

Running Head: DEPRESSION AND FAMILY FACTORS

The Relationship between Depressed Mood and Perceived Parental Alienation, Trust, and Pride  
in Academic Accomplishments: A Study of Family Factors Associated with Depression

### **ABSTRACT**

The purpose of this study was to determine the relationship between depressed mood and parental trust, alienation, and pride in academic accomplishments. The convenience sample was composed of 65 college students attending the University of Michigan. The participants were asked to complete a questionnaire which included the Beck Depression Inventory to measure depressed mood and the Inventory of Parent and Peer Attachment to measure parental alienation and trust. All three hypotheses were supported. Depressed mood and parental alienation were positively correlated. Depressed mood was negatively correlated with both parental trust and pride in academic accomplishments. These results support previous research on the subject and provide an important insight into parental academic perceptions and depression.

# **The Relationship between Depressed Mood and Perceived Parental Alienation, Trust, and Pride in Academic Accomplishments: A Study of Family Factors Associated with Depression**

## **INTRODUCTION**

Depression is a psychological disorder which has detrimental effects on not only the individual, but also the individual's family and society as a whole. Research indicates that in any given year, approximately 18.8 million American adults will suffer from a depressive disorder (Robins & Regier, 1990). Further, according to Kessler (2002), one in six adults in the United States will meet criteria for major depression in their lifetime, while one in four will be diagnosable with either major depression, minor depression or recurrent brief depression. Though depression is often underestimated as simply a blue mood or a state of intense sadness, this assessment is far from accurate. According to the National Institute of Mental Health (2007), depression is a disorder effecting not only mood, but also the physical health and thoughts of the individual.

Symptoms of a depressive disorder are serious. The diagnosis of major depression requires that an individual have experienced a depressed mood most of the day, nearly every day, or a complete loss of pleasure in all or most of the activities the individual used to find pleasurable for at least two months. Beyond these detrimental requirements for the diagnosis of depression, further symptomology can range from sleep and weight loss to thoughts and attempts of suicide (APA, 1994). Depression lasts for weeks, months or even years (NIMH, 2007), and has in recent research been shown to be a disorder of high chronicity. According to Kessler (2002), more than 80% of individuals experiencing a past episode of major depression will have recurrent episodes. This evidence of high chronicity is one of a few variables which lead to the

shocking ranking of depression as the world's number one most burdensome disease according to the World Health Organization Global Burden of Disease study (Murray & Lopez, 1996).

The burdensome nature of this disease warrants further investigation into the possible correlates of depression, which may consequently provide avenues for intervention research to target. One such correlate involves family relationships. There is an abundance of research that suggests that unhealthy family relationships are related to depression. Some of the domains that have been extensively studied include family conflict, support, and cohesion. A two-year longitudinal study on peer and parental support mechanisms in adolescent girls by Stice, Ragan, and Randall (2004) found that poor support from parents was associated with greater levels of depression. Another longitudinal study on support and conflict found that lower levels of support, and greater levels of conflict were related to depression both concurrently and one year later (Sheeber, Hops, Alpert, Davis, & Andrews, 1996). A third study on Turkish university students found low family cohesion to be a significant correlate of suicide probability among college students, even after a multitude of variables such as mood and academic performance were controlled for (Gencoz & Or, 2006). Higher levels of family support and cohesion were also found to be related to lower levels of depression and suicide ideation in a study of African Americans attending a historically black college (Harris & Molock, 2000).

Other constructs similar to conflict and cohesion, such as perceptions of parental alienation and trust, have also been shown to be associated with depression. A study by Pavlidis and McCauley (2001) assessing the differences in mother-child interactions between clinically depressed and non depressed adolescents found that a main difference between depressed and non depressed groups was the lower perception of trust and higher perception of alienation in the adolescent-mother relationship for the clinically depressed group. These results correlated well

with observational recordings for individuals without externalizing behavior problems, but did not correlate well for individuals with externalizing behavior problems. This study was useful in that it used different methodologies for assessing parent-child interactions, including survey and observational research, thereby increasing the scope of the findings. Another study by Essau (2004) which looked at 1035 adolescents randomly selected from 36 schools in Germany found similar results, where scores on parental alienation were significantly higher, and scores on parental trust were significantly lower for depressed adolescents compared to non-depressed adolescents.

Papini and Roggman (1992) studied parental trust, alienation, and communication in terms of attachment theory in middle school children. Attachment theory suggests that a healthy emotional relationship between the parent and child could provide a supportive framework within which a child can develop and master new challenges associated with developmental and environmental transitions (Papini & Roggman, 1992). The study by Papini and Roggman (1992) focused on the transition from elementary to middle school, and found that students with higher levels of parental attachment (corresponding to higher trust and communication levels and lower alienation levels), experienced lower levels of depression.

In accordance with attachment theory, the present study seeks to determine the relationship of two parental attachment variables, trust and alienation, to depressed mood among college students. The transition to college constitutes a significant change in environmental conditions, and requires a great deal of emotional maturation, where, according to attachment theory, a supportive parental relationship may help ease the transition. Accordingly, higher levels of parental attachment may be related to lower levels of depressed mood. In addition to attachment, this study seeks to address the relationship between how academically successful

parents perceive their children to be, and the level of depressed mood in college students. The constructs of self-competence and self worth and their relation to academics have been widely researched, where an individual's own perceptions of their performance has been correlated with motivational and academic achievement variables (Wong, Wiest & Cusick, 2002). In addition, student perceptions of parental attachment have been correlated with academic achievement variables (Wong, Wiest & Cusick, 2002). However, few studies have correlated parental perceptions of academic achievement with depressed mood. As such, this study will provide a good next step in understanding the correlates of depression by extending the current literature to include parental perceptions of the academic competency of their children in addition to attachment variables.

All in all, I will be testing the following 3 hypotheses in order to determine the relationship between parental attachment variables and academic perceptions, and depressed mood in college students.

H1: Perceived alienation in the parent-child relationship will be positively correlated with depressed mood.

H2: Perceived trust in the parent-child relationship will be negatively correlated with depressed mood.

H3: Higher levels of perceived parental pride and approval in academic accomplishments will be correlated with lower levels of depressed mood in college students.

## METHOD

### Participants

In this study, participants were obtained through non random convenience sampling and snowballing methods. Initially, researchers contacted their friends and acquaintances who lived in close proximity to them either in person or through email, and requested their participation in the study. Additional participants were obtained by asking participants to provide the name and email address of one or more of their friends who matched the criteria of the study and would be willing to complete the survey. These individuals were later contacted by email to request participation. In this way, purposive sampling techniques were used in order to specifically target certain sub-populations that were required by members of the research team.

The research team conducted power analyses using G-Power, an internet based statistical software, to determine the number of participants that would be required for the study, and determined that for each independent samples t test hypothesis with a medium effects size of  $d=0.5$ , a sample of  $n=102$  ( $n=51$  per group) would be required for an alpha level at  $\alpha = 0.05$  and statistical power ( $1-\beta$ ) of 0.80. For each correlation hypothesis with a medium correlation coefficient of  $r=.3$ , a sample of  $n=82$  would be required for an alpha level at  $\alpha = 0.05$  and statistical power ( $1-\beta$ ) of 0.80. The alpha level of 0.05 that was used in this study indicates the probability of detecting a *Type 1 error*, which occurs when an effect is found where none really exists. The statistical power of 0.80 indicates the probability of detecting an effect that is actually present. It is defined as  $1 - \beta$ , where  $\beta$  refers to the *Type 2 error*, which occurs when a significant effect is not found when it is actually present.

