



# Interpersonal Dependency in a Sub-Saharan African Sample of Undergraduates: Personality and Gender as Factors.

Juliet Ifeoma Nwufu, Ebele Evelyn Nnadozie, & Ebele Okafor

Department of Psychology University of Nigeria, Nsukka 410001, Enugu state, Nigeria

## ARTICLE INFO

### Keywords:

Anxiety  
Gender  
Interpersonal dependency  
Personality  
Undergraduates  
Young adults

## ABSTRACT

Interpersonal dependency is a complex, multifaceted personality trait that has adaptive and maladaptive variants. Moreover, maladaptive dependency has been linked to numerous forms of psychopathology, including depression, social anxiety, panic, disordered eating, substance abuse, avoidant personality disorder, borderline personality disorder, and especially dependent personality disorder. This study examined personality traits (extroversion, neuroticism, agreeableness, conscientiousness, and openness to experience) and gender as factors in interpersonal dependency among undergraduates. Participants were 300 students (60.0% male and 40% female) conveniently drawn from the University of Nigeria. Their age ranged from 17 to 30 years, with a mean age of 22.2 years ( $SD = 3.4$ ). Two measures were employed in the study, namely, Interpersonal Dependency Inventory (IDI) and the Big Five Inventory (BFI). The results of a hierarchical multiple regression showed that extroversion and neuroticism positively predicted interpersonal dependency. Agreeableness, conscientiousness, and openness to experience were negative predictors of interpersonal dependency. Gender did not have any significant influence on interpersonal dependency. Thus, undergraduates with increased extroversion and neuroticism, and decreased agreeableness, conscientiousness, and openness to experience personality traits may be more likely to experience more interpersonal dependency. Therefore, personality traits that can lead to maladaptive interpersonal dependency among undergraduates should be reduced. This also suggests the need for targeted interventions on interpersonal dependency for undergraduate students with different personality traits.

## Introduction

Undergraduate level university experience, particularly for those who move away from home to go to a university, represents a significant change in the lives of the students. During this time several challenges are faced, including managing the demands of newly independent living, mastering new skills, adapting to a series of novel experiences, and sustaining a focus on academic demands, all without the comforts of one's home, usual support system, and parental monitoring (Arnett, 2009). In a bid to adjust to the university environment, interpersonal dependency may occur among undergraduates. Interpersonal dependency is a stable personality trait characterized by the tendency to rely on others for nurturance, support, and guidance (McClintock et al., 2017). Interpersonal dependency is a particular personality dimension that can have a significant impact on relationships. Although there has been considerable research conducted regarding the construct of dependency, interpersonal dependency research has been neglected in comparison to other relationship research (Hepp et al., 2023). An individual with dependency is motivated to receive support and protection from others can form close, nurturing relationships, develop unhealthy, one-sided relationships, or have both types of relationships (Bornstein, 1997).

Interpersonal dependency has three dimensions, namely, emotional reliance on another person, lack of social self-confidence,

and assertion of autonomy (Avcı Çayır et al., 2018). Emotional reliance on another person reflects the notions of attachment and dependency. It expresses a wish for contact with and emotional support from specific other persons, as well as expresses a dread of loss of that person. It also involves a general wish for approval and attention from others. Lack of social self-confidence reflects the notion of dependency. It expresses wishes for help in decision-making, in social situations, and in taking initiative. Assertion of Autonomy denies dependency or attachment. It asserts preferences for being alone, and for independent behavior. It also expresses the conviction that self-esteem does not depend on the approval of others (Leboeuf, & Antoine, 2023).

As with many psychological constructs, the multifaceted nature of dependency is often overlooked. Rather, dependency is viewed categorically as present or absent, or as pathological or healthy. In the same vein, maladaptive dependent behaviours tend to be generalized into an overarching dependent personality style. In fact, dependency has been defined, studied, and expressed in various ways, including as a personality style, traits, behaviours, and affect (McBride & Bagby, 2006). Most individuals exhibit some type of dependent behaviour in specific relationships and behave independently in other relationships. Therefore, characterizing or labeling an individual's personality as definitively dependent may

not be accurate. In addition, individuals who may be labeled dependent may not always exhibit stereotypically dependent behaviours. For example, individuals with dependency are often expected to be passive and submissive. Research (Bornstein et al., 1996) has found that individuals with dependency will engage in active behaviour to please an authority figure. In this case, the need or goal of the individual with dependency remains the same, but the behaviour would not be classified as dependent.

