

Examining Predictive Factors of Relationship Behaviors

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By

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Abstract

The current study examined the effects of relationship behaviors and dating-age on codependency. Specifically, associations between codependency scores and the initial age of dating, or whether or not participants dated before, were explored. Participants (N = 88; 20 males, 67 females, 1 gender fluid) consisted of university students between the ages of 18 and 31 (M_{age} = 20.63). The multiple regression results suggested that there is a statistically significant negative relationship between codependency scores and the age participants began dating ($p < 0.05$) when factoring in other variables such as personality traits, identity styles, gender, and vertical individualism/collectivism. There was also a weak negative correlation between just the codependency scores and age of dating ($r = -0.23$). No significant differences were found in the codependency scores of people that dated versus the people that never dated. It was difficult to compare daters vs non-daters as only 10 of the participants indicated that they had never dated before. However, none of the non-daters had a high codependency score (greater than 67.2, as suggested by Spann-Fisher) while approximately 20% of the people who dated had high codependency scores. Previously studied variables that have been associated with codependency were controlled for, such as family stressors. Some new variables were examined, such as vertical collectivism, and were found to be positively correlated to developing codependency. Identification of adolescents dating early as predictive of high codependency scores could help to target the prevention and/or treatment of later developing high levels of codependency.

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Introduction

The purpose of this study is to examine the age at which people started dating and whether or not that plays a role in them demonstrating a statistically significant difference in codependent behavior during emerging adulthood (18-29). A similar study was conducted in 2006 by Fidler et al. to examine whether early dating is predictive of smoking during adolescence. This study will also examine other factors such as personality traits, cultural orientation, and identity styles as well. We would also like to examine the early daters that didn't develop high codependency scores and see what aspects of their lives differ from those who did develop codependency. Maybe there is an aspect we are overlooking that can reduce the probability of developing codependence if you are an early dater.

Previous studies about codependence conducted in college or university settings produced results that suggested nearly half of the post-secondary education students displayed middle or high codependent characteristics (Crestler & Lombardo 1999). Considering the rise in family stressors, the uncertainty brought upon by this pandemic, and the decrease in self-esteem with the prevalence of social media use, we hypothesize that more than half of the post-secondary students will display signs of codependent behavior.

Codependency

Codependence was initially used to describe a relationship between a married person and their alcoholic significant other. Codependence is no longer only restricted to substance-abuse-related relationship problems. Others defined it as an excessive focus on relationships due to tense family backgrounds (Fuller & Warner, 2000). This definition has changed tremendously throughout the years and is now used to describe a wide host of maladjusted relationships (Lindley & Giodano, 1999). It is difficult to determine the frequency of codependence due to the altering and vague nature of its definition. While there is no universal description for codependency, this study would like to define

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"codependent" as a person who irrationally changes their behaviors to enable or support the behavior or behaviors of their significant other. This could be done out of fear of the other person leaving (insecurity) or other underlying personal issues, but this study believes that the definition of codependence should be independent of the causation, as we are still trying to determine that and there could be multiple causations as well.

Whatever the reason may be, the consensus is that exhibiting this codependent behavior is undesirable and detrimental for both parties involved. The person exhibiting this behavior is going out of their way to care for something that is usually someone else's responsibility. They do this to gain their partner's approval, which boosts their lacking self-confidence (Lindley & Giordano). This can result in burnout or that person becoming overly committed to their partner because of the abnormal effort they are putting in the relationship. The partner taking advantage of this behavior, knowingly or unknowingly, can develop a sense of entitlement over time to the hurdles that their partner has alleviated for them. This can be evident when, for example, the codependent partner realizes that what they have been doing is unnecessary and begin to stop.

Researchers have conducted several studies examining the relationship between codependence and gender, self-confidence, family stressors, and other variables. This study aims to add to the pre-existing data to deduce which of these (or a combination of these) predictors is the most accurate, with regard to the criteria of participants at hand.