In order to obtain representative samples to evaluate the hypotheses of the entire research team, which included the subgroups of Christians, Jewish individuals, Caucasians, Minorities, on

campus residents, and off campus students, a total sample size of approximately  $n=350$  was estimated to be required. In order to test the three correlational hypotheses presented in this paper, a sample of  $n = 82$  was necessary according to the power analysis. However, due to the convenience sampling method and the absence of an incentive for participation, researchers were ultimately able to obtain a sample of  $n = 65$  participants from the target population of college students.

Tables 1.1-1.7 show the demographic characteristics of the sample obtained by this study. The sample consisted largely of Juniors (20%) and Seniors (47.7%) in college, with the remaining 21.5% of participants being underclassmen, and 10.8% graduate school students (see Table 1.1). In terms of the racial distribution, almost half (47.7%) of the sample was Caucasian, while 12.3% was African American, 15.4% Asian American, 4.6% Asian, 1.5% Bi-racial, and 18.5% other (see Table 1.2). The majority of participants who classified themselves as “other” were of Arab descent. In this sample, 98.5% of the participants were single, while only 1.5% were married (See Table 1.3). The sample was female-biased, where 66.2% of the respondents were female, and only 33.8% were male (see Table 1.4). The grade point averages (GPA) of the respondents were skewed towards the upper end of the spectrum, with the lowest reported GPA being a C, and the vast majority of GPAs (83.2%) fell in the A+ to B range (see Table 1.5). In terms of a family history of depression, 78.5% of the participants did not report any family history of depression, while 20% did (see Table 1.6). Lastly, in terms of actual depressed status based on the Beck Depression Inventory (BDI) cutoff scores, the vast majority of participants (73.8%) fell into the “not depressed” range, while 21.5% of participants fell into the mild to moderate depression range, and 4.6% fell into the moderate to severe depression range (see Table 1.7).



## Measures

In order to measure depression in college students, the Beck Depression Inventory (BDI) was used. The BDI is a measure created to assess the severity of depression among both clinical and normal samples. The measure contains 21 items specifically designed to relate the experience of depression to 6 of the required symptoms for DSM-IV-TR diagnosis. Each item contains four statements that indicate increasing severity of an individual symptom of depression. The 21 items are measured on a 4 point scale ranging from 0 to 3. The range of scores possible is from 0 to 63, where higher scores indicate a greater severity of depression. For details on scoring, see appendix C. The clinical cutoff points can vary depending on the base characteristics of the individuals tested, but a general classification considers a total score of 0-9 to indicate no depression, 10-18 to indicate mild to moderate depression, 19-29 to indicate moderate to severe depression, and 30-63 to indicate severe depression. The BDI has been found to be reliable with internal consistency estimates ranging from .73 to .92 with a mean of .86 (Beck, Steer, & Garbin, 1988). The BDI has also been found to exhibit concurrent validity, and has been correlated with other measures of depression including the Hamilton Psychiatric Rating Scale for Depression (.73) and the MMPI Depression Scale (.76) (Groth-Marnat, 1990).

Perceived alienation and trust was measured by the *Inventory of Parent and Peer Attachment* (see appendix B), a scale that uses 28 parent items to measure the constructs of trust, alienation, and communication in parent-child relationships. The alienation subscale asks questions about anger and interpersonal isolation (ex. I don't get much attention at home), while the trust subscale seeks to find out about understanding and respect in the parent-child relationship (ex. My parents respect my feelings). In total, there are 12 items that correspond to parental trust and 12 items that correspond to parental alienation in the IPPA, with 3 items

inversely overlapping between the two. The IPPA uses a 5 point Likert scale that ranges from almost never or never true to almost always or always true with corresponding numerical values ranging from 0 to 4. The 12 items on parental alienation yield a possible range of scores from 0 to 48, where a higher score indicates higher levels of perceived parental alienation. The 12 items that are included in the alienation subscale are items 6, 7, 9, 10, 11, 15, 17, 18, 19, 20, 23, and 24 on the IPPA (edited) measure used in this study (see appendix B). The 12 items on parental trust also yield a possible range of scores from 0 to 48, where higher scores indicate higher levels of perceived parental trust. Items 1, 2, 3, 4, 9, 12, 13, 16, 17, 19, 21, and 22 on the IPPA (edited) measure in the appendix were used to test perceived parental trust. For details on scoring, see appendix C. The test retest reliability for the IPPA has been found to be high, ranging from .86 to .93 over a three week period. The IPPA has also been found to correlate with measures of related constructs such as the cohesion subscale of the Family Environment Scale (a relationship of .56 was found), demonstrating high concurrent validity (Essau, 2004).

The next construct, perceived parental approval and pride in academic accomplishments, was measured by 4 self-designed, non-validated questions that were measured on a five point scale that corresponded to the scale used by the IPPA. These four items were embedded within the IPPA (edited), and were included as items 5, 8, 14, and 25 (see appendix). The items aimed to measure how much students believed that their parents were proud of them in terms of academics (ex. My parents are proud of my academic performance in college). The possible range of scores for parental pride and approval in academic accomplishments was 0 to 20, with higher scores indicating higher levels of perceived parental pride and approval in academics.

## Procedures

In order to recruit participants for this study, each of the five researchers, who were enrolled in an advanced psychology research lab at the University of Michigan, approached a minimum of twenty college students over the age of 18. Some of the participants were previously known to the researchers, while others lived or worked in close proximity to them. Due to the time limitations, the length of the questionnaire, and the lack of resources to pay for participant recruitment or incentives, the researchers decided to use a convenience sample. This sample was chosen based on proximity and affiliation, so as to allow participants ample time to complete the questionnaire while ensuring its timely return back to the researcher. Additional participants were obtained through snowballing, where the researchers requested the names and contact information of other individuals known to the initial participants who matched the criteria of the study and who would be willing to participate.

When recruiting participants, each researcher approached the participant either in person or through e-mail and asked if they were willing to fill out a 45 minute questionnaire on depression and associated characteristics. The researcher also told them that they would have 24 hours to complete the questionnaire and could return the completed questionnaire to the researcher at a convenient location or by e-mail.

For in-person recruitment, agreeable participants were given a brief introduction to the study, revealing the general areas that would be covered in the questionnaire. Participants' questions and concerns were then answered, after which the researcher asked the participants to read and sign the consent form (see appendix A). After the consent form was signed and collected, the researcher requested that the participant honestly answer the questions in a comfortable setting. Researchers then made an arrangement for the collection of the completed

questionnaire. Questionnaire collection was done by arranging a time and place convenient to the participant to meet either later that day or the following day. The researcher then thanked the participant for his/her participation.

For e-mail recruitment, all initial introductory information was included in the email, along with additional reassurances on confidentiality, where participants were told not to write their names on the participant consent forms if they were going to be returned through email, and that their emails would be deleted immediately after their questionnaires were printed.

Participants were instructed to either highlight or underline their responses and to email the questionnaire back to the researcher who contacted them within 24 hours. Participants were also notified that by replying to the email with an attached completed questionnaire, they were agreeing to all the terms put forth by the informed consent document, including voluntary participation and the confidentiality of the responses.

## **RESULTS**

In order to test the first hypothesis, that depressed mood and perceived parental alienation were positively correlated, the relationship between depressed mood (as measured by the BDI) and perceived parental alienation (as measured by the Parent Alienation subscale of the IPPA) was investigated using Pearson product-moment correlation coefficient. The hypothesis was supported as there was a strong, positive correlation between the two variables,  $r = .697$ ,  $n = 60$ ,  $p < .0005$ , with high levels of depressed mood associated with higher levels of perceived parental alienation (refer to Table 2.1). This relationship was also demonstrated by Figure 1, where alienation scores showed a clear positive relationship with BDI scores.

