RELATIONSHIPS BETWEEN ECONOMIC ABUSE AND DEPRESSION, ANXIETY, AND STRESS IN WOMEN AFTER ENDING A ROMANTIC RELATIONSHIP

by

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Abstract

Intimate Partner Violence (IPV) is an exceedingly important concern, as it spans all demographics, including across socio-economic categories. IPV includes physical violence such as hitting, kicking, and sexual assault as well as non-physical violence, which includes threats, stalking, and economic abuse. Negative health effects have been linked to various forms of IPV, making this a relevant topic to study to lessen the incidences of IPV overall. While there is robust literature available regarding physical IPV, economic abuse is a far less studied subgroup of IPV, including how economic abuse affects mental health after an abusive relationship ends. This study used self-reported data provided by 54 participants who completed a demographic questionnaire, the Revised Scale of Economic Abuse, and the Depression Anxiety Stress Scale to examine the relationship between economic abuse and symptoms of depression, anxiety, and stress in cisgender women one or more years after the end of a heterosexual romantic relationship in which there was economic abuse. It was hypothesized that there was a positive relationship between each DASS subscale (depression, anxiety, and stress) and the SEA2 subscales (economic restriction and economic exploitation) as well as the overall mean for the SEA2 Likert-scale items. To evaluate the relationship between each pair of independent and dependent variables, a one-tail Bivariate Pearson correlation was completed. Due to the data being nonlinear, a Spearman's Rank Correlation Coefficient was also completed for each pair of independent and dependent variables. These analyses found a statistically significant relationship between economic abuse and symptoms of depression, anxiety, and stress independently. This study also found a statistically significant relationship between each of the DASS subscales (depression, anxiety, and stress) and the overall mean of the Likert-scale economic abuse data. The results of this study indicate that economic abuse does have an impact on some people who

experience this type of abuse for as long as a decade after the end of the abusive relationship. This study helps to address the gap in the literature regarding what happens one or more years after one leaves an economically abusive romantic relationship. It is important to consider ways to mediate the potential long-term negative outcomes of experiencing economic abuse. Due to the large number of women who experience at least one incidence of IPV, it is extremely important to consider ways to mediate mental health and economic challenges experienced during and after any type of IPV, including economic abuse. However, although this study indicates the need for assistance, so those who experience economic abuse can work toward being economically stable and being mentally healthy, the help received must be useful to the victims' needs, otherwise these efforts will not be helpful. Solutions considering these details should be considered as future research occurs. The results of this study add to the knowledge about the relationships between symptoms of depression, anxiety, and stress and economic abuse on victims with the unique feature of the study being its focus on the time period after the end of the economically abusive relationship.

Keywords: Intimate partner violence (IPV), economic abuse, depression, stress, anxiety

Dedication

This dissertation is dedicated to all of the amazing friends, family members, and colleagues who supported and encouraged me to continue this important work when the task seemed overwhelming. A special thank you to my amazing children, Madeline, Kallie, and Ezra. Your patience and support have encouraged me to keep this project moving even when the days were long and my energy was low.

Furthermore, this dissertation is dedicated to those who have experienced economic abuse with the goal that this study brings greater awareness to their experiences and challenges. To those who have experienced economic abuse, this work is for you. May it cast a light so strong on your experiences that they cannot be ignored, may it amplify your voices and drive the changes needed to help those of you who experience economic abuse, and may all affected by such abuse rise above these experiences.

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Thank you to Keiser University staff and faculty for preparing me to take on this project and complete my dissertation with fidelity. I would like to express my deepest gratitude to my dissertation chair, Dr. Rita Westermann-Bolton. Her mentorship, guidance, and insightful feedback were invaluable in fostering my academic growth and were integral to my successful completion of this process.

I would also like to express my heartfelt appreciation for my dissertation committee members, Dr. Brian Esterling and Dr. Laurie Slifka, for their support and guidance through this process. Their thoughtful input and constructive criticism greatly enhanced the quality of my research. I am truly fortunate to have had the opportunity to receive their advice and encouragement.

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CHAPTER 1. INTRODUCTION

Introduction to the Study

Intimate Partner Violence (IPV) is a subject often found in both media reports and academic journals. This topic affects children, parents, family members, and society in a variety of ways, which explains the need for continuous research. There are several types of abuse included under the IPV umbrella. One form is physical violence, including sexual violence, which is categorized by behaviors including but not limited to hitting, kicking, using an object to harm, sexual abuse, and homicide. IPV can also be psychological or emotional, such as name-calling, coercive statements, stalking, harassment, and defamation. In contrast, economic abuse focuses on the control of resources, ability to work, and right to one's own money. Though non-physical, economic abuse can cause hardships for those who experience this type of IPV. Additionally, IPV may involve control or harm of something or someone in which a person finds value, such as a child, a home, a friendship, or a job. Many times, more than one type of IPV is present in a relationship, and behavior patterns may escalate from non-physical to physical abuse or back and forth between IPV types (American Psychiatric Association (APA), 2013; Centers for Disease Control and Prevention (CDC), 2022; Christy, 2017; Haifley, 2021).

However, economic abuse is often overlooked as a stand-alone topic to be studied and must be explored further to find ways to provide support for victims in addition to prevention services and strategies. Often, studies and statistics focus on physical violence. For example, the CDC (2022) created a quick reference page titled Fast Facts: Preventing Intimate Partner Violence, which lists basic information about types of abuse. Though this page includes information about physical violence, sexual violence, stalking, and psychological aggression against one's partner or former partner, the page does not review economic abuse as an

independent type of IPV. One may decipher that the CDC means to include IPV in the psychological aggression category listed in the text, as economic abuse includes coercive behavior patterns, but that is unclear and may not be obvious to those who are not aware that this type of IPV has a specific name or that economic abuse is considered abuse or a form of coercive control. While it is understandable to present information about IPV that is physically obvious, as there is clearer proof rather than self-reported data, this does not negate the necessity for tracking the incidences and effects of non-physical IPV, including economic abuse. For example, this CDC page includes action steps to take that assist individuals and families in receiving assistance with becoming and staying financially stable, meaning that the CDC concurs with the academic literature indicating that the economic challenges of IPV are considered important to creating stability for an individual or family (APA; 2013; CDC, 2022; Christy, 2017; Haifley, 2021).

Within physical IPV, there has been research that focused on whether staying with a partner is better than in a shelter and which options for assistance may help the most when leaving a relationship where there is physical IPV (Henze-Pedersen & Poulsen, 2023; Keefe & Hahn, 2021; Pinto et al., 2019; Yakubovich et al., 2022). Additionally, studies have examined LGBTQ+ relationships where IPV is present and how this affects life experiences. Because the LGBTQ+ population has additional safety concerns due to being marginalized, this research has included both physical violence and psychological violence. Psychological IPV may include being outed as LGBTQ+ or a threat to be outed when it was not safe to do so or the individual was not ready to or interested in sharing this information (Anderson, 2020; Kattari et al., 2022; Peitzmeier et al., 2019; Peitzmeier et al., 2020). Moreover, research has been completed to examine a variety of demographics within the LGBTQ+ umbrella to find where similarities and

differences may exist in patterns of physical IPV, including patterns of seeking or not seeking help after being threatened or harmed (Anderson, 2020; Etaugh, 2020; King et al., 2021; Kurdyla, 2023).

More recently, research focused on the COVID-19 pandemic and how this global event affected physical IPV rates as well as personal experiences of physical violence within relationships. Research included the perils of lockdowns on those experiencing IPV during the COVID-19 pandemic. Further, the mental health implications of lockdowns and the pandemic effects on IPV rates and experiences is a subtopic that is explored in the available literature. Understanding physical violence as well as how a pandemic affects this type of IPV is an important topic of study. It is clear that researchers are concerned about the well-being of those who have been through physical abuse. However, additional studies to explore economic abuse would further assist in our understanding of this type of IPV as well as how the pandemic may have affected those experiencing economic abuse (Agüero, 2021; Buttell et al., 2021; Glowacz et al.; 2022; Lyons & Brewer, 2021; McNeil, 2023; Moffitt et al., 2022; Peitzmeier et al., 2022; Usta et al., 2021; Walsh et al., 2022).

Non-physical IPV is studied less often than physical IPV, but it would be helpful to consider this category of abuse when making public policies, deciding family and criminal court cases, and providing social services for those living in poverty due to economic abuse. As a result, there is a gap in the literature regarding some sub-topics of non-physical IPV. One such gap is whether there are long-term effects of economic abuse on women, and potentially their children, after a romantic relationship ends. Long-term effects may include negative medical, emotional, economic, or other repercussions related to prior or continued economic IPV. Though this topic is gaining popularity in literature, more research needs to be completed to thoroughly

examine this form of non-physical IPV. Additional research will support those who experience economic abuse, assist in guiding social services organizations as to the best ways to assist, and guide officers of the court and law enforcement officers when dealing with this type of abuse directly and with situations they are working to evaluate. Non-physical IPV can include economic abuse, such as sabotaging work opportunities, refusal to care for children thus preventing the other parent from working or attending school, refusal to pay support monies owed due to court or child support proceedings when able to, and confiscating income. Focusing on economic issues related to IPV is important; though some research has been conducted, more information is needed to help guide social service programs, officers of the court, and governmental policies that aim to support a path toward economic stability for victims of economic abuse (Haifley, 2021; Postmus, 2020; Stylianou, Postmus, & McMahon, 2013).

Background of the Study

The current body of academic literature mainly focuses on physical IPV. This topic often has statistics readily available through public service and government entities as the result of court cases, law enforcement involvement, CDC studies and programs, and social service program evaluations that are used to gauge efficacy of social service programs and organizations. Non-physical IPV is also a concern yet is studied less often than physical IPV. While continued research of physical IPV is important, non-physical IPV has been shown to create healthcare accessibility disparities, physical and mental health challenges, food insecurity, and behavior challenges for individuals and families (Baughman, 2017; CDC, 2022, Daundasekara et al., 2020; Haifley, 2021; Hsu & Wickrama, 2015; Lefebvre et al., 2017; Pulgar et al., 2016).