Interpersonal dependency as a complex and multifaceted personality trait has adaptive and maladaptive variants (Bornstein 2005). Both adaptive and maladaptive forms of dependency involve relying on others for nurturance, support, and/or guidance. However, healthy dependency is marked by behaviour flexibility, wherein the individual relies on others when the situation is appropriate and engages in self-reliance when autonomous functioning is required. These individuals tend to see themselves as competent, and they develop strong, secure bonds with significant others. Therefore, dependent behaviours may also be viewed as adaptive. For example, individuals with secure attachment who are able to depend on and rely upon others are typically viewed as psychologically healthy (Collin & Read, 1990). In contrast, individuals who lack the interest, desire, or ability to form relationships with others may be diagnosed with maladaptive personality disorders, such as schizoid or avoidant personality disorders (American Psychiatric Association, 1994). In his review, Bornstein (2005) describes a form of adaptive dependency termed mature dependency. Individuals with mature dependency can adapt their dependent behaviour according to the situation and relationship. These individuals also can receive support, as well as provide support to others in a reciprocal interdependence. Individuals with immature dependency are more rigid and exhibit one-sided dependency across situations and relationships. In this example, as with other personality variables and behaviours, the adaptability of dependency is contingent on the amount of flexibility in cognition, emotion, and behaviour.

Additionally, Rude and Burnham (1995) contend that interpersonal dependency can be divided further into two constructs, connectedness, and neediness, with the former being more adaptive and the latter being maladaptive. Interestingly, in their studies they found that connectedness, which is based on trust and closeness with others, was found stronger in women than in men, but was unrelated to level of depression. In contrast to connectedness, neediness, defined by fears of losing closeness with the other, was unrelated to gender.

Personality trait has been argued to be associated with interpersonal dependency. Personality traits is defined as a consistent pattern of thinking, feeling, and behaving of individual (American Psychological Association, 2017). The Big Five Factor Model of personality traits of openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability has provided a meaningful theoretical framework for studying the likely traits that lead to the development of interpersonal dependency in people (Ayodele, 2013). Openness to

experience is characterized by individual willingness to try new things, ability to be vulnerable, and the capacity to think outside the box (Lebowitz, 2016). These Individuals may show adaptive interpersonal dependency in the sense that they love learning, enjoys the arts, engage in creative career/hobby, and likes meeting people (Lebowitz, 2016).

Conscientiousness is described as the tendency to control one's impulses and act in socially acceptable ways, behaviours that facilitate goal-directed behaviour. Conscientious people excel in their ability to delay gratification, work within the rules, and plan and organize effectively. Individuals high in conscientiousness are likely to be successful in school and in their careers, excel in leadership positions and be doggedly pursue their goals with determination and forethought (Lebowitz, 2016). Extraversion is manifested in being energetic, participative, gregarious, and expansive people (Roos & Kazemi, 2021). These individuals may show adaptive interdependency because they tend to be social, assertive, and bold in nature, extraverted individuals form and maintain interpersonal relationships at all levels including schools. Individuals high on extraversion enjoy socializing and developing relationships (Roos & Kazemi, 2021).

Agreeable individuals are described as compassionate, flexible, fair, generous, and considerate (Barrick et al., 2002). They have the tendency to be highly approachable because of their supportive nature and sensitivity. Agreeable individuals are predisposed to seek out interpersonally dependency and accepting environments (Barrick et al., 2002). Emotionally stable individuals are described as confident, controlled, and well adjusted. They tend to be calm, unemotional and secure (Barrick et al., 2002). These characteristics combined with their positive disposition attract others to emotional stable individuals as a source of support and may not fully rely on interpersonal dependency (Roos & Kazemi, 2021). Emotionally stable individuals are more likely to be liked by others, a basic prerequisite for forming and maintaining interpersonal relationships at school.

The present study is anchored on the Trait Theory by Costa and McCrae (1992) called the Five Factor Model (FFM). The tenet of this theory is that personality is seen as habitual patterns of behaviour, thought, and emotions that are manifest in a wide range of situations, at different degrees of expression in different individuals, and influences ones behaviour. Each of the Big Five has been shown to predict several important life outcomes and may be attributed to the level of interpersonal dependency that one has. Therefore, drawing from the perspectives of trait theory, ones quality of interpersonal dependency is a function of his or her personality. Scholars have shown that personality is implicated interpersonal dependency. For instance, Ulusoy and Dumus (2011) study on the Big-Five and Interpersonal dependency revealed a positive significant association between agreeableness, neuroticism, and interpersonal dependency, while negative association was found on extraversion and openness to experience. Furthermore, there was no relationship between conscientiousness and interpersonal dependency.

Similar studies (Bornstein & Cecero, 2000; Esplin et al., 2024; Furnham, 2018) revealed a positive association between extraversion and agreeableness, and a significant negative association between neuroticism, openness to experience. In addition, Maccaferri et al (2020) as well as Kane and Bornstein (2018) reported a significant negative association between conscientiousness and interpersonal dependency. Thus, it is concluded that people with high interpersonal dependency levels are less extravert, more agreeable, and more neurotic, and that people with low interpersonal dependency levels are more extravert, less agreeable, and less neurotic. Dependency levels and personality traits did not differ across age and gender. In another study, Nadeem et al. (2018) reported that agreeableness and extraversion were negatively associated with the interpersonal difficulties and neuroticism has a strong positive link with interpersonal problems.

