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DEPARTMENT OF PSYCHOLOGY

FOSTERING A FUTURE: THE ROLE OF POST-TRAUMATIC STRESS DISORDER AND
SOCIAL SUPPORT ON EMPLOYMENT IN YOUTH AGING OUT OF FOSTER CARE

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ABSTRACT

Research on youth aging out of foster care is limited and rarely focuses on their outcomes in life. Not only are these youths starting out at a disadvantage without a stable home life or clear sources of support compared to other youth their age, they are also less likely to be employed and more likely to suffer from emotional disorders, only worsening their living conditions and potentially their outcomes in life. The present study explored the relationship between post-traumatic stress disorder (PTSD) symptoms and employment status of these youths and also explored a potential mediation role for social support on this relationship. The sample studied were 50 young adults who have aged out of foster care or have been homeless prior to reaching adulthood. Those young adults who had more PTSD symptoms were expected to have low rates of employment. Social support was expected to buffer this link between PTSD and employment status. These hypotheses were tested using self-reported PTSD symptomology (PCL-5), perceived social support (MSPSS), and employment status at the time of the interview. Although the hypotheses were not supported, individual facets of social support were found to negatively correlate with PTSD symptoms. The results of this study may be useful for developing interventions for these youth.

TABLE OF CONTENTS

LIST OF FIGURES	iii
ACKNOWLEDGEMENTS	iv
Chapter 1 Introduction	1
Chapter 2 Purpose of the Present Study.....	7
Chapter 3 Methods	8
Participants.....	8
Procedure	8
Post Traumatic Stress Disorder Checklist for DSM-5 (PCL-5)	9
Multidimensional Scale of Perceived Social Support (MSPSS).....	10
Employment	10
Chapter 4 Results	11
(1) PTSD Symptoms and Employment.....	12
(2) PTSD Symptoms and Social Support.....	12
(3) Social Support and Employment	13
Summary	13
Chapter 5 Discussion	14
Chapter 6 Conclusion.....	19
Appendix A Demographic Information	20
Appendix B Post Traumatic Stress Disorder Checklist for DSM-5 (PCL-5)	21
Appendix C Multidimensional Scale of Perceived Social Support (MSPSS)	22
Appendix D Participants' Explanations of Who is their Family	23
References	24

LIST OF FIGURES

Figure 1. Test of mediation between PTSD and employment by social support	11
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Chapter 1

Introduction

For a majority of young adults, the transition to independence is a fairly gradual process. They slowly become more independent throughout their young adult years, while depending less and less on their parents (Goldscheider & Goldscheider, 1999; Settersten, Furstenberg, & Rumbaut, 2005). In 2017, the U.S. Census Bureau reported that 57% of men and 51% of women aged 18 to 24 years old were living with one or both of their parents. A majority of this population still living at home and are still relying heavily on their parents for both financial and emotional support as they transition to their independence. Roughly 75% of parents with adult children report helping these children financially (Kline, 2017). Additionally, when a nationally representative sample was asked, “Do you feel you have reached adulthood?”, more than 60% of 18- to 25-year-olds reported “in some respects yes and in some respects, not yet” (Arnett, 2000, 2001). This six-year period in an individual’s life where people do not regard themselves as “fully” adult is referred to as “emerging adulthood”. Researchers from this same study described this time period in an individual’s life as when “people have not yet assumed the enduring responsibilities that are normative of adulthood” (Arnett, 2000). This can be contrasted with the situation confronting the 20,020 young adults that age out of foster care every year (Children’s Bureau, 2018). These individuals must make the transition to adulthood more abruptly and primarily on their own. Those former foster care youth typically don’t have traditional families or stable parental figures (e.g., parents or other adults that have permanent guardianship over them) to seek emotional or material support from.

Not only are these youths starting out at a disadvantage without a stable home life or clear source of support, they are less likely to be employed, only worsening their living conditions. Fifty percent of youth that have aged out of foster care are still unemployed by age 24, compared to only a 10% unemployment rate within their same-aged peers (U.S. Bureau of Labor Statistics, 2017). According to Ellwood (1982), being unemployed as a youth seems to correspond with a reduced likelihood of obtaining a job in the future. Employment not only introduces a source of income to maintain the individual's lifestyle, it also serves psychological and socialization functions. It offers opportunities to train and gain skill in a field of work. It also may give youth a sense of purpose in life, as they are positively contributing to society through the work they produce. Finally, having a job promotes shared experiences and bonding with individuals outside one's family or immediate group of friends, furthering one's ability to make connections that they may use to advance their job in the future.