Adverse childhood experiences (ACEs) studies have shown that the higher the ACEs score (the number of adverse situations or experiences in childhood), the higher the chance for

children to struggle with behavior challenges, mental and physical health disparities, and substance abuse (Barnes, 2020; Barrera et al., 2019; Beal, 2019; Schenck-Fontaine & Panico, 2019). In addition, adults have a higher likelihood for challenges such as physical IPV, violence, food insecurity, and homelessness when ACEs scores are elevated (Braveman et al., 2018). Further, there is a higher incidence of drug use, depression, and physical and mental health challenges for adults with high ACEs scores (Houtepen et al., 2020; Lanier et al., 2018; McGrath et al., 2017). Because socio-economic status can affect ACEs scores, economic abuse of a parent or guardian can trickle down to affect children in the home as well causing non-physical IPV, such as economic abuse, which leads to an important topic in the landscape of socioeconomic challenges, social services, psychology, legislation, judicial proceedings, and public policy.

Statement of the Problem

Economic IPV is a less-studied form of IPV yet can have a large influence on the quality of life of an individual as well as their children during the time the abuse occurs. Socio-economic challenges affect access to resources such as healthcare and education opportunities, can cause food insecurity, and can contribute to behavior challenges for individuals and families (Baughman, 2017; CDC, 2022, Daundasekara et al., 2020; Haifley, 2021; Hsu & Wickrama, 2015; Lefebvre et al., 2017; Pulgar et al., 2016).

Additionally, research that examines ACEs has explored how socioeconomic status affects individuals in childhood and as they age into adolescence and adulthood. Findings have shown that the higher a person's ACEs score, the higher the chance they will experience challenges including mental health, physical health, substance abuse, and economic challenges. While ACEs is not the only factor in determining one's risk for negative outcomes, ACEs is a risk factor to be considered. Because economic abuse can affect a child's quality of life, ACEs is

another strong reason to research the potential mental health challenges that participants attribute to experiencing economic abuse in a prior relationship, as this can also influence a child's experience during childhood and their ACEs score (Barnes, 2020; Barrera et al., 2019; Braveman et al., 2018; Houtepen et al., 2020; Lanier et al., 2018; McGrath et al., 2017).

Considering the often-cyclical nature of socioeconomic challenges, it is important to consider whether there are long-term effects of economic abuse on those who experience this form of IPV and how best to mediate these challenges, as not all programs are meaningful for those who receive assistance (Cheng et al., 2016; Coley et al., 2018). Understanding the rates of long-term effects of economic abuse on mental health can directly speak to the resources needed to assist those who struggle to achieve economic stability after leaving an economically abusive relationship.

Purpose of the Study

Economic abuse, also known as financial abuse, is defined as a way to have power over the victim's financial resources to control them, according to Adams et al. (2008). Controlling financial resources can cause economic disparities as well as physical and mental health challenges for the victim and their dependent children (Adams et al., 2008; Barrera et al., 2019; Houtepen et al., 2020; Jahn et al., 2021; Kanougiya et al., 2021; Lanier et al. 2018). After a romantic relationship ends, economic abuse has the potential to become even more impactful, because the newly single individual must provide for themselves while paying for legal services to recover support monies. Single parents must also provide for themselves and their children even if they have very few economic resources due to economic abuse. Campbell (2017) notes that physical abuse can turn into denial of resources and attempts to negatively affect the victim's bank account through repeated court actions brought on by the abuser and refusal to pay

for child support. Christy et al. (2022) found that participants who were providers of services or victims of economic abuse went as far as to suggest creating laws and using court actions against the perpetrators of economic abuse, as this form of IPV may be a challenge to remedy without legal repercussions.

Though economic abuse occurs at any time, there is additional concern by several researchers regarding how the COVID-19 pandemic affected IPV dynamics. Warren et al. (2022) found that the COVID-19 pandemic was used by perpetrators to exercise coercive control over victims. Evidence suggests that COVID-19 has been a reason some people use to explain why they lowered or ended support payments of minors without proof of change in circumstances (Royal, 2022). These are examples of perpetrators of economic abuse, in some cases, using the COVID-19 pandemic to deny resources for those to whom they owe support monies and brings to light the need to study, evaluate, and mediate economic abuse.

Previous literature about economic abuse primarily focused on prevalence in elderly populations and those who are currently in an intimate relationship with the perpetrator. However, research has not yet focused on potential long-term, post-relationship mental health repercussions of prior economic abuse and the potential effects on female victims of this type of abuse (Black, 2008; Kutin et al., 2017). Due to this gap, more research is needed to explore how economic abuse touches the lives of victims after a relationship ends.

Adams and Beeble (2019) examined psychological well-being and focused more on the overall quality of life of participants experiencing various types of abuse. Such mental health issues may affect the parenting strategies of the victim, their ability to seek and hold a steady job, and their efforts in securing adequate food and housing, thus enabling the victim to provide a

continuously stable home life for her children (Berryhill & Durtschi, 2017; Borchers et al., 2016; Chiesa et al., 2018).

Understanding post-relationship ramifications of economic abuse on mental health can facilitate better assistance with mental health, physical health, and economic stability challenges for victims of economic abuse. In addition, studying this type of abuse can better inform officers of the court as to how best to manage divorce cases and repeated post-divorce lawsuits involving finances such as alimony and child support payments, when to adjust child share agreements due to one person not exercising their shared custody rights thus causing the other person to lose time for work, and other factors that may affect economic resources for each party.

Research on economic abuse extends cross-culturally. A study that focused on the strategies for coping with economic abuse in 84 married South-Asian women in Britain, India, and Pakistan found that one-third of the participants were economically abused, while two-thirds were economically and physically abused (Chowbey, 2017). The author also noted that the participants used four types of strategies for dealing with economic abuse: material, confrontational, mediational, and developmental; research on these coping methods can help inform future studies regarding mediations of this type of abuse. The purpose of this study was to use quantitative data to find whether economic abuse leads to self-reported symptoms of depression, stress, and anxiety in adult women one to ten years after ending a romantic relationship where economic abuse occurred. Understanding the rates of depression, stress, and anxiety symptoms after economic abuse can lead to a better understanding of the gravity of this type of IPV; thus, leading to more concentrated, and ideally more effective, approaches for organizations that assist those dealing with socio-economic hardships. This research can also aid court personnel in better understanding the intricacies of decisions about child custody and

visitation, alimony payments, and child support payment orders when patterns of economic abuse are present.

Rationale

This study contributed to the IPV literature at large and to the more specific topic of economic abuse. The quantitative data examined the relationships between symptoms of stress, anxiety, and depression and self-reported experiences of prior economic abuse after a romantic relationship ends using the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008). The data also showed whether the severity of self-reported economic abuse had a relationship with symptoms of depression, anxiety, and stress. This data was used to better understand the gap in literature regarding long-term potential repercussions of economic abuse after a relationship ends. Results from this study were vital to understanding the relationship between economic abuse and mental health, which can also lead to future research regarding whether assistance through economic stability programs can mediate the effects of such economic abuse. Additionally, officers of the court and law enforcement officers have the opportunity to utilize the result from this study and future research to inform decisions about coercive control behavior patterns, how best to rule in family court cases, and ways to mediate challenges that may occur when court orders relating to financial and child custody matters are addressed.

Research Questions and Hypotheses

Research Questions

RQ1. Is there a relationship between economic abuse and symptoms of depression, anxiety, and stress after a romantic relationship where economic abuse was present?

RQ_{1a}. Is there a relationship between economic abuse and symptoms of depression after a romantic relationship where economic abuse was present?

$RQ_{1b.}$ Is there a relationship between economic abuse and symptoms of anxiety after a romantic relationship where economic abuse was present?

$RQ_{1c.}$ Is there a relationship between economic abuse and symptoms of stress after a romantic relationship where economic abuse was present?

RQ2. Is there a relationship between the severity of economic abuse and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present?

RQ_{2a}. Is there a relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present?

$RQ_{2b.}$ Is there a relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present?

$RQ_{2c.}$ Is there a relationship between the severity of economic abuse and symptoms of stress post-relationship where economic abuse was present?

$RQ_{2d.}$ Is there a relationship between the number of incidences of economic abuse and the severity of symptoms of depression, anxiety, and stress post-relationship where economic abuse was present?

Hypotheses

There were several hypotheses regarding economic abuse and potential relationships with the victim's mental health in this study. First, it was expected that there would be a positive relationship between economic abuse and symptoms related to depression in women post-

relationship where economic abuse was present. Second, it was expected that there would be a positive relationship between economic abuse and symptoms related to anxiety in women post-relationship where economic abuse was present. Third, it was expected that there would be a positive relationship between economic abuse and symptoms related to stress in women post-relationship where economic abuse was present. Fourth, it was expected that there would be a positive relationship between the severity of economic abuse and level of self-reported symptoms of each of the following mental health concerns separately: depression, anxiety, and stress.

RQ1. Is there a relationship between economic abuse and symptoms of depression, anxiety, and stress after a romantic relationship where economic abuse was present?

$H1_{0a}$. There is no relationship between economic abuse and symptoms of depression in women post-relationship where economic abuse was present.

$H1_{1a}$. There is a positive relationship between economic abuse and symptoms of depression in women post-relationship where economic abuse was present.

$H1_{0b}$. There is no relationship between economic abuse and symptoms of anxiety in women post-relationship where economic abuse was present.

$H1_{1b}$. There is a positive relationship between economic abuse and symptoms of anxiety in women post-relationship where economic abuse was present.

$H1_{1c}$. There is no relationship between economic abuse and symptoms of stress in women post-relationship where economic abuse was present.

$H1_{1c}$. There is a positive relationship between economic abuse and symptoms of stress in women post-relationship where economic abuse was present.

RQ2. Is there a relationship between the severity of economic abuse and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present?

$H2_{0a}$. There is no relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present.

$H2_{1a}$. There is a positive relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present.

$H2_{0b}$. There is no relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present.

$H2_{1b}$. There is a positive relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present.

$H2_{0c}$. There is no relationship between the severity of economic abuse and symptoms of stress post-relationship where economic abuse was present.

$H2_{1c}$. There is a positive relationship between the severity of economic abuse and symptoms of stress post-relationship where economic abuse was present.

$H2_{0d}$. There is no relationship between the overall number of economic abuse incidences and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present.

$H2_{1d}$. There is a positive relationship between the overall number of economic abuse incidences and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present.