To test the second hypothesis that depressed mood and perceived parental trust were negatively correlated, the relationship between depressed mood (as measured by the BDI) and perceived parental trust (as measured by the Parent Trust subscale of the IPPA) was investigated using Pearson product-moment correlation coefficient. The hypothesis was supported as there was a strong, negative correlation between the two variables,  $r = -.541$ ,  $n = 59$ ,  $p < .0005$ , with high levels of depressed mood associated with lower levels of perceived parental trust (refer to Table 2.2). This relationship was also demonstrated by Figure 2, where trust scores showed a clear negative relationship with BDI scores.

To test the third hypothesis, that depressed mood and perceived parental pride and approval in academic accomplishments were negatively correlated, the relationship between depressed mood (as measured by the BDI) and perceived parental pride and approval in academic accomplishments (as measured by 4 self-constructed questions) was investigated using Pearson product-moment correlation coefficient. The hypothesis was supported as there was a medium, negative correlation between the two variables,  $r = -.319$ ,  $n = 61$ ,  $p < .012$ , with high levels of depressed mood associated with lower levels of perceived parental academic approval and pride (refer to Table 2.3). This relationship was also demonstrated by Figure 3, where academic pride scores were moderately negatively correlated with BDI scores.

## DISCUSSION

This study presented three main hypotheses. The first hypothesis, that perceived parental alienation would be positively correlated with depressed mood was supported by the data. This finding is largely consistent with previous literature which shows that perceived alienation scores on the IPPA are significantly higher for depressed individuals compared to non-depressed

individuals (Essau, 2004; Pavlidis & McCauley, 2001). The present study used a correlation rather than an independent samples t test design (which was often used by previous studies) because the researchers had limited access to clinically depressed individuals. In this sample, only 17 individuals had scores which ranged in the mild to severe depression range according to the cutoff scores of the BDI, and 14 of these individuals were experiencing only mild depression. The small available sample would have likely made an independent samples t test design analysis produce statistically insignificant results. However, by using a Pearson correlation, the results were highly significant, with a correlation coefficient of  $r = 0.697$ . In terms of the percentage of variance, in this study, perceived parental alienation helps explain nearly 48.6% of the variance in respondent's scores on the Beck Depression Inventory.

The second hypothesis, that perceived parental trust would be negatively correlated with depressed mood was also strongly supported by the data. This finding is also consistent with the previous literature, which found that perceived parental trust scores were higher in individuals who were not depressed compared to those that were depressed (Essau, 2004; Pavlidis & McCauley, 2001). The correlation coefficient of  $r = -0.541$  results in a percentage variance of 29.2%. This means that perceived parental trust helps explain 29.2% of the variance in responses on the BDI. Perceived parental alienation and trust were measured by the same instrument, the Inventory of Parent and Peer Attachment developed by Armsden and Greenberg (1987). The IPPA Parent Attachment score includes three subscales, parental alienation, parental trust, and parental communication. The former two were assessed in this study. Some previous literature has correlated overall attachment scores, including all three subscales, and found that higher parental attachment levels were associated with lower levels of depression. This finding is also

consistent with the findings of the present study, even though the communication subscale was not used.

The final hypothesis, that perceived parental pride and approval in academic accomplishments would be negatively correlated with depressed mood was also supported, though to a lesser extent. The correlation coefficient of  $r = -0.319$  shows a medium rather than a large correlation. This is also evident when comparing Figures 1 and 2, which show the correlations of BDI score to parental alienation and trust respectively to Figure 3, which shows the correlation of BDI score to parental pride and approval in academic accomplishments. The points in Figure 3 are far more dispersed, and the pattern and direction of correlation are much more difficult to see than those in Figures 1 and 2. In terms of the percentage of variance, parental pride and approval in academic accomplishments only helps explain 10.1% of the variance in responses on the BDI. There is little prior research that has correlated these two variables directly, but conceptually, the relationship makes sense. Parents of college students are likely to place a moderate to heavy emphasis on academics, particularly in a reputable institution such as the University of Michigan. Not living up to parental expectations may then be related to experiencing higher levels of depressed mood.

Overall, this study contributes to the literature on parental attachment and depression by providing additional support for the relationship between the two variables. In addition, this study makes a theoretical contribution by analyzing the relationship between parental pride and approval in academics and depressed mood. It shows that, for college students, how parents perceive their academic competence may be important to their psychological health. However, the theoretical contributions of this study need to be discussed with caution. There were a great many limitations to the present study that largely reduce the validity and generalizability of the

findings to any other population. These limitations span the entire research process, from conception to completion. The first limitation of the study involves the hypotheses. Barker, Pistrang and Elliott (2002) point out that research should be able to teach the researcher something new, not merely confirm relationships already known to the researcher. The hypotheses presented in this study were largely based on previous research or had strong conceptual and logical grounding. Thus, from the very start, the findings were already known, thereby violating the very intention of research—to discover something new. Another major limitation of the hypotheses is that they were all correlational in nature, which means that causality could not be established from the study. In fact, in terms of the variables used in the study, the directionality of influence is a major area under question. It is possible that low parental attachment would lead to depression, and it is equally possible that depression could lead to low parental attachment as a result of emotional withdrawal (Essau, 2004). As such, the fact that directionality cannot be assessed by this study is a major limitation of the research.

In addition, another limitation of the study involved the sampling procedures and participants. Participants were obtained through non random convenience sampling and snowballing, which led to a biased sample. The sample was female biased, and included more upperclassmen than underclassmen. In addition, the racial distribution was largely unrepresentative as almost half the sample was Caucasian. Not only was the sample unrepresentative, the final sample obtained was also very small ( $n=65$ ) due to limited time for data collection. Thus, due to the small, unrepresentative sample, the findings of this study have very low generalizability to any population other than the sample studied.

The measures used in this study were also somewhat flawed. The BDI is an established measure of depression, but has limitations in how well it corresponds to the DSM criteria for



diagnosing depression. For example, the BDI only covers six of the nine criteria put forth by the DSM to diagnose depression (Groth-Marnat, 1990). The IPPA, which was used to measure parental trust and alienation, has been found to be a valid and reliable measure of attachment. However, in this study, only two of the three subscales were used, thereby calling the validity of the items used into question. In terms of the measure for parental pride and approval in academic accomplishments, the four self designed questions had no established validity or reliability, and no internal consistency analyses were conducted within the study. Consequently, the measure may not be reliable. In terms of validity, the items used appear to have face validity, but may not have content or construct validity. The issues that may diminish the validity of the self-constructed questions include not having adequate coverage of the construct being measured, poor, unspecific, or confusing question wording, and implicit premises guiding the construction of the questions.

Other limitations involved participant response issues, including acquiescence, where participants may have had a tendency to agree more than disagree with statements. This was partially combated by using a few item reversals. A more pressing concern may have been social desirability, where participants may not have wanted to seem depressed, or may not have wanted to reveal unhealthy family circumstances. Other participant response issues included participants not finishing the questionnaire, indicating the same answer for all items on a scale, and not reading the instructions. Not reading the instructions may have invalidated the results as some participants may not have used the correct time frame for responses which were mentioned in the instructions. A final limitation of the study was the lack of methodological pluralism, as only one scale was used to measure each construct. Ultimately, in spite of the limitations, the relationship between family and depression is important to understand as family is a central part of almost

every individual's life. Knowing what interaction patterns are associated with depressed mood can help provide avenues for intervention research to target which may help improve the quality of life for many individuals.

