Polyvictimization of Interpersonal Violence and Mental Health in College Women

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Abstract

Research has established connections between interpersonal violence (IPV) and psychological disorders. The present study assessed the relationships between polyvictimization (PV) – multiple forms of IPV – and mental health in female college students at App State using a DSM-5 psychological disorder screener and a demographics survey. Female participants (n = 134) were recruited for the study via SONA. Average age was 19.6 years, 83% were Caucasian, 88% were heterosexual, and 32% reported a current mental health diagnosis. Participants were asked about IPV, and 47% reported having experienced at least one form. The DSM screener included 13 psychological domains showing sleep problems (14%) as most common among participants. A continuous variable, "Number of IPV Types," quantified PV, and the DSM domains were summed, variable "Total DSM." A univariate ANOVA on sexual orientation (heterosexual vs non-heterosexual) found a difference in Number of IPV Types, with heterosexuals reporting fewer cases of PV, $F(1,134) = 11.1$, $p < .001$, but no differences in Total DSM. A multiple regression run on Number of IPV Types as the criterion variable using the psychological domains initially correlated with this found that only Somatization disorders ($\beta = .40$, $p < .001$) and Suicidal Ideation ($\beta = .37$, $p < .002$) were predictors ($R^2 = .27$). This study suggests nearly half of App State women have experienced IPV, almost one-third report a current psychological disorder, and PV is significantly related to somatization and suicidal ideation.

Keywords: polyvictimization, interpersonal violence, DSM-5 Self Rated Measure, somatization, suicidal ideation

Polyvictimization of Interpersonal Violence and Mental Health in College Women

Polyvictimization is defined as the phenomenon of experiencing multiple forms of victimization, whether physical, sexual, verbal, or psychological. Health consequences of abuse manifest both physically and psychologically, and individuals who experience multiple forms of abuse are at increased risk of more severe and long-term consequences. According to Campbell (2002), common medical consequences include physical injuries and bodily trauma. Additionally, being exposed to intimate partner violence can further increase the victim's risk of depression, anxiety, insomnia, social dysfunction, and PTSD (Campbell, 2002). Unfortunately, limitations in assessment and underreporting of instances of intimate partner violence may be masking other psychological outcomes.

The psychological distress felt by victims of polyvictimization is long-term, and several studies have examined the relationship between psychological distress in adulthood and childhood trauma. Finkelhor et al. (2011) assessed how polyvictimization occurred in children of various age and developmental groups. The study, conducted via telephone, highlighted that older childhood victims were more likely to have experienced multiple forms of victimization and were more likely to have experienced sexual abuse than younger victims within the past year. The study oversampled African American, Hispanic, and low-income participants to ensure enough participants in these categories for a more adequate subgroup analysis. Wright, Crawford, and Castillo (2009) conducted a study examining whether emotional abuse and emotional neglect in childhood contributed to maladaptive behaviors and psychological distress in adulthood. They found that child sexual abuse and child emotional neglect were significant predictors of anxiety and depression (Wright et al., 2009). Child sexual abuse was also associated with bodily dissociation. Therefore, childhood trauma has been associated with several forms of psychological distress, and polyvictimization has been shown to have an effect on individuals from a young age.

Revictimization, Polyvictimization, and Mental Health

Research has also examined the associations between childhood victimization, revictimization, polyvictimization, and mental health. Widom, Czaja, and Dutton (2008) assessed whether childhood victimization increases the risk of revictimization using a prospective cohort study. The researchers found that though the increased rate of revictimization did not necessarily occur in all categories of trauma, victimization increased the risk of interpersonal violence later in the victim's life for both men and women, regardless of race; however, non-whites reported higher rates of trauma than Whites in the study (Widom, Czaia, & Dutton, 2008). Looking into the intersection between polyvictimization, childhood victimization, and psychological distress in college women, Richmond et al. (2009) concluded that using categories of victimization separately, rather than measures of polyvictimization, was less accurate in demonstrating the relationship between psychological distress and victimization. Both studies by Richmond et al (2009) came to similar conclusions about the effectiveness of polyvictimization predicting psychological distress among women. It is important to note that these studies do not negate the importance of measuring individual categories of childhood victimization, but rather advocate for the inclusion of polyvictimization for more significant research (Richmond et al., 2009). Finally, Sabina and Straus (2008) investigated how polyvictimization perpetrated by dating partners was related to mental health among young college students. Using samples from 19 U.S. colleges, the researchers found that polyvictimization was associated with PTSD in college students for both men and women, and depression in college women. Women were also more likely to experience more severe polyvictimization than men (Sabina & Straus, 2008). In conclusion, polyvictimization, specifically in childhood and young adulthood, is clearly related to adverse long-term psychological wellbeing.

The current study is a mental health needs assessment for college women at Appalachian State University and is exploratory in nature. An online instrument was used to gather demographic information, determine a history of interpersonal violence (IPV) and polyvictimization (PV), and assess common psychological disorders in this population. To do this, the study examined base rates of probable psychological disorders and base rates of IPV among participants. The number of types of IPV was used as a composite variable of polyvictimization. Correlations between polyvictimization and each probable psychological disorder were determined and then a multiple regression was run on each disorder with a significant correlation with polyvictimization as the criterion variable. The ultimate goal of this study was to examine any associations between PV and various psychological disorders. Since the study was exploratory, no formal hypothesis was made.

