for my research questions as I am looking at relationships between continuous variables. To conduct this type of analysis there are a few assumptions that must be met. Associations must be linear so I will begin by creating a scatterplot to see if there is a linear relationship. Once this is determined I will check for normality to determine which correlation is suitable for this analysis. The residuals of the data should be normally distributed, this is checked by determining whether the data are normally distributed. I will check the skewness and kurtosis of my data with the appropriate tests. Values outside of the range of -2 to 2 will be considered skewed, while values outside of the range of -4 to 4 will be considered kurtotic. Additionally, I will utilize data screening techniques such as looking at histograms and p-plots to confirm normality. Once I have all this information, I will examine it holistically to determine the distribution of the data and if I can continue with a correlational design that assumes normality of residuals, such as a Pearson's correlation. If the normality assumptions are not met for my data, I can conduct a Spearman's rho correlation.

I will check the data for outliers as it is important to screen the data of continuous variables for outliers to further understand how certain data points may be impacting the descriptive and measures of central tendency. I will create histograms and boxplots as well as compute the data to z-scores to see if there are any z-scores that are outside of the normal distribution of outliers. For my outlier detection parameters, I will consider anything outside of

the range of z-scores -3 to 3 an outlier. Outliers may be impacting the results of the test statistics so it is important to screen them so that you can be aware of this impact. If I were to have any outliers, I will plan to run my analysis both with and without the outlier(s) to understand what is truly going on. If the outlier(s) were having a significant impact on the data, I will report my findings both with and without the outlier.

Research Question 1. For my first research question I would like to know whether the quality of friendships or quantity of friendships are associated with detached personality. I expect stronger negative associations of both overall quality and quantity friendship with detached personality. I plan to correlate responses from the NRI items to the responses from the PID-5 items related to detached personality to examine the association between quality of friendship and detached personality. I hypothesize that the NRI social support scale to be negatively correlated to detachment while the NRI negative interaction scale may be positively correlated to detachment. I will correlate the responses from peer nominations to the response from the PID-5 items related to detached personality to examine the association between quantity friendship and detached personality. I hypothesize that individuals with higher levels of detached personality to have both lower quality of friendship as well as lower numbers of friendships. To test the difference between two correlation coefficients, I will utilize z-tests.

Research Question 2. For my second research question, I will explore whether different facets are differentially associated with friendship quality and quantity. I will run z-tests between correlation coefficients to check whether their difference is significant. For this I will utilize z-tests.

Research Question 3. For my third research question, I plan to examine gender differences within adolescent friendship and detachment. I hypothesize that gender moderates the

association between personality and friendships. I expect the correlations between friendship quality and detachment as well as friendship quantity and detachment to be different for males and females. There typically are gender differences in social support, with females generally scoring higher. I am interested in whether the association with detachment is also different, as that is unclear from the literature. I expect a negative association of detachment and quality of friendship – social support in females and no significant association in males. I will explore differences in the associations of friendship indicators with detachment by using a z-tests to examine the difference in correlations for males and females.

Lastly, I will explore whether different facets of detachment are differentially associated with friendship quality and quantity with gender as a moderator. I will run z-tests between correlation coefficients to check whether their difference is significant.

Results

Preliminary Analyses

The descriptive statistics for Detachment, the Detachment Facets, Friendship Quality – Social Support, Friendship Quality – Negative Interactions, and Friendship Quantity are shown in Table 1. The means were mostly on the low end of the scales for Detachment and Friendship Quality – Negative Interactions. For the Detachment Facets, the means were also on the low end of the PID-5 scale. The mean for Friendship Quality – Social Support was near the middle of the scale. Friendship Quantity was not collected on a scale, but rather peer nominations that were made proportional for each class. Therefore, the mean for Friendship Quantity suggests that the average adolescent in this sample was nominated as a friend by a quarter of their classmates.

Table 1.

Descriptive Statistics for Continuous Variables

Variable	*n*	*M (SD)*	*Skewness*	*Kurtosis*
Detachment Composite	1300	0.60 (0.37)	1.11	1.75
Anhedonia	1300	0.45 (0.47)	1.38	1.92
Depressivity	1300	0.40 (0.56)	1.77	3.29
Intimacy Avoidance	1300	0.88 (0.63)	0.67	0.23
Suspiciousness	1300	0.68 (0.49)	0.70	0.24
Withdrawal	1300	0.53 (0.52)	1.14	1.38
Friendship Quantity	1157	0.25 (0.21)	4.69	40.73
Friendship Quality – Social Support	1300	3.11 (0.97)	0.04	-0.87
Friendship Quality – Negative Interactions	1300	1.45 (0.51)	2.33	9.02

I checked the normality of Detachment, Friendship Quality – Social Support, Friendship Quality – Negative Interactions, and Friendship Quantity distributions by analyzing their histograms and p-p plots, as well as examining skewness and kurtosis. I also examined the Detachment Facets' normality. After completing all of the preliminary analysis related to normality, I concluded that Detachment and Friendship Quality – Social Support were mostly normally distributed, however Friendship Quality – Negative Interactions and Friendship Quantity were not normally distributed. Moreover, the Detachment Facets were not normally distributed. Due to this, I continued with nonparametric data analysis (Spearman's Rho). See Appendix A for figures illustrating normality.

I explored the presence of outliers in the data by examining the histograms and box plots, as well as z-scores. Quality Friendship – Social Support did not have any outliers. Detachment, Quality Friendship – Negative Interactions, and Friendship Quantity all displayed several outliers

(Appendix B). I also explored the presence of outliers within the Detachment Facets by examining the box plots and z-scores (Appendix B). Anhedonia, Depressivity, Intimacy Avoidance, Suspiciousness, and Withdrawal all displayed several outliers. Based on these findings, I ran my analysis both with and without the outliers to identify if any of the outliers impacted the results.

As the preliminary analysis for correlations, I tested whether the associations were linear with scatterplots (Appendix C). This is applied to all pairs of variables that I plan to perform a correlation analyses as linearity an assumption for being able to conduct a correlation. All of the continuous variables that I will be testing for associations had linear relationships. Additionally, based on some of the normality assumptions not being met, I utilized a nonparametric analysis, Spearman's Rho, for my correlations.

RQ 1: Associations Between Detachment and Friendship

Correlation coefficients are displayed in Table 3. The correlation between Detachment and Friendship Quantity was not statistically significant. Both higher-order factors of Quality of Friendship were significantly correlated to Detachment. There was a negative weak statistically significant correlation between Detachment and Quality of Friendship – Social Support. Higher composite scores of Detachment were associated with lower composite scores of Quality of Friendship – Social Support. Alternatively, there was a statistically significant weak, positive correlation between Detachment and Quality of Friendship – Negative Interactions. All of these correlations had small effect sizes. These analysis were run with and without the outliers described previously. The outliers had no substantial impact on the aforementioned correlation coefficients, with the difference between the coefficients obtained with and without outlier being 0.007 or smaller (Appendix 2).

Table 2.

Correlations for Detachment and Friendship Indicators

Variable	Friendship Quantity	Friendship Quality – Social Support	Friendship Quality – Negative Interactions
Detachment Composite	- 0.051	- 0.067*	0.146**
Anhedonia	- 0.062*	0.062*	0.131**
Depressivity	- 0.035	0.001	0.097**
Intimacy Avoidance	0.028	- 0.088**	0.029
Suspiciousness	- 0.098**	0.056*	0.137**
Withdrawal	- 0.060*	- 0.153**	0.128**

Note: *. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

Comparing Correlations Between Detachment and Different Friendship Indicators

There was a statistically significant difference between the correlation coefficients for Friendship Quality – Social Support and Detachment Composite with Friendship Quality – Negative Interactions and Detachment Composite (z = -2.04, p = 0.04). As the correlation coefficient for Detachment Composite and Friendship Quality – Negative Interactions is positive and the correlation coefficient for Detachment Composite and Friendship Quality – Social Support is negative, I cannot conclude that one is stronger than the other. Additionally, there was also a statistically significant difference between the correlation coefficients for Friendship Quantity and Detachment Composite with Friendship Quality – Negative Interactions and Detachment Composite (z = 2.37, p = 0.02). Similar to the above comparison, these correlation coefficients are statistically different from one another, however due to the different directions of the correlation coefficients I cannot conclude that one is stronger than the other. There was no statistically significant difference between the correlation coefficients for Friendship Quantity

and Detachment Composite with Friendship Quality – Social Support and Detachment Composite ($z = 0.40$, $p = 0.68$).

RQ2: Facet Level Analysis

Detachment Facets and Friendship Quantity

Three out of the five Detachment Facets correlations with Friendship Quantity were statistically significant. The relationships between Anhedonia and Friendship Quantity as well as Withdrawal and Friendship Quantity are statistically significant ($p < 0.05$) negative weak positive linear relationships. The relationship between Suspiciousness and Friendship Quantity is a statistically significant ($p < 0.01$) weak negative linear relationship. Lastly, there were no significant relationships of Intimacy Avoidance and Depressivity with Friendship Quantity. All of these correlations had very small effect sizes.

Detachment Facets and Friendship Quality – Social Support

For the correlations of the Detachment Facets and Friendship Quality – Social Support four out of the five correlations were statistically significant. The relationships between Anhedonia and Suspiciousness with Friendship Quality – Social Support were statistically significant weak positive linear relationships. Additionally, there were statistically significant weak negative linear relationships between Intimacy Avoidance and Withdrawal with Friendship Quality – Social Support. Lastly, there was no significant relationship between depressivity and Friendship Quality – Social Support. All of these correlations had small effect sizes.

Detachment Facets and Friendship Quality – Negative Interactions

For the correlations of the Detachment Facets and Friendship Quality – Negative Interactions four out of the five correlations were statistically significant. There were statistically significant weak positive correlations of Anhedonia, Depressivity, Suspiciousness and

Withdrawal with Friendship Quality – Negative Interactions. However, these correlations all had small effect sizes. Lastly, there was no significant relationship between Intimacy Avoidance and Friendship Quality – Negative Interactions.

These analysis were run with and without the outliers described previously. These outliers minimally impacted the correlations. The correlation coefficient for Friendship Quality – Social Support and Depressivity was minimally impacted. The correlation coefficient changed from a very small positive correlation to a very small negative correlation with the removal of outliers. Additionally, the outliers had a slightly larger impact on the Friendship Quantity and Depressivity correlation coefficient. The removal of outliers resulted in a statistically significant correlation coefficient; however the effect size of this correlation was very small (Appendix 2).

Comparing Correlations Between Detachment Facets and Friendship

Anhedonia. There was a statistically significant difference between the correlation coefficients for Anhedonia and Friendship Quantity with Anhedonia and Friendship Quality – Social Support ($z = -3.07$, $p = 0.002$). As the correlation coefficient for Anhedonia and Friendship Quantity is negative and the correlation coefficient for Anhedonia and Friendship Quality – Social Support is positive, I cannot conclude that one is stronger than the other. Additionally, there was a statistically significant difference between the correlation coefficients for Anhedonia and Friendship Quantity with Anhedonia and Friendship Quality –Negative Interactions ($z = -4.79$, $p < 0.001$). As stated above these correlation coefficients are statistically different from one another, however due to the different directions of the correlation coefficients I cannot conclude that one is stronger than the other.

Depressivity. There was a statistically significant difference between the correlation coefficients for Depressivity and Friendship Quantity with Depressivity and Friendship Quality –

Negative Interactions (z = -3.27, p = 0.001). Additionally, there was a statistically significant difference between the correlation coefficients for Depressivity and Friendship Quality –Social Support with Depressivity and Friendship Quality –Negative Interactions (z = -2.45, p = 0.01). The correlation of Friendship Quality – Negative Interactions and Depressivity is stronger than the correlation of Friendship Quality – Social Support and Depressivity.

Intimacy Avoidance. There was a statistically significant difference between the correlation coefficients for Intimacy Avoidance and Friendship Quantity with Intimacy Avoidance and Friendship Quality – Social Support (z = 2.87, p = 0.004). Additionally, there was a statistically significant difference between the correlation coefficients for Intimacy Avoidance and Friendship Quality –Social Support with Intimacy Avoidance and Friendship Quality –Negative Interactions (z = -2.99, p = 0.002). These correlation coefficients are statistically different from one another, however due to the different directions of the correlation coefficients I cannot conclude that one is stronger than the other.

Suspiciousness. There was a statistically significant difference between the correlation coefficients for Suspiciousness and Friendship Quantity with Suspiciousness and Friendship Quality –Social Support (z = -3.81, $p < 0.001$). There was a statistically significant difference between the correlation coefficients for Suspiciousness and Friendship Quantity with Suspiciousness and Friendship Quality –Negative Interactions (z = -5.84, $p < 0.001$). These correlation coefficients are statistically different from one another, however due to the different directions of the correlation coefficients I cannot conclude that one is stronger than the other. Moreover, there was a statistically significant difference between the correlation coefficients for Suspiciousness and Friendship Quantity with Suspiciousness and Friendship Quality –Negative Interactions (z = -2.08, p = 0.03). The correlation of Friendship Quality – Negative Interactions

and Suspiciousness is stronger than the correlation of Friendship Quality – Social Support and Suspiciousness.