Nature of the Study

This correlational study examined the relationships between economic abuse and symptoms of depression, anxiety, and stress in women post-relationship where economic abuse

was present. Because the current body of literature did not have data regarding effects of economic abuse after the relationship ends, this study focused on years one through ten, and beyond, to gain knowledge about any potential relationships between these variables. Additionally, the severity of economic abuse was examined regarding its relationship with depression, anxiety, and stress symptoms in women post-relationship.

Significance of the Study

Physical interpersonal violence (IPV) has been studied at length. Such information is sometimes used in court proceedings including child placements during divorce and when there is Department of Children and Families (DCF) contact, or similar agency involvement, due to allegations of child abuse or neglect. Economic abuse is a form of non-physical abuse or non-physical violence. Oftentimes this type of abuse occurs repeatedly over time and is covertly hidden by excuses, the choice to be jobless or underemployed when employment would not otherwise be a challenge, and otherwise withholding economic resources (Kutin et al., 2017).

This study aimed to evaluate whether there are mental health repercussions due to economic abuse on women who were no longer in a romantic relationship with the perpetrator. The results allowed a comparison between mental health symptom types and whether more incidences of abuse are positively related to a higher self-reported level of mental health challenges. The results can also help officers of the court during proceedings regarding both criminal and family court cases. In addition, organizations that assist IPV survivors in regaining their independence will benefit from the data gathered. Further, information about non-physical IPV may help inform courts, DCF and similar agencies, and domestic violence organizations about the best ways to help victims who have experienced this type of non-physical abuse in meaningful ways.

If economic abuse is lessened overall in the United States, social service systems such as Supplemental Nutrition Assistance Program (SNAP), Medicaid, and Temporary Assistance for Needy Families (TANF) could have less of a burden, as there would potentially be less people in need of government support, though to what degree is unclear. Food insecurity has been linked to higher healthcare costs, which all three programs address (Berkowitz et al., 2017; Herman et al., 2015). These costly social services are funded through taxes; if SNAP, TANF, and Medicaid are needed less often because economic abuse is dealt with swiftly, then the government and tax dollars will carry less of a burden. Therefore, it is reasonable to use the data from this study as a steppingstone to further research, to evaluate the effects of economic abuse and find ways to help victims of this type of abuse to become financially stable so that they, and their families, experience less financial and health disparities and the government has less of a burden.

Definition of Terms

Economic Abuse

Economic abuse refers to the actions or behaviors that control a person's ability to get, use, or keep economic resources (Adams et al., 2008). Examples include sabotaging another person's job opportunities, withholding money owed or shared, withholding things or services money is needed to purchase, and bullying when money is spent. These actions were self-reported using the Revised Scale of Economic Abuse (Adams et al., 2020).

Depression, Anxiety, and Stress Symptoms

The DASS (Depression Anxiety Stress Scales) 42 tool is self-reporting and consists of 42 total questions distributed throughout the tool for each of 3 subscales (anxiety, depression, and stress) (Lovibond & Lovibond, 1995). These questions were chosen based on research, and definitions that come from the CDC and the Diagnostic and Statistical Manual of Mental

Disorders (DSM) 5th edition (American Psychiatric Association, 2013) regarding stress, anxiety, and depression and will be used to measure these named symptoms.

Depression Symptoms: Depression symptoms, such as pessimism, fatigue, seeing no meaning in life, unable to experience enjoyment, and sadness contribute to a sad mood that lasts long-term and gets in the way of everyday life as measured by DASS 42 (APA, 2013; Lovibond & Lovibond, 1995).

Anxiety Symptoms: Anxiety symptoms include having stress and being consistently worried over time. Symptoms may also include apprehension and panic, worries, shakiness or heart palpitations, fatigue, or lack of focus on tasks as measured by DASS 42 (APA, 2013; Lovibond & Lovibond, 1995).

Stress Symptoms: Stress symptoms occur after a traumatic event or events and may include sleeplessness, irritability, being overly tense, or being unable to relax as measured by DASS 42 (APA, 2013; Lovibond & Lovibond, 1995).

Assumptions and Limitations

There were several limitations to this study. Because the focus was on women's economic abuse experiences by a former heterosexual partner or husband, several demographic groups will not be studied. First, the data did not include information about men who experience this form of IPV, those previously in same-sex relationships, and those who experienced economic abuse while engaged in multi-partner relationships. Also, this study did not include those who were in romantic relationships with the person who is perpetrating economic abuse at the time of the study. Instead, this study looked solely at those who had left the abusive relationship one or more years prior to the study. Another limitation was that this study was not longitudinal and did not follow participants over time to observe changes in their economic

situation. This study grabbed a snapshot, or moment in time, and utilized the data available within that snapshot to evaluate variables and hypotheses. This study utilized self-reported data, which means the information came directly from the participants' point of view only, and their former partner or spouse did not have the opportunity to share their experience from their own lens.

CHAPTER 2. LITERATURE REVIEW

Introduction

IPV has been studied for its effects on individuals and society at large. However, much of the academic literature focuses on physical and psychological IPV. There is a smaller segment of research focused on economic abuse during a relationship, whether familial, caretaking, or romantic. However, there is a gap in the literature with regard to long-term effects of economic abuse after the end of a relationship in which one partner experienced economic abuse. The potential long-term relationships between economic abuse and mental health challenges are the focus of this study in an effort to find out whether economic abuse affects life and circumstances beyond the scope of the former romantic relationship.

The search strategy for this study's literature review focused on keywords related to the topics of IPV and economic abuse. Keywords included, but were not limited to, the following: economic abuse, financial abuse, elder abuse, intimate partner violence, IPV, physical abuse, socioeconomic instability, healthcare, mental health, adverse childhood events, and ACEs. Articles that did not clearly share a theme related to the topic of this study were ruled out. However, parallel topics that shed light on theoretical frameworks used in similar topics or disciplines and that helped further the understanding of economic abuse and potential outcomes of socioeconomic challenges were included.

Theoretical Orientation for the Study

The independent variables for this study were types of economic abuse, including the subscales of economic restriction and economic exploitation as set forth in the SEA2 (Adams et al., 2020). Economic abuse was selected because non-physical abuse can take various forms (economic, verbal, emotional/psychological), and focusing on one specific form helped to clarify

the focus of this study as well as any effects of this one type of abuse on mental health after a romantic relationship ends (Adams et al., 2008; Debono et al., 2017).

Dependent variables for this study included symptoms of depression, stress, and anxiety. Depression symptoms were measured to gauge how prevalent this issue is among women who were economically abused before their romantic relationship ended. Depression symptoms were associated with heart disease, difficulties with food intake such as overeating or limiting food, and inflammation markers in the body (Berge et al., 2017; Bourdier et al., 2018; Lamers et al., 2018). Stress symptoms were measured to examine whether these symptoms are an issue for women who were economically abused prior to their relationship ending. Stress symptoms have been linked to mental and physical health problems, such as feeling that one's life is low-quality overall, having high blood pressure or being obese (Anjara et al., 2017, Dalton et al, 2016). Anxiety symptoms were measured to find out if there were any relationships between this variable and economic abuse when women were economically abused prior to their relationship ending. In prior studies, anxiety symptoms have been linked with sleep routine disruption, fatigue, and pain (Gould et al., 2018; Vassend et al., 2018).

Multi-Systems Life Course Perspective

Many social science studies have used the Multi-Systems Life Course Perspective (MSLC), as this option allows a better understanding of one's circumstances by reviewing more than just one potential factor in a situation (Barnett et al., 2019). A person's situation is not generally due to one experience or need, but rather the culmination of multiple life-event variables (Christy, 2017). Implementing MSLC provides a holistic and comprehensive understanding of clients, communities, organizations, and society itself (Murphy-Erby et al., 2010). Christy (2017) utilized a MSLC while considering the experiences individuals have over

time (symbolic interactionism theory, life course theory, and social change perspective) and found that economic abuse is a cause for trauma. Therefore, according to Christy, after investigating the many variables involved and their potential influence in socio-economic status, economic abuse should be considered a type of IPV due to the trauma it can and often does cause. Valandra et al. (2019) completed research using MSLC to gather data regarding African American men's perceptions of IPV. This study found that many factors affect perceptions of IPV, including media, violence and oppression, personal experiences, and socio-cultural expectations. Due to the ability of MSLC to include room for participants to share feedback about how to improve a situation or social concern, participants shared ideas to assist in lowering IPV rates. This study shows how using MSLC can benefit participants and the body of scientific literature, as there is room for input, evaluation, and possible ways to move forward in lessening public health issues such as IPV. Jawed et al. (2023) examined the needs of adolescents who were awaiting out-of-home psychiatric care using MSLC, because children experiencing these situations needed to be considered while understanding the complex situations from which they are operating (2023). By using MSLC, Jawed et al. (2023) had more information with which to work when evaluating the needs of children and how best to support their socioemotional, behavioral, and academic growth and development. Utilizing a theory that focuses through one main lens may be less helpful in assisting researchers in understanding the whole person and the full range of their needs. Utilizing MSLC allows researchers to consider the whole person rather than a small portion of their lived experiences and better align studies with participants' needs and experiences while suggesting useful solutions rather than solutions that may further harm or delay success for participants (Spencer, 2023).

Routine Activity Theory

Routine Activity Theory is often used to examine criminal activity including theft and IPV, which both relate to economic abuse. Routine Activity Theory states that a criminal action can occur when there is a "potential offender, a suitable target, and the absence of a suitable guardian" (Cohen & Felson, 1979). This means that these factors allow opportunity though they do not guarantee that a crime will occur. The routine portion of the Routine Activity Theory refers to both the potential offender and the potential victim's routine activities in their daily lives. Though Routine Activity Theory can refer to in-person criminal opportunities, there is opportunity in online interactions as well (Pyrooz et al., 2015).

Routine Activity Theory helps explain why some forms of financial abuse occur after divorce, though this theory may not entirely explain all forms of economic abuse. Knight et al. (2016) explain that economic abuse is often not reported because it is not always understood. Setterlund et al. (2007) examined elder abuse when an estate is managed by family and found that Routine Activity Theory helps explain how this issue occurs and how to work on prevention strategies. As such, those who care for the elderly via doctor's offices and other services may need better training to better understand and identify this type of abuse. The same may be true for other demographics who are economically abused. This type of abuse may go unseen or underreported unless professionals in social services, law enforcement, and judicial positions fully understand the signs and how to help. Economic abuse after a relationship can occur when support orders are established, or shared custody schedules are set, and one party does not hold up their end of the deal when they otherwise could provide the potential for economic abuse as explained through Routine Activity Theory.