A few meta-analyses have studied each of the Big Five personality factors and how they relate to relationship quality. The most recent of the two found a negative relationship between neuroticism and relationship quality from a total of 18 studies conducted only in Iran (Sayehmiri et al., 2020). Another meta-analysis found a similar but smaller association based on 10 studies examining heterosexual relationships (Malouff et al., 2010) while other meta-analysis demonstrated a significant positive correlation between neuroticism and interpersonal dependency such that highly neurotic individuals tend to be overly sensitive to interpersonal relationships (Kong et al., 2014) and are prone to social problems in real life (Chinneck et al., 2018). There is limited research on personality and interpersonal dependency, especially in the African setting. Hence, this study is aimed at contributing to knowledge by filling this gap.

In addition to personality trait, another possible contributor to interpersonal dependency is gender. From the literature search, it has been discovered that females are more dependent than males, though such information has been clouded by subjective opinions and ideological commitments (Alonso-Arbiol et al., 2002). Some studies (e.g., Bornstein et al., 1997; Kass et al., 1983) have found gender difference in dependency, whereas others have not (Reich et al., 1998). For instance, Wang et al.'s (2022) study on gender and interpersonal dependency revealed that females are more dependent than males. One of the reasons may be due to their greater striving for social affiliation. However, the role of gender is still unclear in across research, thus there is need for more studies (Pritchard, & Yalch, 2009). The aim of the present study is to investigate the predictive role of personality and gender on interpersonal dependency. The review of literature shows that there is dearth of research in this area especially in Nigerian context. Therefore, there is need to extend this research in our context. By understanding the factors that contribute to interpersonal dependency, interventions can be developed to prevent and treat this problem.

In the light of all these considerations, the underlisted hypotheses were tested in this study. (1) Extraversion will negatively predict Interpersonal dependency. (2) Agreeableness will positively predict Interpersonal dependency (3) Conscientiousness will

negatively predict interpersonal dependency. (4) Neuroticism will positively predict Interpersonal dependency (5) Openness to experience will negatively predict interpersonal dependency (6) Females undergraduates will be high on Interpersonal dependency than males.

## Method

### Participants

Participants were 300 students (60.0% male and 40.0% female; mean age = 22.2 years, age range, 17-30, SD =3.4) conveniently drawn from the Faculty of the Social Sciences, Faculty of Arts and Faculty of Engineering in University of Nigeria Nsukka. On ethnicity of participants were Igbo (61.7%), Yoruba (18.0%), and Hausa (20.3%). For religion of participants, there were Christians (66.3%), Muslims (24.7%), and adherents of the African Traditional Religion (9.0%). Participants level of study was as follows; first years (24.3%), 61 second years (20.3%), third years (22.3%), fourth years (16.7%), and fifth years (16.3%). The participants volunteered to take part in the study. An inclusion criterion is that the participant must be an undergraduate in the selected faculties, while those who were not undergraduates were excluded.

### Instruments

The instrument section was made up of three, demographics, the Interpersonal Dependency Inventory (IDI) (Hirschfeld et al., 1977); and the Big Five Inventory (Goldberg, 1993).

Interpersonal Dependency Inventory (IDI).

The IDI (Hirschfeld et al., 1977) is a 48-item self-administered questionnaire that consists of a series of dependency-related statements, each of which is rated on a 4-point scale (1 = not characteristic, 2 = somewhat characteristic, 3 = quite characteristic, 4 = very characteristic). The authors' factor analysis of IDI items resulted in the formation of three subscales: emotional reliance on another person (ER; the degree and intensity of a relationship to a single other person.), lack of social self-confidence (LS; the individual's relationship to people in general), and assertion of autonomy (AA; the degree to which an individual is indifferent to or independent of the evaluations of others) (Hirschfeld et al., 1977). Sample items include: "I would feel helpless if deserted by someone I love," "In an argument, I give in easily," and "I hate it when people offer me sympathy." Corrected split-half reliabilities were: .87 for ER, .78 for LS, and .72 for AA (Hirschfeld et al., 1977). IDI yielded a total alpha reliability of .85 in the present study.

### The Big Five Inventory (BFI)

This is a 44-item scale developed by John and Srivastava (1999) to assess personality from five-dimensional traits of openness (10 items), conscientiousness (9 items), extroversion (8

items), agreeableness (9 items), and neuroticism (8 items). Sample items on the Big-Five are as follows: “I see myself as someone who has an active imagination” (openness to experience), “I see myself as someone who tends to be lazy” (Conscientiousness), “I see myself as someone who is a talkative” (extraversion), “I see myself as someone who has a forgiving nature” (agreeableness), and “I see myself as someone who can be moody (neuroticism). The instrument is a five-point Likert scale with the response format of strongly disagree (1), disagree a little (2), neither agree nor disagree (3), agree a little (4), strongly agree (5). Items scored directly were awarded score range of 1-5 and reverse scored items were also awarded sores range of 5-1. A high score on each scale indicated a high personality trait on each dimension. Across the five subscales, John and Srivastava obtained a convergent validity correlation of .75. Extraversion and agreeableness were reliable with  $\alpha$  of .90 each, while each of conscientiousness, neuroticism, and openness had  $\alpha$  of .92. In the present study, the internal consistency reliability (Cronbach's alpha,  $\alpha$ ) of the scales of the Big Five were .72 (Openness to experience), .76 (Conscientiousness), .74 (Extraversion), .73 (Agreeableness) and .77 (Neuroticism).