Withdrawal. There was a statistically significant difference between the correlation coefficients for Withdrawal and Friendship Quantity with Withdrawal and Friendship Quality – Social Support ($z = 2.33$, $p = 0.01$). The correlation of Friendship Quality – Social Support and Withdrawal is stronger than the correlation of Friendship Quantity and Withdrawal. There was also a statistically significant difference between the correlation coefficients for Withdrawal and Friendship Quantity with Withdrawal and Friendship Quality –Negative Interactions ($z = -4.67$, $p < 0.001$). Additionally, there was a statistically significant difference between the correlation coefficients for Withdrawal and Friendship Quantity with Withdrawal and Friendship Quality – Negative Interactions ($z = -7.2$, $p < 0.001$). These correlation coefficients are statistically different from one another, however due to the different directions of the correlation coefficients I cannot conclude that one is stronger than the other.

RQ3. Associations Between Detachment and Friendship by Gender

Next, I tested for gender differences in the associations between Detachment and Friendship Indicators. The associations between Detachment and the Friendship Indicators were not statistically significantly different for men and women. Nonetheless correlation coefficients for men and women are included in Table 3.

Additionally, I tested for gender differences in the associations between the Detachment Facets and Friendship Indicators. The facet level analysis found no statistically significant differences for the associations between the Detachment Facets and Friendship for men and women. See Table 3 for correlation coefficients.

Table 3.

Correlations for Detachment and Friendship Indicators by Gender

Variable	Friendship Quantity		Friendship Quality – Social Support		Friendship Quality – Negative Interactions	
Gender	Men	Women	Men	Women	Men	Women
Detachment Composite	-0.089*	-0.016	-0.061	-0.080**	0.160**	0.133**
Anhedonia	-0.098*	-0.138**	-0.088*	-0.053	0.144**	0.118**
Depressivity	-0.069	-0.129**	-0.016	-0.016	0.118**	0.084**
Intimacy Avoidance	-0.001	0.027	-0.097*	-0.145**	0.037	0.036
Suspiciousness	-0.195**	-0.162**	0.099*	0.035	0.151**	0.128**
Withdrawal	-0.074	-0.147**	-0.144**	-0.111**	0.141**	0.092*

Note: *. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

Discussion

The purpose of this study was to explore the associations between detachment and three friendship indicators within a sample of Dutch adolescents. The hypotheses for my first research question were supported as I expected that friendship quantity and friendship quality – social support would be negatively related to detachment while friendship quality – negative interaction would be positively related to detachment. For my exploratory research question, I found that different facets were differentially associated with the friendship indicators. Lastly, my hypotheses for my third research question were not supported as I found no gender differences between associations of different friendship indicators and detachment and its facets.

It is important to note that the associations have small effect sizes, indicating that there are other factors affecting friendship quality and quantity. The small effect sizes may also be because the participants from this study are from a non-clinical population, so we would not

expect to see high levels of detachment with this sample. This current study found a lower detachment mean value when compared to a previous study that examined patients with Personality Disorders (M=1.21, SD = 0.53) (Wright et al., 2015). I would expect differences in detachment to be less impactful for friendships as long as they are in the low range. I will discuss potential implication of these findings in detail below, looking at associations from the perspective of both the three friendship indicators as well as the detachment personality facets.

Friendship Indicators and Detachment Composite

Based on the overall detachment composite, the correlations were as expected. Friendship quantity and friendship quality – social support had a positive association with detachment composite, while friendship quality – negative interactions had a negative association with the detachment composite. Thus, indicators of higher quality of friendship, such as providing safe haven and compassion, were associated with lower levels of detachment. Alternatively, indicators of lower quality of friendship, such as criticism and antagonism, were associated with higher levels of detachment. Previous studies have found a similar relationship with quality of friendship with the Big Five personality indicator of detachment, extraversion. Individuals who scored high in extraversion provided higher closeness ratings to their friendships as well as reported lower conflict (Berry et al., 2000). Additionally, having a greater number of friends was associated with lower levels of detachment. Previous research has identified higher levels of extraversion related to a greater social network (Malcolm et al., 2021). These findings provide insight into the relationship between the different indicators of friendship and detachment. However, the associations between friendship indicators and detachment are not particularly strong.

Although the direction of these overall detachment associations with friendship indicators were as expected, there were some surprising differences when examined at the facet level. These findings will be examined in greater detail in the next section.

Detachment Facets

A focus of the current study was the various facets of the detachment domain. Examining the relationships between different friendship indicators from the facet level provides more insight as to how the various detachment facets are related to adolescent friendships.

Unsurprisingly, friendship quality – negative interactions was positively associated with all of the detachment facets, highlighting consistency with the overall detachment domain. The detachment facets represent characteristics that typically are negatively perceived by others. These negative interactions are characterized by conflict, criticism, and antagonism, indicating lower quality of friendship (Furman & Buhrmester, 2009). This aligns with previous findings, indicating that adolescents are more inclined to pursue high quality relationships characterized by social support and companionship rather than those that are lower quality, characterized by unreliability and that are degrading to others (Nangle et al., 2003). Relationships that are lower in quality may be more related to withdrawn and avoidant adolescents who are not finding pleasure in social interactions.

Anhedonia and Depressivity

In terms of the facet level, anhedonia and depressivity have many similarities and may be closely related to one another. Anhedonia is an individual's inability to feel pleasure (Gooding et al., 2016), while depressivity relates to feelings of sadness and inability to engage in social settings (See et al., 2020). Anhedonia and depressivity were both positively associated to

friendship quality – negative interactions, as well as both being negatively related to friendship quantity.

Both anhedonia and depressivity had small positive associations with the friendship quality – social support measure. In this situation, it could be that individuals scoring higher on anhedonia and depressivity still find support in social settings, even if they are not experiencing happiness or pleasure in their friendships. For instance, an individual who is not feeling good or happy may elicit this support from a close peer that is noticing their friend is unhappy (Colarossi & Eccles, 2003). Their friend may be more supportive as they notice this situation.

Furthermore, the association of depressivity and negative interactions was stronger than the association of depressivity and social support. Feelings of sadness and the inability to engage in peer settings are more related to indicators of low quality relationships such as conflict than indicators of high quality relationships like feeling safety within the relationship. This could be related to the different nature of the dimensions. Negative interactions are characterized by arguing and would go up if an individual is irritable, with irritability being associated with depressivity. Alternatively, social support is more about compassion and trust which may not be diminished when you see someone struggling. An individual may get angry with someone who appears to be depressed, however the individual is less likely to withdraw their support from that person (Colarossi & Eccles, 2003).

Withdrawal and Suspiciousness

Both withdrawal and suspiciousness were significantly associated with all friendship indicators. Withdrawal relates to individuals' inclination to remove themselves from peer situations and feel distanced in peer settings (See et al., 2020). Suspiciousness is the general

tendency to mistrust others in a variety of settings, such as at home or within peer settings (See et al., 2020). Suspiciousness can lead to peer withdrawal from a paranoia and lack of trust.

Surprisingly, suspiciousness was positively associated with friendship quality – social support, differing from the relationship of friendship quality – social support and the overall detachment composite. Based on the previous literature I would have expected this to be a negative association (Wong & Raine, 2018). However, this could be due to peers being able to identify that this individual is struggling, and they would like to help the individual. Higher suspicious behaviors, such as mistrust and anxiety, may lead to more social support when more evident to peers. When these behaviors are more apparent, peers may increase their support to this individual, providing a safe haven, secure base, and companionship. Ultimately, this could lead to more peer acceptance, and thus increased social support from others. I could not find any literature exploring this area and it could be worthwhile to further explore in the future.

Withdrawal and friendship quality – social support had a stronger relationship than withdrawal and friendship quantity. This could mean that indicators of good quality relationships such as companionship and providing a secure base, are more related to a tendency to withdraw from peers than the number of friends an individual experiences. It seems like withdrawal is about retreating from closer friendships and that it is less associated with the number of friends. This could be that the more surface level friendships are retained. Alternatively, suspiciousness and friendship quality – negative interactions had a stronger relationship than suspiciousness and friendship quality – social support. An inclination to mistrust and be paranoid in social settings is more related to indicators of low quality relationships such as criticism and antagonism than indicators of high quality relationships like compassion and friendship security. As previously mentioned, this could be related to the different nature of the dimensions. This

experience of having a suspicious friend may not impact the level of support an individual is experiencing. A friend that is consistently mistrusting can illicit some anger, but may not affect support as much given the nature of that dimension.

Intimacy Avoidance

Intimacy avoidance had only a significant relationship with friendship quality – social support and not with negative interactions. Those with higher and lower levels of intimacy avoidance are equally likely to have negative interactions, but are more likely to receive less support (Gabriel et al., 2005). Surprisingly, intimacy avoidance is the only facet that had a positive association with peer quantity. Although it would seem that intimacy avoidance would be associated with lower number of friends, it could be that individuals with higher intimacy avoidance may have a higher proportion of relationships that would have been surface level friendships, meaning that these friends are not close or high in quality. This could also be a strategy for individuals that struggle to have more intimate relationships that are looking for a sense of belonging (Stanton et al., 2017). These individuals may need more lower-intimacy relationships to get to the same amount of support or belonging as an individual that has more intimate relationships.

It is important to note a caveat with intimacy avoidance. Although it could be represented as intimate or close relationship, the measure for intimacy avoidance in the PID-5 is related to having a significant other. Sample items from the PID-5 for intimacy avoidance include “I prefer being alone to having a close romantic partner” and “I prefer to keep romance out of my life” (Krueger et al., 2012). This could have impacted how the adolescents responded to these measures and this may have influenced the results.

Gender

The associations of friendship indicators and detachment were similar across gender groups. Recent research has been conducted within the area of the gender differences with the personality inventory for the DSM-5 (PID-5). Gomez and colleagues (2022) identified some gender differences among different domains of the PID-5; however detachment was not different between genders. While the Gomez et al. (2022) study is only examining level differences in detachment, it is informative in understanding the personality differences between the two genders. In the context of this thesis, I found no differences in the relationships of detachment and its facets with friendship indicators. Detachment and its function might not be something that is strongly associated with gender. I was unable to find literature directly examining detachment and adolescent friendships related to gender, identifying an area where further research could be conducted.

Theoretical Frameworks

Lastly, I would like to address the theoretical frameworks that grounded the development of my research questions. These questions were grounded in three major theories – the attachment theory (Bowlby, 1969; Ainsworth, 1978), the interpersonal theory (Sullivan, 1953), and the psychosocial theory (Erikson, 1950). The attachment theory explained how individuals first make relationships, and how this can have an impact on how they make relationships in the future, while the interpersonal theory and psychosocial theory explained that peer relationships are a major factor contributing to personality development during the adolescent years. Based upon these theoretical frameworks, I had anticipated quality of friendship rather than quantity of friendship to be more salient. This relates to Erikson's theory through which detachment could be interpreted as an adaptation of attachment being related to making friends in later developmental tasks. Detachment could be an indicator of earlier attachment, as attachment

styles could be stable and effect later relationship development. However, we know that attachment is not perfectly stable overtime and is not as deterministic as it once was thought to be (Jones et al., 2017). In the adolescent years, popularity and having many friends is seen as thriving and better versus the quality of those friendships (Nangle et al., 2003). There is evidence from this current study that the development of personality is somewhat important for quality of friendship but not the number of friendships as those could be a large number of low quality friendship. Additionally, my findings do align with Karen Horney's work, as there are quite a few associations of friendship indicators with detachment and its facets suggesting that the detachment domain indeed is an important part of personality for interpersonal functioning, as predicted by Horney (1945). Moreover, my findings provide support that the categorical approach of Horney's (1945) adaption of the interpersonal theory could be refined with a dimensional facet level approach as personality works more in a continuum (Widiger & Costa, 2012). At the same time, I conclude that detachment may not play such a strong role in relationship formation during this specific age and specific population as I predicted based upon these theories. Although my research was done with a correlational model, it appears there may not be such a strong relationship between this specific domain of personality and friendship indicators.

Limitations and Future Directions

A limitation of this data is that it may not be generalizable to adolescents outside of the south of The Netherlands. There is very little demographic diversity within this sample. These Dutch individuals within the south of the Netherlands may be experiencing some phenomena unrelated to the current study that could be impacting the association between friendship and

detachment. Therefore these associations may not be generalizable to populations outside of these individuals.

Furthermore, the operationalization of friendship for this study may not be generalizable to other contexts. Dutch systems in regard to creating friendships are different experiences compared to that in the United States. For example, in the Netherlands, some peer relationships are from sports and arts activities that are not linked to the middle or high school (Baerveldt et al., 2007). In the United States, a majority of the sports and clubs in middle and high school are organized through the school. In the Netherlands, adolescents are typically part of clubs based on the specific geographical location where they live and, therefore they may have friends that do not attend the same school (Baerveldt et al., 2007). This study only allowed students to select a peer from the class as a friend for the measure of friendship quantity. Adolescence is a time when friendships are being formed well beyond the classroom and thus the friendship quantity assessment is not fully inclusive. There could be some individuals who were not close with anyone in their class at school but had a lot of friends from their neighborhood. In the context of the Netherlands, students typically bike to school in groups, consisting of students from one or more village. These students from the same bike groups could attend a variety of schools in the larger area where they are biking to. These missed peer connections are another limitation to the study.

Another major limitation of this analysis is that due to utilizing a correlational model, I cannot infer causal relationship of detachment and friendship quality or quantity. This means that we cannot say that detachment is causing lower numbers of friendships or lower quality friendships. Previous research has shown extraversion and other personality dimensions as predictors for friendship quality through a series of controlled correlations (Neyer et al., 2001).