Method

Participants

Participants for this study were 142 adults, studying at Appalachian State University, who were recruited via SONA, the psychology department's participant pool software. All open psychology studies were listed in a random order on SONA, and students were able to access this survey for 15 days. From the original participant pool, 5 entries were deleted due to incomplete data, and 3 were deleted because the participants identified as male. Male participants were excluded because the study was intended to focus on females. However, nonbinary individuals (n = 3) were not removed as they may have identified as female at a prior point in their lives.

Of the remaining 134 adults, 131 identified as female, and 3 identified as non-binary. For the sake of results, both gender groups are combined and referred to as "female." Participants ranged in age from 18 to 45 years, with an average age of 19.6 years. Of the participants, 88% identified as heterosexual and 83% identified as Caucasian/White. To protect anonymity, participants were not asked to report their names or any other identifying information. This

experiment was approved for a Category 2 exception by the Appalachian State University Institutional Review Board (IRB) on December 27, 2019, study number 20-0117. The approval email can be found in Appendix A.

Materials

Consent Form. A digital consent form was used to inform all participants that their participation was completely anonymous and voluntary. The form was displayed on the first page of the online SONA survey and can be found in Appendix B. No identifying information was tied to the participants, and participants were compensated with one "experiential learning credit" (ELC) – an option for extra credit in introductory and other lower-level psychology courses – following the completion of the study.

Demographics Scale. The demographics scale included a series of 11 questions that helped classify participants by age, gender, sexual orientation, education level, etc. The demographics scale is displayed in Appendix C.

Interpersonal Violence Assessment. Questions were asked about interpersonal violence (IPV) victimization throughout the participants' lives (see Appendix C). The item consisted of seven forms of interpersonal violence: "physical abuse in the family in which you were raised, verbal abuse in the family in which you were raised, sexual abuse in the family in which you were raised, sexual assault or rape, physical abuse by a partner/spouse, verbal abuse by a partner/spouse, and sexual abuse by a partner/spouse." Participants indicated all forms of IPV they have experienced. If none, participants chose the "I have never experienced any of the above situations" option. To create the variable "Number IPV Types," the number of IPV categories chosen was summed for each participant. If the "never experienced" category was chosen, the participant received a score of 0 for Number of IPV.

DSM-5 Self-Rated Measure. The DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure–Adult (American Psychiatric Association, 2013) is a self-rated measure that asks

surveyors a series of 23 questions that assess 13 psychiatric domains: depression, anger, mania, anxiety, somatic symptoms, suicidal ideation, psychosis, sleep problems, memory, repetitive behaviors and thoughts, dissociation, personality functioning, and substance use. The questionnaire is a screening instrument and is not intended to diagnose participants. Rather, it is meant to serve as a guide and provide clinicians insight as to psychological domains that warrant further clinical attention for their patient before reaching a psychiatric diagnosis. The assessment can also be used to track progress in symptoms of patients over time. Each question is to be answered based on "the past two weeks." The questions are scored on a 5-point scale (0 = none or not at all; 1 = slight or rare, less than a day or two; 2 = mild or several days; 3 = moderate or more than half the days; and 4 = severe or nearly every day). The right to reproduce this survey was given by the American Psychiatry Association to all researchers. The screener and associated directions can be found in Appendix D. Participants only received the second page of the screener tool.

Previous research on the validity and utility of the DSM-5 screener has shown the measure to be reliable, especially when used in conjunction with other psychopathology tests. In a study conducted by Bravo, Villarosa-Hurlocker, and Pearson (2018) on college students in the United States, the DSM-5 screener demonstrated consistent moderate to strong internal consistency among the 13 domains (average $\alpha = .75$, lowest $\alpha = .61$ for substance use, highest $\alpha = .84$ for anxiety) and moderate to strong positive associations with one another. Accessing convergent and criterion-related validity, correlations between the DSM-5 domains and corresponding domain screeners proved positive with moderate to strong associations (average $r = .53$, lowest $r = .42$ for anxiety domain with fear of negative evaluation, highest $r = .67$ for depression domain and DASS-21 screener; Bravo, Villarosa-Hurlocker, & Pearson, 2018). Looking into the sensitivity and specificity of the DSM-5 screener, Bastiaens and Galus (2018) found the instrument was somewhat reliable as threshold increased from a score of 2 (mild or

several days) to 3 (moderate or more than half the days) when examining four specific domains: depression, mania, anxiety, and psychosis. Of note - participants in the Bastiaens and Galus (2018) were all patients in a rehabilitation center, all had substance use disorders, and many had been clinically diagnosed prior to the start of the study. Results of the study suggest that the DSM-5 measure is reliable in predicting certain psychopathological conditions, especially if participants are reporting higher scores on domains. Additionally, Kagee, Tsai, Lund, and Tomlinson (2012) reiterated the importance of using screeners as a first step to formal diagnosis of psychological disorders in patients and emphasized that further clinical assessment should be done before the patient can be formally diagnosed. Overall, these three studies suggest this DSM-5 screener has measurement validity. Thus, this instrument was used in the study with scores of four considered to be a "probable" psychological disorder for the 13 domains.