**Procedure**

Approval for the study was given by the Ethical Committee of the Department of Psychology, University of Nigeria, Nsukka. Subsequently, a letter of introduction was also obtained from the Department by the researchers. The students were met in their departmental classrooms within their respective faculties during free lecture time. The researchers addressed the students by informing them that the questionnaire is for research purposes, and that they have choice to participate or not, and are free to withdraw at any time. They were also told to give their honest and accurate responses to the items on the questionnaire and it will be treated with absolute confidentiality. Appropriate instructions on how to fill the questionnaire were given to the participants. There were no time limits in the filling of the questionnaire. A total of 325 copies of the questionnaire were distributed to the students in the various faculties to only students who were willingly to participate in the study. After completion and collection, the researchers noted that 25 copies were incorrectly filled, while (300) valid copies were used for analysis. Thus, the response rate was 92.3%.

**Design and Statistics**

Cross-sectional design was employed because of its ability to capture a particular group of people with different ages at a given point in time. Hierarchical multiple regression was used to examine the prediction of the dependent variable by the independent variables. It also could estimate the contributions of the predictors in relation to interpersonal dependency.

**Results**

**Table 1: Pearson’s correlations of demographic variables, gender, extraversion, agreeableness, conscientiousness, and interpersonal dependency among undergraduates.**

Variables	Mean	SD	1	2	3	4	5	6	7	8
1 Age	22.19	3.37	-							
2 Gender	-	-	.18**	-						
3 Level	-	-	.19**	-.15**	-					
4 Extraversion	27.91	10.27	.04	.05	.04	-				
5 Agreeableness	26.63	11.76	-.04	-.07	-.06	-.84***	-			
6 Conscientiousness	27.84	10.15	.06	.08	.05	.91***	-.87***	-		
7 Neuroticism	23.43	10.10	-.04	-.07	-.06	-.85***	1.00***	-.88***	-	
8 Openness	26.19	12.25	.04	.09	.04	.96***	-.85***	.86***	-.85***	-
9 ID	120.10	42.42	-.03	-.10	-.04	-.85***	.93***	-.88***	.94***	-.86***

Note. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ ; ID = interpersonal dependency; Gender (Coded 1 = Male, 2 = Female).

Table 1 shows the correlation among the study variables. Older age was associated with being female but associated positively with level. Being male was associated with higher level. Extraversion was negatively related with agreeableness, neuroticism, and interpersonal dependency, but correlated positively with conscientiousness, and openness to experience. Agreeableness correlated negatively with conscientiousness, and openness to experience, but correlated positively with neuroticism and interpersonal dependency among undergraduates. Conscientiousness associated negatively with neuroticism, and interpersonal dependency among undergraduates, but associated positively with openness to experience. Neuroticism associated negatively with openness to experience but associated positively with interpersonal dependency among undergraduates. Openness correlated negatively with interpersonal dependency among undergraduates.

**Table 2: Hierarchical multiple regression predicting interpersonal dependency among undergraduates by gender, extraversion, agreeableness, conscientiousness, neuroticism and openness to experience.**

Predictors	Step 1			Step 2		
	B	B	t	B	$\beta$	t
Extraversion	2.13	.52	5.79***	2.10	.51	5.74***
Agreeableness	-5.28	-1.46	-6.27***	-5.29	-1.47	-6.29***
Conscientiousness	-1.32	-.32	-6.06***	-1.30	-.31	-5.96***
Neuroticism	8.70	2.07	8.73***	8.71	2.07	8.77***
Openness	-1.95	-.56	-7.50***	-1.94	-.56	-7.48***
Gender				-2.53	-.03	-1.70
R <sup>2</sup>		.91			.91	
$\Delta R^2$		.91			.00	
F		612.36 (5, 294)***			541.53 (6, 293)***	
$\Delta F$		612.36 (5, 294)***			2.87 (1, 293)	

Note. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ .

Results of the hierarchical multiple regression for the test of the hypotheses is shown in Table 2. In Step 1, extraversion was a significant positive predictor of interpersonal dependency,  $\beta = .52$ ,  $p < .001$ . The B showed that for each one unit rise in extraversion, interpersonal dependency among undergraduates increases by 2.13 units. Agreeableness was a significant negative predictor of interpersonal dependency,  $\beta = -1.46$ ,  $p < .001$ . The B showed that

for each one unit rise in agreeableness, interpersonal dependency decreases by -5.28 units. Conscientiousness was a significant negative predictor of interpersonal dependency,  $\beta = -.32, p < .001$ . The  $B$  showed that for each one unit rise in conscientiousness, interpersonal dependency decreases by -1.32 units. Neuroticism was a significant positive predictor of interpersonal dependency,  $\beta = 2.07, p < .001$ . The  $B$  showed that for each one unit rise in neuroticism, interpersonal dependency increases by 8.70 units. Openness to experience was a negative significant predictor of interpersonal dependency,  $\beta = -.56$ . The model was significant,  $F(5, 294) = 612.36, R^2 = .91$ . The  $R^2$  of .91 indicated that 91% of variance in interpersonal dependency was explained by the five facets of personality.