Through path analysis, Neyer and colleagues (2001) identified that personality traits predicted change in various aspects of social relationships. Extraversion, the Big Five alternative of detachment, predicted changes in quality of relationships. Moreover, quality of relationships with preschool children also predicted later extraversion. Only extraversion and neuroticism had this reciprocal relationship with relationship quality. Given the findings of Neyer and colleagues (2001), detachment could predict friendship as well as early childhood friendships could predict later detachment.

Moreover, there is some limitation in the design of the study in regard to gender. Gender was placed on the binary, which is relatively accurate for the Netherlands especially during the time that this date was collected. There likely were many individuals who did not feel like they belonged on the binary, but they may not have had the vocabulary to express their feelings yet and the social context was not particularly encouraging for exploring gender identity beyond the binary. If the study was replicated it could be important to explore friendship and detachment with greater gender differentials.

Lastly, a limitation could be that I utilized too broad of an approach to my measure of relationship quality. I utilized two higher order factors for the Network of Relationship Inventory – social support and negative interactions (See et al., 2021). Social support includes items such as seeking safe haven, seeking secure base, providing safe haven, providing secure base, and companionship. Friendships may not be reciprocal, meaning that it may not be accurate to reduce seeking and providing into one factor. However, I examined the correlations of the seeking and providing measures with detachment and its facets and found no differences in the correlations. Correlation coefficients can be found in Appendix D.

A possible future direction would be examining more domains of personality that may be related to adolescent friendships such as antagonism and psychoticism. Antagonism is representative of low agreeableness and is defined as an individual having some antisocial characteristics as well as being grandiose and attention seeking (Hopwood et al., 2012). Moreover, psychoticism, related to openness to experience, includes eccentricity, perceptual problems, and strange behavior (Hopwood et al., 2012). These domains seem as though they would be related to an individual's quality and quantity of friendships. Antagonism has been identified as a predictor of lower quality friendships (Hanna, 1998). Furthermore, previous research has explored some links between psychoticism and friendship quality in young adolescents (Pavlou et al., 2016). Psychoticism was related to self-reported poor quality friendships, which were characterized by increased conflict and reduced levels of security in friendships (Pavlou et al., 2016). Exploring more domains of the PID-5, and their various facets, in the context of different indicators of friendship could expand the understanding of the relationship between personality and friendship during the adolescent years.

Lastly, another future direction could be examining the stability of detachment and friendship quality over the various measurement occasions of the Project-Me study. Unfortunately friendship quantity was only collected in Wave one so we cannot explore this over multiple waves. Although this study is just examining Wave one, examining the other Waves may provide more insight into how these variables are changing over time. Additionally, this could provide more information about the direction of effects.

Conclusion

This current study explored the relationships between detachment and friendship quality as well as detachment and friendship quantity, among Dutch adolescents. This thesis highlights

the value of examining personality from the facet level to gain greater specificity about personality. While the domain level approach is useful it may not provide all the details about an individual's personality. In my thesis, utilizing a facet level approach to detachment provided additional specific insights that would have gone lost had I only focused on detachment at the domain level. This thesis expanded upon previous research surrounding detachment and friendship indicators while finding that this personality domain and its facets may not have such a negative impact on adolescent friendships as the literature suggests, within this age group of Dutch adolescents.