Cultural Orientation

Cultural orientation refers to certain tendencies that influence the way people think or act, with these tendencies arising as a result of one's cultural environment. Previous studies suggested that the development of codependent behaviors among Taiwanese college students may be influenced by their cultural values (Chang, 2012). Specifically, they indicated that a sense of pride and guilt was associated

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with students that displayed codependent traits. They theorized that the pride feelings were experienced when the students were caring for others while the guilty feelings were a result of them partaking in activities other than caring for others or being self-involved. Thus, this study used the HVIC cultural orientation scale to examine possible associations between codependency and the four dimensions of cultural orientation. Specific attention will be paid to horizontal and vertical collectivism as they examine how willing a person is to sacrifice for the collective, even if there are instances of inequality. In other words, they measure whether a person feels accepting of putting the needs of the many over the needs of the few, or the one.

Life History

Life History uses behavioral and cognitive indicators to measure life-history strategies or components of psychosocial resource allocations. The life-history measures of interest to this study are parent relationship quality, friend/social contact support, Community involvement, and Family contact support. Parent relationship quality is of interest since previous study results suggest that family stressors are predictive of developing codependent tendencies (Fuller & Warner, 2000). Also, other studies have suggested that students that have fewer family-of-origin problems have fewer conflicts and greater satisfaction in relationships (Chang, 2012). Thus, we predict that having a greater parent relationship quality and family contact support may make individuals less likely to display codependent tendencies. We would also like to examine if friend/social contact support or community involvement could substitute for family contact support and have a similar effect.

Identity & Personality Styles

While there are no direct studies conducted on identity styles and codependency, there are studies conducted that suggest there are associations between an individual's identity style and their self-esteem (Soenens & Berzonsky, 2016; Passmore et al., 2005). Given that low self-esteem has been

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linked with high codependency traits (Lindley & Giodano, 1999), the study would like to examine if there are specific identity styles associated with high codependency traits. The three identity styles measured are diffuse-avoidant items, informational items, and normative items.

The same thing is true for personality styles. Some studies have proposed associations between self-esteem and personality styles (Huis in 't Veld et al., 2011; Bentall et al., 2011), which is why this study would like to examine possible associations between personality styles and codependency characteristics. The personality styles of interest to this study are extraversion, agreeableness, conscientiousness, and emotional stability. Even though the openness to experience personality-trait was measured in the survey used, it was not of any particular interest to the study.

Method

The Participant Criteria

The age of the participants ranged from 18-31. The study was initially concerned with late adolescence (participants aged 18-21), as that makes the majority of undergraduate students. However, given the relatively small sample size and the interest of 21 participants who didn't fall within this range, the age range shifted to include the emerging adulthood stage (18–29 years old). Only one participant fell out of this range (aged 31). Participants (N = 88; 20 males, 67 females, 1 gender fluid) consisted of university students between the ages of 18 and 31 ($M_{\text{age}} = 20.63$). Approximately 77% of the participants did not identify as belonging to a visible minority. The majority of the participants in were first and second-year students (66%) and 95% indicated they were in their first four years of university.

Of the people that declared that they dated before (N= 78), 61 identified themselves as female, 16 as male, and 1 as gender fluid with an average age of 20.77. Approximately 23% declared they were part of a visible minority.

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Of the people that declared that they had never dated before (N= 10), 6 identified themselves as female and 4 as male with an average age of 19.55. Only 20% declared they were part of a visible minority.

Recruitment

The data was collected between February and April, throughout the Winter semester of the 2021/2022 academic year at Saint Mary's University. Students attending Saint Mary's University were recruited via the SONA system. Through SONA, Saint Mary's students enrolled in psychology courses were allowed to complete a 15-minute survey. In compensation for their time, they were eligible to receive one-quarter of a bonus point toward their psychology class of choice. University students were able to share the website link with colleagues interested in the study. 6 participants not enrolled in SONA accessed the survey directly by clicking on a link to the online survey. Participants had to read and agree to the consent form before they could begin the survey. The consent form provided them with details about the study, the risks associated with completing the survey, confidentiality, right to withdraw at any time, as well as giving them the option to skip questions they felt were difficult to answer. The university counseling center's contact information was listed as well, at the beginning and end of the survey. This was done just in case the participants experienced any emotional/psychological distress from participating in this study.