Unemployment, in addition to not reaping the previously mentioned benefits of having a job, has been linked to an increased risk for committing crimes (Farrington et al., 1986; Horney, Osgood, and Marshall, 1995), more conflicts suffered with people within the same household (Conger, Ge, Elder, Lorenz, & Simons, 1994), and a higher risk of developing mental health issues and a poorer psychological well-being (Warr, Jackson, and Banks, 1988).

Not only do these youth have poorer job standings compared to their peers, they are also more likely to develop Post-Traumatic Stress Disorder (PTSD). This may suggest that mental health problems contribute to the capacity to be unemployed as symptoms of PTSD may include being withdrawn so as to have limited social interactions, severe anxiety which may be exacerbated with stress from working, and loss of interest in activities, among others.

Mendlowicz and Stein (2000) found, through a review of epidemiological studies, that

participants with PTSD had a significantly higher risk of poorer overall well-being, fair or poor physical health, current unemployment, and significantly more physical limitations than their peers. The National Foster Youth Institute, an organization aimed at aiding youth in the foster care system, reported that 25% of these youth have shown or may still be showing symptoms of PTSD. In all adolescents aged 13- to 18-years-old, the U.S. Department of Veterans Affairs reported that only 5% have met the criteria for PTSD sometime in their young lives, indicating that PTSD is 5x more likely in youths who have aged out of foster care. Although there is presently insufficient information on the quality of life with patients with PTSD, Malik and colleagues (1999) found that this quality of life is markedly compromised.

As children who have entered the foster care system have done so for reasons making it impossible to stay in their homes, sadly many are likely to have entered for experiencing maltreatment and neglect. These reasons may hint at the experience of trauma, with possible reasons for entering foster care including sexual abuse, neglect, abandonment, truancy, and death of a parent. When being questioned about childhood maltreatment, a majority of the respondents noted having experienced more than one conflict or difficulty with their parents or caregivers. Mersky and Topitzes (2009) found that maltreatment victims fare significantly worse than their peers in the areas of educational and economic attainment, criminal conduct, and behavioral and mental health, while this population already has noted a decrease in the ability to obtain a job. Therefore, the goal of the present study is to recognize potential correlations between factors in these youths' lives.

The development of PTSD has also been linked to both social support and employment. Interpersonal characteristics of an individual, such as social support, have been implicated in PTSD (Adams & Boscarino, 2005). Laffaye, Cavella, Drescher, and Rosen (2008) found in their

sample of veterans that the more severe their participants' PTSD symptoms were, the greater the decrease in social support from friends, with the support from family members not changing. As many youth who have aged out of foster care have limited interaction with family members, support from friends would likely be more important in coping with their situations. Laffaye's (2008) findings, however, suggest this support may decrease if severe PTSD symptoms are present. Additionally, Adams and Boscarino (2006) found that within the first year after a traumatic event occurs for an individual, having low social support increased the likelihood of the onset of PTSD. However, these results did not remain true for the second year after the traumatic event occurred. This might suggest that the youth who have recently experienced a traumatic event in the present study may be more susceptible to developing PTSD. These results may generalize to youth in foster care, who also experience significant and traumatic life events.

Furthermore, a meta-analysis found that social support was one of the most robust predictors of developing PTSD (Brewin, Andrews, & Valentine, 2000). This negative association between social support and PTSD has been associated with not only a greater likelihood of developing PTSD, but PTSD has also been shown to deteriorate relationships and support. This suggests that even if social support is present during a traumatic event, reducing the likelihood of PTSD, it may still deteriorate over time if the individual does develop PTSD. Finally, another study found that after developing the PTSD, continuous social support dampened the severity of the symptoms, specifically the negative posttraumatic cognitions (Zang, et. al, 2017). If social support remains after developing PTSD, although research suggests that is it less likely, individuals experiencing PTSD symptoms may be able to see relief in the severity of their symptoms.