Variables

The variables of depression, anxiety, and stress symptoms were expected to have a positive linear relationship with economic abuse and to be higher in those who experienced more economic abuse than those who experienced less, as per their self-reported data.

Populations and Factors Examined in the Literature

Previous literature suggests that economic abuse is prevalent in elderly populations and those who are currently in an intimate relationship with the perpetrator but does not thoroughly examine potential post-relationship effects on adults who experience this type of abuse in the United States (Black, 2008; Kutin et al., 2017). However, this is an important area of research as mental health challenges that occur due to economic abuse stress have the potential to affect mood regulation of the victim, their ability to seek and hold a steady job, and may make it difficult for them to secure adequate food and housing, thereby leading to a continuously unstable home life for themselves and any children they have (Berryhill & Durtschi, 2017; Borchers et al., 2016; Chiesa et al., 2018). Christy (2017) found that economic abuse can cause trauma and should be included under the umbrella of IPV because of this relationship. It is important to understand the potential ramifications of economic abuse during a prior relationship on mental health to better assist victims of this type of abuse with regard to becoming financially stable as well as strengthening resiliency and providing mental health supports. In addition, economic abuse studies may better inform officers of the court how best to handle divorce cases and post-relationship lawsuits, especially when alimony or child support are being considered. When child custody and visitation plans are being adjusted or created, there may be economic abuse to take into consideration (Campbell, 2017; Royal, 2022; Warren et al., 2022). Lack of resources, sabotage of employment via harassment, or refusal to assist with childcare arrangements or child custody time may affect income and the ability to stay employed in a

position that provides enough income to sustain a household. Unfortunately, it may not be immediately obvious that economic abuse is happening, because excuses, choosing to quit a job or remaining joblessness when opportunities are available, and withholding economic resources are not as obvious as a physical injury would be (Kutin et al., 2017).

Withholding child support is a form of economic abuse if done to control or cause harm to another party on purpose without other issues preventing payment (Campbell, 2017; Royal, 2022). However, other reasons for nonpayment of support monies may exist, such as job loss or illness keeping one from working. Turner & Waller (2017) note that fathers who are behind in support payments, called being in arrears, tend to have three less days of child custody time per month. There can be multiple variables affecting this statistic including but not limited to the quality of the co-parenting relationship, ability to travel to the child, legal troubles, and work schedule. Additionally, Turner and Walker focused on fathers, though they are not exclusively the ones who pay support in the United States. Fathers who owed arrears also were less engaged in day-to-day activities and provided less social/emotional support in children's lives. Turner and Walker explain that this may be due to the arrears. However, it is possible for someone who has arrears to behave in these patterns and have arrears because they truly do not care to assist in raising the children. Many variables exist within this area, and additional studies will shed more light on patterns of involvement, arrears, and relationships between parents and children.

Economic Abuse

Economic, or financial, abuse is defined as a way to control others' financial resources and is swiftly becoming a hot topic among lay people and researchers (Adams et al., 2008). Chowbey (2017) defines several forms of economic abuse that may affect people during marriage. Some of these definitions can be used to study economic abuse after a relationship as

well. The categories used for the purposes of this study include “preventing the use of resources,” “preventing the acquisition of economic resources,” “refusing to contribute, exploiting resources, and/or generating economic costs,” and “jeopardizing future finances.”

Depression Symptoms

Depression symptoms such as pessimism, fatigue, seeing no meaning in life, unable to experience enjoyment, and sadness contribute to a sad mood that lasts long term and gets in the way of everyday life will be used to define the participants’ self-reported challenges and will be measured by DASS 42 (APA, 2013; Lovibond & Lovibond, 1995).

Anxiety Symptoms

Anxiety symptoms for the purpose of this study will be self-reported and include having stress and being worried more often than not over time. Symptoms may also include apprehension and panic, worries, shakiness or heart palpitations, fatigue, or lack of focus on tasks as measured by DASS 42 (APA, 2013; Lovibond & Lovibond, 1995).

Stress Symptoms

Stress symptoms for the purpose of this study include being unable to relax, over-aroused or tense, irritable, or startled easily and will be self-reported and measured by DASS 42 (APA, 2013; Lovibond & Lovibond, 1995).

Significance

This study aimed to examine any relationships between symptoms of depression, anxiety, and stress, with prior economic abuse on women after a relationship ends. This information can help officers of the court when making decisions about child custody schedules and child support as well as organizations that assist IPV survivors in regaining their independence. Additionally, information about non-physical IPV may help inform courts, DCF, and other children and family

services agencies, and domestic violence organizations about the best ways to help those who have been subject to non-physical abuse. Plus, those who experienced this type of IPV may be better served by mental health referrals and programs if negative mental health effects are seen and future research reviews ways to assist in lessening any potential effects of economic abuse over time.

Mental Health

Previous research indicates a link between economic insecurity and mental health challenges, such as symptoms of stress, depression, and anxiety. Pulgar et al. (2016) found that though farm workers have many types of stress, the highest correlation for depression came from economic hardship. Their multivariable logistic regression showed economic hardship to affect farmworkers, particularly women, more than other factors such as documentation status and farm work stress. Stylianou (2018a) reviewed literature relating to economic abuse experiences and depressive symptoms of those who experienced IPV and found, using hierarchical regression analyses, that economic abuse was more likely to be associated with symptoms of depression than were other forms of IPV. McGrath et al. (2017) reviewed 23,998 participants' data from 17 countries and noted that those who had adverse childhood experiences were more likely to experience psychotic episodes with an overall risk proportion of 31%. According to Barrera et al. (2019), their respondents, of which 92% were Latino, who had three or more adverse childhood experiences were three times more likely to experience and report more mental distress and eight times as likely to have substance abuse such as alcohol or drug issues than those who had less than three adverse childhood experiences. Damian et al. (2021) examined ACEs and their heightened link among participants in their study to suicidal ideation even after controlling for mental health disorders, age, and ethnicity. Barnes et al. (2020) explains that though resiliency

strategies may exist, it is still important to ensure that any Adverse Childhood Experiences (ACEs) be evaluated and having coping skills does not necessarily negate the effects of ACEs on children. Hsu and Wickrama (2015) examined poverty's effects on children's health and found that maternal mental health, paternal investment in children, insurance status, and quality of healthcare affect children's health outcomes. This means that economic factors may affect children's health outcomes as well as the potential strain on public services, such as Medicaid, TANF, and SNAP. Those who experience economic abuse are less likely to speak up if this is the only abuse experienced, as compared to those who experience physical, sexual, or emotional abuse alongside economic abuse (Kanougiya, 2021). Additionally, economic abuse has been shown to increase the chances for moderate to severe depression, anxiety, and suicidal ideation (Kanougiya, 2021). However, the likelihood of these mental health challenges rises when additional forms of abuse are present.

Financial Stability

Voth Schrag et al. (2018) explain that economic abuse has a positive correlation to economic hardship for an individual. Economic hardship is associated with lower income for one's children though additional factors such as opportunities available, attitudes toward these opportunities, and ability to seize these opportunities can also affect income and economic stability (Braveman et al., 2018; Corcoran, 1995). Negative physical and mental health outcomes due to lack of access to proper care and choices in treatments and physicians is a marked concern as well (Guerrero et al., 1998; Schuler et al. 2020). Clinically significant symptoms of mental health issues such as depression and anxiety have been found in parents and children living below the poverty level in the United States (Acri et al., 2017; Lanier et al., 2018). Higher support amounts are positively linked to a lowered chance for health decline in children

(Baughman, 2017). Additionally, that support needs to be meaningful to the person or family who are utilizing the assistance (Barnes et al., 2016). While poverty may become a cycle, there are ways to potentially aid in lowering economic hardship; however, these steps are not necessarily going to solve all issues related to poverty and economic abuse (Cheng et al., 2016). To help individuals raise their socio-economic status, interventions such as training, healthcare, transportation, and job seeking assistance are helpful, which makes the issue of economic abuse pertinent to someone who is being economically abused or who has left an abusive relationship (Cheng et al., 2016; Coley et al., 2018).

Physical interpersonal violence, including IPV, has been studied at length, and information is sometimes used in court proceedings including child placements during divorce and after children and family services or state Department of Revenue involvement due to allegations of child abuse or neglect. In contrast, economic abuse is a form of non-physical abuse, or non-physical violence. Oftentimes, this type of abuse happens over time and is covertly hidden by excuses, joblessness, and withholding economic resources (Kutin et al., 2017).

If economic abuse is lessened overall in the United States, social service systems such as SNAP, Medicaid, and TANF could have less of a burden as there would potentially be less people in need of government support. Though poverty will likely still be a concern, one subset of this type of need may be lessened if awareness and action to assist with economic abuse are identified and acted on in an effective way. Food insecurity has been linked to higher healthcare costs, which all three programs address (Berkowitz et al., 2017). However, these social services are still needed and are funded through taxes, so when economic abuse is dealt with swiftly and successfully, then the government and taxpayer dollars have less of a burden. Therefore, it is important to evaluate the effects of economic abuse and find ways to help those who experience

this type of IPV to become financially stable so they, and their families, have higher quality of life with less stress, so our government has a better situation for accountability. Additionally, Stoner et al. (2019) found that transactional sex may be used to ensure financial and housing stability, which is not only an economic instability concern, but also poses potential physical safety concerns, such continuing abuse or the potential for contracting HIV.

Parenting Practices

Symptoms of stress and depression can raise rates of child abuse (Lutenbacher & Hall, 1998). Parenting practices and the effects of stress on parents living in poverty affect children's achievement, behavior, and mental health (Heerman et al., 2017; Liew et al., 2018; Santiago et al., 2011). Simons and Steele (2020) used a sample of adolescent African American children and found that parental psychological stress, caregiver conflict, and parenting conflict can affect academic achievement in this sample group. Schenck-Fontaine and Panico focused on behavior challenges in children and different combinations of economic hardship; they found high instances of behavior challenges no matter the combination of economic stress factors in their population of 17,000 families in the United Kingdom (2019). Postmus, Huang, et al. (2012) found that mothers experiencing economic and psychological abuse in the first year raised the chance of depression and the chance of a mother spanking children by their fifth year of life. In contrast, physical abuse alone did not raise these chances. The authors also found that the higher the amount of economic abuse, the higher the odds are of a mother having depression in the fifth year. These findings support utilizing research studies to look further into potential effects of economic abuse during a romantic relationship after the end of that relationship.