Measures

Sociodemographic information

The survey started by asking participants a few questions regarding age, gender, and current level of education. There was a question asking if the participants identified themselves as a member of a visible minority in Canada, with a visible minority being defined to eliminate any ambiguity. The definition used was "Visible minority refers to whether a person belongs to a visible minority group as

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defined by the Employment Equity Act and, if so, the visible minority group to which the person belongs. The Employment Equity Act defines visible minorities as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in color.” This was done for two reasons. The first is to get a sense of the demographic of the participants to know how generalizable the results may be. The second reason was the study would have liked to examine whether there were differences in codependency scores associated with specific backgrounds, but not enough diverse participants to examine this.

Personality

Participants were then asked to complete the Ten Item Personality Inventory (Solmi et al., 2022). They were presented with ten qualities and asked to rate how much they see those qualities in themselves from a range of 1 (disagree strongly) to 7 (agree strongly). These ten items tested for agreeableness, extraversion, conscientiousness, emotional stability, and openness to experience. Each personality trait had an item that was directly measured and an item that was reverse-scored to measure it. The study is interested to examine whether there is a particular association between any of the first four personality traits and codependency scores.

Dating

Dating can be a difficult construct to measure accurately as it can mean different things to different people, especially at a young age. Thus, before asking any questions related to dating, it was defined to the participants as “going out with someone in whom one is romantically or sexually interested”. Firstly, they were asked if they had dated anyone before. If the answer was yes, another question would appear after asking them at what age did they begin dating.

Codependency

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The Spann-Fischer codependency scale was used because it is an established scale that has been tested for validity (Lindley et al., 1999). The participants were presented with 16 items and asked to rate how much they agree with each statement, on a scale from 1 (strongly disagree) to 6 (strongly agree). Some studies have used this scale to examine possible links between codependency and self-confidence, autonomy, and self-esteem. In this study, the scale will be used to examine possible links between the age of dating and codependency. Fisher et al. suggested classifying scores of 67.2 as high and 37.3 as low since the mean of the scores was approximately 52.6.

ALHB

The Mini-K Short Form of the ALHB (Arizona Life History Battery) was used to measure six dimensions of life-history theory (Figueredo et. al, 2006). They are Insight-Planning-Control, Parent relationship quality, friend/social contact support, Family contact support, Harm avoidance, and Community involvement. This study is primarily interested in examining potential relationships between codependency and Parent relationship quality, friend/social contact support, Community involvement, and Family contact support.

HVIC Scale

The horizontal/vertical individualism/collectivism scale was used to measure the four dimensions of individualism and collectivism (Triandis & Gelfand, 1998). It consists of 14 items and each item was scaled from 1 (strongly agree) to 7 (strongly disagree). There were 3 items for each individualism dimension and 4 items for each collectivism item. The study was particularly interested in the link between vertical collectivism and codependency. Vertical collectivism involves viewing oneself as part of a community or collective and being accepting of potential inequality or hierarchy for the greater good of the collective. This could be a definition of codependence if you replace the word

collective with a partnership. Thus, the study hypothesizes that there will be a positive correlation between vertical collectivism and codependency scores.

ISI-5

The identity style inventory was used to measure the three dimensions of identity styles, informational, normative, and diffuse-avoidant styles (Berzonsky et. al, 2013). An identity style refers to the way individuals manage self-related information as they reflect on identity issues. 27 items were presented to participants, with 9 measuring each identity style. Participants were asked to respond on a scale of 1 (not at all like me) to 5 (very much like me). The study is interested to see whether there is a specific identity style associated with codependency scores.

The Present Study

Research question one: Is there a relationship between the age people began dating and their codependency score?

