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Identity Commitments: The Relationship Between
Aspects of Commitments and Internalizing
Disorders

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Abstract

Identity development is an important task during adolescence and young adulthood. A well-developed identity is associated with greater well-being. In the current study we looked at aspects of identity commitments and their relation with anxiety and depressive symptoms. We hypothesized that commitment strength and commitment integration would predict anxiety and depressive symptoms. By interviewing the participants ($N = 135$) and administering questionnaires, we gathered scores on commitment strength, integration, anxiety and depressive symptoms. Multiple regression analyses showed that mean commitment strength over all domains significantly predicted anxiety and depressive symptoms ($p < .01$). Overarching commitment strength, commitment integration over all domains and overarching commitment integration were not significant predictors of anxiety and depressive symptoms. Our results suggest that stronger commitments are related to less anxiety and depression. Future research is needed to determine the direction of the relationship. If this suggest that stronger commitments indeed influence anxiety and depression, this can have important implications in the prevention and treatment of anxiety and depressive symptoms.

Keywords: Identity Development, Commitment Strength, Commitment Integration, Anxiety Symptoms, Depressive Symptoms

Identity Commitments: The Relationship Between Aspects of Commitments and Internalizing Disorders

Some people seem to know exactly who they are and what their purpose is in life. They know what they find important and are confident that the values and beliefs they hold are right. There are also people who are more in doubt about who they are and who keep on searching for what they want in life. They are not sure about their beliefs and values and therefore these may change a lot. Especially during adolescence, most people go through a period of doubt and exploration. It is a normal process, essential even according to Erikson (1950) in order to develop a strong identity to which one feels committed. However, if one stays too long in this period of exploration and is not able to develop a strong identity, this can have negative effects, on well-being for example (Meeus, 2011).

Developing a strong identity is the main task during adolescence according to Erikson (1950). He defined identity as a guiding point from which an individual experiences the world (Erikson, 1968). More recent research has shown that identity development is not restricted to adolescence, but stays relevant in young adulthood as well (Arnett, 2007). Identity develops throughout the lifespan, but also gives a sense of self-continuity over time in different situations and in interactions with different people. Furthermore, it enables us to differentiate between others and ourselves. Erikson also explained how to develop a strong identity and to get to know yourself and your place in society. According to him, this can be achieved by integrating past childhood identifications with new experiences. This way, a sense of continuity in identity can be maintained, while also being able to take on new social roles. Marcia (1966) has further developed the theory of identity formation, by establishing two dimensions that are important in successfully fulfilling this developmental task. These are identity exploration and commitment. By exploring different identity roles the goal is to establish an identity one feels

committed to. Once this has been reached, someone is in the achieved identity status, which is the best status out of the four identity statuses Marcia identified.

However, exploration does not always have a positive effect on identity formation. When someone keeps on exploring but does not gain any new insights, this is not beneficial (Luyckx et al., 2014). Exploration may also not always be necessary, identity relevant experiences can occur without active exploration as well. Therefore, Van der Gaag and colleagues (2020) proposed a new model, which looks at the current identity structure without needing information about past exploration. They merely looked at the commitments people have now. A commitment refers to the extent to which individuals adhere to and invest in choices relevant to identity (Marcia, 1966). These commitments could be specific to one of the domains of life that are central to identity, or it could be an overarching commitment, which involves multiple domains and is more than the sum of the commitments in those domains.

The identity domains that have been distinguished so far can be divided into an interpersonal, ideological and occupation domain (McLean, Syed, Yoder & Greenhoot, 2016). The commitments people have in these domains vary in content, but also in strength and integration. Commitment strength is a measure for how dedicated someone is to an aspect of identity. Commitment integration is the extent to which the content of a commitment is integrated into a coherent whole. By applying these two aspects of identity to the four identity statuses of Marcia (1966), four identity landscapes resulted: the foreclosed identity landscape, characterized by high commitment strength and low commitment integration; the achieved identity landscape, with both high commitment strength and high commitment integration; the diffused identity landscape, with both low commitment strength and low commitment integration and the moratorium identity landscape, with low commitment strength and both low and high commitment integration.