Since what happens in a parent's mental health can affect children, it is important to find out whether economic abuse and its potential lingering effect of economic fragility and cyclical

poverty affects parental mental health in a way that can affect parenting and thus ACEs, which affects a continuing cycle concerning the mental health and safety of children (Steele et al., (2016).

Oftentimes studies focus on mothers who are experiencing IPV, including economic abuse, but mothers are not the only ones who may have depressive symptoms that carry over beyond the event or situation that causes the symptoms. Fathers who have depressive symptoms over stressful events often still have these symptoms a year later, and this may affect parenting, among other life responsibilities (Bamishigbin et al., 2017). When men participate in programs to facilitate positive fathering methods, then support in the form of mental health counseling to deal with the stressors of life such as coparenting, financial stress, and symptoms of mental health issues has been found to assist in retaining and utilizing strategies learned (Fitzgerald et al., 2012). Though parenting is not always determined by stress and adversity, this can be a factor some of the time according to the academic literature available. Logically, it would be helpful to identify whether economic abuse does or does not contribute to this stress in order to identify whether this type of IPV can be lessened and potentially lower parents' stress and any difficulties in parenting that result from stress or socioeconomic challenges.

Overall Quality of Life

Economic abuse may affect quality of life in that healthy food, the opportunity to attend college or trade school, a chance for secure housing, access to medical and mental health care and medication when needed, and other factors may be influenced by economic status. Programs that focus food aid, incentives for healthy eating, and education about nutrition can be valuable but only if there is a way to afford healthy foods on a regular basis, as this topic is complex and may be due to a variety of factors (Carrillo-Álvarez, 2023); Penne & Goedemé, 2021). Though

funding may be available to assist with higher education and job training, there is no guarantee that incidentals such as food and housing will be paid for, and money available may not exceed tuition costs, causing a disparity for those with a lower socioeconomic status (Fergusson & Woodward, 2000; Wagner et al., 2014). Students who are facing the reality of a lower socioeconomic status are more likely to work through school, making it more difficult to participate in studying, which may be a detriment to their grades (Walpole, 2003). Housing insecurity refers not only to financial challenges but also to housing arrangements that end up falling apart, causing one or more individuals to lose that housing option (DeLuca & Rosen, 2022; Medina et al., 2020, Vásquez-Vera et al., 2019). Though health disparities can occur for multiple reasons, socioeconomic status and the lack of access to insurance or the means to afford co-pays and medications are part of the issue (Bjur et al., 2019; Kivimäki et al., 2020; McMaughan et al., 2020).

Self-injurious behavior, such as substance abuse or other physical harm of oneself, for example, cutting or suicide attempts, are more likely in times of stress, whether societal, such as cultural expectations or personal, such as experiencing financial or physical adversity (Cervantes et al., 2014; McLafferty et al., 2019; Moskowitz et al., 2013). Barnes et al. (2016) examined the potential for self-harm during times of economic hardship. They found that events such as, but not limited to, debt collector calls and lapses in employment raised the chance that one would feel worthless or exceedingly unhappy to the point where self-harm was a greater possibility. This study was focused on recession issues in the United Kingdom but applies in that participants' emotions due to lack of a stable socio-economic situation is similar to the potential emotions one would likely have if economically unstable due to economic abuse, which is a form of IPV. Additionally, some participants had prior experiences with at least one form of IPV

(though specific individual incidences were not controlled for in this study) in general and the incidences of IPV cannot be ruled out as a potential factor in their situation. Economically abusive relationships often include one or more additional forms of abuse that are likely to be used as ways to control the victim (Alsawalqa, 2020). At the same time, socioeconomic factors, such as education level, can affect whether or not a woman has long-term negative consequences of economic abuse. This is not a factor separated from external occurrences. For example, a mother who has higher education degrees may struggle if her current or former partner refuses to participate in child share time, assist with daycare, or help with a medically fragile child, a child with behavior challenges, or a child with other special needs. While education and higher education degrees can assist with opportunities, economic abuse may still derail employment options in some situations. Alsawalqa (2020) noted that both during and after an economically abusive relationship, women often experience struggles with psychological and physical health due to the lack of resources at their disposal to improve their situation. Barnes et al. (2016) found that their participants noted a lack of meaningful assistance with economic challenges. Reeskens and Vandecasteele (2017) found that economic hardship resilience is more prevalent among those with support systems. Examples from the study include religion and church affiliation, while social networks, like family and friends, can assist though they are not physical or financial resources. In short, these factors may be part of the reason why some people are more resilient than others, but these factors are not shown to completely negate economic hardship effects on people.

Because economic abuse is strongly linked to material hardship (Voth Schrag, 2015) and social services and charities attempt to fill in gaps due to financial hardship, it becomes of interest to these services to see economic abuse lessened over time. In theory, this would allow

service providers to utilize a larger portion of their financial and physical supports on each person who came to get help rather than splitting the resources among a larger amount of people.

Hetling et al. (2016) studied the effects of the Moving Ahead Through Money Management curriculum and found that self-reported financial literacy improved by 40% among those who experienced IPV in general. However, this effect does not consider a person's current financial situation, available financial resources, and whether an individual is still in the IPV situation or has left their partner. These factors may limit the efficacy of such a curriculum that means well but can only reach so far given a person's situation. Examining economic abuse and ways to mediate this type of IPV through effective, useful programs is another layer of this topic.

Easing the need for social services could potentially open doors to more quality within supportive options for those who are struggling. This may also allow for the scaling back of services to allow for monies to be spent in other areas such as education, special needs services, and other endeavors.

Measurement Tools

Dass 42

The DASS (Depression Anxiety Stress Scales) 42 tool is self-reporting and consists of 42 total questions distributed throughout the tool for each of 3 subscales that are labeled anxiety, depression, and stress (Lovibond & Lovibond, 1995). These questions were chosen based on research and definitions that came from the CDC and DSM regarding stress, anxiety, and depression and will be used to measure symptoms related to the same.

Revised Scale of Economic Abuse

The Revised Scale of Economic Abuse (SEA2) (Adams et al., 2020) is the updated version of the Scale of Economic Abuse (Adams et al., 2008). This measurement tool allows

participants to self-report economic abuse using a Likert Scale, which consists of items in two subscales: Economic Restriction and Economic Exploitation. Participants may choose severity from 0–4 for each of the 14 items combined in these two subscales.

Economic abuse, when added to and compared with other types of IPV, raises the chances of victims having symptoms of depression immediately after leaving abusive partners, regardless of socio-economic and demographic characteristics (Stylianou, 2018b).

Economic abuse is correlated with other types of abuse, meaning that they may exist in the same intimate partner relationship and be perpetrated by the same person onto the victim (Postmus, Plummer, et al., 2012). Economic abuse may be present as job sabotage, economic control, or exploitative behaviors. This type of abuse is linked to lower chances of future economic self-sufficiency, and strongly linked to material hardship (Voth Schrag, 2015).

Common forms of economic abuse include job or income loss, control of a paycheck by a partner, not being allowed to work, and threats to or destruction of property or other belongings, such as a cellphone (Antai et al., 2014). Possible ways to prevent and help victims recover from economic abuse include screening guidelines, legislation to provide ways for a victim to receive relief from the abuse, such as protective orders or reparation payments, and education (Reeves & Wysong, 2010).

Gap in Literature

Economic abuse has been examined in several demographic groups. For example, elder abuse may occur in the form of economic abuse. The body of literature focuses on the characteristics of this type of abuse in the elderly (Davies et al., 2013). Economic abuse may be perpetrated by anyone including family members, caregivers, including those who are paid caregivers, or business professionals, such as insurance agents or investment agents (Tueth,

2000). Economic stability can assist with lowering the likelihood for abuse, economic or otherwise, of elderly persons, which can also lead us to consider this topic within the lens of economic abuse as IPV during and after romantic relationships (E-Shien et al., 2021). Training health care professionals to identify both obvious and subtle types of economic abuse as well as to find appropriate interventions in elder abuse in general, including how to identify and help those with dementia who are experiencing economic abuse, is indicated as a necessity by some study authors (Acierno et al., 2010; Manthorpe et al., 2012; Peterson et al., 2014). Elder abuse parallels economic abuse of an intimate partner in that there is a way to cause economic hardship on purpose when it is not necessary, and the victim likely has no power to stop the abuse unless they have resources and supports to assist them.

Further, studies have examined the prevalence of economic abuse during and immediately after separation or the end of a relationship. Whether the mother stays with a father or not, IPV can be harmful in that it takes resources a mother, and potentially a father though many studies do not focus on this aspect, needs to care for the children, whether financial, emotional, or psychological (Lévesque et al., 2022). One particularly telling study completed by Lévesque et al. (2022) focused on the perinatal period from pregnancy until a child was the age of 2. The authors found that several themes emerged. First, IPV occurring meant that a parent would have more tasks to complete to aid in basic survival of themselves and their offspring. Second, children who had an elevated chance as targets for violence meant that mothers had to be more vigilant in protecting their children, which also causes additional time and resources to be needed in addition to higher stress levels being probable. The authors also noted a weaker bond between the parent who was a victim of IPV and their child, as well as lowered self-confidence in the victim. These results directly speak to the need for further research regarding

the economic abuse category of IPV. Economic abuse was included in the IPV umbrella in this study. This type of IPV clearly has the potential to affect life experiences in a negative way thus affecting the parent-child bond as well as self-confidence and safety. To understand the degree to which this may occur and which mediating factors may help one to avoid or lessen potential negative situations due to economic abuse, additional study is needed.

Predictors of violence, including assaults, emotional abuse, serious physical and emotional injuries, and threats to harm or kill, have been found in these studies (Ellis & Stuckless, 2006). Toews and Bermea (2017) interviewed 22 women and found that the coercion and control tactics men used during relationships also continued afterward as they tried to continue their control methods. It stands to reason that though more studies are needed, one type of coercive control under the IPV umbrella is economic abuse, also often termed "financial abuse."