Not only has social support been shown to correlate with PTSD, but it has also been found to relate to employment. Chan (2015) found that social support in a workplace promoted more sustainable attachment to work. This was observed through addressing workplaces challenges as a team, finding resolutions to work-based conflicts, and building workers self-confidence. This helped individuals to adapt to stress and work well in a professional setting. Additionally, Bunning and colleagues (2014) focused on a different type of social support. Mothers who wished to return to the labor market after childbirth were able to do so if they had individuals supporting them in childcare. Both Gjerdingen (2014) and Perreault (2017) found a positive correlation between employment and social support, with mental health problems negatively correlated with both. As youth that have aged out of foster care look for employment, social support seems to enhance their ability to both get and maintain a job through a variety of factors. While social support directly relates to the onset and outcome for PTSD, it also plays an indirect role in the ability for an individual to obtain a job (i.e., childcare, work conflict resolutions, mental health). Therefore, social support may account for possible changes in employment levels and explain the relationship between these variables. For all these reasons, social support may act as a mediator in the relationship between PTSD symptoms and employment.

Previous research has reported homelessness and unemployment to be a significant problem among youth aging out of foster care, yet studies have not attempted to identify these potential risk or protective factors. Additionally, there has been limited research on the rates of PTSD symptoms in those children who may be more at risk for these issues due to traumatic and unstable home lives.

While there appears to be a link between PTSD and employment, with social support also interacting with both of these variables, no study has yet to address the specific relationship

between these items. By learning the how youth who have aged out of foster care may be negatively affected by difficulties with employment or how they struggle with PTSD symptoms, future researchers may be able to identify these difficulties earlier, leading to an easier transition to adulthood for these individuals.

Chapter 2

Purpose of the Present Study

The purpose of this study is to test the link between PTSD symptoms in young adults aging out of foster care and whether or not they have a job. The hypotheses are as follows:

- (1) Young adults with a higher number of PTSD symptoms will be less likely to be employed at the time of the study.
- (2) Young adults' level of perceived social support will act as a mediator for the link between PTSD symptoms and employment.

Chapter 3

Methods

Participants

This study included 50 young adults that have aged out of foster care or have been homeless prior to reaching adulthood. The participants were recruited from agencies providing services to youth in the north central Pennsylvania area. The majority of the sample was female ($n = 33$). The mean age was 19.38 years old ($SD = 1.66$). With regard to ethnicity, 25 (50%) of the participants identified as White/Caucasian, 11 (22%) as African American, 2 (4%) as Hispanic/Latino, and 12 (24%) as part of another ethnic group. Of the participants, 46 (92%) reported having been in foster care placement. Additional demographic information can be found in Appendix A.

Procedure

Representatives from agencies who provide services to youth were given details regarding the present study. These representatives were then asked to pass on the information to all eligible young adults in their programs. Those participants that chose to take part in the study then participated in a three-hour interview at their corresponding agency. Undergraduate students were trained to conduct these interviews. A total of 24 measures were administered to the participants, three of which were used for analyses in the present study: Post Traumatic Stress

Disorder Checklist for DSM-5 (PCL-5), Multidimensional Scale of Perceived Social Support (MSPSS), and current employment status.

Post Traumatic Stress Disorder Checklist for DSM-5 (PCL-5)

The PCL-5 is a 20-item self-report measure used to assess both the presence and severity of PTSD symptoms experienced. All items addressed in the PCL-5 correspond with DSM-5 criteria for PTSD. This measure is not used to diagnose participants with PTSD, but rather to quantify symptoms (e.g., avoiding memories, anhedonia, irritable behavior, etc.) and screen individuals for PTSD.

When administered, the PCL-5 instructs participants to rate how bothered they have been by each of 20 items on a 5-point Likert scale. This scale ranges from 0-4, with 0 corresponding to “not at all” and 4 corresponding to “extremely”. For this study, all 20 items were summed (range 0-80). Although a cut-point of 33 is typically recommended when running analyses with the PCL-5, a lower cut-point is suggested when screening participants or when it is desirable to maximize detection of possible cases. Therefore, a cut-point of 31 was ultimately chosen. Bovin and colleagues found this score to be optimally efficient for the diagnosis of PTSD, further supporting the choice of this specific cut-point ($\kappa (.5) = .58$). In this same study, internal consistency was demonstrated ($\alpha = .96$), in addition to test-retest reliability ($r = .84$), and convergent and discriminant validity (Bovine et al., 2016), lending support to the credibility of the chosen measurements within the present study. See Appendix B.

Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS is a 12-item research tool that assesses perceptions of support from each of three sources: family, friends, and a significant other. Of the 12 items that comprise the scale, 4 items are specifically addressing each of the three subscales (e.g., family). Participants are asked to rate how they feel about each item using a 7-point Likert Scale. The scale ranges from 1-7, with 1 being “very strongly disagree” and 7 being “very strongly agree”.

For this study, a mean score was calculated for the sum of the three subscales, with scores ranging from 1 to 2.9 being considered low support; a score of 3 to 5 being considered moderate support; and a score from 5.1 to 7 being considered high support. Additionally, mean scores were calculated independently for each of the subscales (i.e., family, friends, significant other). Zimet and colleagues (1988) found this measure to be internally consistent for the whole scale ($\alpha = 0.88$), as well as each of the individual subscales ($\alpha = 0.91, 0.87$, and 0.85 , respectively). Within this study, this scale was also found to be reliable ($\alpha = 0.93$). This scale was also reliable within this study ($\alpha = 0.92$). See Appendix C.

Employment

Employment at the time of the study was assessed. Participants were asked to report if they were currently employed, if they were part- or full-time, and for how many hours a week they worked.

Chapter 4

Results

As a first step in exploring relationships among the study variables: PTSD symptoms, employment, and social support, a Pearson correlation matrix was constructed. To conduct a mediational analysis to test the study hypotheses, four conditions are required: (1) confirming significance of the relationship between PTSD symptoms and employment, (2) confirming the significance of the relationship between PTSD symptoms and social support, (3) confirming the significance of the relationship between social support and employment, and (4) confirming the significance (or the meaningful reduction in effect) for the relationship between PTSD symptoms and employment in the presence of social support. Unfortunately, all the foundational conditions were not met, as there was no significant relationship between PTSD symptoms and employment, making testing a mediational relationship impossible.

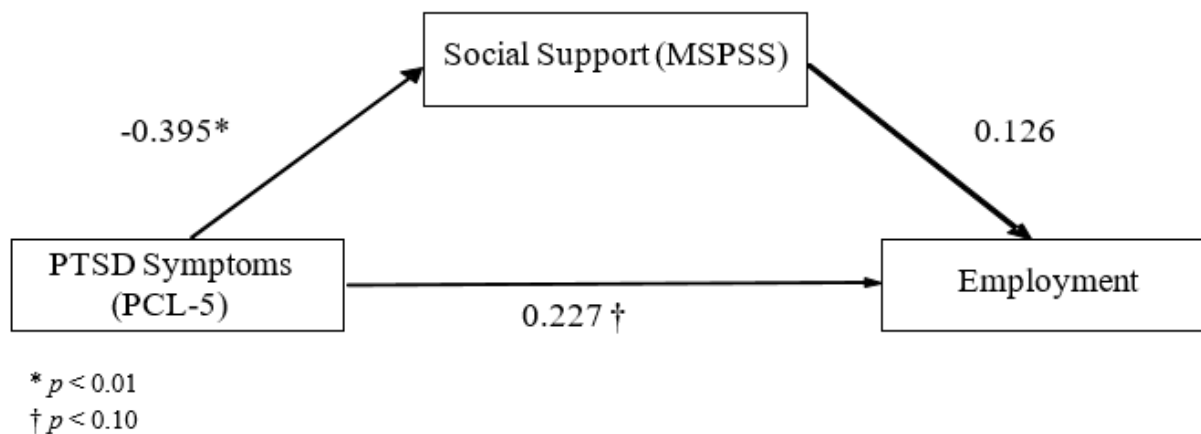


Figure 1. Test of mediation between PTSD and employment by social support

(1) PTSD Symptoms and Employment

The association between PTSD and employment status for youth who have aged out of foster care (or who have been homeless) were tested using a Pearson Correlation (Statistical Package for the Social Sciences, Inc., 2017). Three correlations were computed between levels participants' PTSD symptoms using different variables describing employment, but none were found to be significant (number of hours worked $r = -0.05$, $p = \text{n.s.}$; part- or full-time work status $r = 0.16$, $p = \text{n.s.}$; employed [yes/no] $r = 0.23$, $p = 0.057$). While there was no significant relationship between PTSD symptoms and employment, there was a trend between levels of symptoms and whether the participant was employed or not.