Hypothesis one: We hypothesize that the younger you started dating, the higher your codependency is likely to be. There is not much previous research related to the age of dating and codependency scores. Thus, the aim here is to fill a gap in the literature and provide another possible factor that may affect codependency scores. The rationale behind this is that getting used to having a partner from a young age may make people more likely to partake in partner-pleasing behavior just in order not to be alone. Previous research has already found low self-confidence to be a strong predictor of codependency and young people are suffering from low self-confidence due to the rise in social media use, social anxiety disorders, and other factors that were not present before (relatively speaking, around 20 years ago).

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Research question two: Is there a difference between the codependency scores of people who dated versus people who never dated? This comparison will be done to examine how strong of a factor dating is on codependency scores.

Research question three: Is vertical collectivism predictive of codependency scores?

Hypothesis three: We hypothesize that there will be a positive correlation between vertical collectivism and codependency scores. This hypothesis is based on the similarity between the beliefs of people who score high in vertical collectivism and the behaviors of codependent people.

Research question four: Is there a specific identity style that is predictive of codependency scores?

Research question five: Is there a specific personality trait that is predictive of codependency scores?

Results

Table1. Regression statistics for participants that previously dated

| <i>Regression Statistics</i> | |
|------------------------------|--------------------|
| Multiple R | 0.81292926 |
| R Square | 0.660853982 |
| Standard Error | 7.147956536 |
| Observations | 77 |

Table 2. Descriptive statistics for participants that previously date.

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|--|---------------------|-----------------------|---------------|----------------|
| Intercept | 25.049 | 10.955 | 2.286 | 0.026 |
| At what age did you begin dating? | -0.990 | 0.478 | -2.069 | 0.043 |

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| | | | | |
|--------------------------------------|---------------|--------------|---------------|--------------|
| What is your gender? | 4.891 | 2.513 | 1.946 | 0.056 |
| Extraversion | -1.183 | 0.598 | -1.977 | 0.053 |
| Agreeableness | 1.180 | 0.853 | 1.384 | 0.171 |
| Conscientiousness | 0.027 | 0.974 | 0.028 | 0.978 |
| Emotional Stability | 2.606 | 0.785 | 3.319 | 0.002 |
| Diffuse-avoidant items | 0.504 | 0.154 | 3.262 | 0.002 |
| Informational items | 0.562 | 0.179 | 3.137 | 0.003 |
| Normative items | -0.106 | 0.169 | -0.626 | 0.534 |
| VI | -0.347 | 0.292 | -1.188 | 0.239 |
| VC | 0.545 | 0.220 | 2.473 | 0.016 |
| Parent relationship quality | 0.571 | 0.378 | 1.512 | 0.136 |
| Family contact support | -0.468 | 0.223 | -2.101 | 0.040 |
| Friend/Social contact support | 0.033 | 0.314 | 0.104 | 0.917 |
| Community involvement | 0.252 | 0.265 | 0.952 | 0.345 |

Table3. Regression statistics for all participants

| <i>Regression Statistics</i> | |
|-------------------------------------|---------------|
| Multiple R | 0.7802 |
| R Square | 0.6087 |
| Standard Error | 7.2352 |
| Observations | 87 |

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Table 4. Descriptive statistics for all participants.

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> | <i>Frequency of Level of Codependency Scores</i> | | |
|-------------------------------|---------------------|-----------------------|---------------|----------------|--|--------|-----|
| | | | | | High | Medium | Low |
| Intercept | 13.359 | 9.172 | 1.456 | 0.15 | 16 | 68 | 4 |
| What is your gender? | 4.064 | 2.246 | 1.81 | 0.075 | | | |
| Extraversion | -1.273 | 0.595 | -2.14 | 0.036 | | | |
| Agreeableness | 1.435 | 0.816 | 1.759 | 0.083 | | | |
| Conscientiousness | 0.074 | 0.94 | 0.078 | 0.938 | | | |
| Emotional Stability | 2.496 | 0.753 | 3.315 | 0.001 | | | |
| Diffuse-avoidant items | 0.479 | 0.151 | 3.173 | 0.002 | | | |
| Informational items | 0.481 | 0.168 | 2.861 | 0.006 | | | |
| Normative items | -0.118 | 0.159 | -0.742 | 0.461 | | | |
| VI | -0.557 | 0.274 | -2.033 | 0.046 | | | |
| VC | 0.66 | 0.209 | 3.152 | 0.002 | | | |
| Parent relationship quality | 0.311 | 0.342 | 0.911 | 0.365 | | | |
| Family contact support | -0.321 | 0.21 | -1.523 | 0.132 | | | |
| Friend/Social contact support | 0.141 | 0.294 | 0.479 | 0.634 | | | |
| Community involvement | 0.151 | 0.251 | 0.6 | 0.55 | | | |