Various studies have found that people with a stronger sense of identity, meaning the achieved identity status, report lower levels of different negative emotional states and higher levels of psychological well-being (e.g. Bronson, 1959; Constantinople, 1970; Howard & Kubis, 1964; Seaton et al., 2006; Stark & Traxler, 1974). This indicates lower depression and anxiety scores. Furthermore, people in the moratorium identity status report the highest level of anxiety out of all identity statuses (Waterman, 1992). Whereas people who are in the committed identity statuses, mainly the foreclosed, report the least anxiety. Moreover, commitment was found to be a significant positive predictor for well-being in the domains of personality traits, friends and acquaintances, and occupation (Karaś & Ciecuch, 2018). Commitment also negatively predicts symptoms of depression and generalized anxiety disorder (Crocetti et al., 2008). Therefore, it seems likely that commitment strength has a negative association with anxiety and depression.

Commitment integration, however, remains a bit more questionable. Since commitment integration is not directly assessed in the identity statuses that are used in the aforementioned studies, it is not possible to use these to draw conclusions about the association of commitment integration with anxiety and depression. However, Sokol and Eisenheim (2016) have shown that disturbances in continuous identity are related to negative affect, indicating that a less integrated identity may be associated with poorer mental health. Subsequently, more studies have shown that identity integration promotes well-being. Negative past experiences that are integrated into one's life story are for example found to be beneficial for well-being (e.g., Adler et al., 2016; Bauer & McAdams, 2004; King & Raspin, 2004; Lilgendahl & McAdams, 2011; McAdams, 2001; Pals, 2006). Identity integration has also been shown to function as a buffer for stress (Mason, et al., 2019), which plays an important role in the development and maintenance of many psychological problems.

Nonetheless, the direct relation between identity integration and anxiety and depression has not been studied so far and there is also some evidence pointing in the opposite way. As mentioned before, Waterman (1992) found that people in the foreclosed identity status report less anxiety than those in the achieved identity status, suggesting that low commitment integration does not predict more anxiety. Furthermore, we do not yet know whether the strength and integration of the overarching commitment or the commitments in specific domains are more relevant when we want to say something about anxiety and depression. So, in the present study we will look at the association of commitment strength and commitment integration with symptoms of anxiety and depression. This will teach us whether developing a strong and integrated identity is useful in preventing anxiety and depression. Moreover, we will look whether the overarching commitment or the domain-specific commitments have stronger relations with anxiety and depression.

Method

Participants

All participants in the study were either recruited via the SONA project or the Paid Participant Pool (PPP) of the University of Groningen. Data was gathered over two different periods. In total 137 people participated, but one person did not fill in the demographic questionnaire, so the following data are of the remaining 136 participants. Ages range from 17 to 32, with a mean age of 20.96 ($SD = 2.40$). The majority was female (59%). Out of all participants 41% was Dutch and 19% was German, the others were from diverse nationalities, mostly European or Asian. The participants in the SONA project were all first-year psychology students at the University of Groningen, who had to participate in studies, in order to receive credits. Anyone could sign up for this study via the PPP, people who did received a compensation for it.

Materials

The main outcome measures for this study were commitment strength and commitment integration in different domains of life and of the overarching domain, anxiety and depressive symptoms. Commitment strength refers to how important the commitment is to someone, while commitment integration refers to how integrated the commitment is into different parts of someone's life.

Commitment strength and commitment integration

The Groningen Identity Development Scale – Landscape version (GIDS-L; Van der Gaag et al., 2021a) and its updated version (GIDS-L2; Van der Gaag et al., 2021b) were used to collect data on identity. Seven items address commitment strength, questions are for example: “Could you easily give up this commitment?” or “Are you certain about this commitment?” Participants could indicate their answer by selecting a point on a bar ranging from 0 to 100, with 0 indicating a very negative answer and 100 indicating a very positive answer. Commitment integration was measured by four items, an example is: “Do you feel that this commitment involves many aspects of your life?” The answer scale was the same as the one used for commitment strength. Both commitment strength and commitment integration have a good internal consistency, with a Cronbach's alpha of .84 and .82 respectively.