Procedure

Participants were asked to voluntarily complete an online survey containing the consent form, demographics scale, and DSM-5 questionnaire, respectively. The first page of the survey packet was the consent form that informed participants of their rights and any risk of continuing the survey. Following the consent form was the demographics scale. They were then asked about their history of interpersonal violence. The DSM-5 Self -Rated Measure was completed in a table format last.

Data Analytic Strategy

In order to analyze the results of this survey, descriptive data, such as race, education level, and sexual orientation, were transcribed into frequencies and percentages. A continuous variable, titled "Number of IPV Types," was created to quantify polyvictimization by summing the number and type of IPV each participant has experienced. Another variable, titled "Total DSM" was created by summing the number of domains in which participants were flagged, meaning they responded with "4" on at least one item within the domain. Correlations were

conducted between Number of IPV Types and each DSM category. The DSM category to Number of IPV Types correlations that were significant were then entered into a multiple regression equation with DSM categories as predictor variables and Number of IPV Types as the outcome variable.

Results

Forty-seven percent of participants reported at least one form of IPV with 46% of that population reporting polyvictimization. Overall, 21.6% of participants experienced polyvictimization. The forms and frequencies of each type of victimization are listed in Table 1. Of the participants, 22% (n = 134) were actively taking medication for stress or mental health, 19% (n = 134) were participating in counseling or psychotherapy for stress or mental health, and 32% (n = 134) had a current mental health diagnosis. Additionally, the study examined participant responses to the DSM-5 screener at the highest threshold, meaning those reporting a "4" on any of the domain items asked in the DSM screener were considered to have a probable psychiatric diagnosis. The most common DSM domains, domains in which the majority of participants answered "4," were sleep problems (14%) followed by anxiety disorders (6%). A complete frequency of respondents who answered "4" on any given domain can be seen in Table 2.

A univariate ANOVA on race, White vs non-White, found no differences in Number of IPV Types, $F(1,134) = .001$, $p = .98$, nor in Total DSM disorders, $F(1,133) = .04$, $p = .85$). Examination of sexual orientation, heterosexual vs non-heterosexual, using an ANOVA found a significant difference in Number of IPV Types, with heterosexual women reporting fewer cases of IPV than non-heterosexual women, $F(1,134) = 11.1$, $p < .001$. There were no differences in sexual orientation for Total DSM disorders.

General correlations between each of the 13 domains, Total DSM, and Number of IPV Types was also determined (See Table 3). Note that only suicidal ideation (SI), obsessive-

compulsive disorder (OCD), sleep, body, anger, dissociation, anxiety, and depression were significantly related to Number of IPV Types at an alpha of less than .01. Personality disorders (PD) had a significant correlation to Number of IPV Types at the .05 level. When correlated with one another, Number of IPV Types and Total DSM displayed a significant correlation (r = .327, $p < .001$).

Systematic review of the data showed a link between various psychological disorders and Number of IPV Types, $F(9, 132) = 5.11$, $p < .001$. A multiple regression was run using only the psychological disorder domains that were initially correlated with Number of IPV Types as predictor variables with Number of IPV Types serving as the criterion variable. Only Somatization disorders ($B = .40$, $p < .001$) and Suicidal Ideation ($B = .37$, $p < .002$) were predictors of Number of IPV Types, and they accounted for 27% of the variance ($R^2 = .27$) when these psychological disorders were allowed to compete with one another. The coefficient regression is displayed in Table 4.

Discussion

The purpose of this study was to explore associations between base rates of probable psychological disorders and reported history of IPV in college women. Previous research found that IPV is associated with higher levels of anxiety, depression, PTSD, insomnia, and general social dysfunction (Campbell, 2002; Finkelhor et al., 2011). IPV occurring in childhood has also been associated with long-term psychological distress, particularly in female victims (Richard et al., 2009; Sabina & Straus, 2008). This study determined that IPV and psychological distress are prevalent among female college students at Appalachian State University. Although many of the DSM psychological domains were associated with polyvictimization, probable somatization disorder and suicidal ideation were the two psychological domains to be most associated with a history of polyvictimization, as seen by the multiple regression run on the data (Table 4). This does not refute previous findings. Rather, it highlights that somatization - feeling physically

distressed and sick – is a common manifestation for women with a history of IPV victimization. Psychological trauma from IPV may be influential in the occurrence of unexplained physical illness. If true, and these individuals are seeking help from medical doctors who are unable to find organic causes of the illnesses, then these individuals are not obtaining the help they need. Further, our results highlight that suicidal ideation – as the epitome of psychological distress - is also a more prominent association for polyvictimization when all of these relevant psychological domains from the DSM-5 screener were run in a multiple regression against one another. Taken together, this suggests that women's victimization histories, especially polyvictimization, are associated with very serious psychological and physical health consequences.