In Step 2, gender was not a significant predictor of interpersonal dependency,  $\beta = -.03$ . The model was not significant,  $F(1, 293) = 2.87, R^2 \Delta = .00$ . The  $R^2 \Delta$  of .00 indicated that 0% of the variance interpersonal dependency was explained by gender. All the variable in the study explained 91% of the variance in interpersonal dependency.

### Discussion

The major goal of this study was to examine whether personality traits and gender predict interpersonal dependency among undergraduates in Nigeria. The result of this study showed that extraversion was a significant positive predictor of interpersonal dependency among undergraduates. Hypothesis 1 which stated that extraversion will negatively predict interpersonal dependency was not supported. This finding is consistent with previous studies (Uye et al., 2022; Ulusoy & Dumus, 2011) which reported that extraversion had a strong positive relationship with interpersonal relationship. This indicates that increase in extraversion was associated with high interpersonal dependency among undergraduates. Extroverts are more likely to be bold, assertive, and social. They may be more likely to seek relationships with people at all levels, including in schools. This makes them more likely to develop interpersonal dependency. This implies that undergraduates who are highly extroverted are likely going to display high interpersonal dependency.

Similarly, agreeableness was a negative significant predictor of interpersonal dependency among undergraduates, indicating that increase in agreeableness was associated with low interpersonal dependency among undergraduates. Thus hypothesis 2 which stated that agreeableness will positively predict interpersonal dependency was rejected. This present finding contradicts previous studies (Epslin, 2022; Bornstein & Cecero, 2000) which reported that agreeableness had a strong positive relationship with interpersonal relationship but supports that of Nadeem et al.'s (2018) finding. Our findings may be explained, in part, by the fact that agreeable people are characterized as approachable, flexible, fair, generous, and considerate. Self-assured, in control, and well-adjusted, emotionally stable people

help without depending on others. Undergraduates with high agreeable traits may adapt well in school without developing interpersonal dependency.

Conscientiousness was a significant negative predictor of interpersonal dependency indicating that increase in conscientiousness was associated with low interpersonal dependency among undergraduates. This is consistent with previous studies by Maccaferri et al (2020), Kane and Bornstein (2018) which reported that conscientiousness had a strong negative relationship with interpersonal relationship. Thus, hypothesis 3 which stated that Conscientiousness will negatively predict interpersonal dependency was supported. Undergraduates who are conscientious are excellent at postponing gratification, following guidelines, making wise plans, and tenaciously pursuing objectives. They ensure success by excelling in leadership, education, and flexibility. They are less likely to exhibit interpersonal dependency.

Neuroticism was a significant positive predictor of interpersonal dependency, indicating that increase in neuroticism was associated with high interpersonal dependency among undergraduates. Thus, hypothesis 4 which stated that neuroticism will positively predict Interpersonal dependency was supported. This finding is consistent with previous studies (Carvalho et al., 2019; Bornstein et al., 2010) which reported that neuroticism dimension of personality trait had a strong positive relationship with interpersonal relationship. The present finding can be attributed to the trait-like propensity of neurotic people "to report distress, discomfort, and dissatisfaction over time regardless of the situation. These characteristics make those undergraduates more prone to acquire interpersonal dependency since they are more likely to have a negative life view, feel dissatisfied with their lives, and consequently become dissatisfied with their relationships.

The finding also showed that openness to experience was a negative predictor of interpersonal dependency among undergraduates, indicating that increase in openness to experience was associated with low interpersonal dependency among undergraduates. Thus, hypothesis 5 which stated that openness to experience will negatively predict interpersonal dependency was supported. This finding is consistent with previous studies (Ulusoy & Dumus, 2011) which reported that openness to experience had a strong negative relationship with interpersonal relationship. This is because people with high openness are willing to try new things and can think creatively. They can adapt well to their surroundings rather than being dependent on others because they love learning, appreciate the arts, pursue creative careers or hobbies, and like meeting new people. Consequently, open-minded freshmen are less likely to become dependent on others.

Gender was not a significant predictor of interpersonal dependency among undergraduates. Thus, hypothesis 6 which stated that female undergraduates will be high on interpersonal dependency than males was not supported. This demonstrates

that interpersonal dependence can affect undergraduates of any gender. This implies that being male or female does not increase nor decrease undergraduate students' interpersonal dependency.