Table 5. T-test comparing the Codependency score of people who dated versus people who never dated.

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| t-Test: Two-Sample Assuming Unequal Variances | | |
|--|--------------------|--------------|
| | <i>Never Dated</i> | <i>Dated</i> |
| Mean | 55.1 | 58.7 |
| Variance | 36.767 | 119.592 |
| Observations | 10 | 78 |
| Hypothesized Mean Difference | 0 | |
| Df | 18 | |
| t Stat | -1.5738 | |
| P(T<=t) one-tail | 0.0665 | |
| t Critical one-tail | 1.7341 | |
| P(T<=t) two-tail | 0.1329 | |
| t Critical two-tail | 2.1009 | |

Table 6. Correlation results between Codependency score and initial Age of dating

| | <i>COD Score</i> | <i>At what age did you begin dating?</i> |
|--|------------------|--|
| COD Score | 1 | |
| At what age did you begin dating? | -0.23 | 1 |

*The data of the single gender-fluid participant was excluded from all the tables above except tables 5 & 6 as this number was not large enough to include in the sample. Their data was used in the analyses in Table 5&6 because their analyses are independent of gender.

Discussion

Using the variables listed in the first column in table 2 (which were discussed in the measures section), we were able to explain 66.08% of the variability in the codependency data for those who have indicated that they have dated before. This is greater than the 60.87% of explained variability for all participants which does not include the age of dating. A correlation test between codependency score and age of dating (table 6) indicated a weak negative correlation between them ($r=-0.23$).

Previous study results suggested nearly half of the post-secondary education students displayed middle or high codependent characteristics (Crestler & Lombardo 1999). We predict that this number is most likely to increase and the results in table 4 suggest that 95% of the university students surveyed displayed middle or high codependent characteristics which is a massive increase. One possible explanation can be derived if we examine the first definition of codependence, which is being in a relationship with a partner who has issues with substance abuse as it is reported that substance abuse is on the rise (Watts, 2014). Another possible explanation can be obtained by examining recent studies that show that social media use in adolescence is linked with low self-esteem (Woods & Scott, 2016). Given that codependency and self-esteem were found to be negatively correlated (Lindley & Giodano, 1999), the rise in the medium to high codependent characteristics makes sense. Since this study's primary interest is in predictive factors of relationship behaviors and the greater variability in codependency scores being explained using data for those who have indicated that they have dated before, table 4 results will no longer be of interest for further discussion.

An independent-samples t-test was conducted (table 5) to test our second research question, which is whether or not there is a difference between the codependency scores of people who dated versus people who never dated. The results indicated that there was no statistically significant difference between the codependency scores of those who have dated vs those who haven't dated.

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However, approximately 20% of the people who dated had high codependency scores (greater than 67.2, as suggested by Spann-Fisher) and approximately 5% had low codependency scores (less than 37.3) while none of the participants who indicated they had never dated had a high codependency score. It is also interesting to note that all of the participants that indicated they had never dated fell within the medium codependency score range. This may simply be the result of the small sample size in the non-daters group.

As predicted, there appears to be a positive correlation between vertical collectivism and the codependency scores for people that indicated they had dated before. The basis of our prediction, which is based on the similarity between the beliefs of people who score high in vertical collectivism and the behaviors of codependent people, could be one possible explanation for these results.

There also appears to be a negative correlation between family contact support and the codependency scores for people that indicated they had dated. Perhaps having a strong supportive relationship with one's family and sharing their relationship details with them can make people less likely to partake in codependent behavior. This may be due to several reasons such as the family members recognizing these behavioral patterns and advising against them. This may also be because they already have strong contact support, they'll be less likely to overemphasize seeking an additional supporting relationship.