Given that body somatization and suicidal ideation were strongly related to polyvictimization in this group of college females, college campuses and other healthcare facilities should provide assessment for these symptoms and risks for their patients and offer accessible treatment options. Nearly half (47%) of the sample population of college women at Appalachian State University have experienced some form of IPV, with many experiencing polyvictimization. Yet commonplace services, such as mental health counseling, may not always be available on college campuses. Unfortunately, we did not assess why many of the participants who reported a current mental health diagnosis were not accessing healthcare. It is unclear whether they believe such services are not readily available or whether other personal factors like mental illness self-stigma may be preventing them from seeking care.

Previous research suggests that marginalized communities like the LGBTQ+ community and racial minorities are more likely to experience IPV than their heterosexual and White counterparts (Brown & Herman, 2015; Wu et al., 2013). A critical review by Edwards, Sylaska, and Neal (2015) revealed that risk factors of IPV in LGBTQ+ individuals include lower socioeconomic status, younger age, lack of power, physical disability, attachment and dependency issues, and HIV+ status. Wu et al. (2003) echoed a similar finding in racial

minorities concerning lower SES, unemployment, and HIV+ status. Although we did not find any significant racial differences, that may be a result of limited diverse representation in our sample. The fact that our non-heterosexual participants were reporting more polyvictimization than heterosexual women suggests that our college campus needs to ensure our health center and counseling center provides a welcoming environment for our LGBTQ+ community.

In order to assist individuals dealing with a history of IPV and polyvictimization, college health workers and administrations should be trained in suicide and IPV prevention efforts. Counseling on Access to Lethal Means (CALM) and the Question, Persuade, and Refer (QPR) training program are two suicide intervention programs highlighted for effectiveness (Johnson et al., 2011; Sale et al., 2018; Tompkins & Witt, 2009). CALM has been proven to increase comfort and knowledge in health care professions and increase the frequency in which they discuss the restriction of lethal means with their patients (Sale et al., 2018). Even a brief CALM workshop has proven effective in promoting lethal means reduction by health care professionals and counselors to their patients (Johnson et al., 2011). Similarly, a study done by Wilson, Michael, and Jordan (2020) displayed that CALM CARPE Diem training, a novel form of the CALM gatekeeper training, increased the knowledge of suicide prevention and means reduction training in a sample of RAs at Appalachian State University. Additionally, QPR training for RAs has proven beneficial in heightening their knowledge of suicide prevention short-term and serving as a gatekeeper training program (Tompkins & Witt, 2009). Furthermore, research has found that victims of IPV are more likely to disclose incidents to friends and other informal support systems than to formal support systems, such as therapists or other healthcare professionals (Sylaska & Edwards, 2014; Sylaska & Edwards, 2015). However, most of these informal support systems are not properly trained in dealing with IPV scenarios in a trauma-informed manner. With training, this could change, and victims could depend on their support system on a deeper level. For instance, incoming college students could be given an introductory

training course in campus resources, including more advanced training offered to individuals or groups if requested (e.g., resident advisors, sorority leaders). Once properly trained, healthcare workers, college administration, and others attending the university would be more aware of the situation and able to assist IPV victims and curb suicidal ideation in ways that are comfortable and effective for both the victim and those in whom they choose to confide. As these are extremely sensitive and difficult topics, it is important to address the issues delicately, though firmly, and in a way in which students feel safe and not judged.

Moreover, providing training on how to utilize the DSM-5 instrument as a screener for probable psychological issues would be helpful to better treat those who have experienced IPV and polyvictimization. Individuals could complete the screener as they await treatment from a health care professional, and they would be provided specialized training to better understand their patients. Since the screener is not time-consuming, it would not burden patients or professionals. To work, this would need to be implemented as a routine procedure, similar to the paperwork filled out every time one visits a hospital or clinic. At the minimum, clinicians should be more forward in asking patients about psychological history and past trauma. For populations that may be especially vulnerable to these situations, the DSM-5 screener gives clinicians an opening without scaring off the patient. This leads to a better understanding of the patient and may assist in getting patients more accurate treatment or help services.

Limitations

This study was not without limitations. The title of the study as it was presented on SONA, the ASU Stress and Happiness Study, was not neutral and could have presented a selection bias for students who are more stressed than the average population. Since the study order was randomized on SONA, there is no way to know if the study was chosen out of convenience or selected specifically due to the study's name.

In addition, the DSM-5 instrument used is not intended for diagnosing mental health issues but instead was designed to screen for *possible* psychological disorders or issues. The domains tested in the screener are not comprehensive, and some domains which have been associated with IPV in previous studies, such as PTSD and eating disorders, are not mentioned (Schrag & Edmond, 2018; Silverman et al., 2001). For example, Silverman et al. (2001) found associations between unhealthy weight control, specifically taking laxatives, vomiting, or taking diet pills, and dating violence experienced by adolescent females. Further, Schrag and Edmond (2018) found a significant positive correlation between the extent of IPV experienced in the past year and PTSD symptomology in females attending a community college. Moreover, the domains assessed only use 1-3 questions, which does not cover all of the actual DSM-5 symptoms for each of these diagnoses.