The present study is not without limitations. Firstly, this study design was a cross-sectional collection of data using subjective self-report measures. Recall bias and social desirability bias are usually associated with self-report measures, causal inferences cannot, therefore, be made from these findings. A longitudinal study could overcome these challenges. Future studies should also try mixed method approach by collecting both quantitative and qualitative data. This will help to explore more means of data collection. Our data were collected only from students in a particular institution; and this limit the extent of the generalisability of our findings. Future researchers could incorporate more samples in other institutions across regions incorporating students from various faculties instead of a single faculty. Another limitation of this study, which future studies might focus on, is our inability to explore other variables including moderators and mediators.

## References

- Avcı Çayır, G., & Kalkan, M. (2018). The effect of interpersonal dependency tendency on interpersonal cognitive distortions on youths. *Journal of Human Behavior in the Social Environment*, 28(6), 771-786.
- Al-Khatib, B.A., Awamleh, & Samawi, F.S. (2012). Student's adjustment to college life at Albalqa Applied University. *American International Journal of Contemporary Research*, 2(11), 5-16.
- Allport, G. W., & Odbert, H. S. (1961). Trait names: A psycho-lexical study. *Psychological Monographs*, 47, (1) 211-215.
- AlonsoArbiol, I., Shaver, P. R., & Yáñez, S. (2012). Insecure attachment, gender roles, and interpersonal dependency in the Basque Country. *Personal Relationships*, 9(4), 479-490.
- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, D.C.: Author.
- American Psychological Association. (2017). Personality. Retrieved from <http://www.apa.org/topic/personality>.
- Arnett, M. C. (2009). Adjustment amongst first year students in a Malaysian university. *European Journal of Social Sciences*, 8(3), 496-505
- AlonsoArbiol, I., Shaver, P. R., & Yáñez, S. (2002). Insecure attachment, gender roles, and interpersonal dependency in the Basque Country. *Personal Relationships*, 9(4), 479-490.
- Ayodele, K. O. (2013). The influence of big five personality factors on lecturers-students' interpersonal relationship. *The African Symposium: An Online Journal of the African Educational Research Network*, 13(1), 28-33.
- Ayodele, K.O. (2010). Family dysfunction and environmental factors as predictors of adolescents bullying behavior. *International Journal of Psychology and Human Development*, 5, 83-90.
- Bacchiochi, J.R., Bagby, R.M., Cristi, C., & Watson, J. (2003). Validation of connectedness and neediness as dimensions of the dependency construct. *Cognitive Therapy and Research*, 27, 233-242.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2002). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9(1), 9-30.
- Beeney, J. E., Stepp, S. D., Hallquist, M. N., Ringwald, W. R., Wright, A. G. C., Lazarus, S. A., Scott, L. N., Mattia, A. A., Ayars, H. E., Gebreselassie, S. H., & Pilkonis, P. A. (2019). Attachment styles, social behavior, and personality functioning in romantic relationships. *Personality Disorders*, 10(3), 275-285. <https://doi.org/10.1037/per0000317>
- Bell, K. M., Howard, L., & Cornelius, T. L. (2022). Emotion dysregulation as a moderator of the association between relationship dependency and female-perpetrated dating aggression. *Journal of Interpersonal Violence*, 37(5-6), 2891-2911.
- Bender, D.S. (2005). The therapeutic alliance in the treatment of personality disorders. *Journal of Psychiatric Practice*, 11, 73-87.
- Blachnio, A., Przepiorka, A., Senol-Durak, E., Durak, M., Sherstyuk, L. (2017). The role of personality traits in Facebook and internet addictions: A study on Polish, Turkish, and Ukrainian samples. *Computers in Human Behavior*, 68, 269-275.
- Blau, P. M. (1964). *Exchange and power in social life*. New York, USA: Wiley.
- Bornstein, R. F., & Cecero, J. J. (2000). Deconstructing dependency in a five-factor world: a meta-analytic review. *Journal of Personality Assessment*, 74(2), 324-343. [https://doi.org/10.1207/S15327752JPA7402\\_11](https://doi.org/10.1207/S15327752JPA7402_11)
- Bornstein, B. F., Matero, N. B., Winarick, D. J., & Reichman, A. L. (2010). Interpersonal dependency in borderline personality disorder: Clinical context and empirical evidence. *Journal of Personality Disorders*, 24(1), 109-127.
- Bornstein, R. F. (2005). The dependent patient: Diagnosis, assessment, and treatment. *Professional Psychology: Research and Practice*, 36, 82-89.
- Bornstein, R. F. (2012). Illuminating a neglected clinical issue: Societal costs of interpersonal dependency and dependent personality disorder. *Journal of clinical psychology*, 68(7), 766-781.
- Bornstein, R. F., & Kennedy, T. D. (2004). Interpersonal dependency and academic performance. *Journal of Personality Disorders*, 8(3), 240-255.
- Bornstein, R. F., Matero, N. B., Winarick, D. J., & Reichman, A. L. (2010). Interpersonal dependency in borderline personality disorder: Clinical context and empirical evidence. *Journal of Personality Disorders*, 24(1), 109-127.
- Bornstein, R.F. (1997). Dependent personality disorder in the *DSM-IV* and beyond. *Clinical Psychology: Science and Practice*, 4, 175-187.
- Bornstein, R.F., Riggs, J.M., Hill, E.L., & Calabrese, C. (1996). Activity, passivity, self-denigration, and self-promotion: Toward an interactionist model of interpersonal dependency. *Journal of Personality*, 64, 637-673.

- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Carvalho, L. D., Pianowski, G., & Gonçalves A. P. (2019). Dimensional Clinical Personality Inventory-2: investigating key factors on the assessment of dependent personality disorder. *Psychology, Health & Medicine*, 24(6), 732-738.
- Cattell, R. B. (1973). *Personality and mood by questionnaire*. San Francisco, CA: Jossey-Bass
- Çayir, G. A., & Kalkan, M. (2018). The effect of interpersonal dependency tendency on interpersonal cognitive distortions on youths. *Journal of Human Behavior in the Social Environment*, 28(6), 771-786.
- Chinneck, A., Thompson, K., Mahu, I. T., Davis-MacNevin, P., Dobson, K., & Stewart, S. H. (2018). Personality and prescription drug use/misuse among first year undergraduates. *Addictive Behaviors*, 87, 122-130.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644-663.
- Côté, S., & Moskowitz, D. S. (1998). On the dynamic covariation between interpersonal behavior and affect: prediction from neuroticism, extraversion, and agreeableness. *Journal of Personality and Social Psychology*, 75(4), 10-32.
- Costa Jr, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653-665.
- David, D. (2001). Interpersonal functioning among women reporting a history of childhood sexual abuse: Empirical findings and methodological issues. *Clinical Psychology Review* 21(4), 553-576.
- Day, N. J., Townsend, M. L., & Grenyer, B. F. (2022). Pathological narcissism: An analysis of interpersonal dysfunction within intimate relationships. *Personality and Mental Health*, 16(3), 204-216.
- Esplin, C. R., Rasmussen, B. D., Hatch, S. G., Hawkins, A. J., & Braithwaite, S. R. (2024). Neuroticism and relationship quality: A meta-analytic review. *Journal of Personality and Social Psychology*. Advance online publication. <https://doi.org/10.1037/pspi0000463>
- Estévez, A., Chávez-Vera, M. D., Momeñe, J., Olave, L., Vázquez, D., & Iruarrizaga, I. (2018). *The role of emotional dependence in the relationship between attachment and impulsive behavior*. Universidad de Murcia.
- Eysenck, H. J. (1991). Dimensions of personality: 16, 5 or 3? Criteria for a taxonomic paradigm. *Personality and Individual Differences*, 12, 773-790.
- Freud, S. (1958; originally published in 1913). On beginning the treatment: Further recommendations on the technique of psychoanalysis. In *Standard edition of the complete works of Sigmund Freud* (pp. 97-108). London: Hogarth Press.
- Furnham, A. (2018). A Big Five facet analysis of sub-clinical dependent personality disorder (Dutifulness). *Psychiatry Research*, 270, 622-626.
- Greenberg, L. S., Elliot, R., Watson, J. C., & Bohart, A. C. (2001). Empathy. *Psychotherapy: Theory, Research, Practice, and Training*, 38, 380-384.
- Gude, T., Hoffart, A., Hedley, L., & Ro, O. (2004). The dimensionality of dependent personality disorder. *Journal of Personality Disorders*, 18, 604-610.
- Homans, G. C. (1958). Social behaviour as exchange. *American Journal of Sociology*, 63(6), 597-606.
- Huprich, S.K. (2008). Scoring manual for oral dependency. In Jenkins, S.R. (Ed.), *A handbook of clinical scoring systems for thematic apperceptive techniques* (pp. 399-410).
- Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Hepp, J., Niedtfeld, I., & Schulze, L. (2023). Experimental paradigms in personality disorder research: A review of covered RDoC constructs, methodological issues, and future directions. *Personality Disorders: Theory, Research, and Treatment*, 14(1), 50-55.
- Kane, F. A., & Bornstein, R. F. (2018). Unhealthy dependency in victims and perpetrators of child maltreatment: A meta-analytic review. *Journal of clinical psychologist*, 74(6), 867-882.
- Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology*, 72(5), 1075.
- Kong, D. T., Dirks, K. T., & Ferrin, D. L. (2014). Interpersonal trust within negotiations: Meta-analytic evidence, critical contingencies, and directions for future research. *Academy of Management Journal*, 57(5), 1235-1255.
- Kass, F., Spitzer, R. L., & Williams, J. B. (1983). An empirical study of the issue of sex bias in the diagnostic criteria of DSM-III axis II personality disorders.
- Kumaraswamy, K.M. (2015). The usage of social networking apps among students: A case study of Gulbarga City. *Global Journal for Research Analysis*, 4(3), 1-3.
- Lange, T. M., & Couch, L. L. (2011). An assessment of links between components of empathy and interpersonal problems. *The New School Psychology Bulletin*, 8(2), 83-90.
- Lazarus, S. A., Cheavens, J. S., Festa, F. & Rosenthal, Z. M. (2014). Interpersonal functioning in borderline personality disorder: A systematic review of behavioral and laboratory-based assessments. *Clinical Psychology Review*, 34(3), 193-205.
- Leboeuf, I., & Antoine, P. (2023). Exploring the processes of connection and disconnection in imagery work in a patient with depression and dependent personality disorder. *Journal of Clinical Psychology*, 79(7), 1641-1655.
- Lebowitz, S. (2016). The Big 5 personality traits could predict who will and won't become leader. *Business Inside*, 12(1), 15-20.
- Maccaferri, G. E., Dunker-Scheuner, D., De Roten, Y., Despland, J., Sachse, R., & Kramer, U. (2020). Psychotherapy of dependent personality disorder: The relationship of patient/therapist interactions to outcome. *Psychiatry*, 83(2), 179-194.
- Marescaux, E., De Winne, S., & Sels, L. (2013). HR practices and HRM outcomes: The role of basic need satisfaction. *Personnel Review*, 42(1), 4-27. doi: 10.1108/00483481311285200
- McBride, C., & Bagby, R. M. (2006). Rumination and interpersonal dependency: Explaining women's vulnerability to depression. *Canadian Psychology*, 47, 184-194.
- Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The five-factor model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality*, 44(1), 124-127.
- Myloslavska, O. V. (2018) "Interpersonal dependence and differential types of reflection in students boys and girls". *Law and Safety*, 71(4), 15-18
- Nadeem, A., Mahmood, Z., & Saleem, S. (2018). Personality traits as predictors of interpersonal difficulties in university students in Pakistan. *Pakistan Journal of Social and Clinical Psychology*, 16(1), 3-9.
- Ng, H. M., & Bornstein, B. F. (2005). Comorbidity of dependent personality disorder and anxiety disorders: A meta-analytic