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Appendix A

Tests of Normality

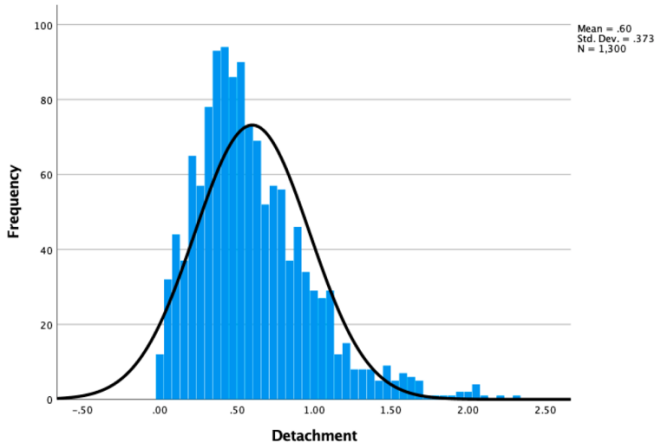

Figure A1. Histogram for detachment

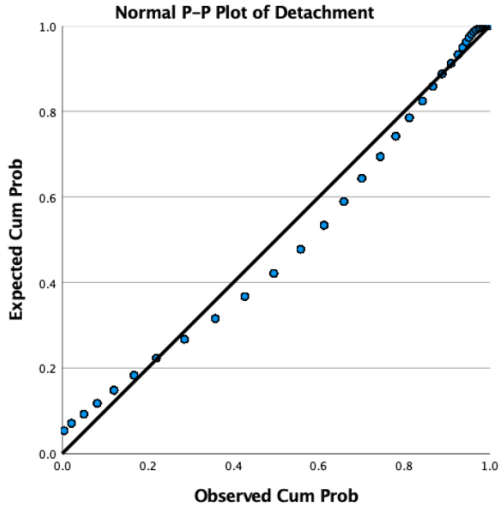

Figure A2. P-P Plot for detachment

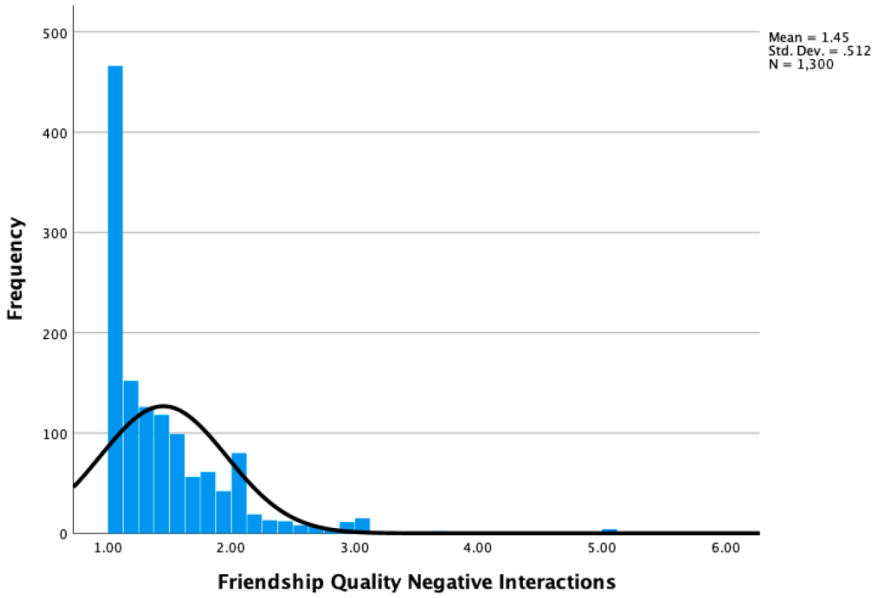

Figure A3. Histogram for quality negative interactions

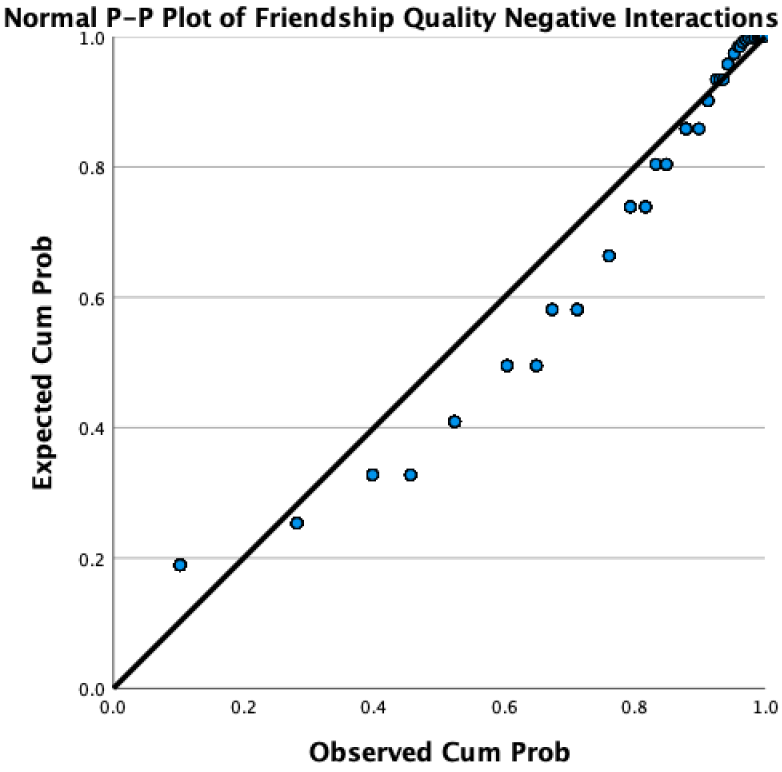

Figure A4. P-P Plot for quality negative interactions

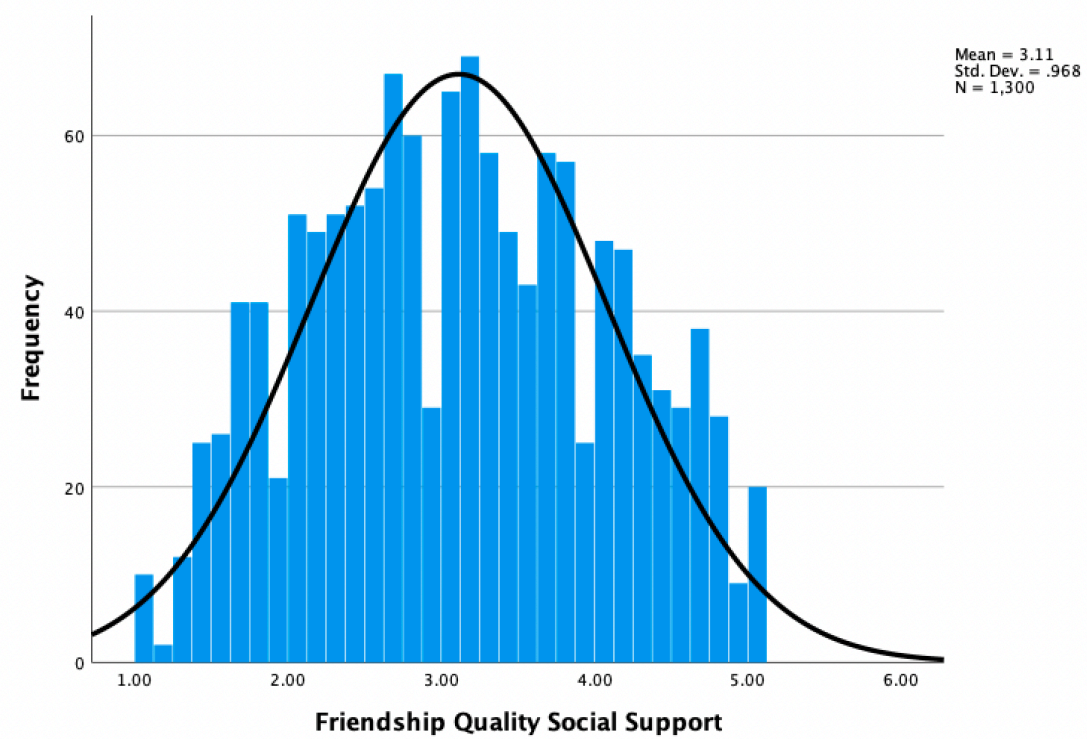

Figure A5. Histogram for quality social support

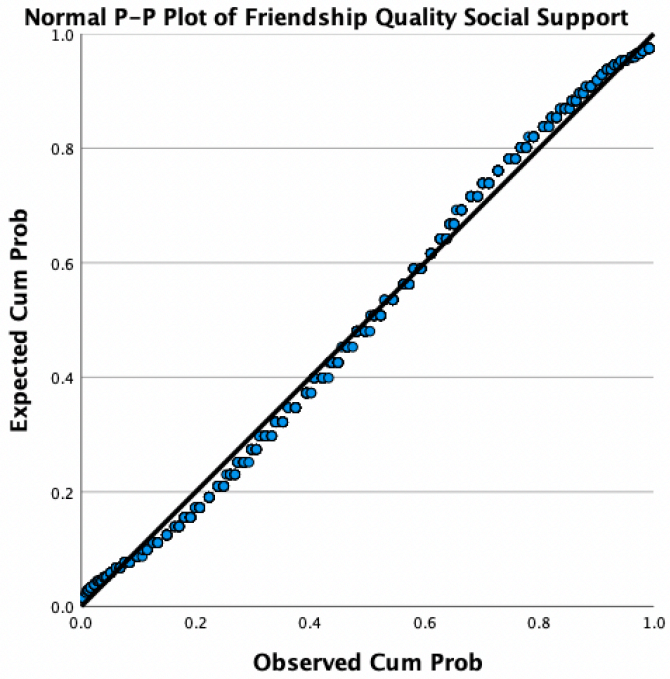

Figure A6. P-P Plot for quality social support

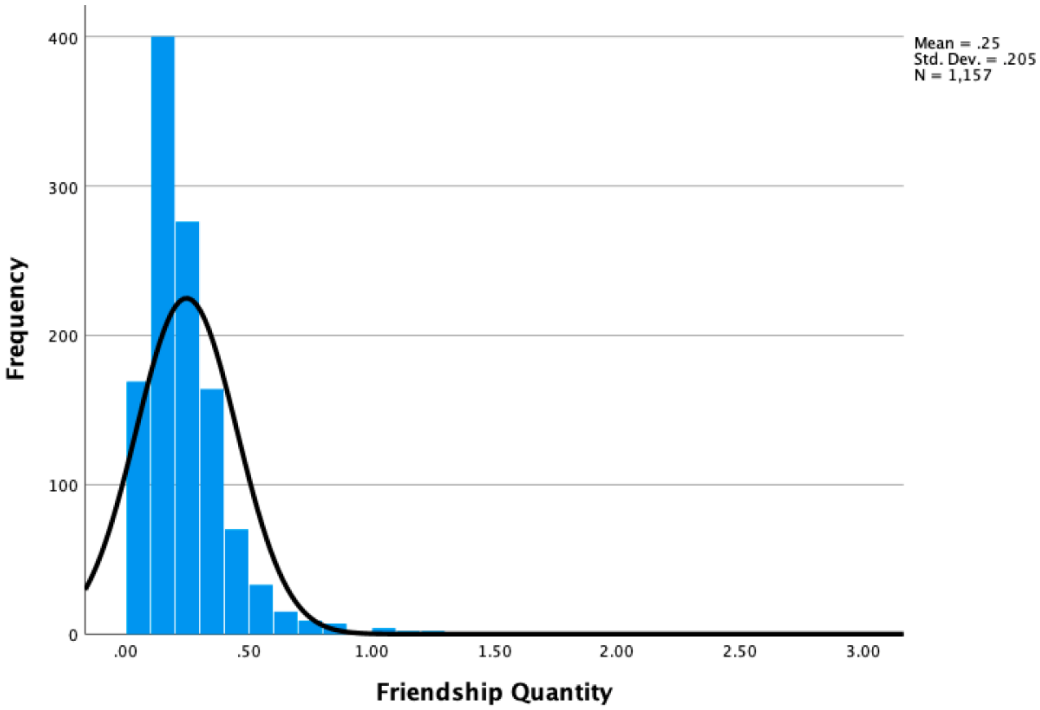

Figure A7. Histogram for friendship quantity

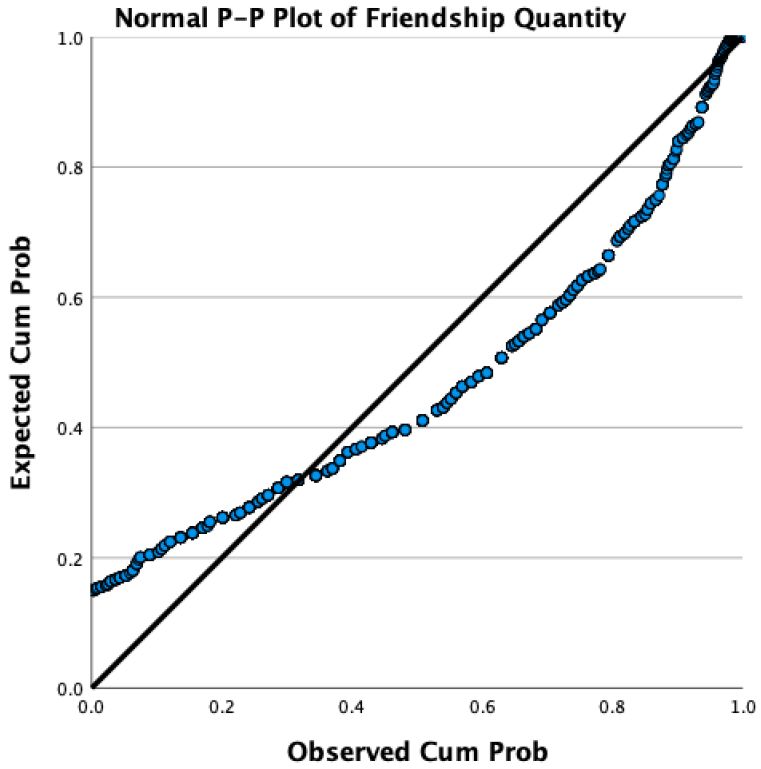

Figure A8. P-P Plot for friendship quantity