There may have been overlap between reporting in the "sexual assault or rape" category and the family and/or spouse sexual abuse categories on the IPV measure. Frequencies for these categories suggest very minimal overlap occurred, if any, but there was no way of knowing whether participants who experienced family and/or spouse sexual abuse doubly counted those experiences as sexual assault or rape, thereby fitting one event into multiple categories instead of reporting the event as to where it fits best. However, since there is a chance that both forms of IPV occurred in tandem, it is not unreasonable to state that one event contained this unique form of polyvictimization. In addition, the majority of participants identified as White and heterosexual. When looking into differences between races and sexual orientation for IPV, none were found. However, previous research has highlighted that non-White and non-heterosexuals are at increased risk of experiencing IPV (Widom, Czaia, & Dutton, 2008). The lack of association seen in this study could be due to a lack of representation for these marginalized groups and poor statistical power.

Future Studies and Conclusion

Many of the probable psychological disorders were associated with polyvictimization; and it is not fully understood why only somatization and suicidal ideation were significant when entered into regression together. Somatization may be the ultimate bodily or "medical" expression of trauma and certain individuals having suicidal thoughts is evidence of extreme psychological distress and hopelessness, yet future research is needed to understand these connections more thoroughly. Further research should also be applied to the impact of suicide prevention training in healthcare, psychologists, RAs, and other major staff in college settings, such as the university faculty and administration. Instead of short-term benefits, however, studies should look into the long-term impact of this amenity for victims of IPV, especially those experiencing polyvictimization. Additionally, a more diverse participant pool may uncover other significant relationships that were not established in this study. Overall, more research needs to be done to determine the extent to which interpersonal violence and polyvictimization influence or impact psychological disorders.

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Tables and Figures

Table 1

Frequency and Percent of Participants Who Reported Each Type of IPV

Type of IPV	Frequency (No. of Participants)	Percent
Physical Abuse, Family	6	4.5
Verbal Abuse, Family	35	26
Sexual Abuse, Family	1	0.7
Sexual Assault or Rape	31	23
Physical Abuse, Partner	7	5
Verbal Abuse, Partner	29	22
Sexual Abuse, Partner	8	6
None	71	53

Table 2

Frequency and Percentage of Each Probable Psychological Diagnosis Reported by Participants

Domain	Frequency (No. of Participants)	Percent
Depression	3	2.3
Anger	8	6.0
Mania	1	.7
Anxiety	9	6.8
Somatic Symptoms	4	3.0
Suicidal Ideation	2	1.5
Psychosis	0	0
Sleep Problems	18	13.5
Memory	3	2.3
Repetitive Thoughts and Behaviors	5	3.8
Dissociation	7	5.3
Personality Functioning	7	5.3
Substance Use	7	5.3

Table 3

Correlations of All Domains and IPV

Variable	*n*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. No. IPV Types	134	—														
2. Total DSM	133	.33*	—													
3. Depression	133	.25**	.82**	—												
4. Anger	133	.24**	.76**	.66**	—											
5. Mania	133	.09	.54**	.40**	.39**	—										
6. Anxiety	133	.17*	.80**	.61**	.63**	.45**	—									
7. Body	133	.42**	.76**	.61**	.54**	.38**	.57**	—								
8. SI	133	.36**	.57**	.51**	.39**	.22**	.33**	.33**	—							
9. Psychosis	133	.11	.40**	.23**	.22*	.26**	.25**	.28**	.46**	—						
10. Sleep	133	.28**	.74**	.50**	.50**	.39**	.65**	.62**	.23**	.20*	—					
11. Memory	133	.15	.67**	.47**	.41*	.25**	.50**	.52**	.22**	.33**	.43**	—				
12. OCD	133	.25**	.71**	.54**	.46**	.36**	.50**	.47**	.45**	.24**	.47**	.42**	—			
13. Dissociation	133	.26**	.76**	.63**	.55**	.24**	.49**	.49**	.45**	.21*	.50**	.52**	.53**	—		
14. PD	133	.19*	.84**	.74**	.61*	.32**	.64**	.56**	.44**	.24**	.58**	.58**	.51**	.68**	—	
15. Substance	133	.11	.41**	.27**	.19*	.25**	.33**	.22**	.30**	.26**	.15	.29**	.28**	.27**	.34*	—

*Correlation is significant at the .01 level
**Correlation is significant at the .05 level

Table 4

Coefficient Regression [a]

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**T**	**Sig.**
(Constant)	1.141	.138		8.295	.000
Depression	-.065	.112	-.079	-.584	.560
Anger	.035	.092	.043	.383	.703
Anxiety	-.119	.092	-.156	-1.293	.199
Body	.308	.085	.403	3.636	.000
SI	.311	.092	.317	3.369	.001
Sleep	.087	.073	.138	1.193	.235
OCD	-.001	.079	-.001	-.009	.993
Dissociate	.052	.078	.075	.663	.509
PD	-.122	.092	-.176	-1.323	.188