The mental health of a parent directly affects a child's development. Economic abuse is one stressor which may affect mental health, making economic abuse an important topic to examine with regard to parental mood and quality of parenting practices. Lanier et al. (2018) found that children exposed to poverty and parental mental illness are at a higher risk for special healthcare needs as compared to those without these adverse childhood occurrences, even if other adverse childhood occurrences were present. In the study completed by Houtepen et al. (2020), it was found that high adverse childhood events including socioeconomic deprivation, parental substance abuse, and parental mental health challenges are linked to lower education levels and health issues, such as a higher likelihood of depression, smoking, and drug use. Schuler et al. (2020) found that economic hardship itself was not a factor in poor diet in children,

such as high-fat foods, but that stress was indeed linked to higher rates of high-fat foods in a child's diet.

Daundasekara et al. (2020) found that there was an increase in risk for obesity in children who were living in homes with a high increase of poverty versus those with a lower income level that stayed stable, which adds to this discussion. While this stress is not necessarily from one source or another and there could be a mix of issues adding up to cause parental stress, it is important to note that high stress can affect a child's food availability and intake.

Braveman et al. (2018) found that economic hardship in childhood is linked to higher potential for experiencing hardships later in life, such as IPV, poverty, food insecurity, and homelessness. Unfortunately, this indicates the potential for a cyclical process from mother to child due to lack of stability and resources. Lefebvre et al. (2017) found that children whose families experienced economic hardship in the past six months were two times as likely to experience maltreatment than children whose families had not faced economic hardship in the prior six months. Child maltreatment can cause higher costs to society and losses in personal earning power as those children grow up (Thielen et al., 2016). Though the type of maltreatment and how the person who experienced it internalized this experience, or multiple experiences, can affect the outcome, this is still a concerning issue as children grow to be adults who either need support or can support themselves. This speaks to parental stress levels, child welfare concerns, and what families need to have a greater chance for a safe environment for parents and children.

Beal et al. (2019) examined psychosocial function in adolescents with complex trauma and found that trauma type will affect the usefulness of interventions and supports put in place. For example, adolescents who experienced family violence had a higher likelihood of poor psychosocial well-being. On the other hand, family instability showed a higher rate of cigarette

and marijuana use. At the same time, the authors noted that unexpected family tragedy did not show a trend toward poorer psychosocial well-being and substance use overall. Jahn et al. (2021) studied self-rated health surveys of young adults in Scandinavia and found that those with more adverse childhood experiences had a higher self-reported rate of overall health issues. This indicates that adverse childhood experiences can affect one's perception of their health in adulthood.

When parents are helped to deal with the stress of becoming single, the costs to society are potentially lowered and less government services will be used particularly in the social justice system, but also in the realm of mental health and behavioral services. Life satisfaction and quality have been examined in some studies as well. Women who leave low-quality relationships and marriages tend to have a higher life satisfaction than if they stay in a poor relationship, whereas the difference is not as large in life satisfaction when women leave what they perceive to be a normal relationship, while men did not have a large difference in life satisfaction when leaving a relationship (Bourassa et al., 2015; Hahn & Postmus, 2014; Herman et al., 2015).

Ayala-Nunes et al. (2018) found in their Portuguese and Spanish research sample that support put in place by organizations or government entities does not have as large of an effect as one may think on socio-economic hardships and the potential for mental health challenges. A lack of financial resources in social welfare agency supports can affect one's psychological well-being while raising the potential for psychological challenges. Psychological distress mediation may not occur if the social support system is not targeted to each person's needs, is dysfunctional, lacks quality or responsiveness, etc. In short, social support needs to be focused

and useful to the recipient for the resource or resources to have a positive effect. (Ayala-Nunes et al., 2018; Barnes et al., 2016).

CHAPTER 3. METHODOLOGY

Introduction

This study focused on the potential relationship between economic abuse and symptoms of depression, anxiety, and stress after the abusive relationship ended. This section will provide information about the research methods and sampling design. Additionally, ethical considerations and procedures to protect participants is shared. Further, this section provides information about the measurement tools used, data collection procedure, data analysis process, and findings of this study.

Purpose of the Study

This study aimed to examine any potential relationships between mental health symptoms of depression, anxiety, and stress and economic abuse after the end of an abusive relationship where this type of IPV was present in order to help officers of the court (and organizations that assist IPV survivors in regaining their independence) to better support individuals by providing effective services and assistance. This study's data also guides future research regarding effective ways to assist in lessening the potential effects of economic abuse. Organizations that receive grants to provide services may be better able to make actionable gains in helping those who have experienced this type of IPV as a result of this study.

Research Questions and Hypotheses

Research Questions

RQ1. Does the type of economic abuse affect symptoms related to depression, anxiety, and stress after a relationship in which economic abuse was present?

RQ_{1a}. Is there a relationship between economic abuse and symptoms related to depression in women post-relationship where economic abuse was present?

$RQ_{1b.}$ Is there a relationship between economic abuse and symptoms related to anxiety in women post-relationship where economic abuse was present?

$RQ_{1c.}$ Is there a relationship between economic abuse and stress in women post-relationship where economic abuse was present?

RQ2. Does the severity of economic abuse affect women's symptoms related to depression, anxiety, and stress after a relationship in which economic abuse was present?

$RQ_{2a.}$ Is there a relationship between the severity of economic abuse and depressive symptoms after a relationship where economic abuse was present?

$RQ_{2b.}$ Is there a relationship between the severity of economic abuse and anxiety symptoms after a relationship where economic abuse was present?

$RQ_{2c.}$ Is there a relationship between the severity of economic abuse and stress symptoms after a relationship where economic abuse was present?

$RQ_{2d.}$ Does the overall number of incidences affect self-reported results on the DASS post-relationship where economic abuse was present?

Hypotheses

This study examined several hypotheses. It was expected that there would be a positive relationship between economic abuse and symptoms related to depression in women after a relationship in which economic abuse was present. Also, it was expected that there would be a positive relationship between economic abuse and symptoms related to anxiety in women after a relationship in which economic abuse was present. In addition, it was expected that there would be a positive relationship between economic abuse and symptoms related to stress in women after a relationship in which economic abuse was present. Further, it was expected that a positive

relationship would exist between severity of economic abuse and level of self-reported symptoms of each of the following separately: depression, anxiety, and stress.

RQ1. Does the type of economic abuse affect symptoms related to depression, anxiety, and stress after a relationship where economic abuse was present?

$H1_{0a}$. There is no relationship between economic abuse and symptoms related to depression in women post-relationship.

$H1_{1a}$. There is a positive relationship between economic abuse and symptoms related to depression in women post-relationship.

$H1_{0b}$. There is no relationship between economic abuse and symptoms related to anxiety in women post-relationship.

$H1_{1b}$. There is a positive relationship between economic abuse and symptoms related to anxiety in women post-relationship.

$H1_{0c}$. There is no relationship between economic abuse and stress in women post-relationship.

$H1_{1c}$. There is a positive relationship between economic abuse and stress in women post-relationship.

RQ2. Does severity the of economic abuse affect women's symptoms related to depression, anxiety, and stress after a relationship with economic abuse ends?

$H2_{0a}$ There is no relationship between the severity of economic abuse and symptoms related to depression post-relationship where economic abuse was present.

$H2_{1a}$. There is a positive relationship between the severity of economic abuse and symptoms related to depression post-relationship where economic abuse was present.

$H2_{0b}$. There is no relationship between the severity of economic abuse and symptoms related to anxiety post-relationship where economic abuse was present.

$H2_{1b}$. There is a positive relationship between the severity of economic abuse and symptoms related to anxiety post-relationship where economic abuse was present.

$H2_{0c}$. There is no relationship between the severity of economic abuse and stress post-relationship where economic abuse was present.

$H2_{1c}$. There is a positive relationship between the severity of economic abuse and stress post-relationship where economic abuse was present.

$H2_{0d}$. The overall number of incidences of economic abuse does not affect self-reported results on the DASS post-relationship where economic abuse was present.

$H2_{1d}$. The overall number of incidences does positively affect self-reported results on the DASS post-relationship where economic abuse was present.

Research Design

This study used quantitative methods to examine any existing relationships between self-reported symptoms of depression, anxiety, and stress and economic abuse after the end of the abusive relationship. This study used a non-experimental design. Data was collected via Survey Monkey. Measures included a questionnaire to collect demographic information, the DASS (Lovibond & Lovibond, 1995), and the SEA2 (Adams et al., 2008). The DASS is available under public domain usage and requires no additional permissions to be used. No personally

identifying information was collected, making this an anonymous sample. The Statistical Package for Social Sciences (SPSS) (IBM, 2021) was used to run a bivariate Pearson correlation. This method evaluated the relationship between each questionnaire item and by the self-reported severity and type of economic abuse and self-reported level of depression, anxiety, and stress symptoms experienced.

Sampling Design

Setting

The setting for this study was virtual. Participants completed an anonymous survey online through Survey Monkey using the SSL encryption option. This study did not ask for personally identifying information and used the data encryption version of Survey Monkey to further protect participants' identities.

Population

The population for this study was cisgender women who experienced economic abuse in a prior intimate partner relationship. This is a subpopulation of the larger population of 52 million women who have experienced IPV according to the National Intimate Partner and Sexual Violene Survey conducted in 2016 and 2017, then published in 2022 (Leemis et al.). Participants had to be currently residing in the United States but will not be required to be citizens to participate. As names and addresses were not collected, residential status was self-reported by disclosing one's state of residence.

Sample

To determine the sample size for this study, a power analysis was completed using statistical software G*Power 3.1.9.7. The most recent CDC statistics for IPV were utilized. This information was published in the National Intimate Partner and Sexual Violence Survey and is

the most recent data provided by the CDC as it was collected in 2016 and 2017, then published in 2022 (Leemis et al.). According to survey participants' self-reported experiences, 42% of women, totaling 52 million, have experienced some form of IPV at least once in their lifetime (Leemis et al., 2022). This population information was utilized to find the sample size for this study.

A one-tail Pearson correlation analysis test design was used in the G*Power 3.1.9.7 software. In this test, alpha=.05 and power=.80 which placed the estimated minimum sample size at N=67 (Faul et al., 2007). In order to consider the possibility that data could be missing, participants could stop without completing the survey, and to leave room to adjust for confounding factors, an additional 13 participants, 20%, were accepted as survey participants. This brought the total minimum participant number to 80 and which helped ensure enough data was collected for this study (Martinez-Mesa et al., 2014).