This questionnaire resulted in four different variables that we used. The first one was mean commitment strength, which measured the mean commitment strength over all domains, including the flexible domain(s), but excluding the overarching domain. The second one was the strength of the overarching commitment. If someone had multiple overarching commitments, we only used the commitment that scored in total the highest on commitment strength and commitment integration, by adding up the scores of these two measures. The third variable was mean commitment integration, which measured the mean commitment integration over the same domains as mean commitment strength. The last one was the integration of the

overarching commitment, which was the same commitment as was used in commitment strength.

Anxiety and depressive symptoms

Furthermore, anxiety and depressive symptoms were measured by the Hospital Anxiety and Depression Scale (HADS; Stern, 2014). This scale consists of 14 items, half of which measure anxiety and the other half measure depression. All questions are about how the participant was feeling the past week. An example of an item about anxiety is “I feel tense or wound up” and for depression “I still enjoy the things I used to enjoy”. There are four answer options, ranging from low to high agreement with the statement. The answer that indicates the least anxiety or depressive symptoms is zero points, and the answer that indicates the most symptoms is three points. Cronbach's alpha for the anxiety subscale of the HADS varied from .68 to .93 (mean .83) and for the depression subscale from .67 to .90 (mean .82; Bjelland, et al., 2002). Both indicating good internal consistency.

Procedure

Participants could sign up for this study online. At the start of the study, the participants were asked to sign the informed consent form and to answer some demographical questions. When they had done this, the interview began. By answering questions about a specific domain of life, the participants were encouraged to think about their commitment in that domain and were asked to write it down. Afterwards they filled in the GIDS-L2 questionnaire, which asks several questions about the commitment strength and its level of integration. This was repeated for every domain. The domains were friendship, family, occupation, leisure time, intimate relations and one or two flexible domain. At the flexible domains the participant could talk about any topic that was not yet discussed but that was also very important to them. When all domains had been covered, the participants were asked to find one or more overarching commitments. For each overarching commitment the participants were asked to fill in the

GIDS-L2 questionnaire as well. As a last step, participants were asked to fill in the HADS and some other additional questionnaires.

In this correlational study, we first looked at the correlations between commitment strength, commitment integration, anxiety and depression, to see if there was a relationship between these variables. To test whether commitment strength and commitment integration were predictors of anxiety and depression, multiple linear regression analysis was used. To see whether commitment strength and commitment integration over all domains, or of the overarching domain was the best predictor, these were entered in the model as separate variables. This resulted in four predictor variables, called mean commitment strength, mean commitment integration, overarching commitment strength and overarching commitment integration.

Results

Preliminary analysis

Out of the 137 people that participated, two people were excluded from the analysis. One of them did not fill in the HADS, so there was no data for anxiety and depressive symptoms. The other one did not have data on the overarching commitment. So, in total we used the data of 135 people. There were also some people who missed a few data points. Eighteen people skipped at most one question about commitment strength or commitment integration per domain. Given the number of questions by which these variables were computed we could still use the data of these participants for the analysis without any problem, by using the mean scores. Using the mean scores was also more convenient here, since people differed in the amount of commitments they had and this way we could use all commitments. Moreover, two people skipped some questions about anxiety and/or depression. By filling in the mean scores for the missing values on the other items, we could still compute the total scores. If this resulted in a decimal number it was rounded up or down. Table 1 shows a summary of the

descriptive statistics of all variables in the study. In Table 2 the Pearson correlation coefficients are shown for all variables. All correlations were significant at the $p = .01$ level, except for the correlation between mean commitment integration and anxiety symptoms.

Table 1

Descriptive Statistics of the Main Variables in the Study

Variable	N	Mean	SD	Minimum	Maximum
Mean CS	135	70.74	9.36	52.14	96.43
Mean CI	135	67.76	11.20	35.35	100.00
Overarching CS	135	78.52	14.04	43.14	100.00
Overarching CI	135	81.94	13.45	35.50	100.00
Anxiety symptoms	135	7.85	4.00	0.00	21.00
Depressive symptoms	135	3.93	3.14	0.00	17.00

Note. CS = Commitment Strength, CI = Commitment Integration.

Table 2

Pearson Correlations Between Commitment Aspects, Anxiety and Depressive Symptoms.