(2) PTSD Symptoms and Social Support

Although no relationship was found between the primary variables, social support was analyzed to determine possible relationships with PTSD symptoms and employment. Significant correlations were found between PCL-5 values and total MSPSS scores ($r = -0.395$, $p < 0.01$), such that those who rated less symptoms of PTSD perceived themselves as having higher social support. MSPSS was further broken into subscales, which were also significantly correlated with PCL-5 responses. An additional significant negative relationship was found between the MSPSS family subscale and PCL-5 responses ($r = -0.473$, $p < 0.01$) such that those who responded as experiencing more severe PTSD symptoms showed less familial support. A similar relationship was found for the friend subscale ($r = -0.247$, $p < 0.05$), but no significant relationships were found for the significant other subscale ($r = -0.185$, $p = 0.10$).

(3) Social Support and Employment

No significant relationship was found between MSPSS and any of the metrics of employment status, whether it was hours worked ($r = -0.070, p = 0.34$), employment status ($r = 0.148, p = 0.15$), or part- or full-time employment ($r = 0.078, p = 0.29$).

Summary

As there was no primary correlation between PTSD symptoms and employment, the mediational relationship could not be tested. Relationships, however, were found among the other variables. A significant negative correlation was found between PTSD symptoms and social support, both in the total score and in the “family” and “friends” subscales. The “significant other” subscale did not show similar results. There is no significant relationship found between social support and employment.

Chapter 5

Discussion

The aim of the present study was to identify a possible relationship between levels of PTSD symptoms and employment, and whether social support mediated this relationship. Contrary to prior work, this study failed to find a significant relationship between level of PTSD symptoms and employment status. Significant relationships were found between PTSD symptoms and overall levels of social support, as predicted, though no relationship was found between social support and employment. When the social support was examined (i.e., family, significant other, friends), significant relationships are present between PTSD symptoms and the participants' support from family and friends, while no relationship was seen support from significant others.

Although the relationship between PTSD symptoms and employment was not significant, a strong trend was present with higher levels of PTSD being negatively linked to being employed or not. The lack of a stronger relationship was likely due to the fact that all the participants were recruited from independent living facilities. These independent living facilities provided not only transportation and support from the individuals living there, but it also provided structure in daily living that itself support employment (i.e., making sure the youth are waking up on time, ensuring that youth attend work, etc.). This was not accounted for in the design of the study and the results would not be generalizable to those youth who have aged out of foster care who were not enrolled in independent living programs. While this constrained the study's ability to find a significant link, a strong negative trend still exists. This suggests that the relationship between PTSD symptoms and employment status would be more pronounced for those individuals who

have not been a part of independent living. Future research would need to be conducted to test this hypothesis.

Additionally, the relationship between PTSD symptoms and social support was explored. As mental health problems are often mitigated by social support, and social support may act as a network for obtaining a job, it was predicted that social support would mediate the relationship between PTSD symptoms and employment. The subcategories of friends and family were also noted to be significantly linked with level of PTSD symptoms, but “significant others” were not. These findings, while interesting, are not able to be more deeply understood, as participants were not asked specific questions regarding who they considered to be in each category, how many people were in each category, how much contact they had with these people, and what support types they were provided, among other possible questions. If better understood, this information may suggest how to better ensure that these youth feel more socially supported.

However, it is also interesting that family was found to have a significant relationship with PTSD symptoms, as these individuals have been in foster care or homeless, and now a majority of which are living in an independent living facility as opposed to with their families. Reports from the Census Bureau (2017) show that roughly 55% of young adults aged 18- to 24-years-old are still living in their parents’ home. All participants of this study were not living with their parents at the time of the interview, but 22% ($n = 11$) did report living with their biological siblings while in foster care and 8% ($n = 4$) reported having children. According to the data found in this study, perhaps youth who have aged out of foster place a greater emphasis on the importance of family and rate higher social support from their family if they are living or have lived with one or more of their siblings (i.e., stronger correlations between social support and PTSD symptoms). This was not supported by the data, however, as there is not a significant

correlation between siblings living with participants in foster care and social support scores from family ($r = -0.04, p = 0.386$). Additionally, there is no relationship between the 32% of participants that reported living with siblings in foster care and the participants' levels of PTSD symptoms ($r = -0.07, p = 0.306$).