Recruitment

Domestic violence organizations and nonprofits which educate about the harms of intimate partner violence were asked to share a recruitment poster, a survey link, and an institutional review board (IRB) approved informed consent form using social media accounts and groups as well as through a link printed on a recruitment poster that they were allowed to share with potential participants. The informed consent form included information about how to get help if experiencing negative effects (panic, fear, confusion, renewed feelings over past trauma, or other effects as reported by participants) from participating and how to contact the university IRB, the study's author should there be questions or issues (Becker-Blease & Freyd, 2006; Brabin & Berah, 1995; DePrince & Freyd, 2006). Additionally, the form included language stating that SSL encryption on SurveyMonkey was to be used to protect participant

data, and the study author was the only person who had access to the SurveyMonkey account where the data is housed. Names or other identifying information were not collected. Participants were advised of this before they began the survey. Once data was collected, it was transferred to the study author's personal computer which was and continues to not be shared with others, and the study author has a password for security. Additionally, the Internet connection, though connected to the computer, was and continues to be password protected to maintain participant privacy.

Because outreach through domestic violence organizations yielded only 18 participants, and ten of those participants provided incomplete data sets, the study's author and dissertation committee determined that an additional way of promoting this study to potential participants was necessary. As such, an IRB revision request was submitted to the IRB committee. This revision request asked for permission to recruit participants for the study via social media. This request was approved, and an additional 54 responses were collected, 46 of which yielded complete data sets. The total number of participants using both methods of participant recruitment was 72. Of these 72 responses, fifty-four had complete data sets, and 18 responses had incomplete data sets.

Measures

Assessment One

The Depression Anxiety Stress Subscales (DASS; Lovibond & Lovibond, 1995) evaluates symptoms of depression, anxiety, and stress. This measurement tool contains 42 items in this measurement tool with 14 items per subscale. The lower the score overall and in each subscale, the less negative emotional stress one is undergoing. The DASS (Lovibond & Lovibond, 1995) is a self-report measure and should not be used to diagnose medical conditions, such as Major

Depressive Disorder. However, this measure does examine symptomology and assigns a value and label to the level of symptomology in each subscale which relates to a participant's score (normal, mild, moderate, severe, very severe). Antony, Bieling, Cox, Enns, and Swinson (1998) found DASS (Lovibond & Lovibond, 1995) to have internal consistency and concurrent validity in a sample which included clinical and community participants. Also, the authors note that the subscales were able to adequately separate the three subscales and their symptoms. Crawford and Henry (2003) found that in a sample of 1711 participants, using confirmatory factor analysis, there was high convergent and discriminant validity as well as a high rate of reliability.

Figure 1

Depression Anxiety Stress Scales Page One (Lovibond & Lovibond, 1995)

DASS

Name: *Date:*

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1	I found myself getting upset by quite trivial things	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I just couldn't seem to get going	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I had a feeling of shakiness (eg, legs going to give way)	0	1	2	3
8	I found it difficult to relax	0	1	2	3
9	I found myself in situations that made me so anxious I was most relieved when they ended	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting upset rather easily	0	1	2	3
12	I felt that I was using a lot of nervous energy	0	1	2	3
13	I felt sad and depressed	0	1	2	3
14	I found myself getting impatient when I was delayed in any way (eg, elevators, traffic lights, being kept waiting)	0	1	2	3
15	I had a feeling of faintness	0	1	2	3
16	I felt that I had lost interest in just about everything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life wasn't worthwhile	0	1	2	3

Note. The DASS 42 is allowed to be reprinted as it is considered public domain and can be reprinted and copied freely.

Figure 2

Depression Anxiety Stress Scales Page Two (Lovibond & Lovibond, 1995)

Reminder of rating scale: 0 Did not apply to me at all 1 Applied to me to some degree, or some of the time 2 Applied to me to a considerable degree, or a good part of time 3 Applied to me very much, or most of the time					
22	I found it hard to wind down	0	1	2	3
23	I had difficulty in swallowing	0	1	2	3
24	I couldn't seem to get any enjoyment out of the things I did	0	1	2	3
25	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
26	I felt down-hearted and blue	0	1	2	3
27	I found that I was very irritable	0	1	2	3
28	I felt I was close to panic	0	1	2	3
29	I found it hard to calm down after something upset me	0	1	2	3
30	I feared that I would be "thrown" by some trivial but unfamiliar task	0	1	2	3
31	I was unable to become enthusiastic about anything	0	1	2	3
32	I found it difficult to tolerate interruptions to what I was doing	0	1	2	3
33	I was in a state of nervous tension	0	1	2	3
34	I felt I was pretty worthless	0	1	2	3
35	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
36	I felt terrified	0	1	2	3
37	I could see nothing in the future to be hopeful about	0	1	2	3
38	I felt that life was meaningless	0	1	2	3
39	I found myself getting agitated	0	1	2	3
40	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
41	I experienced trembling (eg, in the hands)	0	1	2	3
42	I found it difficult to work up the initiative to do things	0	1	2	3

Note. The DASS 42 is allowed to be reprinted as it is considered public domain and can be reprinted and copied freely.

Assessment Two

The Revised Scale of Economic Abuse (SEA2) (Adams et al., 2008) was used to evaluate types of, and severity of, economic abuse that participants experienced (Adams et al., 2020). This measure is an updated version of the Scale of Economic Abuse created by Adams et al.

(2008) and has demonstrated both reliability and validity (Adams, Beeble, & Gregory, 2015). The SEA2 (Adams et al., 2008) includes 14 statements of actions such as “Keep financial information from you,” and “Keep you from having a job or going to work.” The survey allows participants to specify on a zero-to-four Likert Scale as to how often the 14 listed behaviors occurred with their partner, with 0 being “Never” and 4 being “Very Often” (Adams et al., 2020). Convergent validity was confirmed using regression analyses in SPSS (IBM, 2021), though demographic variables did affect the outcomes in each subscale with $p<.05$ to $p<.01$ in these analyses. Additionally, construct validity was shown for this measurement tool as well ($p=0.050$) when examining the relationship between the restriction of economic resources and exploitation of economic resources. The authors state that the SEA2 (Adams et al., 2008) does, indeed, measure what it intends to measure and thus is a valid tool for examining economic abuse. Using the Conflict Tactics Scale (Sullivan et al., 1992), also known as the CTS, to compare, the reliability coefficient is .95 in the participant sample (Lucente et al., 2001; Postmus et al., 2016; Straus, 1979). See Figure 3.

Figure 3

Revised Scale of Economic Abuse (Adams et al., 2008)

Using the 0–4 scale below, during your relationship, how often did your partner do the following:	0 Never	1 Hardly ever	2 Sometimes	3 Often	4 Very often
1. Keep you from having the money you needed to buy food, clothes, or other necessities	☐	☐	☐	☐	☐
2. Keep financial information from you	☐	☐	☐	☐	☐
3. Decide how you could spend money rather than letting you spend it how you saw fit	☐	☐	☐	☐	☐
4. Make you ask him/her for money	☐	☐	☐	☐	☐
5. Hide money so that you could not find it	☐	☐	☐	☐	☐
6. Demand that you give him/her receipts or change when you spent money	☐	☐	☐	☐	☐
7. Keep you from having a job or going to work	☐	☐	☐	☐	☐
8. Make you use your money to buy him/her things or pay his/her bills when you didn't want to	☐	☐	☐	☐	☐
9. Spend his/her money however he/she wanted while your money went to pay for necessities	☐	☐	☐	☐	☐
10. Take out a loan or buy something on credit in your name without your permission	☐	☐	☐	☐	☐
11. Make you take out a loan or buy something on credit when you didn't want to	☐	☐	☐	☐	☐
12. Put bills in your name, leaving you to pay them	☐	☐	☐	☐	☐
13. Force or pressure you to give him/her your savings or other assets	☐	☐	☐	☐	☐
14. Steal your property	☐	☐	☐	☐	☐

Note. Researchers and practitioners should contact the lead author for permission to use the SEA2.

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Data Collection

Domestic violence organizations were asked to share the recruitment poster, survey link, and an institutional review board (IRB) approved informed consent form using social media accounts and groups as well as through a link printed on paper that they were allowed to share with prior and current clients. This form included information about how to get help if experiencing negative effects (panic, fear, confusion, renewed feelings over past trauma, or other effects as reported by participants) from participating and how to contact the university IRB or the study's author should there be questions or issues (Becker-Blease & Freyd, 2006; Brabin & Berah, 1995; DePrince & Freyd, 2006). Additionally, the form included language that states that SSL encryption on SurveyMonkey will be used to protect participant data, and the study author will be the only person who has access to the SurveyMonkey account where the data is housed.

Names and other personally identifying information were not collected. However, demographic information was collected including socioeconomic categories, level of education, ethnicity, state, religion (if any), employment status, and the number of children for whom the participants are financially responsible. Participants were notified that personally identifying information would not be collected before they began the survey. This survey included DASS (Lovibond & Lovibond, 1995) subscales, SEA2 (Adams et al., 2020) subscales, and demographic information questions. Once data was collected, it was transferred to the study author's personal computer, which has a secure password not shared with anyone else. Additionally, the Internet connection that was used also has a password, which only the study author knows, and provides an additional layer of participant privacy protection.

Data Collection Tools

It is of the utmost importance in any study to use ethical practices to safeguard participants' identity and safety. As such, SurveyMonkey, using SSL, was used to collect data from the measurement tools and demographic survey. Information collected included socioeconomic categories, employment status, level of education, ethnicity, state, religion (if any), number of years since the economically-abusive relationship ended, and the number of children for whom the participants are financially responsible. Factors such as occupation, income level, and whether one is fully or underemployed were considered to be a potential factor related to feelings related to depression, anxiety, and stress which were examined during this study (Santiago et al., 2013; Wray et al., 2013).