[a.] Dependent variable = No. IPV Types

Appendix A

IRB Approval Email

To: Pearl Imoh
Psychology
CAMPUS EMAIL

From: Nat Krancus, IRB Administrator
Date: 12/27/2019
RE: Notice of Exempt Research Determination

STUDY #: 20-0117
STUDY TITLE: Mental Health Needs Assessment for Women in Appalachia (ASU Stress & Happiness Survey)

Exemption Category: 2.Survey, interview, public observation

This study involves no more than minimal risks and meets the exemption category or categories cited above. In accordance with 45 CFR 46.101(b) and University policy and procedures, the research activities described in the study materials are exempt from IRB review.

What a determination of exempt research means for your project:

1. The Office of Research Protections staff have determined that **your project is research, but it is research that is exempt from the federal regulations regarding research.**

2. Because this research is exempt from federal regulations, **the recruitment and consent processes are also exempt from review.** This means that the procedures you described and the materials you provided were not reviewed Office of Research Protections staff, further review if these materials are not necessary, and you can change these procedures and materials without review from this office. You can use the consent materials you may have provided in the application, **but you can change the consent procedures and materials without submitting a modification. Note that if your consent form states that the study was "approved by the IRB" this should be removed. You can replace it with a sentence that says that the study was determined to be exempt from review by the IRB Administration.**
3. **You still need to get consent from adult subjects and, if your study involves children, you need to get assent and parental permission.** At the very least, your consent, assent, and parental permission processes should explain to research subjects: (a)the purpose, procedures, risks, and benefits of the research; (b) if compensation available; (c) that the research is voluntary and there is no penalty or loss of benefits for not participating or discontinuing participation; and (d) how to contact the Principal Investigator (and faculty advisor if the PI is a student). You can also use exempt research consent template, which accounts for all of these suggested elements of
consent: https://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/Exempt%20Consent%2012.18.13.docx.

4. **Special Procedures and populations for which specific consent language is suggested.** Research involving children, the use of the SONA database for recruitment, research with students at Appalachian State University, or MTurk should use the specific language outlined by Office of Research Protections on our website: https://researchprotections.appstate.edu/human-subjects-irb/irb-forms.

5. **Non-procedural Study Changes**: most changes to your research will not require review by the Office of Research Protections. However, the following changes require further review by our office:

- the addition of an external funding source,
- the addition of a potential for a conflict of interest,
- a change in location of the research (i.e., country, school system, off site location),
- the contact information for the Principal Investigator,
- the addition of non-Appalachian State University faculty, staff, or students to the research team, or

6. **Changes to study procedures.** If you change your study procedures, you may need to submit a modification for further review. Changes to procedures that may require a modification are outlined in our SOP on exempt research, a link to which you can find below. Before submitting a modification to change procedures, we suggest contacting our office at irb@appstate.edu or (828)262-4060.

Investigator Responsibilities: All individuals engaged in research with human participants are responsible for compliance with University policies and procedures, and IRB determinations. The Principal Investigator (PI), or Faculty Advisor if the PI is a student, is ultimately responsible for ensuring the protection of research participants; conducting sound ethical research that complies with federal regulations, University policy and procedures; and maintaining study records. The PI should review the IRB's list of PI responsibilities.

To Close the Study: When research procedures with human participants are completed, please send the Request for Closure of IRB Review form to irb@appstate.edu.

If you have any questions, please contact the IRB Adminstrator at (828) 262-4060.

Best wishes with your research.

Important Links for Exempt Research:

Note: If the link does not work, please copy and paste into your browser, or visit https://researchprotections.appstate.edu/human-subjects.

1. Standard Operating Procedure for exempt research (#9): https://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/sop_9_approved_1.21.2019.pdf

2. PI responsibilities: https://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/PI%20Responsibilities.pdf

3. IRB forms: http://researchprotections.appstate.edu/human-subjects/irb-forms

Appendix B

Consent Form for College Students

Participation in this study is completely voluntary and private. You may discontinue your participation at any time. If you decide to participate, please answer all questions posed to you via the SONA questionnaire site.

The 1st part of the survey is a demographics screener that will ask you questions about yourself. The 2nd part will ask you questions about your stress and mental health to help us better understand the healthcare needs of women at Appalachian State University. The only risk to you for completing the survey is that it may make you think more about your stress and your mental health. Participants will be compensated 1 ELC point following the completion of the survey.

If you have any questions about the survey, please feel free to contact Dr. Denise Martz, a Licensed Clinical Psychologist and ASU Psychology Professor, at martzdm@appstate.edu or (828) 262-8953 or ASU student Amaka Imoh at imohpc@appstate.edu.

Thank you for your participation!