## REFERENCES

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders*. (4th Ed.) Washington, DC: American Psychiatric Association.
- Armsden, G., & Greenberg, M. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16, 427-454.
- Barker, C., Pistrang, N. & Elliott, R. (2002). *Research methods in clinical psychology* (2nd ed). West Sussex: John Wiley & Sons.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77- 100.
- Essau, C. (2004). The association between family factors and depressive disorders in adolescents. *Journal of Youth and Adolescence*, 33, 365-372.
- Gençöz, T., & Or, P. (2006). Associated factors of suicide among university students: Importance of family environment. *Contemporary Family Therapy: An International Journal*, 28(2), 261-268.
- Groth-Marnat, G. (1990). *The handbook of psychological assessment* (2<sup>nd</sup> ed.). New York: John Wiley & Sons.
- Harris, T. L., & Molock, S. D. (2000). Cultural orientation, family cohesion and family support in suicide ideation and depression among african american college students. *Suicide and Life-Threatening Behavior*, 30(4), 341-353.

- Papini, D. & Roggman, L. (1992). Adolescent perceived attachment to parents in relation to competence, depression, and anxiety: A longitudinal study. *The Journal of Early Adolescence*, 12, 420-440.
- Kessler, R. C. (2002). Epidemiology of depression. *Handbook of Depression*, 23-42.
- Murray, C. J. L., & Lopez, A. D. (Eds.). (1996). *The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020*. Cambridge, MA: Harvard University Press.
- National Institute of Mental Health. (2007). Depression: What is a depressive disorder?. [www.nimh.nih.gov](http://www.nimh.nih.gov). Accessed: September 24, 2007.
- Pavlidis, K., & McCauley, E. (2001). Autonomy and relatedness in family interactions with depressed adolescents. *Journal of abnormal child psychology*, 29(1), 11-21.
- Robins LN, Regier DA (Eds). *Psychiatric Disorders in America, The Epidemiologic Catchment Area Study*, 1990; New York: The Free Press.
- Sheeber, L., Hops, H., Alpert, A., Davis, B., & Andrews, J. (1997). Family support and conflict: Prospective relations to adolescent depression. *Journal of abnormal child psychology*, 25(4), 333-344.
- Stice, E., Ragan, J., & Randall, P. (2004). Prospective relations between social support and depression: Differential direction of effects for parent and peer support? *Journal of abnormal psychology*, 113(1), 155-159.

Wong, E., Wiest, D., & Cusick, L. (2002). Perceptions of autonomy support, parent attachment, competence and self-worth as predictors of motivational orientation and academic achievement: An examination of sixth-and ninth-grade regular education students. *Adolescence*, 37, 255-267.

## **APPENDIX A**

### **Consent Form A Study of Aspects of Depression**

You have been asked to participate in the research project described below. You have been asked to participate in this study because you are a student at the University of Michigan who can provide us with valuable information relating to the topic of depression.

Depression is one of the most common psychological disorders facing our society, one that produces harmful effects on not only the individual suffering the disorder but his or her family and friends as well. Depression is a disorder affecting millions of Americans each year which produces symptoms ranging from a depressed mood and loss of enjoyment in things typically found to be enjoyable, to attempted and successful suicide. Though much has been studied with regards to this topic, due to the diverse nature of the disorder and the individuals it affects, it is important to gain as much knowledge as is possible in order to better understand and treat the disorder. As a result this study seeks to uncover the effects that many aspects of life and culture have on the level of depressed mood an individual experiences. This study will focus on the aspects of religion, family, race, and living arrangements, as well as resiliency, and how they each relate to one's mood.

If you choose to participate in this study you will be asked to fill out a single questionnaire consisting of questions regarding the above mentioned areas of interest. You have the freedom to complete the questionnaire in your own time and in the location of your choice. We do ask that you complete the questionnaire in one session, and that you return the questionnaire to the researcher within 48 hours. Your full participation in this study will consist of your agreement to participate, your completion of the questionnaire, and finally the returning of the questionnaire to the researcher. The time required to complete the questionnaire will be approximately 40 minutes.

Some of the questions that you will be asked to complete may be seen as sensitive. You will be asked questions regarding religion and faith, alcohol use and family interactions. Though some of these questions may be perceived as difficult or uncomfortable to some, there is little or no risk involved in your participation in this research project.

Your participation in this study will be beneficial in many ways. Your participation will be personally beneficial in that you will have the opportunity to think critically about important issues of faith, family, and lifestyle, which may lead to a better understanding of one's self. Your participation in this project will also provide valuable and much needed information to the researchers which could contribute to the body of knowledge concerning depression, potentially allowing psychologists to better understand the disorder itself as well as identify those at risk for the development of the disorder. The information obtained in this study may lead to future research which could provide psychologists with information valuable in the effort to more efficiently and effectively treat those individuals already suffering from Depression.

Your participation in this study is completely confidential. As this study is anonymous, your name will not be linked to any of the information you provide in participating. To ensure this, your questioner will be labeled with a random identification number, and you will not provide the researchers with your name at any time. Individual responses to questionnaires will not be shared with anyone outside the research team, and results will be provided unlinked to any personal identity. In addition, all consent forms and responses to questionnaires will be destroyed after one week.

Your participation in this study is voluntary. You have the right to refuse to participate in this study. If you do choose to participate, you have the right to discontinue your participation at any time free of penalty. As you complete the questionnaire you may choose to skip any question you would prefer to leave unanswered.

If you have any questions about the above described research project or the conditions of your participation, please contact xxx.

---

By signing this document you consent to participating in the above described study conducted at the University of Michigan. You verify that you are at least 18 years of age, that you have read the above consent form, and that all of your questions have been answered.

I have read and understand the above information. I understand that my participation in this study is completely voluntary and that I have the right to discontinue my participation at any time without penalty.

---

Participants Signature

---

Date

## APPENDIX B

The following scale will ask you about your feelings, attitudes, behaviors, and experiences in the areas of family, home, and religion. Please try to answer the following questions truthfully and to the best of your ability. The information you provide will be important in establishing the possible correlates of depression and will be invaluable to our research.

### Demographics

The following questions ask you about general demographic information. Please circle or fill in the appropriate response for each item.

1. What is your grade level? Circle one.

Freshman          Sophomore          Junior          Senior          Grad/ Professional    Other: \_\_\_\_\_

2. Age: \_\_\_\_\_

3. I identify myself as: (Circle one.)

Native American    Hispanic    Hispanic American    Asian    Asian American

Caucasian (non Hispanic)    African American (non Hispanic)

Bi/ Multi Racial    (Please name: \_\_\_\_\_)    Other: \_\_\_\_\_

4. What is your marital status? Circle one.

Single          Married          Separated          Divorced          Widowed

5. What is your gender? Circle one.

Female          Male

6. What is your current residence as a student? Circle one.

On Campus          Off Campus

7. How long have you lived in your current residence as a student? Circle one.

Less than one year          More than one year          More than two years          More than three years

8. Are you working? Circle one.

Yes, Full time          Yes, Part time          No

9. Where are you currently living? Circle One.

House          Apartment          Residence Hall/ Dormitory          Fraternity/ Sorority

Other: \_\_\_\_\_



10. Who are you living with currently? Circle one.

With Roommate (s)

Alone

With Parent (s)

With Spouse

With Children

Other: \_\_\_\_\_

11. What is your approximated Cumulative GPA? Circle one.

A+   A   A-   B+   B   B-   C+   C   C-   D+   D   D-   F

12. How many credits are you taking currently? Circle one.

Full Time (12+ credits)

Part Time (1-11 credits)

13. Is there a history of depression in your family? Circle One.

Yes

No

The following 21 questions ask you about your feelings, attitudes and actions over the past week. In answering these questions, think about each item carefully and give the answer out of the group of 4 items that best reflects how you have been feeling during the past week. Remember, you can stop at any time and skip any question.