Positive correlation between emotional stability and the codependency scores for people that indicated they had dated. This was a surprising find as one would expect a more emotionally stable person to come to more rational decisions and behaviors.

Positive correlation between diffuse-avoidant and informational identity styles and the codependency scores for people that indicated they had dated. Given that people that are characterized by diffuse-avoidant identity styles have been found to exhibit reliance on approaches that would allow

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them to avoid self-relevant conflicts and problems as well as a reliance on acquiring information from others about how to act with regard to social situations (Berzonsky & Ferrari, 2009), this correlation seems sensible. The same can not be said, however, about the positive correlation with the informational identity style. Given that they welcome criticism and actively engage in self-reflection and skeptical thinking as they look to evolve themselves, one would expect them to be less likely to engage in codependent behavior for a prolonged period. There may be one of two possible explanations for this result. Either this is a result of the small, unrepresentative sample size or because they are so open to criticism from others and in constant self-reflection, this makes them a target for people who look to take advantage of malleable people in relationships.

Implications

The implications of this study are restricted due to the limitations of the study (discussed below), but interesting enough to conduct further examinations into the statistically significant results. Nevertheless, the current findings suggest that there is a weak, yet significant correlation between age of dating and codependency scores. There were also significant positive correlations associated between codependency scores for participants that indicated they had dated and emotional stability, diffuse-avoidant identity style, informational identity style, and vertical collectivism. There also appears to be a negative correlation between family contact support and the codependency scores for participants that indicated they had dated.

The current study implies that the age of dating, along with the other significant variables discussed above, can play an important role in predicting codependency scores. Future research may take the information summarized in this paper and, with the addition of previously found data associating other variables (like self-esteem), further the understanding of predictive factors of codependency.

Limitations and Future Directions

The sample size of the group that indicated they had not dated was relatively small compared to the sample size of the group that indicated they had dated. Perhaps a larger sample size would equate to different results, given that the group that indicated that they had dated displayed greater variability in their codependency data (20% had high codependency scores and 5% had low codependency scores versus all medium codependency scores for those who indicated they hadn't dated). The sample in total was not diverse (predominantly Caucasian) and therefore not representative of the general population which makes it difficult to make definitive claims regarding the results of the study. Moreover, there were significantly more females than males in the study due to two reasons. The first is that there are more women attending university than men (Frenette & Klarka, 2007) and there are more women pursuing a degree in the psychological field than men.

Not all previously studied variables that have been associated with codependency were controlled for, such as self-confidence. Incorporating that into future studies as well as the age of dating may help explain a greater percentage of the variability in codependency scores.

Surveys may not be the best way to collect sensitive information, as some participants may have differences in understanding and interpreting the question. Participants may also provide unconscious responses which were evident in some cases where the same the participants took the survey twice (probably in an attempt to get more bonus points) and provided different responses.

Future Directions

Address the limitations by incorporating a similar approach as in the A 5-year prospective study conducted across 36 schools examining whether early dating is predictive of smoking during adolescence, but with interview questions instead of survey questions being most optimal.

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Another aspect to look into would be the participant's partners' ages when they started dating. It would be interesting to see if the codependency scores differed based on whether they were older than them or younger/same age. Perhaps dating someone who's older would make a person more likely to engage in partner-pleasing codependent behavior because they may attempt to impress them or view them as superior or more knowledgeable? Also, future studies could look to examine the early daters that didn't develop high codependency scores and see what aspects of their lives differ from those who did develop codependency as not a significant amount was found in this study to analyze. Maybe there is an aspect we are overlooking that can reduce the probability of developing codependence if you are an early dater (like having a high score in family contact support).