	1	2	3	4	5	6
1. Mean CS	-					
2. Mean CI	.48***	-				
3. Overarching CS	.59***	.34***	-			
4. Overarching CI	.49***	.49***	.69***	-		
5. Anxiety symptoms	-.31***	-.12	-.23**	-.23**	-	
6. Depressive symptoms	-.40***	-.30***	-.29***	-.30***	.54***	-

Note. CS = Commitment Strength, CI = Commitment Integration.

** $p < .01$. *** $p < .001$.

Main analysis

Before testing the hypotheses, data was checked for possible violations of the assumptions of linear regression analysis. First, assumptions were tested for anxiety symptoms as dependent variable. No significant violations of linearity and homoscedasticity were found (Figure A1 and A2). There were some minor violations of normality of the residuals for anxiety symptoms (Figure A3), however the sample size was large enough, so this did not cause any problems for the analysis.

When testing the assumptions for depressive symptoms as dependent variable some more severe violations of linearity, homoscedasticity and normality were found (Figure A4, A5 and A6). However, since the number of participants is quite large, multiple linear regression could still be used.¹ Multicollinearity was assessed by computing the Variance Inflation Factor, which was within acceptable range (highest value: $VIF = 2.32$).

The first hypothesis was that commitment strength and commitment integration were predictors of anxiety symptoms. A multiple linear regression analysis was carried out with anxiety symptoms as the dependent variable and mean commitment strength, mean commitment integration, overarching commitment strength and overarching commitment integration as predictor variables. Results are shown in Table 3. A significant model emerged: $F(4,130) = 4.06, p = .004$. The model explained only 8.4% of the variance in anxiety symptoms (adjusted $R^2 = .084$). By examining the individual predictors, we saw that mean commitment strength was the only significant predictor of anxiety symptoms ($B = -.125; t(130) = -2.66, p = .009$). This means that anxiety symptoms decreased with .125 when mean commitment strength increased with one. So if we for example compare someone who scored 60 points on mean

¹ Although a Box-Cox transformation of the dependent variable would make the regression analysis more accurate, this statistical technique is not part of the curriculum. Therefore we assumed the dependent variable to be normally distributed and did not transform it. Results must be interpreted with caution.

commitment strength with someone who scored 80 points, the second person would on average score 2.5 points lower on anxiety symptoms. This is a medium effect on a scale from 0 to 21.

The second hypothesis, about the predictive value of commitment strength and commitment integration on depressive symptoms, was also tested by a multiple regression analysis. This time the same predictor variables were used, but now with depressive symptoms as the dependent variable. This resulted in a significant model: $F(4,130) = 7.07, p = < .001$. This model explained 15,3% of the variance in depressive symptoms (adjusted $R^2 = .153$). Again, only mean commitment strength was a significant predictor in the model ($B = -.095; t(130) = -2.66, p = .009$). This indicates that depressive symptoms decreased with .095 when commitment strength increased with one point. If we again compare someone who scored 60 points with someone who scored 80 points on mean commitment strength, the last person would on average score 1.9 points lower on depressive symptoms. This is also a medium effect on a scale from 0 to 17. In Table 4 the regression coefficients for predicting depressive symptoms are presented.

Table 3

Regression Coefficients for Predicting Anxiety Symptoms

Variable	B	SE	95% CI		B	t	p
			LL	UL			
Mean CS	-.125	.047	-.219	-.032	-.293	-2.657	.009
Mean CI	.029	.036	-.043	.100	.080	.790	.431
Overarching CS	.004	.036	-.067	.075	.014	.110	.912
Overarching CI	-.041	.037	-.113	.032	-.137	-1.112	.268

Note. CS = Commitment Strength, CI = Commitment Integration.

Table 4

Regression Coefficients for Predicting Depressive Symptoms

Variable	B	SE	95% CI		β	<i>t</i>	<i>p</i>
			<i>LL</i>	<i>UL</i>			
Mean CS	-.095	.036	-.165	-.024	-.282	-2.661	.009
Mean CI	-.032	.027	-.086	.022	-.115	-1.181	.240
Overarching CS	-.006	.027	-.060	.047	-.028	-.235	.814
Overarching CI	-.019	.028	-.074	.036	-.082	-.692	.490

Note. CS = Commitment Strength, CI = Commitment Integration.