1. ☐ I do not feel sad  
☐ I feel sad  
☐ I am sad all the time and I can't snap out of it  
☐ I am so sad or unhappy that I can't stand it
2. ☐ I am not particularly discouraged about the future  
☐ I feel discouraged about the future  
☐ I feel I have nothing to look forward to  
☐ I feel that the future is hopeless and that things cannot improve
3. ☐ I do not feel like a failure  
☐ I feel I have failed more than the average person  
☐ As I look back on my life, all I can see is a lot of failures  
☐ I feel I am a complete failure as a person
4. ☐ I get as much satisfaction out of things as I used to  
☐ I don't enjoy things the way I used to  
☐ I don't get real satisfaction out of anything anymore  
☐ I am dissatisfied or bored with everything
5. ☐ I don't feel particularly guilty  
☐ I feel guilty a good part of the time  
☐ I feel quite guilty most of the time  
☐ I feel guilty all of the time
6. ☐ I don't feel I am being punished  
☐ I feel I may be punished  
☐ I expect to be punished  
☐ I feel I am being punished
7. ☐ I don't feel disappointed in myself  
☐ I am disappointed in myself  
☐ I am disgusted with myself  
☐ I hate myself
8. ☐ I don't feel I am any worse than anybody else  
☐ I am critical of myself for all my weakness or mistakes  
☐ I blame myself all the time for my faults  
☐ I blame myself for everything bad that happens
9. ☐ I don't have any thoughts of killing myself  
☐ I have thoughts of killing myself, but I would not carry them out  
☐ I would like to kill myself  
☐ I would kill myself if I had the chance
10. ☐ I don't cry any more than usual  
☐ I cry more now than I used to  
☐ I cry all the time now  
☐ I used to be able to cry, but now I can't cry even though I want to

11. ☐ I am no more irritated by things than I ever am  
☐ I am slightly more irritated now than usual  
☐ I am quite annoyed or irritated a good deal of the time  
☐ I feel irritated all the time now
12. ☐ I have not lost interest in other people  
☐ I am less interested in other people than I used to be  
☐ I have lost most of my interest in other people  
☐ I have lost all of my interest in other people
13. ☐ I make decisions about as well as I ever could  
☐ I put off making decisions more than I used to  
☐ I have greater difficulty in making decisions than before  
☐ I can't make decisions at all anymore
14. ☐ I don't feel that I look any worse than I used to  
☐ I am worried that I am looking old or unattractive  
☐ I feel that there are permanent changes in my appearance that make me look unattractive  
☐ I believe that I look ugly
15. ☐ I can work about as well as before  
☐ it takes an extra effort to get started at doing something  
☐ I have to push myself very hard to do anything  
☐ I can't do any work at all
16. ☐ I can sleep as well as usual  
☐ I don't sleep as well as I used to  
☐ I wake up 1-2 hours earlier than usual and find it hard to get back to sleep  
☐ I wake up several hours earlier than I used to and cannot get back to sleep
17. ☐ I don't get more tired than usual  
☐ I get tired more easily than I used to  
☐ I get tired from doing almost anything  
☐ I am too tired to do anything
18. ☐ My appetite is no worse than usual  
☐ My appetite is not as good as it used to be  
☐ My appetite is much worse now  
☐ I have no appetite at all anymore
19. ☐ I haven't lost much weight, if any, lately  
☐ I have lost more than five pounds  
☐ I have lost more than ten pounds  
☐ I have lost more than fifteen pounds
20. ☐ I am no more worried about my health than usual  
☐ I am worried about physical problems such as aches and pains, or upset stomach, or constipation  
☐ I am very worried about physical problems and it's hard to think of much else  
☐ I am so worried about my physical problems that I cannot think about anything else
21. ☐ I have not noticed any recent change in my interest in sex  
☐ I am less interested in sex than I used to be  
☐ I am much less interested in sex now  
☐ I have lost interest in sex completely

The next set of questions discusses the effects that living arrangements have on student's level of life satisfaction. Each item has five responses, strongly agree, agree, neutral, disagree, and strongly disagree, or N/A if the response does not apply. Please circle the best response that applies. For the last three questions in this section, there is a measurement of frequency so please circle the best response that applies. Some questions may not apply to you, feel free to skip any question or circle N/A.

1. On campus living can be a distracter

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

2. . Off campus living can be a distracter.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

3. I feel less anxiety/ stress while living off campus.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

4. I am a more productive student living off campus.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

5. I am a more productive student living on campus.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

6. My academic grades have been negatively affected by my job.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

7. It is difficult obtaining or keeping a job while attending school.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

8. My academic grades have been negatively affected by my responsibilities in having a family.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

9. I feel more anxiety/ stress because I have a job while being a student.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

10. I feel a higher level of anxiety/stress because of my responsibilities as a parent while being a student.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

11. Being a student affects my level of life satisfaction negatively.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

12. Having a roommate has had a positive affect on my life style while being a student.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree      N/A

13. I prefer to live with a roommate.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

14. I prefer to live alone.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

15. I prefer to work while being a student.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

16. My roommate is a distracter.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

17. My job is a distracter.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

18. Work negatively affect my academics

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

19.. My roommate(s) is a distracter.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

20. I feel more anxiety/ stress while living on campus.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

21. I feel less anxiety living on campus.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
----------------	-------	---------	----------	-------------------	-----

22. At what age did you first use alcohol?

Never	Under 21	21-25	25-30	30 or Older
-------	----------	-------	-------	-------------

23. What is the average number of drinks consumed in a week?

More than 20	Less than 20	More than 10	Less than 10	Less than 5	None
--------------	--------------	--------------	--------------	-------------	------

24. Within the last year how often have you consumed alcohol?

Never	Once a year	Once a Month	Once a Week	More than twice a Week
-------	-------------	--------------	-------------	------------------------

The following 20 questions will ask you about aspects of your personal outlook on your religious experience as well as your personal religious practice. Please read each item carefully and answer each one truthfully to the best of your ability. Excluding question number six, your possible responses follow the form: (1) I strongly disagree, (2) I tend to disagree, (3) I am not sure, (4) I tend to agree, (5) I strongly agree.

**I would identify myself as: (circle one)**

**(Catholic) (Non-catholic Christian) (Religiously Jewish) (Other)**

1) I enjoy reading about my religion.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

2) I go to church/synagogue because it helps me to make friends.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

3) It doesn't much matter what I believe so long as I am good.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

4) Sometimes I have to ignore my religious beliefs because of what people might think of me.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

5) It is important to me to spend time in private thought and prayer.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

6) I would prefer to go to church/synagogue:

- (1) a few times a year or less
- (2) once every month or two
- (3) two or three times a month
- (4) about once a week
- (5) more than once a week

7) I have often had a strong sense of God's presence.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

8) I pray mainly to gain relief and protection.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

9) I try hard to live **all** my life according to my religious beliefs.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

10) What religion offers me most is comfort in times of trouble and sorrow.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

11) My religion is important because it answers many questions about the meaning of life.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

12) I would rather join a scriptural study group than a church/synagogue social group.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

13) Prayer is for peace and happiness.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

14) Although I am religious, I don't let it affect my daily life.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

15) I go to church/synagogue mostly to spend time with my friends.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

16) My whole approach to life is based on my religion.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

17) I go to church/synagogue mainly because I enjoy seeing people I know there.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

18) I pray mainly because I have been taught to pray.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

19) Prayers I say when I'm alone are as important to me as those I say in church/synagogue.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

20) Although I believe in my religion, many other things are more important in life.

I strongly disagree      I tend to disagree      I am not sure      I tend to agree      I strongly agree

The following 25 items ask questions about your relationship with your parents. Each item consists of a statement with five response options: almost always or always true, often true, sometimes true, rarely true, and almost never or never true. Please read each statement and circle the one response that best matches how you feel about the statement.