Furthermore, this study failed to replicate findings from Laffaye and colleagues (2008). These researchers found that more severe PTSD symptoms did not correlate with social support from family. Further research would need to be conducted to determine why family support in this study was correlated with decreased PTSD symptoms. Perhaps independent living programs allow the typical family support to remain intact more than other foster care programs.

Finally, the relationship between social support and employment was not supported. Again, this may be due to the fact that the participants were all living in independent living facilities that provided them with support needed for obtaining and keeping employment. To account for this, future studies may compare differences between youth with and without independent living programs support and also choose to look at those individuals living in independent living facilities should provide additional questionnaires probing what types of support these participants feel they are receiving from the independent living facility in which they live. As the social support questions for this study asked about family, friends, and significant others, there was no clear place for participants to rate the other support they feel they are receiving in their lives. This support and employment may be more strongly correlated to employment than that found in this study, but further research would be needed to test this hypothesis.

Several limitations for this study are present. For example, this sample was not random as the youth who participated were part of organizations that agreed to take part in the study.

Therefore, these results may not necessarily be generalizable to either young adults who have aged out of foster care or those that have lived in independent living facilities in other demographic locations. Additionally, some participants may have rated individuals who were not closely or not at all related to them as their biological family, as the results from a question asked during the interview are summarized and can be seen in Appendix D. As the relationship between PTSD symptoms and social support from family members was significant, this result may not be interpreted correctly if the participants considered those living with them, significant others, or managers of their facilities as members of their family. This relationship also eludes to the question how much contact they are having with their immediate family members, even when living in an independent living facility. While it is known whom these individuals reported as their family, it is still unclear how much contact they have with these people. This family contact may be a confounding variable that future researchers may want to explore and control for. Furthermore, sample size in this study was relatively small, limiting power to detect associations. Finally, as noted earlier, the fact that these youth have taken part in an independent living facility aids them in ways that other youth who have aged out of foster care may not have had the opportunity to take part in. For example, the participants of this study had access to affordable housing, help maintaining employment, and workers who acted as a support system for them. For these reasons, the results obtained in this study are not generalizable to all youth that have aged out of foster care.

To account for these limitations, future researchers may choose to use a more random sample of participants by recruiting them throughout the United States, so that the results may be more generalizable to the youth in more than just the northern and central regions of Pennsylvania. Participants may also be asked how much contact they are what types of support

they are receiving (i.e., monetarily, emotionally, etc.) from family, friends, and significant others to be able to predict what specific support leads to the best outcomes (i.e., lower levels of PTSD symptoms). Finally, a larger sample should be used as participants in this study and followed throughout their lifetimes to be able to increase the power and allow for causal interpretations, and therefore the confidence, of knowing how these individuals adapt over their lifetimes, as compared to this study that only addressed a single moment in time during their young adult lives with its cross sectional data.

Chapter 6

Conclusion

The relationship between PTSD symptoms and employment status among youth who have aged out of foster care or who have been homeless remains unclear. While a trend existed among these variables, no significant correlation was found. A mediational condition of social support on this relationship was therefore not testable, however a significant relationship between PTSD symptoms and social support was found. As this study used participants who were taking part in a state-funded independent living program, the fact that these results did not replicate what has been found in the literature regarding youth who have not lived in independent living programs suggests that these programs improved these young adults' transition to adulthood.

Appendix A

Demographic Information

Age (Mean) 19.38 [18-26]

	Count			Count	% of Whole
Gender			School Status		
Male	17	34%	In School	20	40%
Female	33	66%	Not in School	30	60%
Race			Highest Level of Education		
White	25	50%	None	26	52%
Black	11	22%	Some High School	11	22%
Hispanic	2	4%	High School	5	10%
Other	12	24%	Some College	6	12%
Living Status			College	2	4%
With Family	11	22%	Employment Status		
In Foster Home	1	2%	Unemployed	16	32%
With Roommates	10	20%	Part-time	22	44%
In Group Home	14	28%	Full-time	12	24%
With Partner	6	12%	Marital Status		
Alone	8	16%	Single	33	66%
Placements in Foster Care			In a Relationship	13	26%
1	12	24%	Married	3	6%
2	5	10%	Other	1	2%
3	3	6%			
4 +	20	40%			
N/A	10	20%			