Discussion

The aim of the current study was to examine the relationships of commitment strength and commitment integration with anxiety and depressive symptoms. Our first hypothesis was that low commitment strength and low commitment integration are predictors of a higher level of anxiety symptoms. We found some evidence that this is the case for commitment strength, but not for commitment integration. Our second hypothesis was that low commitment strength and low commitment integration are predictors of a higher level of depressive symptoms. Again, we found some evidence for commitment strength but not for commitment integration. A follow-up question we had was whether the strength and integration of the domain-specific commitments or of the overarching commitment better predicted anxiety and depressive symptoms. We found that the mean commitment strength over all domains predicted anxiety and depressive symptoms, but not the strength of the overarching commitment. So, for commitment strength the mean over all domains seems to be the best predictor. For commitment

integration, neither the mean score over all domains, nor the score on the overarching commitment had predictive value.

Our first finding indicates that people with on average stronger commitments in various domains of life, report less symptoms of anxiety and depression. This is in line with previous research (e.g. Bronson, 1959; Constantinople, 1970; Crocetti et al., 2008; Howard & Kubis, 1964; Karaś & Ciecuch, 2018; Seaton et al., 2006; Stark & Traxler, 1974; Waterman, 1992). However, we only found a small effect, so people with on average stronger commitments in the domains of life are in general only a bit less anxious and depressed than people with weaker commitments.

Secondly, we found that people who score higher on strength of the overarching commitment do not differ from others in their symptoms of anxiety and depression. This was contrary to our expectations, since the literature mentioned above indicates that a stronger identity is connected to lower levels of anxiety and depression. So, how is it possible that commitment strength over all domains does predict anxiety and depressive symptoms, but the strength of the overarching commitment does not? In order to explain this, we should look at the concepts we measured in a bit more detail. Commitment strength over all domains is the mean of the strength of all commitments of the domains of life. So, people have a commitment for every domain of which some may be stronger and others may be weaker. By taking the mean score over all domains, we get a general measure of commitment strength of the domains of life, and therefore of most aspects that are relevant to identity. However, in case of the overarching commitment, the commitment is formed by looking at all domains and identifying a common theme. In this case we only looked at the overarching commitment that scored highest on commitment strength and commitment integration. It is likely that this only captures a part of people's identity, because it is difficult to capture someone's whole identity in a few sentences. Therefore the strength of the overarching commitment may not say much about the

strength of identity as a whole, making it less reliable to tell us something about anxiety and depression.

Our third finding indicates that people who score higher on mean commitment integration, do not score differently on anxiety and depressive symptoms than people who score lower on mean commitment integration. One study supports our finding (Waterman, 1992), but most studies that have been done showed some relation between commitment integration and anxiety or depression, therefore we did not expect this result. The difference in findings may be due to differences in measurements. The studies that found a relation looked at continuous identity, the integration of negative past experiences and identity integration as a buffer for stress (e.g., Adler et al., 2016; Bauer & McAdams, 2004; King & Raspin, 2004; Lilgendahl & McAdams, 2011; Mason, et al., 2019; McAdams, 2001; Pals, 2006; Sokol & Eisenheim, 2016). Continuous identity was related to anxiety and depression, but only in the form of present to future expectations about whether someone would be the same person (Sokol & Eisenheim). This differs from how we measured integration, we looked whether the commitments are integrated into different parts of people's lives at this moment in time. The integration of negative past experiences is also a very specific part of integration, which we do not measure with our survey. In short, the way we measure commitment integration has not been used in studies on this topic before, therefore it was difficult to make predictions.

Lastly, we saw that people who scored higher on commitment integration of the overarching domain did not differ in anxiety and depressive symptoms from people who score lower. This can probably be explained by the reasons mentioned above for mean commitment integration, since commitment integration is measured in the same way for both variables. Furthermore, if identity is not fully captured in the overarching commitment, integration of the overarching commitment does not say much about identity integration. Therefore it is possible that the link with anxiety and depressive symptoms is not found.