Appendix C

Demographics Scale for College Women

1. What is your age?
_____

2. What is your race/ethnicity? **(circle one)**
White/Caucasian
Black or African American
Hispanic or Latino
Asian or Pacific Islander
Native American
Bi or Multi-Racial
Other (please describe):
_____

3. What is your sexual orientation? **(circle one)**
Straight/Heterosexual
Gay/Lesbian
Bisexual
Pansexual
Queer
Other (please describe):
_____

4. I identify as a _____ (**circle one)**
Woman
Man
Non-Binary/Non-Conforming Person
Other (please describe):
_____

5. Are you transgender? **(circle one)**
Yes
No
I don't know what this means

6. What is your highest level of education? **(circle one)**
Completed middle school
High school diploma/GED
Associate's degree
Trade/Technical School
Military/ Other on the job training
Bachelor's degree (from a 4-year institution)
Master's degree
Doctoral degree (e.g., MD, Ph.D.)
Other (please describe):
_____

7. What best describes where you grew up? **(circle one)**
Rural
Suburban
Urban

8. Are you currently taking any medications for stress or mental health? **(circle one)**
Yes (please name): _____
No

9. Are you currently participating in counseling/ therapy for stress or mental health? **(circle one)**
Yes (please name): _____
No

10. Have you been clinically diagnosed with a stress or mental health disorder? **(circle one)**
Yes (please name):
_____
No

11. During your lifetime, have you **ever** experienced…. **(circle all that apply)**

Physical abuse in the family in which you were raised
Verbal abuse in the family in which you were raised
Sexual abuse in the family in which you were raised
Sexual assault or rape
Physical abuse by a partner/spouse
Verbal abuse by a partner/spouse
Sexual abuse by a partner/spouse
I have never experienced any of the above situations

Appendix D

DSM-5 Screener

The APA is offering a number of "emerging measures" for further research and clinical evaluation. These patient assessment measures were developed to be administered at the initial patient interview and to monitor treatment progress. They should be used in research and evaluation as potentially useful tools to enhance clinical decision-making and not as the sole basis for making a clinical diagnosis. Instructions, scoring information, and interpretation guidelines are provided; further background information can be found in DSM-5. The APA requests that clinicians and researchers provide further data on the instruments' usefulness in characterizing patient status and improving patient care at http://www.dsm5.org/Pages/Feedback-Form.aspx.

Measure: DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult **Rights granted:** This measure can be reproduced without permission by researchers and by clinicians for use with their patients.

Rights holder: American Psychiatric Association

To request permission for any other use beyond what is stipulated above, contact: http://www.appi.org/CustomerService/Pages/Permissions.aspx

DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult

Name: _____ **Age:** ____ **Sex:** ❑ **Male** ❑ **Female** **Date:** _____

If this questionnaire is completed by an informant, **what is your relationship with the individual?**

_____

_____ **In a typical week, approximately how much time do you spend with the individual?**_____ **hours/week**

Instructions: The questions below ask about things that might have bothered you. For each question, circle the number that best describes how much (or how often) you have been bothered by each problem during the **past TWO (2) WEEKS**.

	During the past **TWO (2) WEEKS**, how much (or how often) have you been bothered by the following problems?	**None** Not at all	**Slight** Rare, less than a day or two	**Mild** Several days	**Moderate** More than half the days	**Severe** Nearly every day	**Highest Domain Score** (clinician)
I.	1. Little interest or pleasure in doing things?	0	1	2	3	4	
	2. Feeling down, depressed, or hopeless?	0	1	2	3	4	
II.	3. Feeling more irritated, grouchy, or angry than usual?	0	1	2	3	4	
III.	4. Sleeping less than usual, but still have a lot of energy?	0	1	2	3	4	
	5. Starting lots more projects than usual or doing more risky things than usual?	0	1	2	3	4	
IV.	6. Feeling nervous, anxious, frightened, worried, or on edge?	0	1	2	3	4	
	7. Feeling panic or being frightened?	0	1	2	3	4	
	8. Avoiding situations that make you anxious?	0	1	2	3	4	
V.	9. Unexplained aches and pains (e.g., head, back, joints, abdomen, legs)?	0	1	2	3	4	
	10. Feeling that your illnesses are not being taken seriously enough?	0	1	2	3	4	
VI.	11. Thoughts of actually hurting yourself?	0	1	2	3	4	
VII.	12. Hearing things other people couldn't hear, such as voices even when no one was around?	0	1	2	3	4	
	13. Feeling that someone could hear your thoughts, or that you could hear what another person was thinking?	0	1	2	3	4	
VIII.	14. Problems with sleep that affected your sleep quality over all?	0	1	2	3	4	
IX.	15. Problems with memory (e.g., learning new information) or with location (e.g., finding your way home)?	0	1	2	3	4	
X.	16. Unpleasant thoughts, urges, or images that repeatedly enter your mind?	0	1	2	3	4	
	17. Feeling driven to perform certain behaviors or mental acts over and over again?	0	1	2	3	4	
XI.	18. Feeling detached or distant from yourself, your body, your physical surroundings, or your memories?	0	1	2	3	4	