Appendix B

Post Traumatic Stress Disorder Checklist for DSM-5 (PCL-5)

(Weathers et al., 2013)

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Appendix C

Multidimensional Scale of Perceived Social Support (MSPSS)

(Zimet, Dahlem, Zimet, & Farley, 1988)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
 Circle the "2" if you **Strongly Disagree**
 Circle the "3" if you **Mildly Disagree**
 Circle the "4" if you are **Neutral**
 Circle the "5" if you **Mildly Agree**
 Circle the "6" if you **Strongly Agree**
 Circle the "7" if you **Very Strongly Agree**

1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7	SO
2.	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7	SO
3.	My family really tries to help me.	1	2	3	4	5	6	7	Fam
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7	Fam
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7	SO
6.	My friends really try to help me.	1	2	3	4	5	6	7	Fri
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7	Fri
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7	Fam
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7	Fri
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7	SO
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7	Fam
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7	Fri

Appendix D

Participants' Explanations of Who is their Family

Who Participants Considered Their "Family"	Number	Percentage
One or More Biological Parents	17	34
A Biological Parent and Siblings	9	18
Adoptive Parents	1	2
Biological Siblings	1	2
Foster Parents	5	10
Step-Parent	2	4
Extended Family	7	14
Non-Related Individuals	8	16

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ACADEMIC VITA

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EDUCATION

CAMERON COUNTY HIGH SCHOOL, Emporium, PA

High School Diploma, Jun 2015

- Valedictorian of Graduating Class

PENNSYLVANIA STATE UNIVERSITY, University Park, PA

Psychology/Neuroscience, Graduation, May 2019

- Schreyer Honors College

WORK EXPERIENCE

SHEETZ, Emporium, PA

Salesperson, Jun 2016 – Feb 2018

- Resolve customer complaints regarding sales while preparing specific food items simultaneously.

CAMERON COUNTY AMBULANCE SERVICE, Emporium, PA

Emergency Medical Technician, Sept 2016 - Present

- Administer first aid treatment or life support care to sick or injured persons in prehospital settings.
- Observe, record, and report to physician the patient's condition or injury, the treatment provided, and reactions to drugs or treatment.

PENN STATE UNIVERSITY AMBULANCE SERVICE, University Park, PA

Emergency Medical Technician, Apr 2017 - Present

- Worked as the primary crew for the Pennsylvania State University, both during day and night shifts.
- Responsible for athletes and bystanders at university-sponsored events, including sporting and club events, concerts, the Special Olympics, and Penn State University affiliated parties and gatherings.

CERTIFICATIONS

- CPR Certified through American Heart Association
- Emergency Medical Technician Certification
- HazMat Awareness
- EVOC Training Introduction to Incident Command System (IS-00100.b)

AWARDS AND HONORS

- | | |
|--|---|
| • Chemistry Award (2013) | • Superior Academic Achievement in |
| • Miss Cameron County (2013) | College of Liberal Arts (2017) |
| • Math, National, Art, Spanish Honor Societies (2013-2015) | • The President Sparks Award (2017) |
| • Future Business Leaders of America (2014-2015) | • Psi Chi Honor Society (2017-2019) |
| • PA State BIG 30 Academics (2015) | • The Evan Pugh Scholar Award – Senior |
| • Marching Blue Band (2015) | (2018) |
| • The President's Freshman Award (2016) | • Phi Kappa Phi Honor Society (2018-2019) |

VOLUNTEER HISTORY

- 4-H Camp Counselor (2012-2014)
- Cameron County SPCA (2014-2015)
- EMT at Cameron County and St. Marys Area Ambulance Services (2014-2016)
- Guy and Mary Felt Manor Activities Director (2015)
- EMT at Pennsylvania State University Ambulance Service (2016-2017)
- Security Committee Member at Penn State THON (2016-2017)
- Cameron County Food Pantry (2017)
- Research Assistant for Dr. Sandra Azar's Social Cognition and Parenting Research Laboratory (2017-2018)