Our findings partly support the theory that strong and well-integrated commitments are related to better well-being. Commitment strength could predict anxiety and depressive symptoms, depending on which domains were used. Commitment integration does not seem to be predictive of anxiety and depressive symptoms. However, more research should be done on this topic to say anything concrete about it. If further research also supports the theory of commitment strength as a predictor of anxiety and depressive symptoms, we can look at the practical implications of this. It might be helpful in therapy for example, by focusing on the development of identity commitments, in order to lessen someone's anxiety and/or depressive symptoms. However, the clinical implications will probably be limited, because only a small part of anxiety and depression can be explained by commitment strength. Furthermore, we do not know the direction of the relationship. It can also be that anxiety and depressive symptoms are causing commitments to weaken. A mutual influence is also possible and most likely (Potterton et al., 2022).

Limitations and future directions

This study had several limitations that have to do with both methodological as well as conceptual issues. First of all, most participants in the study were quite young and therefore it is likely that they were still searching for their identity. For younger people a lack of commitment has less of an impact on their well-being (Luyckx et al., 2013; Meeus et al., 1999). Therefore, the findings are not generalizable to other age groups and future research could focus on this to see if there is indeed a difference. Secondly, the measurements all rely on self-report. During the interviews, we tried to make sure that the commitments represent what is important to the participant. However, we do not measure if it is really a good representation of their identity. This is something that is important to know, since the theory used for this study relies on the idea that we can measure identity strength and integration through people their commitments. Lastly, we found very few people who scored above what is considered 'normal'

on depressive symptoms. So the differences between people their scores are small, which makes comparing them less reliable. Future research should therefore focus on comparing a clinical group with a norm group. Also more research can be done on commitment strength and integration and how they relate to identity. This way, it becomes clearer if commitments are a good representation of people's identity.

Conclusion

Identity development remains an important task during adolescence and young adulthood. Being able to commit to an identity is associated with greater well-being. We expected that we could measure how committed someone was to their identity, by measuring commitment strength and integration. However, the results only partly support the theory that commitment strength is predictive of less anxiety and depressive symptoms. This was dependent on the domain the commitment was based on. Commitment integration did not seem to predict anxiety and depressive symptoms in this study. More research is needed to determine whether there is indeed no relation or if we did not find an effect due to measurement errors. If we discover how commitments and their aspects are related to identity, we can better assess the relation between identity and well-being.

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Appendix A

Assumption Checks

Figure A1

Scatterplot of the Predicted Values and Residuals with Anxiety Symptoms as Dependent Variable

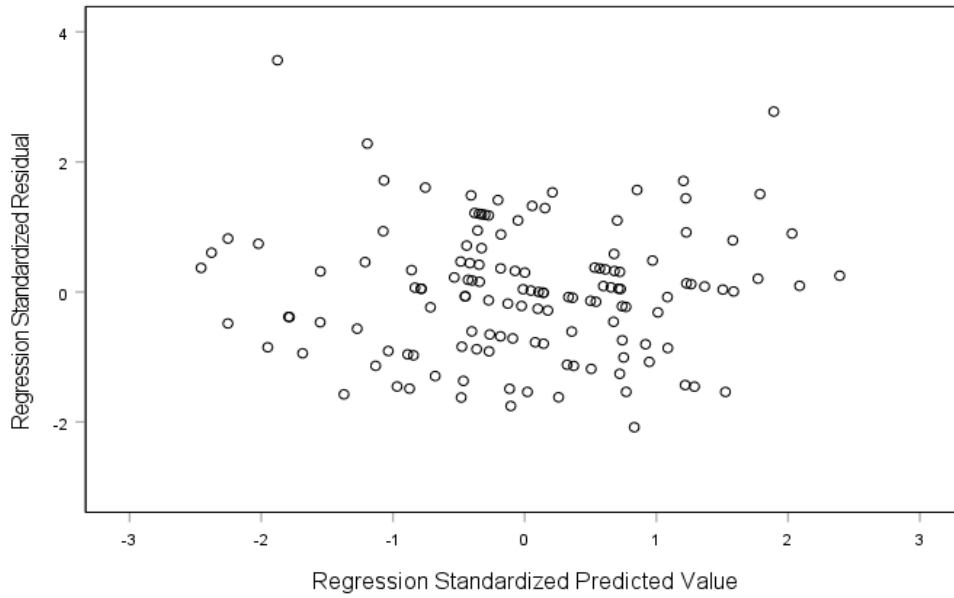


Figure A2

Normal P-P Plot of Regression Standardized Residuals with Anxiety Symptoms as Dependent Variable