1. My parents respect my feelings.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

2. I feel my parents are successful as parents.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

3. I wish I had different parents.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

4. My parents accept me as I am.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

5. My parents approve of my academic choices in college.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

6. I have to rely on myself when I have a problem to solve.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

7. Talking over my problems with my parents makes me feel ashamed or foolish.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

8. My parents are proud of my academic accomplishments in college.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

9. My parents expect too much from me.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

10. I get upset easily at home.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

11. I get upset a lot more than my parents know about.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

12. When we discuss things, my parents consider my point of view.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

13. My parents trust my judgment.

almost always or always true    often true    sometimes true    seldom true    almost never or never true



14. My parents approve of my academic performance in college.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

15. My parents have their own problems, so I don't bother them with mine.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

16. My parents help me to understand myself better.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

17. I feel angry with my parents.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

18. I don't get much attention at home.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

19. My parents understand me.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

20. I don't know whom I can depend on these days.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

21. When I am angry about something, my parents try to be understanding.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

22. I trust my parents.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

23. My parents don't understand what I'm going through these days.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

24. I feel that no one understands me.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

25. My parents are proud of my academic performance in college.

almost always or always true    often true    sometimes true    seldom true    almost never or never true

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes into two groups, but people differ on how important their *ethnicity* is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in:

In terms of ethnic group, I consider myself to be \_\_\_\_\_

Use the numbers given below to indicate how much you agree or disagree with each statement.

- | 4: Strongly<br>Agree  | 3: Somewhat<br>Agree | 2: Somewhat<br>Disagree | 1: Strongly<br>Disagree |
|---|----------------------|-------------------------|-------------------------|
| 1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs. |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 2. I am active in organizations or social groups that include mostly members of my own ethnic group.                  |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 3. I have a clear sense of my ethnic background and what it means for me.   |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 4. I like meeting and getting to know people from ethnic groups other than my own.                                    |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 5. I think a lot about how my life will be affected by my ethnic group membership.                                    |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 6. I am happy that I am a member of the group I belong to.  |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 7. I sometimes feel it would be better if different ethnic groups didn't try to mix together.                         |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 8. I am not very clear about the role of my ethnicity in my life.   |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 9. I often spend time with people from ethnic groups other than my own.   |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |
| 10. I really have not spent much time trying to learn more about the culture and history of my ethnic group.          |                      |                         |                         |
| Strongly agree  | Somewhat agree       | Somewhat disagree       | Strongly disagree       |

11. I have a strong sense of belonging to my own ethnic group.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

12. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

13. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

14. I have a lot of pride in my ethnic group and its accomplishments.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

15. I don't try to become friends with people from other ethnic groups.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

16. I participate in cultural practices of my own group, such as special food, music, or customs.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

17. I am involved in activities with people from other ethnic groups.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

18. I feel a strong attachment towards my own ethnic group.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

19. I enjoy being around people from ethnic groups other than my own.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

20. I feel good about my cultural or ethnic background.

Strongly agree                      Somewhat agree                      Somewhat disagree                      Strongly disagree

Write in the number that gives the best answer to each question.

21. My ethnicity is

- (1) Asian, Asian American, or Oriental
- (2) Black or African American
- (3) Hispanic or Latino
- (4) White, Caucasian, European, not Hispanic
- (5) American Indian
- (6) Mixed; parents are from two different groups
- (7) Other (write in): \_\_\_\_\_

22. My father's identity is (use numbers above).

23. My mother's identity is (use numbers above).

Following is a list of experiences which many people have some time or other. Please indicate for each experience how much it has been a part of your life over the past month. Put a “1” in the box provided next to an experience if it was not at all part of your life over the past month; “2” for an experience that was only slightly part of your life over that time; “3” for an experience that was distinctly part of your life; and “4” for an experience that was very much part of your life over the past month.

#### Intensity of Experience over the Past Month

- 1 = not at all part of my life
- 2 = only slightly part of my life
- 3 = distinctly part of my life
- 4 = very much part of my life

#### 1. Disliking your daily activities

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 2. Disliking your work

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 3. Ethnic or racial conflict

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 4. Conflicts with in-laws or boyfriend's/girlfriend's family

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 5. Being let down or disappointed by friends

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 6. Conflicts with supervisor(s) at work

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 7. Social rejection

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 8. Too many things to do at once

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 9. Being taken for granted

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

#### 10. Financial conflicts with family members

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

11. Having your trust betrayed by a friend

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

12. Having your contributions overlooked

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

13. Struggling to meet your own standards of performance and accomplishment

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

14. Being taken advantage of

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

15. Not enough leisure time

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

16. Cash flow difficulties

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

17. A lot of responsibilities

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

18. Dissatisfaction with work

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

19. Decisions about intimate relationship(s)

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

20. Not enough time to meet your obligations

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

21. Financial burdens

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

22. Lower evaluation of your work than you think you deserve

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

23. Experiencing high levels of noise

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

24. Lower evaluation of your work than you hoped for

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

25. Conflicts with family member(s)

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

26. Finding your work too demanding

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

27. Conflicts with friend(s)

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

28. Trying to secure loans

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

29. Getting “ripped off” or cheated in the purchase of goods

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

30. Unwanted interruptions of your work

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

31. Social isolation

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

32. Being ignored

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

33. Dissatisfaction with your physical appearance

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

34. Unsatisfactory housing conditions

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

35. Finding work uninteresting

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

36. Failing to get money you expected

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

37. Gossip about someone you care about

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

38. Dissatisfaction with your physical fitness

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

39. Gossip about yourself

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

40. Difficulty dealing with modern technology (e.g. computers)

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

41. Hard work to look after and maintain home

Not at all part of my life   only slightly part of my life   distinctly part of my life   very much part of my life

Thank you for participating in our study!

Everybody experiences life issues. However, if you feel that your situation is serious enough and desire immediate assistance please feel free to use some of the student services listed on the following page.

### **Referral Sheet**

Everybody experiences life issues however if you feel that your situation is serious enough and desire immediate assistance please feel free to use some of these student services. (See below)

#### **UM Counseling & Psychological Services (CAPS)**

3100 Michigan Union

734-764-8312

Free, confidential services for UM students including:

- Short-term psychotherapy for individuals or couples
- Assessment of substance abuse patterns
- Sexual assault counseling
- Referrals for additional help

#### **UM University Health Service**

207 Fletcher

734-764-8320

Medical management of common mental health issues.

#### **UM Psychological Clinic**

530 Church Street, Suite 2456

734-764-3471

Affordable, confidential assessment, counseling, and treatment with specialty services for anxiety, couples' therapy, and adult ADHD and Learning Disabilities." Accepts some insurance plans including M-CARE, offers sliding-fee scale.

#### **UM Center for the Child and Family**

530 Church Street

734-764-9466

Comprehensive range of mental health services for children and families in the community including:

- IQ Testing
- ADHD Evaluations
- Emotional and Behavioral Concerns
- Parenting
- Grief and Loss
- Relationship Issues for Marriage and Couples

For an **Emergency** please call 911 or go to seek psychiatric services at the University of Michigan Hospital or call the Department of Public Safety (DPS).

Department of Public Safety can do safety checks on students. For emergencies call 911; for non-emergencies call 734-763-1131.