Tests of Normality for Facets of Detachment

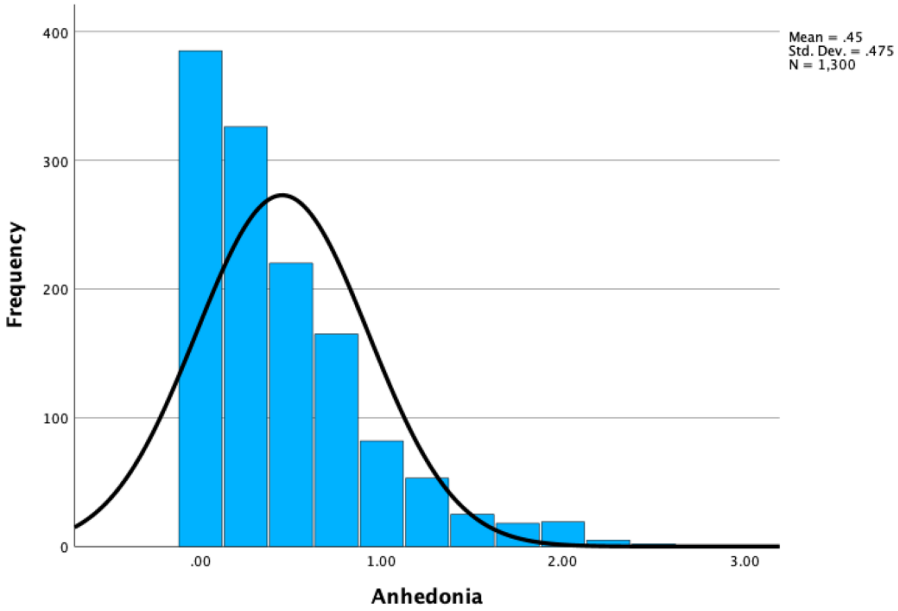

Figure A9. Histogram for anhedonia

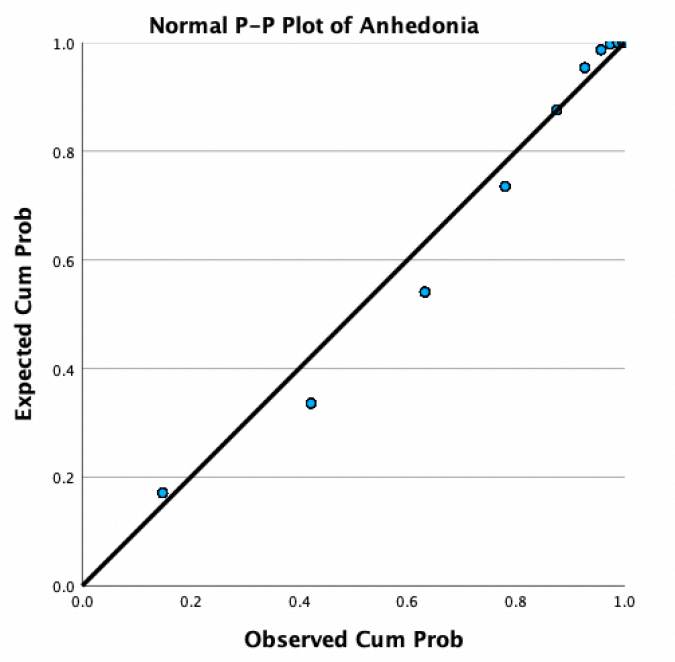

Figure A10. P-P Plot for anhedonia

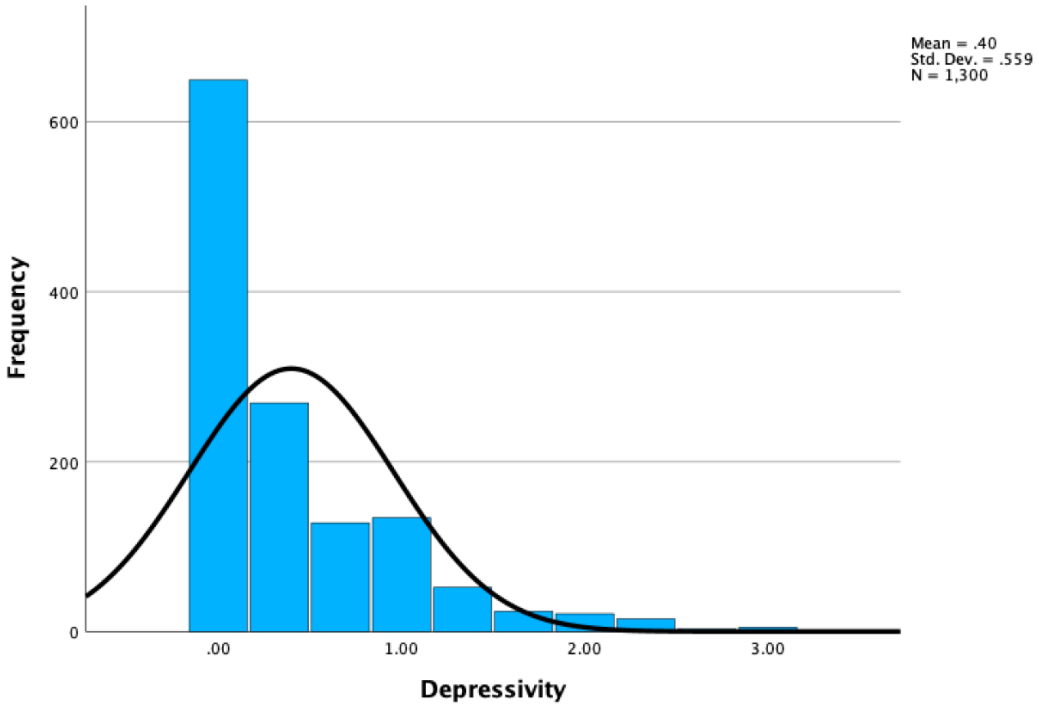

Figure A11. Histogram for depressivity

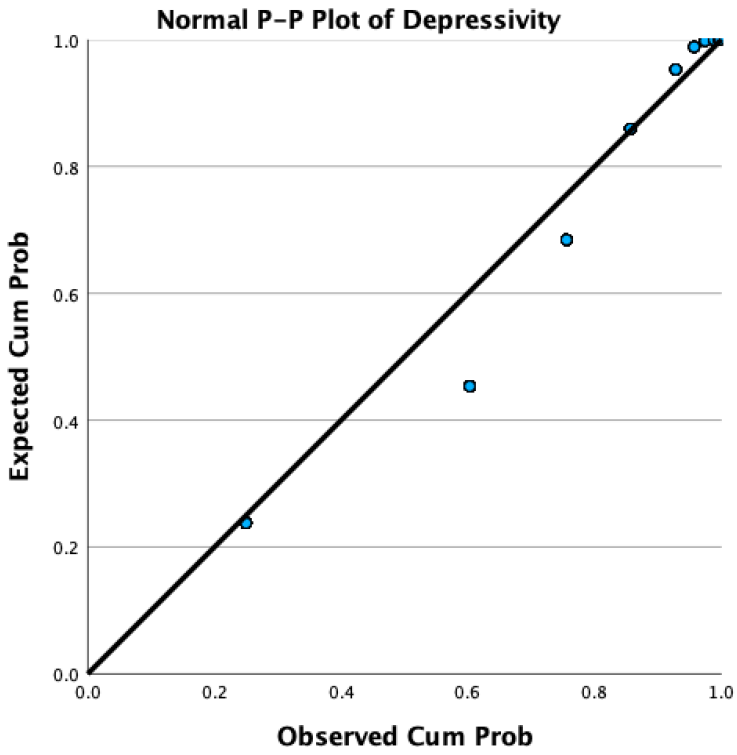

Figure A12. P-P Plot for depressivity

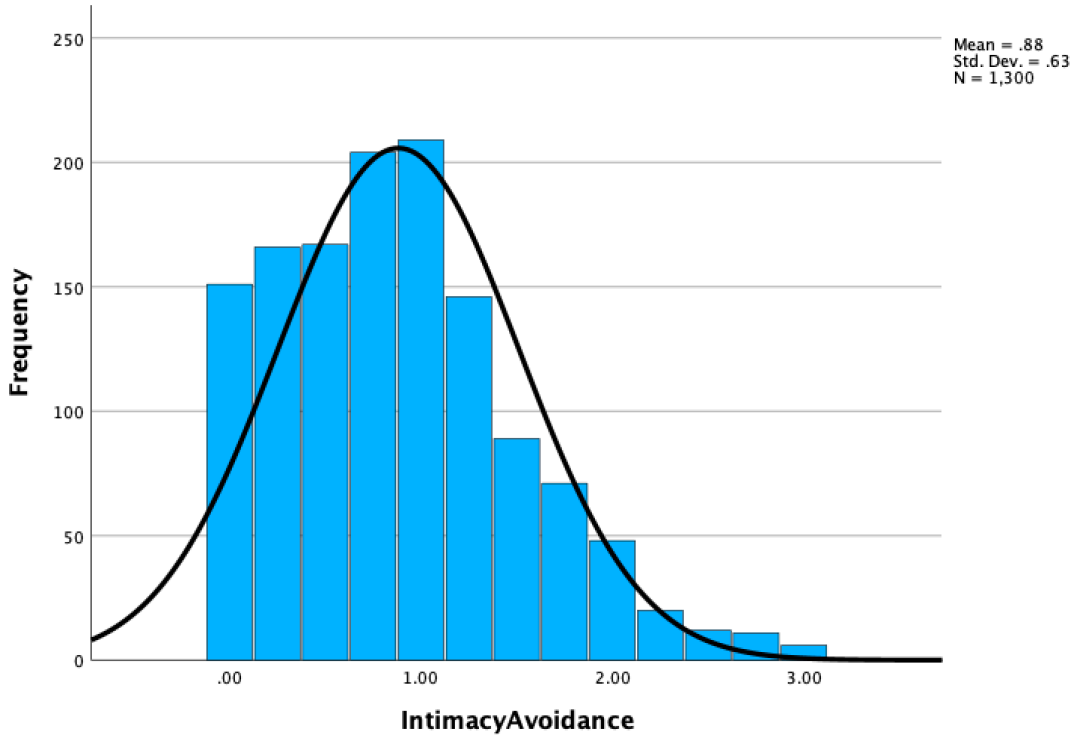

Figure A13. Histogram for intimacy avoidance

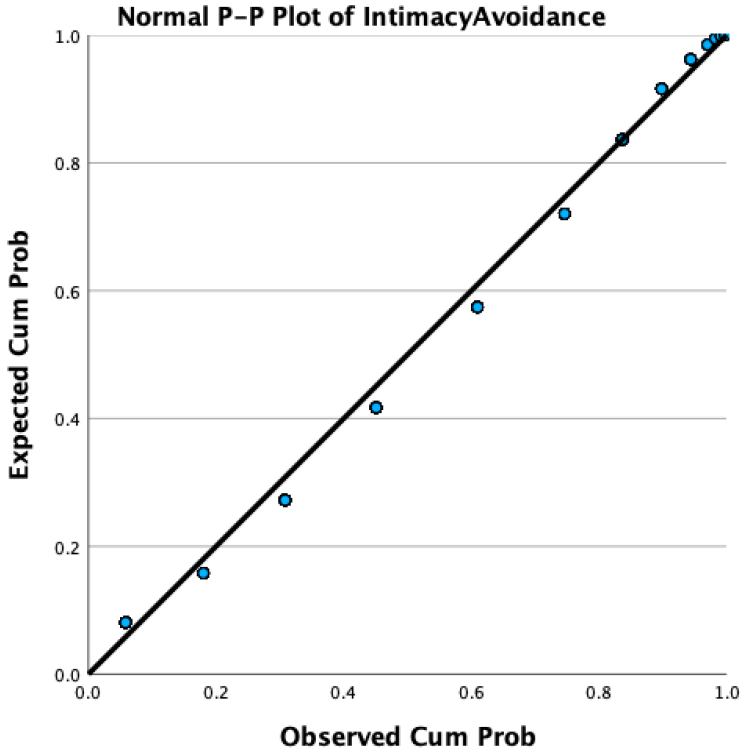

Figure A14. P-P Plot for intimacy avoidance

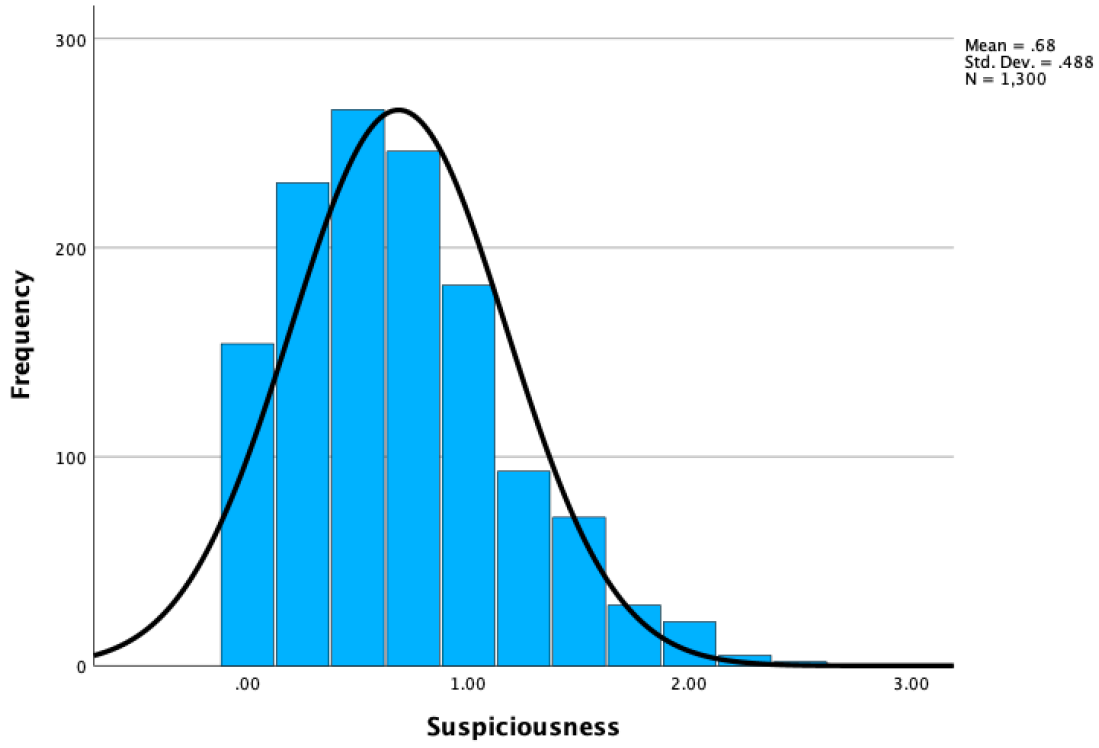

Figure A15. Histogram for suspiciousness

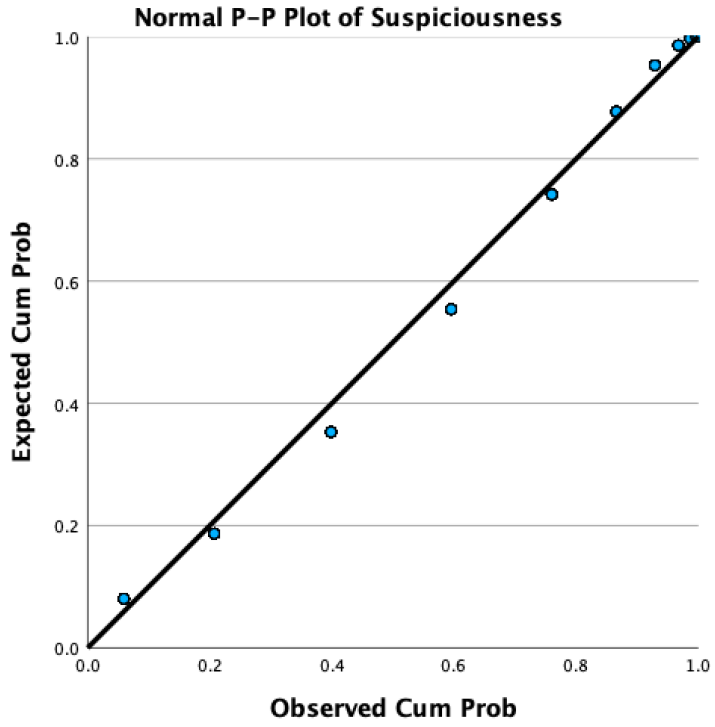

Figure A16. P-P Plot for Suspiciousness

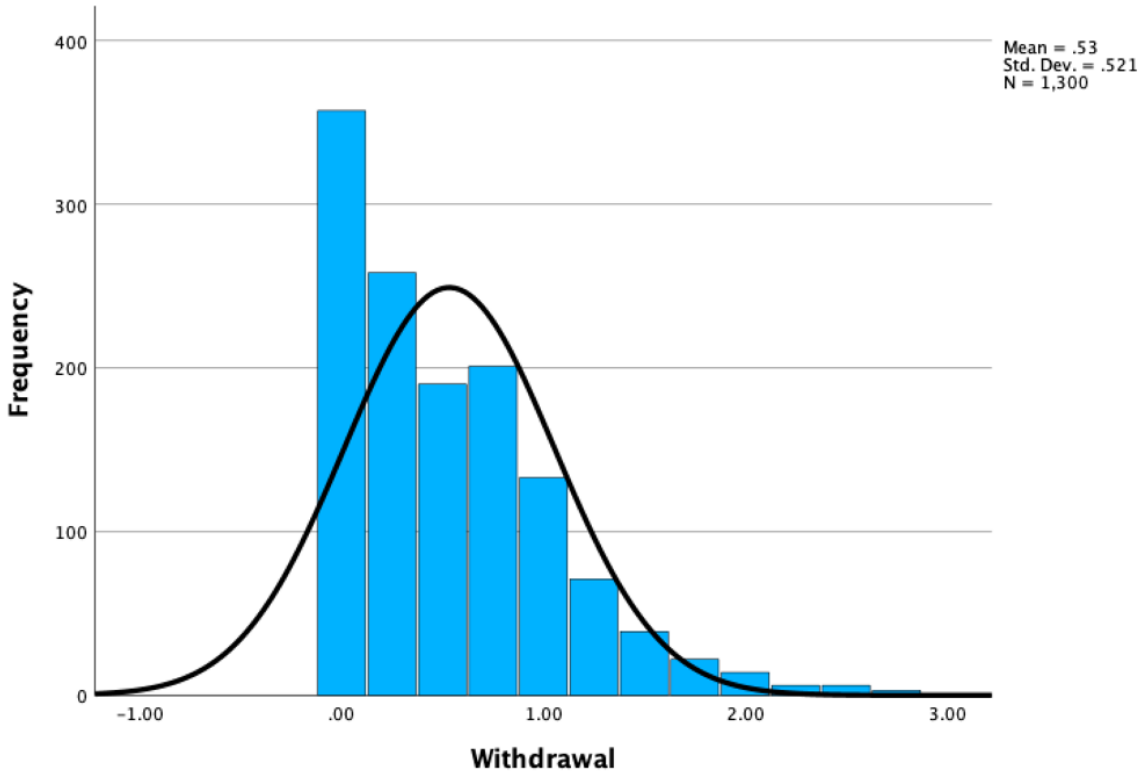