Conclusions

The present study aimed to examine possible connections between dating and codependency scores. Specifically, whether previously dating affected your codependency score and whether the age you began dating affected your codependency score. The results found no indication that previously dating affects codependency scores but did find a moderately weak correlation between age of dating and codependency scores. Also, 95% of the university students surveyed displayed middle or high codependent characteristics, as compared to previous study results that suggested nearly half of the post-secondary education students displayed middle or high codependent characteristics. (Crestler & Lombardo 1999).

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References

Berzonsky, M., & Ferrari, J. (2009). A Diffuse-Avoidant Identity Processing Style: Strategic Avoidance or Self-Confusion? *Identity (Mahwah, N.J.)*, 9(2), 145-158.

Berzonsky, M., Soenens, B., Luyckx, K., Smits, I., Papini, D., & Goossens, L. (2013). Development and Validation of the Revised Identity Style Inventory (ISI-5): Factor Structure, Reliability, and Validity. *Psychological Assessment*, 25(3), 893-904.

Carfora, Rachel Ellen. (2009). "Codependency among only children as predicted by parenting styles practiced in family-of-origin" Masters Thesis, Smith College, Northampton, MA.

Crester, G. A., & Lombardo, W. K. (1999). Examining codependency in a college population. *College Student Journal*, 33(4), 629-637.

Fidler, J., West, R., Jarvis, M., & Wardle, J. (2006). Early dating predicts smoking during adolescence: A prospective study. *Addiction (Abingdon, England)*, 101(12), 1805-1813.

Figueredo, A., Vásquez, G., Brumbach, B., Schneider, S., Sefcek, J., Tal, I., . . . Jacobs, W. (2006). Consilience and Life History Theory: From genes to brain to reproductive strategy. *Developmental Review*, 26(2), 243-275.

Frenette, M., Zeman, Klarka, Statistics Canada. Analytical Studies Branch, & Canadian Electronic Library. (2007). Why are most university students, women? Evidence-based on academic performance, study habits, and parental influences (Research paper series (Statistics Canada. Analytical Studies Branch); no. 303). Ottawa: Statistics Canada, Analytical Studies Branch.

Fuller, J., & Warner, R. (2000). Family stressors as predictors of codependency. *Genetic, Social, and General Psychology Monographs*, 126(1), 5-22.

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Lindley, N., Giordano, P., & Hammer, E. (1999). Codependency: Predictors and psychometric issues. *Journal of Clinical Psychology, 55*(1), 59-64.

Solmi, M., Granzio, U., Boldrini, T., Zaninotto, L., & Salcuni, S. (2022). Stigma and attitudes towards restrictive practices in psychiatry among psychology students: A network and path analysis study in an Italian sample. *Journal of Mental Health (Abingdon, England), 31*(1), 66-74.

Triandis, H. C. & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology, 74*, 118-128.

Watts, V. (2014). SAMHSA Uses Recovery Event to Report Rise in Substance Abuse. *Psychiatric News, 49*(19), 1.

Woods, H., & Scott, H. (2016). Sleepy teens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression, and low self-esteem. *Journal of Adolescence (London, England.), 51*(1), 41-49.

Chang, S. (2012). A cultural perspective on codependency and its treatment. *Asia Pacific Journal of Counselling and Psychotherapy, 3*(1), 50-60.

Soenens, B., Berzonsky, M., & Papini, D. (2016). Attending to the role of identity exploration in self-esteem. *International Journal of Behavioral Development, 40*(5), 420-430.

Passmore, N., Fogarty, G., Bourke, C., & Baker-Evans, S. (2005). Parental Bonding and Identity Style as Correlates of Self-Esteem Among Adult Adoptees and Nonadoptees. *Family Relations, 54*(4), 523-534.

Huis in 't Veld, E., Vingerhoets, A., & Denollet, J. (2011). Attachment style and self-esteem: The mediating role of Type D personality. *Personality and Individual Differences, 50*(7), 1099-1103.

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Bentall, R., Myin-Germeys, I., Smith, A., Knowles, R., Jones, S., Smith, T., & Tai, S. (2011). Hypomanic Personality, Stability of Self-Esteem and Response Styles to Negative Mood. *Clinical Psychology and Psychotherapy*, 18(5), 397-410.