**APPENDIX C****DATA ENTRY CODEBOOK:**

ID Number

Grade Level: 1=freshman 2=Sophomore 3=Junior 4=Senior 5=Grad School/ Other

Age

Racial Identity:

1 = Caucasian (non Hispanic)

2 = African American (non Hispanic)

3 = Asian American

4 = Hispanic American

5 = Native American

6 = Asian

7 = Hispanic

8 = Bi/ Multi Racial

9 = Other

Marital Status: 1 = Single 2 = Married 3 = Separated 4 = Divorced 5 = Widowed

Gender: 1 = Male 2 = Female

Residence: 1 = on campus 2 = off campus

Residence time: 1 = &lt; one year 2 = &gt; one year 3 = &gt; two years 4 = &gt; three years

Working? 1 = yes, full time 2 = yes, part time 3 = no

Current Residence:

1 = House 2 = Apartment 3 = Residence Hall 4 = Fraternity/ Sorority 5 = Other

With whom? 1 = Roommate(s) 2 = Alone 3 = parent(s) 4 = spouse 5 = children

GPA:

1 = A+ 2 = A 3 = A- 4 = B+ 5 = B 6 = B- 7 = C+ 8 = C 9 = C- 10 = D+ 11 = D 12 = D-

13 = F

Credits: 1 = Full time (&gt;11) 2 = Part time (1-11 credits)

Depression history? 1 = Yes 2 = No

BDI: 1 – 21 (from the top) 1st option = 0 2nd option = 1 3rd option = 2 4<sup>th</sup> option = 3

Living Arrangements: 1 - 21

5=Strongly Disagree

4=Disagree

3=Neutral

2=Agree

1=Strongly Agree

0=N/A

Living Arrangements: 22

0=Never

1=Under 21

2=21-25

3=25-30

4=30 or older

Living Arrangements: 23

5=More than 20

4=Less than 20

3=More than 10

2=Less than 10

1=Less than 5

0=None

Living Arrangements: 24

0=Never

1=Once a Year

2=Once a Month

3=Once a Week

4=More than twice a Week

“Age Universal” I-E Scale: 1 – 20

Religion? : 1 = Catholic-Christian 2 = non-Catholic-Christian 3 = Religiously Jewish 4 = other

1 = I strongly disagree

2 = I tend to disagree

3 = I’m not sure

4 = I tend to agree

5 = I strongly agree

Inventory of Parent and Peer Attachment (IPPA): 1 – 25

4 = almost always or always true

3 = often true

2 = sometimes true

1 = seldom true

0 = almost never or never true

For data entry, items 9, 17, and 19 need double entry (items 9T and 9A; 17T and 17A; 19T and 19A)

Multigroup Ethnic Identity Measure: 1 – 23

4 = strongly agree

3 = somewhat agree

2 = somewhat disagree

1 = strongly disagree

My ethnicity:

1 = Asian, Asian American, or Oriental

2 = Black or African American

3 = Hispanic or Latino

4 = White, Caucasian, European, not Hispanic

5 = American Indian

6 = Mixed; parents are from two different groups

7 = Other

My father’s ethnicity: use numbers above

My mother’s ethnicity: use numbers above

Life Experiences: 1 – 41

1= Not at all part of my life

2= only slightly part of my life

3= distinctly part of my life

4= very much part of my life

## DATA CHECKING

Frequencies for categorical variables

Get range of answers, n

Descriptives for continuous or scale variables

Get Mean, Std dev, range, n

## DATA REDUCTION:

Scoring the BDI:

Score 0 for the first option, 1 for the second option, 2 for the third option, and 3 for the fourth option for items 1-21

Scoring Living Arrangements:

Score 0 for N/A, 1 for Strongly Agree, 2 for Agree, 3 for Neutral, 4 for Disagree, 5 Strongly Disagree for items 1,2, 5-11,13-20, and 21

Score 0 for Never, 1 for Under 21, 2 for 21-25,3 for 25-30, 4 for 30 or older for item 22

Score 5 for More than 20, 4 for Less than 20, 3 for More than 10, 2 for Less than 10, 1 for Less than 5, 0 for None for items 23

Score 0 for Never, 1 for Once a Year, 2 for Once a Month, 3 for Once a Week, 4 for More than twice a Week for item 24

Then reverse score the following items:

score 0 for N/A, 5 for Strongly Agree, 4 for Agree, 3 for Neutral, 2 for Disagree, 1 Strongly Disagree for items 3,4,12, and 21

Scoring I-E Scale:

For all items: score 1 for “I strongly disagree”, 2 for “I tend to disagree”, 3 for “I’m not sure”, 4 for “I tend to agree”, 5 for “I strongly agree”

Sum scores of items 1-4, 8, 10, 13-15, 17-18 and 20 to attain total extrinsic religious orientation score

Sum score of items 5-7, 9, 11-12, 16 and 19 to attain total intrinsic religions orientation score

Scoring the IPPA:

Score 0 for almost never or never true, 1 for seldom true, 2 for sometimes true, 3 for often true, and 4 for almost always or always true for items 1-8, 9T, 10-16, 17A, 18, 19T, 20-25

Then reverse score the following items in this way:

Score 0 for almost always or always true, 1 for often true, 2 for sometimes true, 3 for seldom true, and 4 for almost never or never true for items 9A, 17T, and 19A

Sum scores of items 6, 7, 9A (reverse scored), 10, 11, 15, 17, 18, 19A (reverse scored), 20, 23, 24 to attain Parental Alienation Score

Sum scores of items 1, 2, 3, 4, 9T, 12, 13, 16, 17T (reverse scored), 19T, 21, 22 to attain Parental Trust score

Sum scores of items 5, 8, 14, 25 to attain Parental pride and approval in academics score

Scoring Ethnicity:

For 1-20: score 1 for “Strongly Disagree,” 2 for “Somewhat Disagree,” 3 for “Somewhat Agree,” 4 for “Strongly Agree.”

Sum of scores of items 1-3, 5-6, 8, 10-14, 16-18, 20 attain Ethnic Identity

Sum of scores of items 4, 7, 9, 15, 19 attain Other Group Orientation

Scoring Life Experiences:

Score 1 for not at all part of my life, 2 for only slightly part of my life, 3 for distinctly part of my life, and 4 for very much part of my life

## HYPOTHESIS TESTING

### Life Situations/ Arrangements

H: On campus students college students associate higher levels of anxiety or discomfort with the college campus.

Statistic: Independent Sample t- Test

Variables:

BDI of Off Campus and On Campus Students (Sum of items 1-21)

### Religiosity and Depression

H1: In general Jewish individuals have higher levels of depressed mood as rated by the BDI than Christian individuals

Statistic: Independent samples t-test

Variables:

Average BDI score for Jewish individuals and average BDI score Christian individuals

H2: Extrinsic religious orientation is related positively related to depressed mood

Statistic: Pearson correlation

Variables:

BDI Score (individuals indicating self as Jewish or Christian only)

Extrinsic score of I-E Scale (individuals indicating self as Jewish or Christian only)

H3: Intrinsic religious orientation is related negatively to depressed mood among Jewish and Christian students

Statistic: Pearson correlation

Variables:

BDI Score (individuals indicating self as Jewish or Christian only)

Intrinsic score of I-E Scale (individuals indicating self as Jewish or Christian only)

### Parent-Child Relationship and Depression

H1: Perceived alienation in the parent-child relationship will be positively correlated with depressive symptomology.

Statistic: Pearson correlation – both the IPPA and BDI are continuous variables

Variables:

BDI Score (sum of items BDI1-BDI21)

IPPA Parent Alienation Score: sum of following items:

IPPA6,7,9A(reverse scored),10,11,15,17,18,19A(reverse scored),20,23,24

H2: Perceived trust in the parent-child relationship will be negatively correlated with depressive symptomology.

Statistic: Pearson correlation – both the IPPA and BDI are continuous variables

Variables:

BDI Score (sum of items BDI1-BDI21)

IPPA Parent Trust Score: sum of following items:

IPPA1,2,3,4,9T,12,13,16,17T(reverse scored),19T,21,22

H3: Higher levels of perceived parental pride and approval in academic accomplishments will be correlated with lower levels of depression in college students.