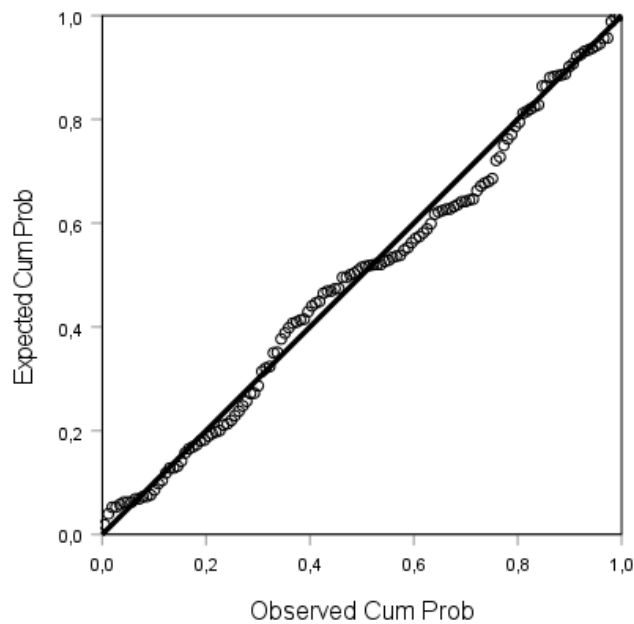


Figure A3

Histogram of the Distribution of the Residuals of Anxiety Symptoms

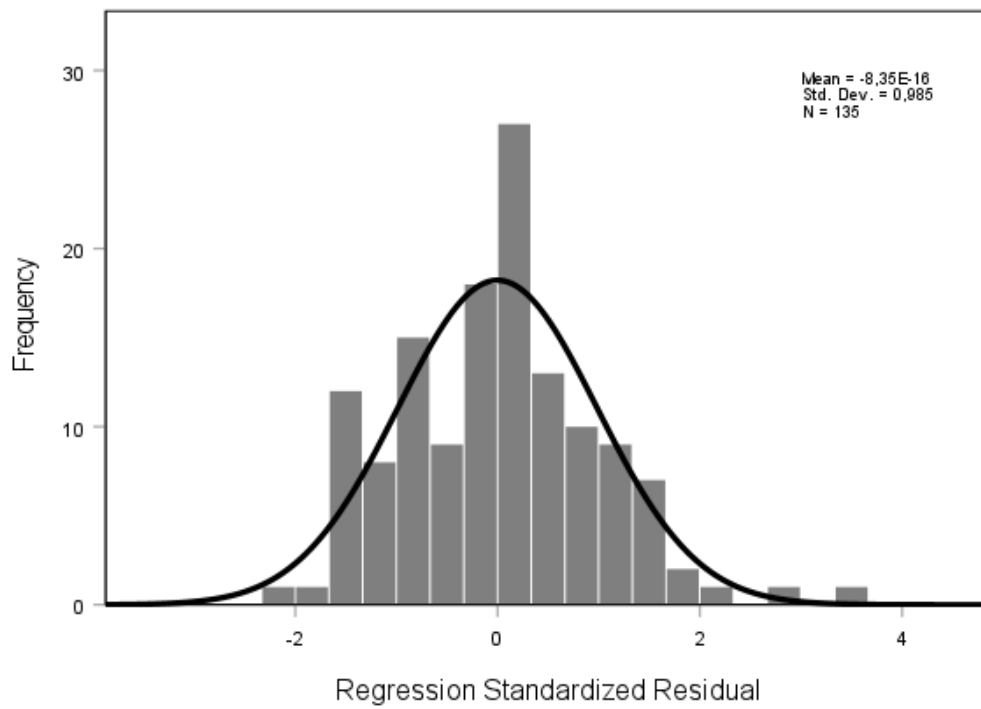


Figure A4

Scatterplot of the Predicted Values and Residuals with Depressive Symptoms as Dependent Variable