Figure A17. Histogram for withdrawal

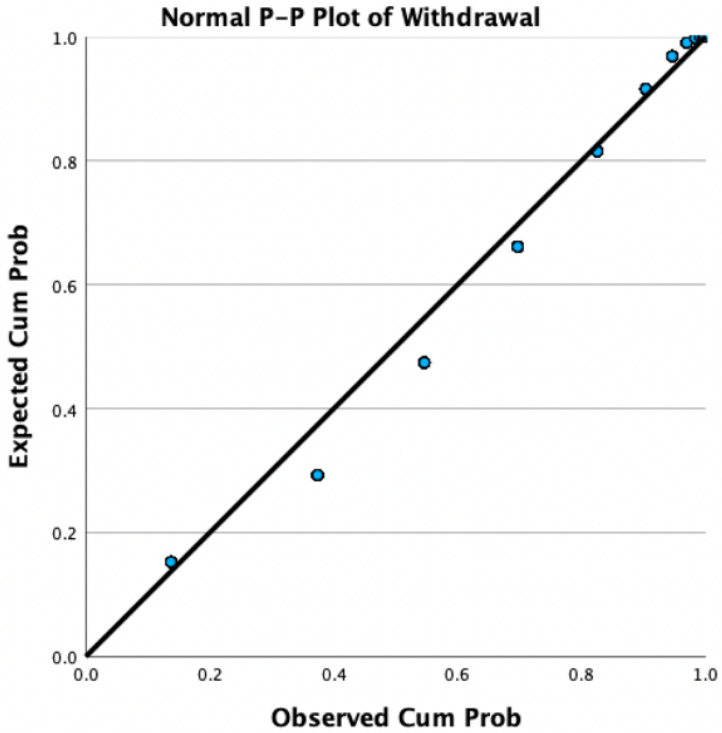

Figure A18. P-P Plot for withdrawal

Appendix B

Outlier Detection for Continuous Variables

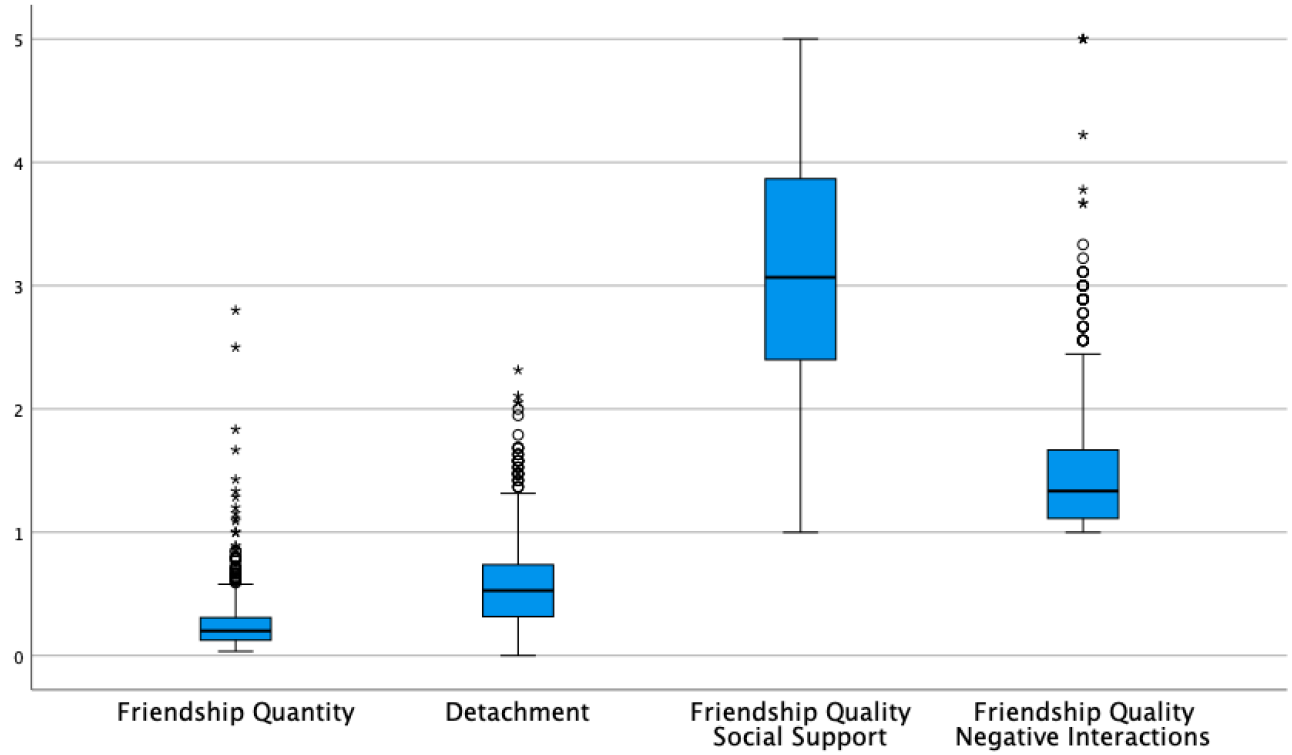

Figure B1. Boxplots for continuous variables

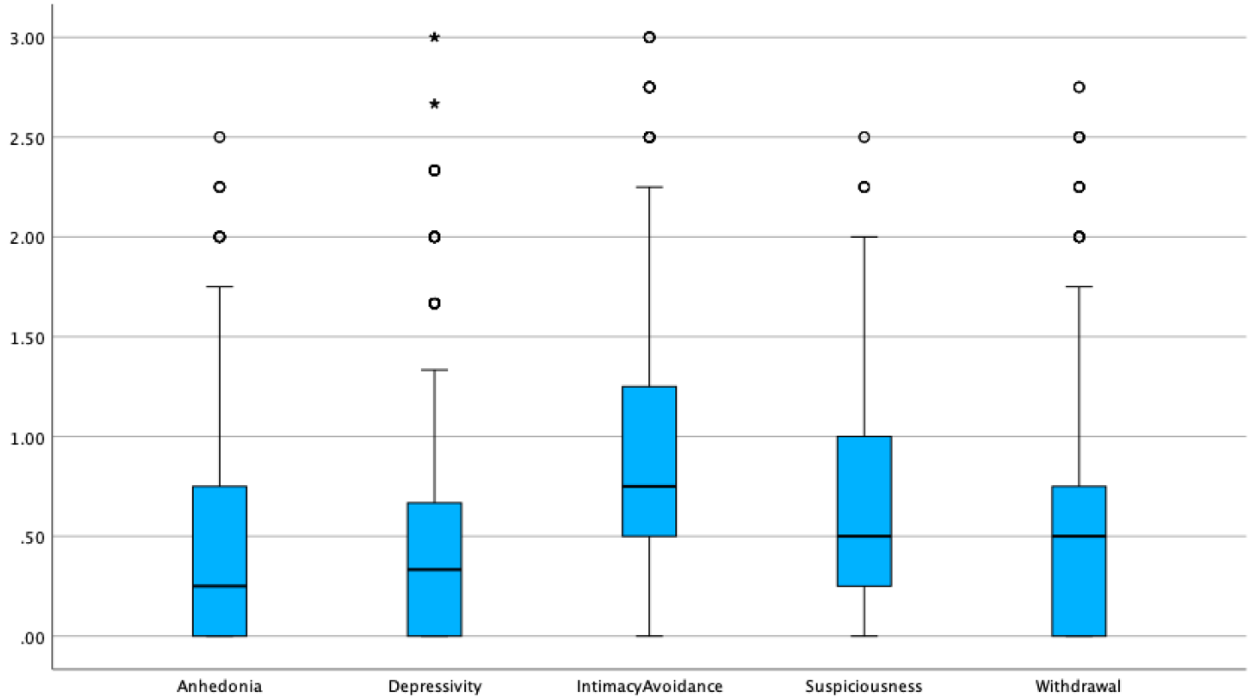

Figure B2. Boxplots for detachment facets

Table B.

Correlations for Detachment and Friendship Indicators Without Outliers

Variable	Friendship Quantity	Friendship Quality – Social Support	Friendship Quality – Negative Interactions
Detachment Composite	-0.044	-0.069*	0.146**
Anhedonia	- 0.108**	-0.070*	0.136**
Depressivity	- 0.083**	-0.016	0.075**
Intimacy Avoidance	0.015	- 0.083**	0.040
Suspiciousness	- 0.180**	0.061*	0.149**
Withdrawal	- 0.100**	- 0.165**	0.125**