XII.	19. Not knowing who you really are or what you want out of life?	0	1	2	3	4	
	20. Not feeling close to other people or enjoying your relationships with them?	0	1	2	3	4	
XIII.	21. Drinking at least 4 drinks of any kind of alcohol in a single day?	0	1	2	3	4	
	22. Smoking any cigarettes, a cigar, or pipe, or using snuff or chewing tobacco?	0	1	2	3	4	
	23. Using any of the following medicines ON YOUR OWN, that is, without a doctor's prescription, in greater amounts or longer than prescribed [e.g., painkillers (like Vicodin), stimulants (like Ritalin or Adderall), sedatives or tranquilizers (like sleeping pills or Valium), or drugs like marijuana, cocaine or crack, club drugs (like ecstasy), hallucinogens (like LSD), heroin, inhalants or solvents (like glue), or methamphetamine (like speed)]?	0	1	2	3	4	

Instructions to Clinicians

The DSM-5 Level 1 Cross-Cutting Symptom Measure is a self- or informant-rated measure that assesses mental health domains that are important across psychiatric diagnoses. It is intended to help clinicians identify additional areas of inquiry that may have significant impact on the individual's treatment and prognosis. In addition, the measure may be used to track changes in the individual's symptom presentation over time.

This adult version of the measure consists of 23 questions that assess 13 psychiatric domains, including depression, anger, mania, anxiety, somatic symptoms, suicidal ideation, psychosis, sleep problems, memory, repetitive thoughts and behaviors, dissociation, personality functioning, and substance use. Each item inquires about how much (or how often) the individual has been bothered by the specific symptom during the past 2 weeks. If the individual is of impaired capacity and unable to complete the form (e.g., an individual with dementia), a knowledgeable adult informant may complete the measure. The measure was found to be clinically useful and to have good test-retest reliability in the DSM-5 Field Trials that were conducted in adult clinical samples across the United States and in Canada.

Domain	Domain Name	Threshold to guide further inquiry	DSM-5 Level 2 Cross-Cutting Symptom Measure available online
I.	Depression	Mild or greater	LEVEL 2—Depression—Adult (PROMIS Emotional Distress—Depression—Short Form)[1]
II.	Anger	Mild or greater	LEVEL 2—Anger—Adult (PROMIS Emotional Distress—Anger—Short Form)[1]
III.	Mania	Mild or greater	LEVEL 2—Mania—Adult (Altman Self-Rating Mania Scale)
IV.	Anxiety	Mild or greater	LEVEL 2—Anxiety—Adult (PROMIS Emotional Distress—Anxiety—Short Form)[1]
V.	Somatic Symptoms	Mild or greater	LEVEL 2—Somatic Symptom—Adult (Patient Health Questionnaire 15 Somatic Symptom Severity [PHQ-15])
VI.	Suicidal Ideation	Slight or greater	None
VII.	Psychosis	Slight or greater	None
VIII.	Sleep Problems	Mild or greater	LEVEL 2—Sleep Disturbance - Adult (PROMIS—Sleep Disturbance—Short Form)[1]
IX.	Memory	Mild or greater	None
X.	Repetitive Thoughts and Behaviors	Mild or greater	LEVEL 2—Repetitive Thoughts and Behaviors—Adult (adapted from the Florida Obsessive-Compulsive Inventory [FOCI] Severity Scale [Part B])
XI.	Dissociation	Mild or greater	None
XII.	Personality Functioning	Mild or greater	None
XIII.	Substance Use	Slight or greater	LEVEL 2—Substance Abuse—Adult (adapted from the NIDA-modified ASSIST)

Scoring and Interpretation

Each item on the measure is rated on a 5-point scale (0=none or not at all; 1=slight or rare, less than a day or two; 2=mild or several days; 3=moderate or more than half the days; and 4=severe or nearly

every day). The score on each item within a domain should be reviewed. Because additional inquiry is based on the highest score on any item within a domain, the clinician is asked to indicate that score in the "Highest Domain Score" column. A rating of mild (i.e., 2) or greater on any item within a domain (except for substance use, suicidal ideation, and psychosis) may serve as a guide for additional inquiry and follow up to determine if a more detailed assessment for that domain is necessary. For substance use, suicidal ideation, and psychosis, a rating of slight (i.e., 1) or greater on any item within the domain may serve as a guide for additional inquiry and follow-up to determine if a more detailed assessment is needed. The DSM-5 Level 2 Cross-Cutting Symptom Measures may be used to provide more detailed information on the symptoms associated with some of the Level 1 domains (see Table 1 below).

Frequency of Use

To track change in the individual's symptom presentation over time, the measure may be completed at regular intervals as clinically indicated, depending on the stability of the individual's symptoms and treatment status. For individuals with impaired capacity, it is preferable that the same knowledgeable informant completes the measures at follow-up appointments. Consistently high scores on a particular domain may indicate significant and problematic symptoms for the individual that might warrant further assessment, treatment, and follow-up. Clinical judgment should guide decision making.

Table 1: Adult DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure: domains, thresholds for further inquiry, and associated Level 2 measures for adults ages 18 and over

[1]The PROMIS Short Forms have not been validated as an informant report scale by the PROMIS group.