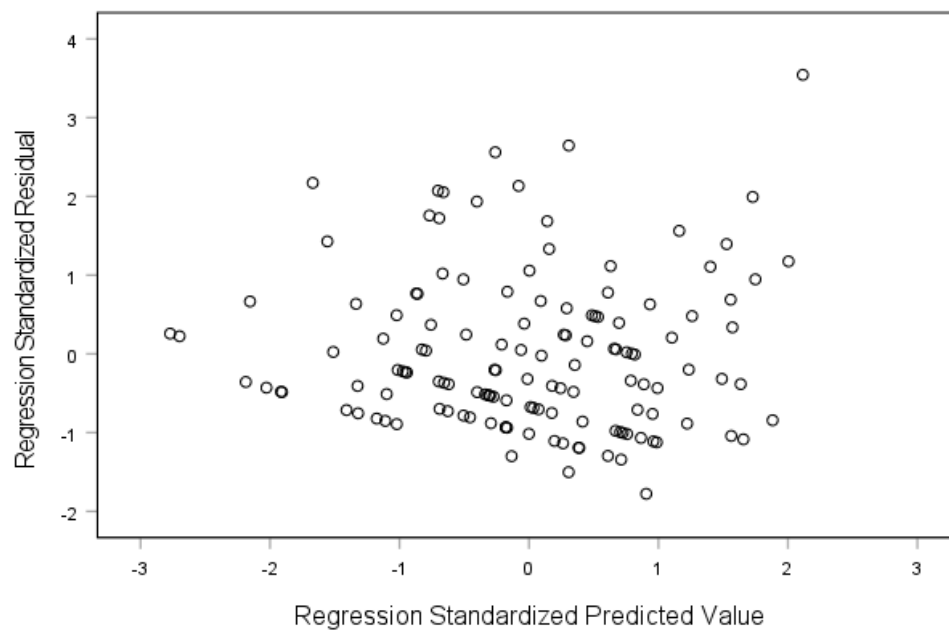


Figure A5

Normal P-P Plot of Regression Standardized Residuals with Depressive Symptoms as Dependent Variable

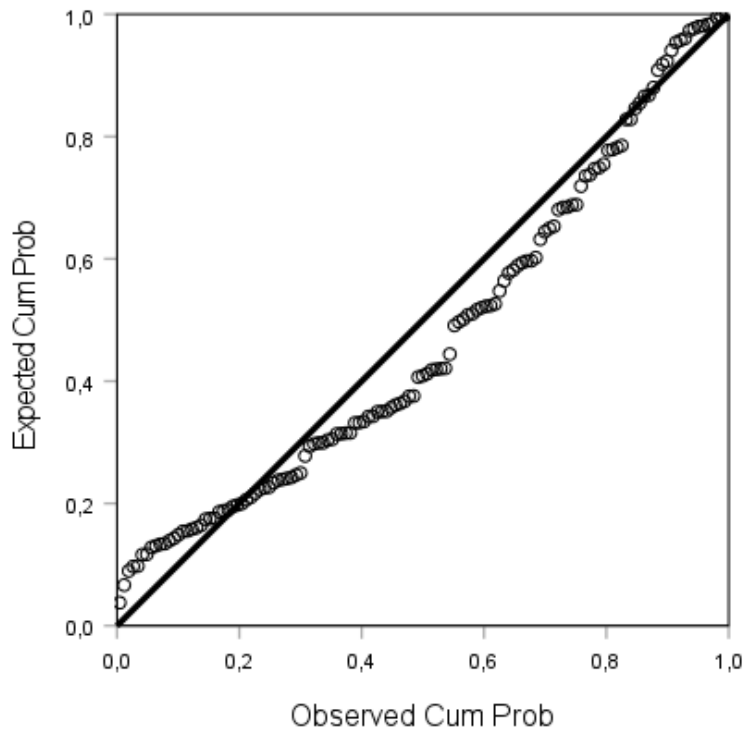


Figure A6

Histogram of the Distribution of the Residuals of Depressive Symptoms