Note: *. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

Appendix C

Tests of Linearity

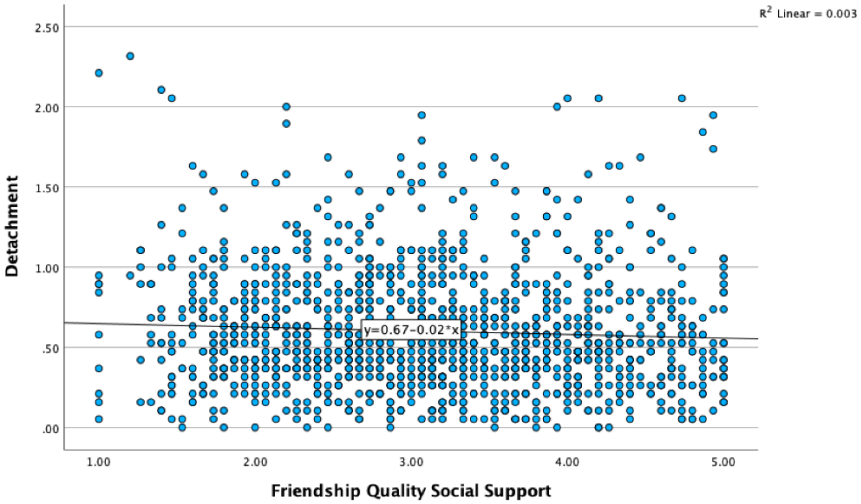

Figure C1. Detachment and Friendship Quality – Social Support scatterplot

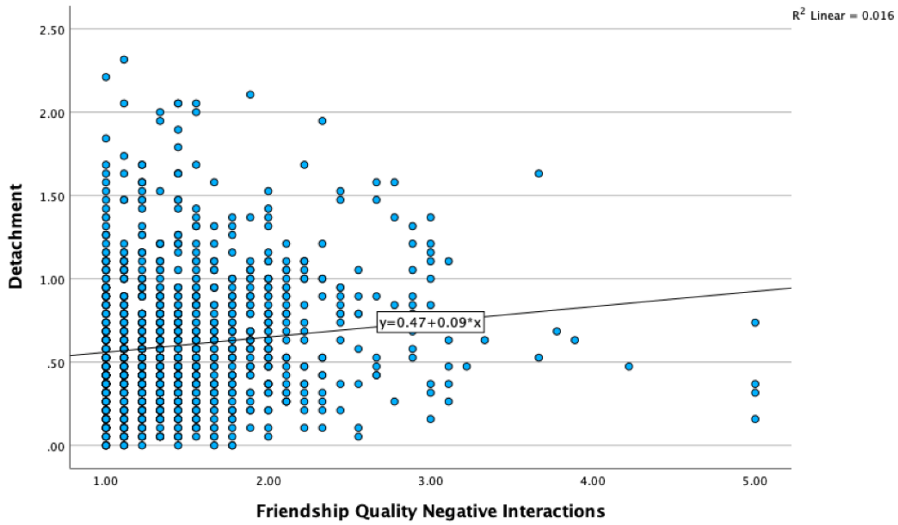

Figure C2. Detachment and Friendship Quality – Negative Interactive scatterplot

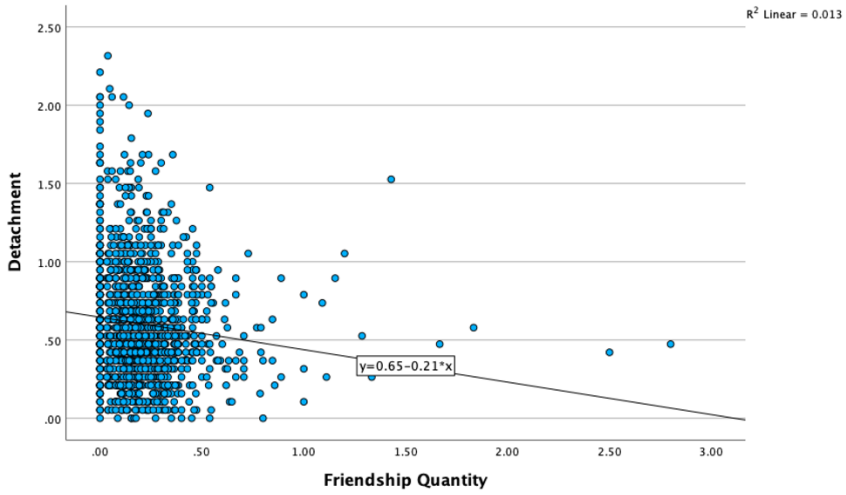

Figure C3. Detachment and Friendship Quantity scatterplot

Tests of Linearity for Detached Facets

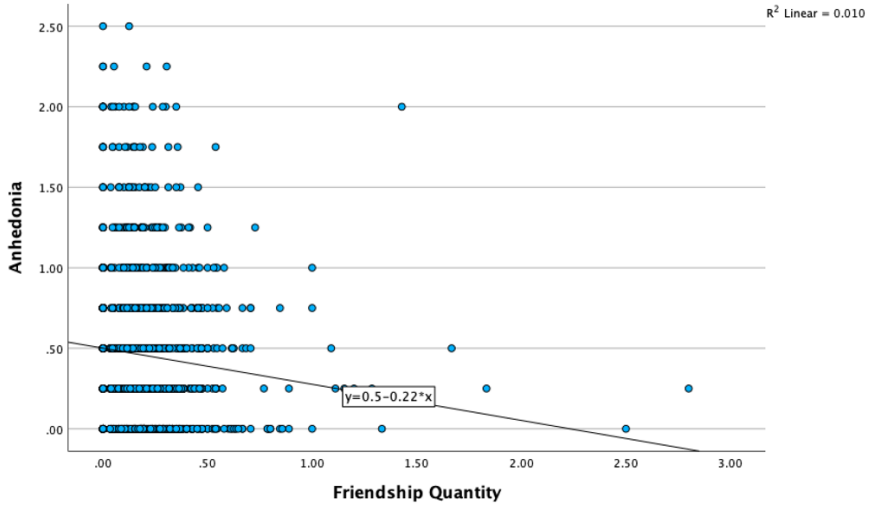

Figure C4. Anhedonia and Friendship Quantity scatterplot

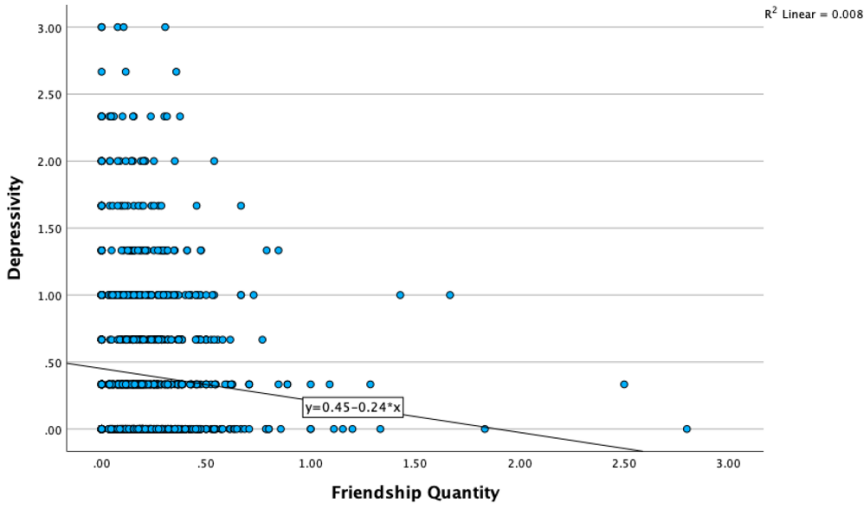

Figure C5. Depressivity and Friendship Quantity scatterplot

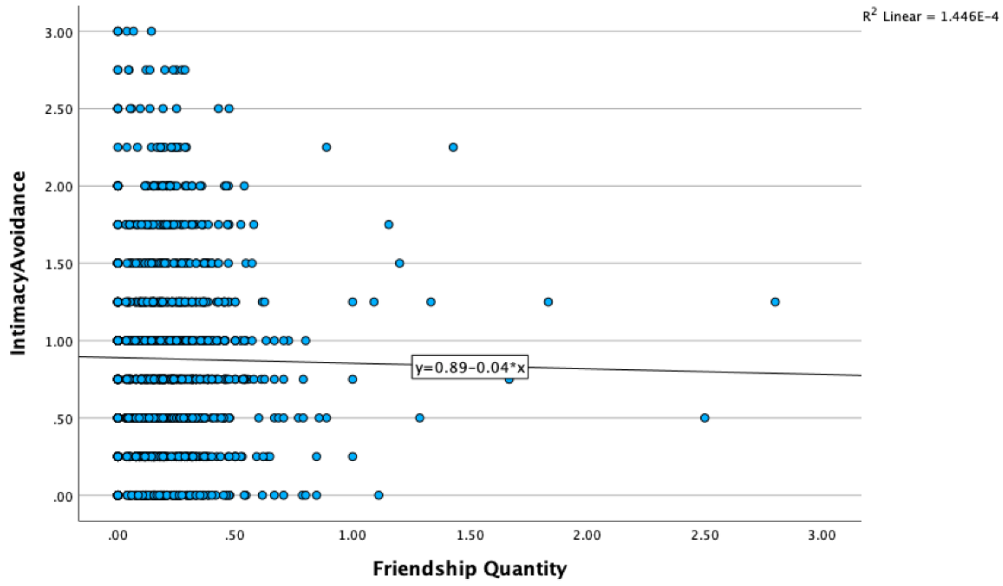

Figure C6. Intimacy Avoidance and Friendship Quantity scatterplot

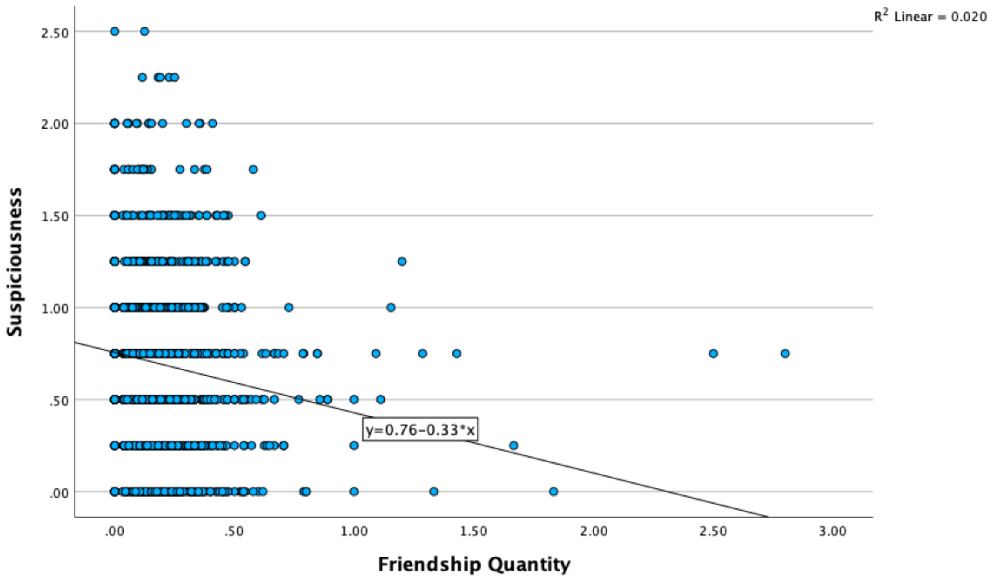

Figure C7. Suspiciousness and Friendship Quantity scatterplot

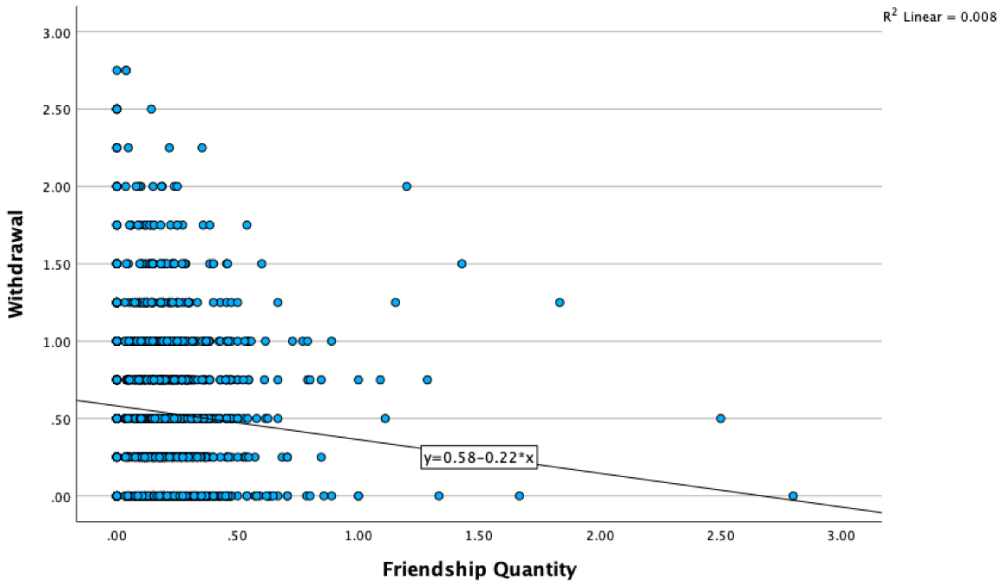

Figure C8. Withdrawal and Friendship Quantity scatterplot

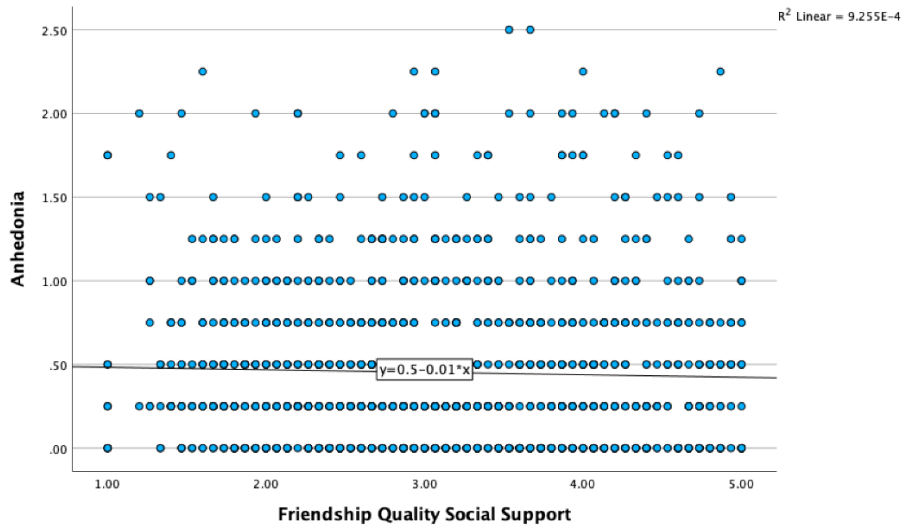

Figure C9. Anhedonia and Friendship Quality – Social Support scatterplot

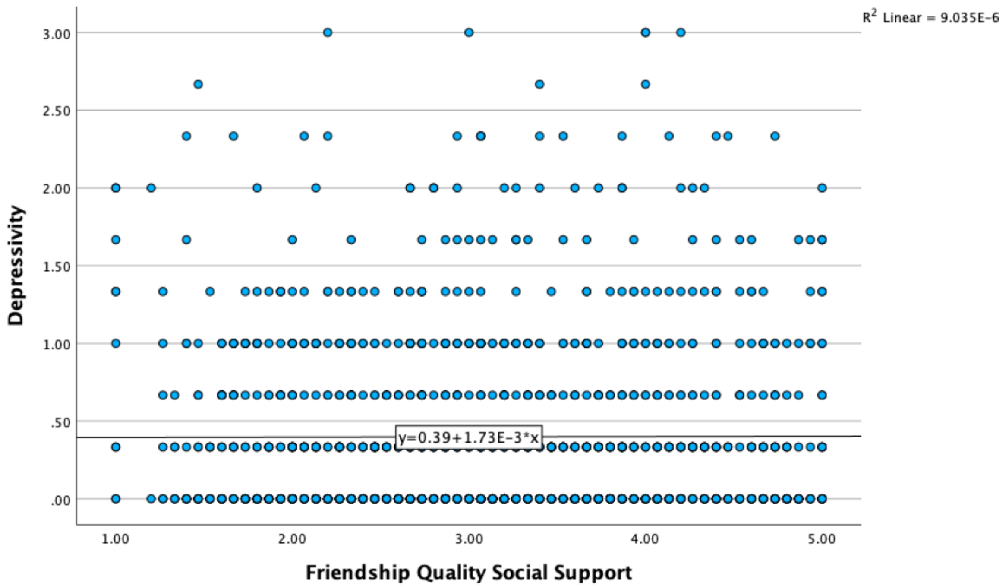

Figure C10. Depressivity and Friendship Quality – Social Support scatterplot

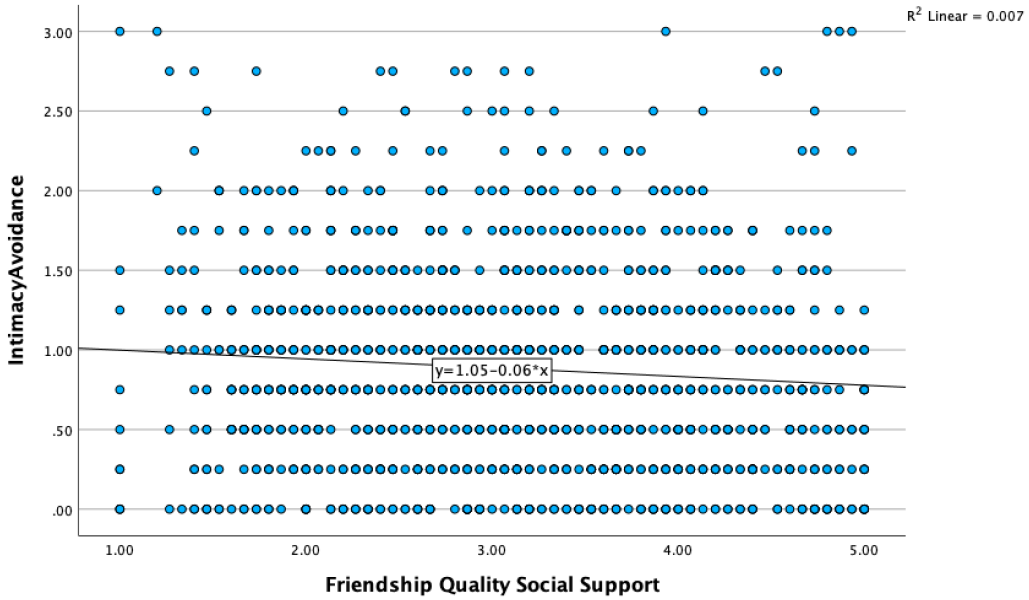

Figure C11. Intimacy Avoidance and Friendship Quality – Social Support scatterplot