- review. *Clinical Psychology: Science and Practice* 12(4), 395-406.
- Overholser, J. C. (2006). The dependent personality and interpersonal problems. *Psychology, Health & Medicine*, 24(6), 732-738.
- Perles, F., Martín, J. S., & Canto, J. M. (2019). Gender and conflict resolution strategies in Spanish teen couples: Their relationship with jealousy and emotional dependency. *Journal of Interpersonal Violence*, 34(7), 1461-1486.
- Pincus, A. L., & Gurtman, M. B. (2005). The three faces of interpersonal dependency: structural analyses of self-report dependency measures. *Journal of Personality and Social Psychology* 69(4), 744
- Pritchard, M. E., & Yalch, K. L. (2009). Relationships among loneliness, interpersonal dependency, and disordered eating in young adults. *Personality and Individual Differences*, 46(3), 341-346.
- Reich, D. B., & Zanarini, M. C. (2008). Sexual orientation and relationship choice in borderline personality disorder over ten years of prospective follow-up. *Journal of personality disorders*, 22(6), 564-572.
- Roos, J. M. & Kazemi, A. (2021). Personality traits and Internet usage across generation cohorts: Insight from a nationally representative study. *Current Psychology*, 40, 1287-1297.
- Rude, S. S., & Burnham, B. L. (1995). Connectedness and neediness: Factors of the DEQ and SAS dependency scales. *Cognitive Therapy and Research*, 19, 323-340.
- Saleem, S., Ihsan, Z., & Mahmood, Z. (2014). Development of interpersonal difficulties scale for university students. *Pakistan Journal of Psychological Research*, 29(4), 277-297.
- Sanathara, V. A., Gardner, C. O., Prescott, C. A., & Kendler, K. S. (2014). Interpersonal dependence and major depression: Aetiological inter-relationship and gender differences. *Psychological Medicine* 33(5), 927-931.
- Sanathara, V. A., Gardner, C. O., Prescott, C. A., & Kendler, K. S. (2003). Interpersonal dependence and major depression: Aetiological inter-relationship and gender differences. *Psychological Medicine*, 33(5), 927-931
- Ulusoy, Y., & Durmuş, E. (2011). Investigation of Interpersonal Dependency Tendency in Terms of Five-Factor Personality Traits. *Inonu University Journal of the Faculty of Education (INUJFE)*, 12(2).10-15.
- Uye, E. E., Abiahu, K. C., Ikechukwu, D. S., & Olapegba, P. O. (2022). Role of personality traits and internet addiction on interpersonal relationship quality among undergraduates of University of Ibadan, Nigeria. *Journal of Psychology and Behavioural Disciplines*, 2(2), 2814-3183.
- Watson, D., Clark, L. A., & Carey, G. (1988). Positive and negative affectivity and their relation to anxiety and depressive disorders. *Journal of Abnormal Psychology*, 97(3), 346-353. <https://doi.org/10.1037/0021-843X.97.3.346>
- Wilson, S., Stroud, C. B., Durbin, C. E. (2017). Interpersonal dysfunction in personality disorders: A meta-analytic review. *Psychological Bulletin*, 143(7), 677-734. <https://doi.org/10.1037/bul0000101>