Statistic: Pearson correlation – both the Academic pride and approval scale (embedded in the IPPA) and BDI are continuous variables

Variables:

BDI Score (sum of items BDI1-BDI21)

Academic Pride and Approval Score: sum of following items:

IPPA5, 8, 14, 25

### Ethnicity and Depression

H1: Ethnic minorities are more depressed than Caucasians

Statistic: Independent samples t-test

Variables:

BDI Scores for ethnic minorities and Caucasians (Sum of items BDI1-BDI21)

Multigroup Ethnic Identity Measure (Sum of items 1-20)

### Life Experiences and Depression

H: Higher level of stress is correlated to higher level of depression in college students

Statistic: Pearson correlation – both the LE and BDI are continuous variables

Variables:

BDI Score (sum of items BDI1-BDI21)

LE: sum of following items: 1-41

## TABLES AND FIGURES

**Table 1.1: Grade level of the participants**

### Grade Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Freshman	5	7.7	7.7	7.7
	Sophomore	9	13.8	13.8	21.5
	Junior	13	20.0	20.0	41.5
	Senior	31	47.7	47.7	89.2
	Grad school/ Professional/ Other	7	10.8	10.8	100.0
	Total	65	100.0	100.0	

**Table 1.2: Racial Distribution of Participants****Racial Identification**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Caucasian (non Hispanic)	31	47.7	47.7	47.7
	African American (non Hispanic)	8	12.3	12.3	60.0
	Asian American	10	15.4	15.4	75.4
	Asian	3	4.6	4.6	80.0
	Bi/ Multi Racial	1	1.5	1.5	81.5
	other	12	18.5	18.5	100.0
	Total	65	100.0	100.0	



Table 1.3: Marital Status of Participants

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	64	98.5	98.5	98.5
	Married	1	1.5	1.5	100.0
	Total	65	100.0	100.0	

**Table 1.4: Gender of Participants****Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	22	33.8	33.8	33.8
	Female	43	66.2	66.2	100.0
	Total	65	100.0	100.0	

Table 1.5: GPA in terms of letter grade of Participants

GPA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A+	2	3.1	3.2	3.2
	A	11	16.9	17.5	20.6
	A-	12	18.5	19.0	39.7
	B+	17	26.2	27.0	66.7
	B	12	18.5	19.0	85.7
	B-	8	12.3	12.7	98.4
	C	1	1.5	1.6	100.0
	Total	63	96.9	100.0	
Missing	99	2	3.1		
Total		65	100.0		

**Table 1.6: Participants with or without a family history of depression****Family History of Depression**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	1	1.5	1.5	1.5
yes	13	20.0	20.0	21.5
no	51	78.5	78.5	100.0
Total	65	100.0	100.0	

**Table 1.7: Depression Diagnosis based on BDI Score****Depression**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Depressed	48	73.8	73.8	73.8
	Mild-Moderate Depression	14	21.5	21.5	95.4
	Moderate-Severe Depression	3	4.6	4.6	100.0
	Total	65	100.0	100.0	

**Table 2.1: Correlation between BDI score and Perceived Parental Alienation****Correlations**

		BDI score	Alienation
BDI score	Pearson Correlation	1	.697(**)
	Sig. (2-tailed)		.000
	N	65	60
Alienation	Pearson Correlation	.697(**)	1
	Sig. (2-tailed)	.000	
	N	60	60

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

**Table 2.2: Correlation between BDI score and Perceived Parental Trust****Correlations**

		BDI score	Trust
BDI score	Pearson Correlation	1	-.541(**)
	Sig. (2-tailed)		.000
	N	65	59
Trust	Pearson Correlation	-.541(**)	1
	Sig. (2-tailed)	.000	
	N	59	59

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

**Table 2.3: Correlation between BDI score and Perceived Parental Pride and Approval in Academic Accomplishments**

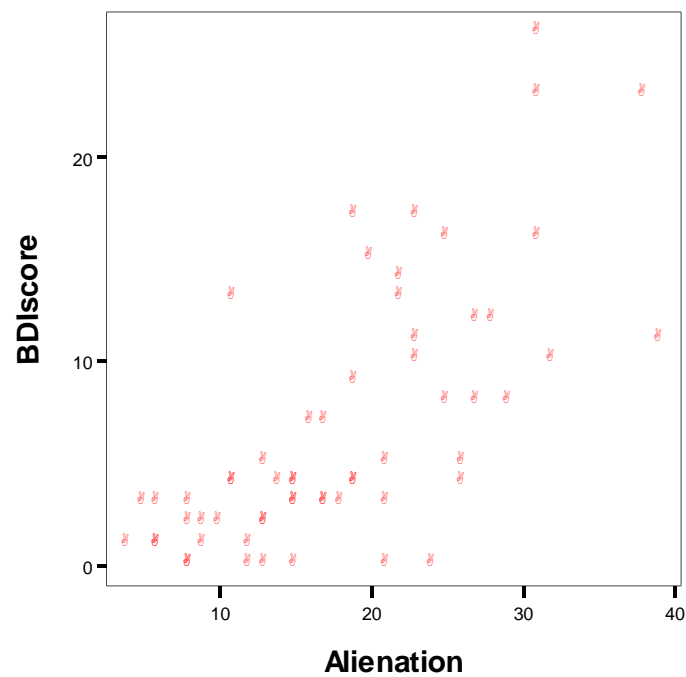
**Correlations**

		BDI score	AcademicPride
BDI score	Pearson Correlation	1	-.319(*)
	Sig. (2-tailed)		.012
	N	65	61
AcademicPride	Pearson Correlation	-.319(*)	1
	Sig. (2-tailed)	.012	
	N	61	61

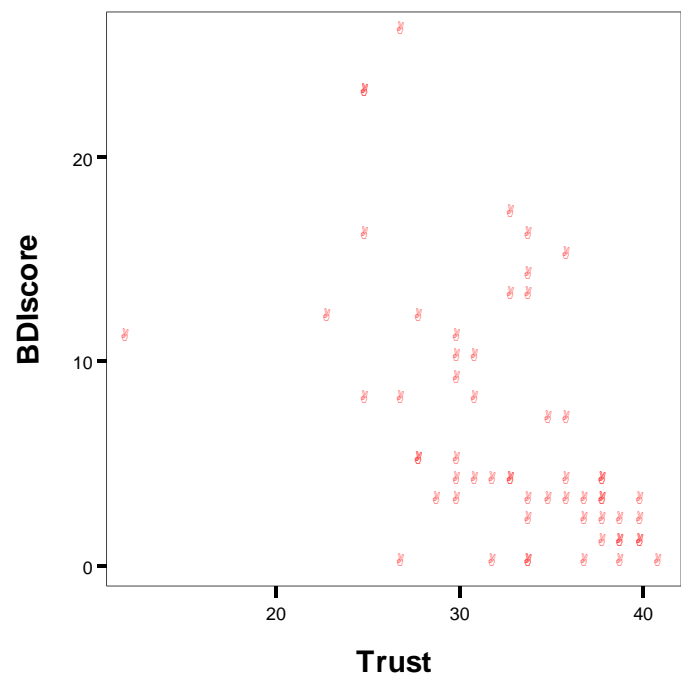
\* Correlation is significant at the 0.05 level (2-tailed).



**Figure 1: Scatter plot of BDI score against Perceived Parental Alienation Score**



**Figure 2: Scatter plot of BDI score against Perceived Parental Trust Score**



**Figure 3: Scatter plot of BDI score against Perceived Parental Pride and Approval in Academic Accomplishments Score**