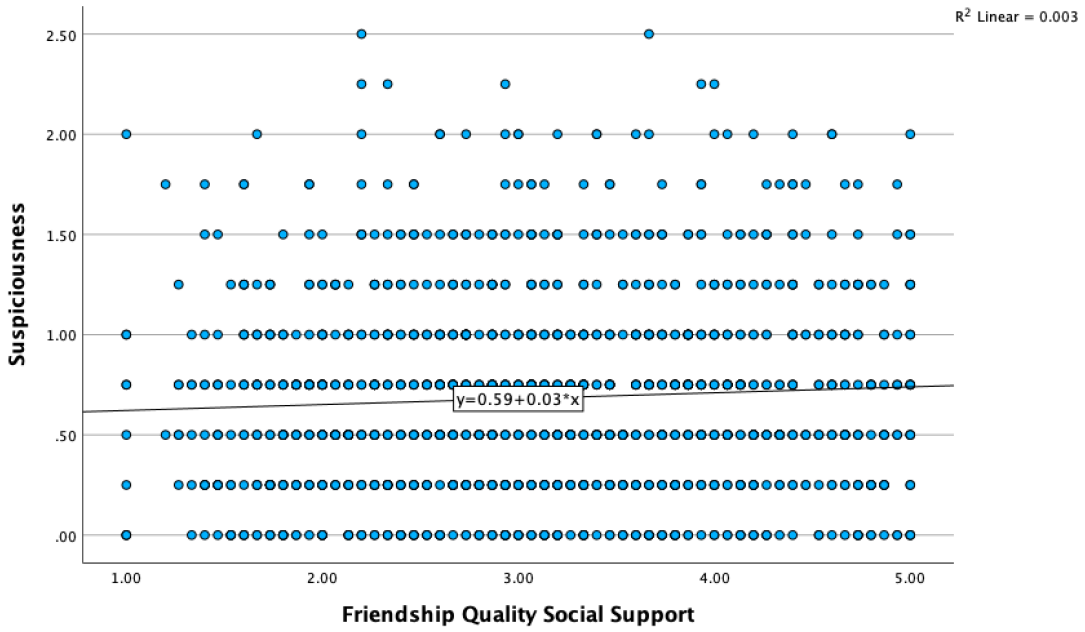

Figure C12. Suspiciousness and Friendship Quality – Social Support scatterplot

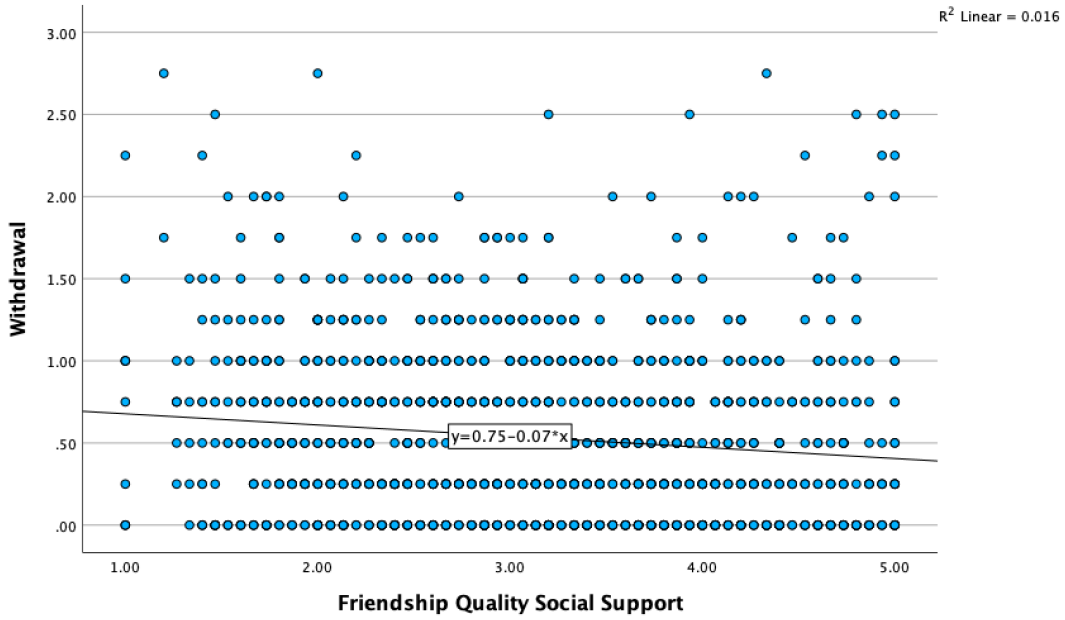

Figure C13. Withdrawal and Friendship Quality – Social Support scatterplot

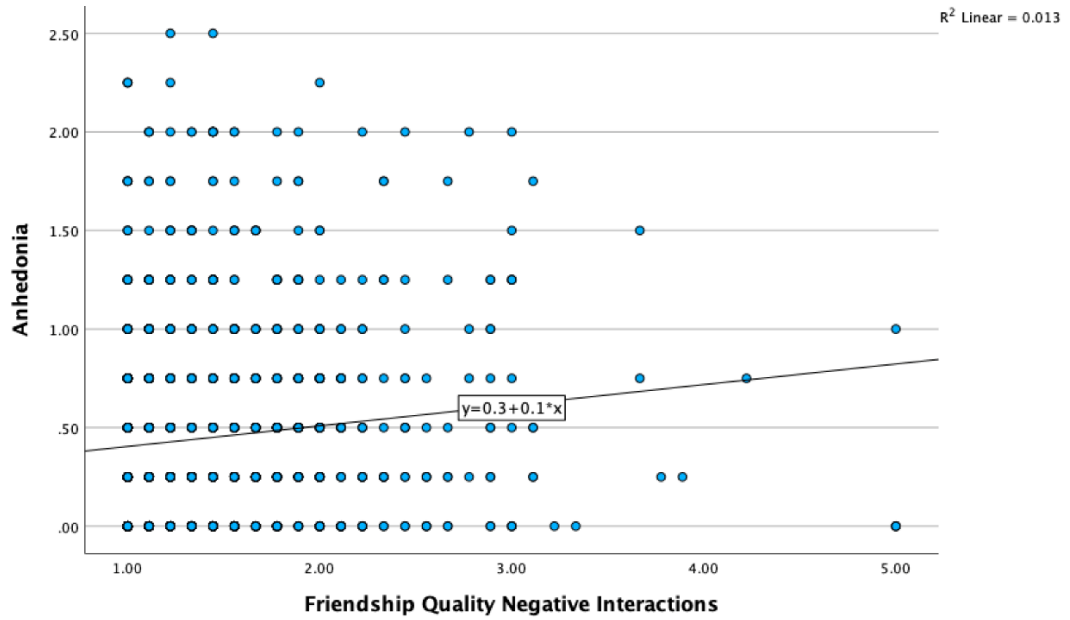

Figure C14. Anhedonia and Friendship Quality – Negative Interactions scatterplot

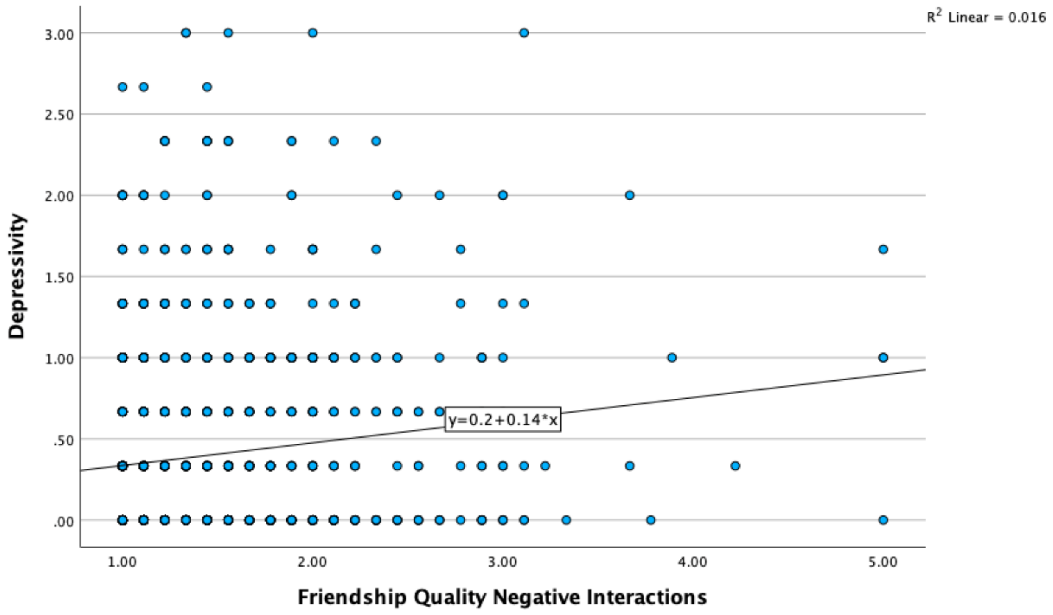

Figure C15. Depressivity and Friendship Quality – Negative Interactions scatterplot

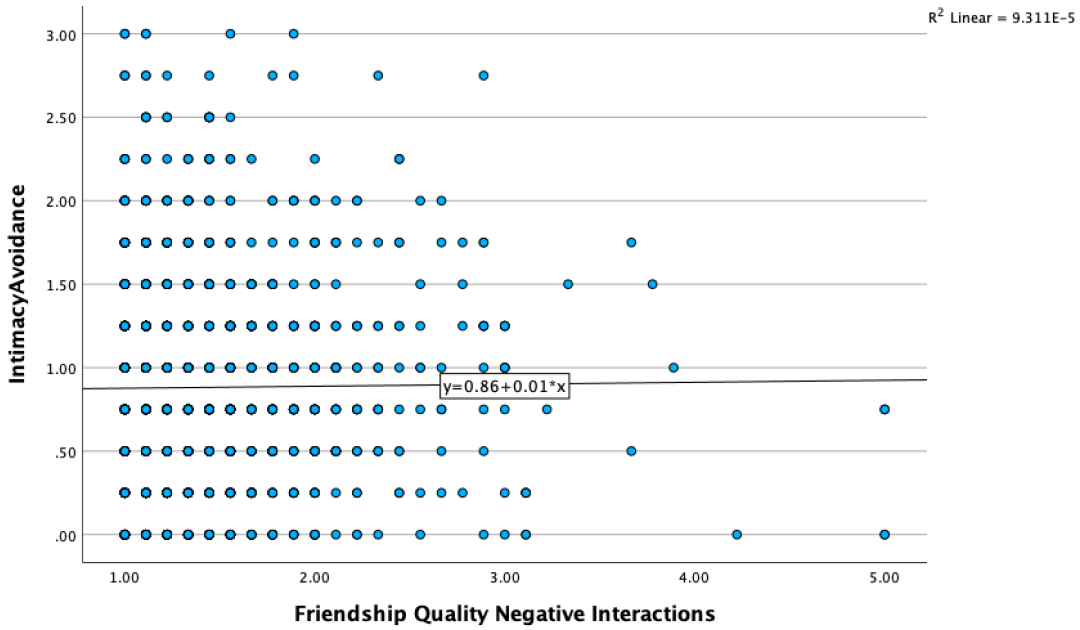

Figure C16. Intimacy Avoidance and Friendship Quality – Negative Interactions scatterplot

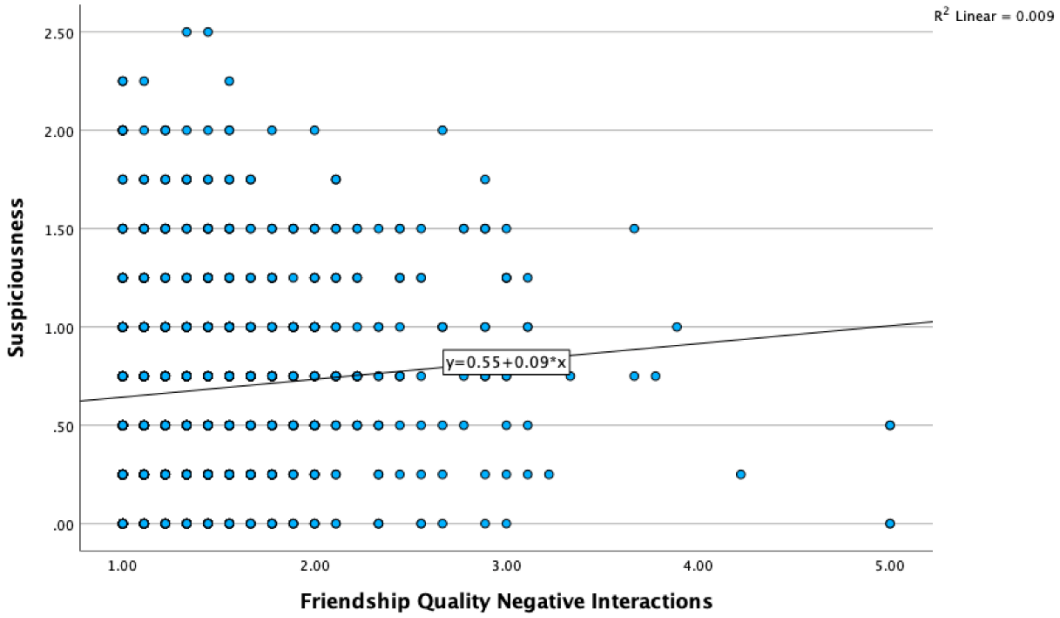

Figure C17. Suspiciousness and Friendship Quality – Negative Interactions scatterplot

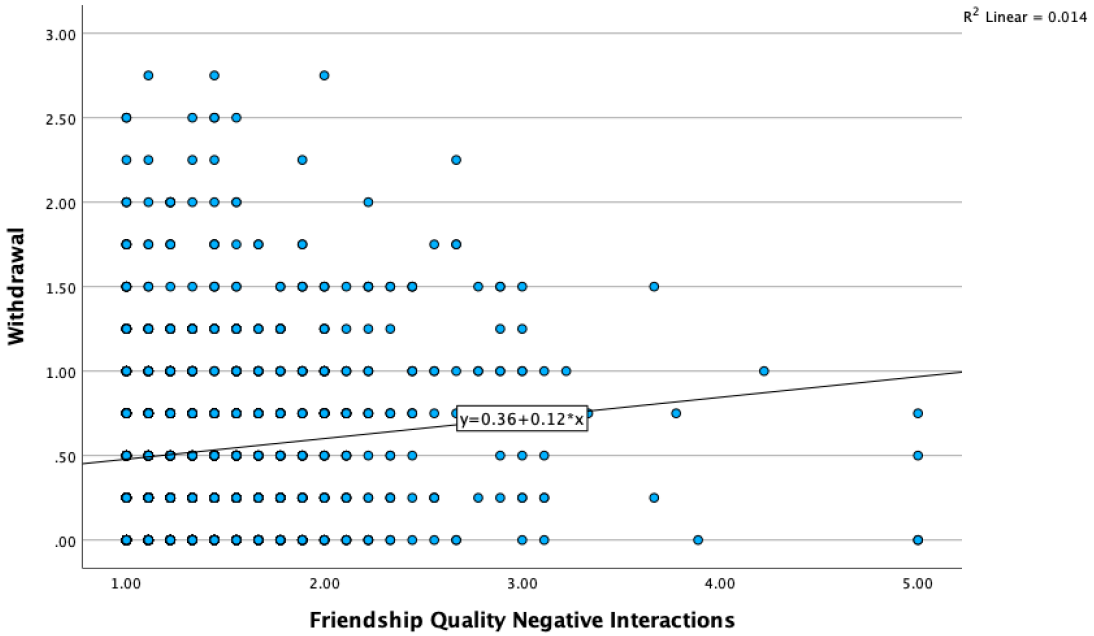

Figure C18. Withdrawal and Friendship Quality – Negative Interactions scatterplot

Appendix D

Correlations for Detachment and Seek/Provide Social Support Indicators

Table D.

Correlations for Detachment and Seek/Provide Social Support Indicators

Variable	Seek Safe Haven	Seek Secure Base	Provide Safe Haven	Provide Secure Base
Detachment Composite	- 0.025	- 0.073**	- 0.031	- 0.060*
Anhedonia	0.003	- 0.108**	- 0.010	- 0.090**
Depressivity	0.047	- 0.055	0.026	- 0.019
Intimacy Avoidance	- 0.091**	- 0.049	- 0.080**	- 0.060*
Suspiciousness	0.108**	0.033	0.078**	0.031
Withdrawal	- 0.132**	- 0.113**	- 0.127**	- 0.111**

Note: *. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)