Data Collection Procedures

Domestic violence organizations were asked to share the survey link along with a recruitment poster and institutional review board (IRB) approved informed consent form using

social media accounts and groups as well as through a link printed on paper that they may share with prior and current clients. This form included information about how to get help if experiencing negative effects (panic, fear, confusion, renewed feelings over past trauma, or other effects as reported by participants) from participating and how to contact the university IRB, the study's author if there were questions or issues (Becker-Blease & Freyd, 2006; Brabin & Berah, 1995; DePrince & Freyd, 2006). Additionally, the form included the fact the SSL encryption on SurveyMonkey was used to protect participant data and the study author was the only person who had access to the SurveyMonkey account where the data was housed. No names or other identifying information were collected. Participants were told this before they began the survey which included DASS (Lovibond & Lovibond, 1995) items, Scale of Economic Abuse (Adams et al., 2008) items, and demographic information questions. Once data was collected, it was transferred to the study author's personal computer which was not shared, and continues to not be shared, with anyone and has a password for security. Additionally, the Internet connection, which was used, though connected to the computer, also had, and continues to have, a password which is known only by the author of this study further maintaining participant privacy.

Internal and External Validity

Internal and external validity are important parts of the methodology of any study. As such, internal and external validity were considered heavily in the design of this study. It is also important to recognize that not all variables can be controlled in studies, which may affect both internal and external validity.

The internal validity of this study may be affected by several factors. Due to the nature of this study and it being completed online using self-reported data, there is less control over variables that exist in real-world scenarios and the private lives of participants. It will be

assumed that participants share honest responses and that their perception of life events is clear and correct. However, there is a possibility that participants' answers will be skewed by their emotions or perceptions of events. It is also possible that some participants would have felt more pronounced depression, anxiety, and stress (dependent variables in this study) if they had additional independent variables affecting their lives beyond prior experiences of economic abuse. However, it is expected that this concern is not highly likely to affect study validity (Andrade, 2018; Bracht & Glass, 1968; Streefkerk, 2023).

Another potential factor in the internal validity of this study is that participants were recruited via social media and the study author did not have the ability to randomly choose from a participant pool. This could potentially affect internal validity as a randomized participant sample can strengthen internal validity. Further, sample attrition, participants choosing to stop the study, would mean that data would be incomplete. The recent COVID-19 pandemic may be a history effect in that this worldwide event has caused stress, anxiety, depression, and financial stability challenges for many during this time (Andrade, 2018; Bai et al., 2020; Bracht & Glass, 1968; Browning et al., 2021; Buheji et al., 2020; Elbogen et al., 2021; Streefkerk, 2023). External validity of a study can be affected by many factors, especially when considering the broader use of data in real-world conditions. Because this study relied on social media to recruit participants, it was not possible to determine in advance the population demographics of those who had chosen to participate, which may lower external validity and may represent a sample representativeness limitation. There were cross-cultural limitations as this study was only open to residents of the United States. Though participants could be from a variety of countries and cultures, this study will not have a large focus on countries and IPV experiences outside of the United States. However, because cultures often differ in their social structures and how they

view teamwork versus individual goals may influence views and self-reporting of incidences of economic abuse as well as symptoms of depression, anxiety, and stress (Andrade, 2018; Bracht & Glass, 1968; Streefkerk, 2023).

Storage and Protection of Data

This study utilized protective measures when collecting housing data. SSL encryption on SurveyMonkey was used to protect participant data and the study author was the only person with access to the SurveyMonkey account where the data was housed. Names and other identifying information were not collected. The data collected was then transferred to the study author's personal computer which is never shared with others, and which has a password for security. The author utilized SPSS (IBM, 2021), a statistical management software from IBM, (2021) under their private license and Microsoft Excel spreadsheets to organize and analyze data. Additionally, the Internet connection, though connected to the computer, was and continues to be password protected to maintain the privacy of the participants. Three years after the study has been completed, the data will be destroyed.

Data Analysis

Introduction

Analyses examined self-reported symptoms of depression, stress, and anxiety in women who experienced economic abuse after their intimate partner relationship has ended using the DASS (Lovibond & Lovibond, 1995). Additionally, self-reported data regarding how often incidences of economic abuse occurred during their intimate partner relationship was gathered and analyzed using the Scale of Economic Abuse (Adams et al., 2008). This data, along with personally non-identifying demographic information was used to observe relationships between variables.

Organizing Raw Data

Raw data was collected through SurveyMonkey. This data was transferred to an Excel spreadsheet to assist in organization of the information. This data will be destroyed after three years have passed.

Preparation of Data for Analysis

Raw data was placed into Excel Spreadsheets to help with organization. Three spreadsheets were used to separate SEA2 (Adams et al., 2008) data, DASS (Lovibond & Lovibond, 1995) data, and demographic data. Participants were identified only through the number assigned but were placed in the same numerical order on each spreadsheet for continuity and clarity of information. Data was reviewed to be certain all components of each part of the survey data are there. Any incomplete data, other than when a participant marked "Prefer not to answer," was marked as unusable and separated from the data used for analysis.

Managing and Processing Data

Raw data was examined for missing values. When information was missing from a participant's data, the participant's responses were excluded during the statistical analysis portion of the study. Any excluded data was noted in the raw data spreadsheets. As Likert scales were used in the SEA2 (Adams et al., 2008) and DASS (Lovibond & Lovibond, 1995) the number endorsed by participants for each item was applied to the space for the item in the corresponding spreadsheet on the line by each participant's number. The demographic spreadsheet, however, included the specific answer each participant gave for each demographic question. After all data was transferred to a spreadsheet and examined for missing values, the full raw data sets with no missing values were input into SPSS (IBM, 2021) for data analysis.

Statistical Analysis

SPSS (IBM, 2021) was utilized to complete a bivariate Pearson correlation to examine the relationship of the variety of distribution of each of the variables explored. Additionally, an examination of correlations between SEA2 (Adams et al., 2008), DASS (Lovibond & Lovibond, 1995), and demographic information was completed.

Expected Findings

The current body of literature indicates that economic challenges can affect one's mental health (Agüero, 2021; Buttell et al., 2021; Glowacz et al.; 2022; Lyons & Brewer, 2021; McNeil, 2023; Moffitt et al., 2022; Peitzmeier et al., 2022; Usta et al., 2021; Walsh et al., 2022). While additional variables may affect who is susceptible to mental health struggles when faced with economic challenges, there are efforts to mitigate socioeconomic challenges by providing resources that effectively assist those experiencing this type of hardship (Baughman, 2017; CDC, 2022, Daundasekara et al., 2020; Haifley, 2021; Hsu & Wickrama, 2015; Lefebvre et al., 2017; Pulgar et al., 2016). Additionally, children's experiences with adverse childhood events can affect them both in the moment and as they grow into adulthood (Barnes, 2020; Barrera et al., 2019; Beal, 2019; Schenck-Fontaine & Panico, 2019). Considering the current body of academic literature, it was expected that there would be a positive relationship between economic disparities caused by economic abuse and mental health. It was also expected that each variable in the DASS subscales (depression, anxiety, and stress) (Lovibond & Lovibond, 1995) would show a positive relationship with the presence of economic abuse when measured by the SEA2 (Adams et al., 2008). As such, the current study results were expected to show a positive correlation between economic abuse and symptoms of depression, a positive relationship between economic abuse and symptoms of anxiety is expected, and a positive relationship between economic abuse and symptoms of stress is expected. The potential effects of the

severity of economic abuse on mental health are not yet fully understood. However, based on the literature available regarding mental health and socioeconomic challenges, it was expected that this study would find that there is a positive correlation between the severity of economic abuse and symptoms of depression. This study is also expected to find that there is a positive correlation between the severity of economic abuse and symptoms of anxiety. Lastly, a positive correlation between the severity of economic abuse and symptoms of stress was expected in this study.

Ethical Considerations

A major tenet of academic research is to protect the identity of participants. This is especially true of those who have experienced abuse and whose participation in research studies could cause further targeted victimization should their identity become public knowledge. As a result, great care was taken in the consideration of how to share this study and how best to protect participants' identities. As such, SurveyMonkey was used as it has an option to use SSL encryption to protect participant data and identity. This survey host also provides guidance to help researchers understand and use the site to create consent forms which give participants the necessary opportunity to have informed consent before deciding whether to participate in a study or not. Additionally, this hosting site allows information to be provided before and after the survey, so participants could seek assistance if they feel unsafe or have questions. Participants could easily end the survey at any time without completing it should they feel a need to do this. During any mental health related study, there may be negative emotions tied to questions about depression, anxiety, stress, and economic abuse (Becker-Blease & Freyd, 2006; Brabin & Berah, 1995; DePrince & Freyd, 2006; DePrince & Freyd, 2006). Information regarding how to seek assistance in case these feelings are overwhelming and medical or psychological support was

needed were included. No financial or other incentive was given for participation in this study. However, participants were informed in advance that this study would help provide understanding of any potential mental health effects after leaving a relationship where one was economically abused (Becker-Blease & Freyd, 2006; Brabin & Berah, 1995; DePrince & Freyd, 2006). This study was not expected to cause harm. However, some participants could have had negative emotional or physical reactions to questions and to the memories that might have come up because of the questions (Bordens & Abbott, 1991).

CHAPTER 4. DATA ANALYSIS AND RESULTS

Introduction

Economic abuse is one type of IPV and is defined as a way for the perpetrator to have power over the victim's financial resources to control the victim, according to Adams et al. (2008). Research has shown that controlling financial resources can cause economic disparities as well as physical and mental health challenges for the victim and their dependent children (Adams et al., 2008; Barrera et al., 2019; Houtepen et al., 2020; Jahn et al., 2021; Kanougiya et al., 2021; Lanier et al. 2018). However, the available research has not focused on the potential long-term effects of economic abuse after the end of a relationship.

This study aimed to examine any potential relationships between economic abuse and symptoms of depression, anxiety, and stress after the end of an abusive relationship where this type of IPV was present. The results may help officers of the court and organizations that assist IPV survivors in regaining their independence to better support them by providing more effective services and assistance. Additionally, survivors of IPV may be better served if negative mental health effects can be more easily identified and social service agencies can utilize this information to provide meaningful supports to improve survivors' mental health and help them become more economically stable. This study can also guide future research regarding more effective ways to assist in lessening the potential mental health challenges victims experience due to one or more instances of economic abuse. Organizations that receive grants to provide services may be better able to make actionable gains in helping those who have experienced this type of IPV as a result of this study.

The results of the demographic questions in two online surveys, SEA2 (Adams et al., 2020) and DASS (Lovibond & Lovibond, 1995) were examined using SPSS (IBM, 2021) to run

a bivariate Pearson correlation. This analysis method evaluated how each questionnaire item was affected by the self-reported severity and type of economic abuse and self-reported level of depression, anxiety, and stress symptoms experienced by participants.

Research Questions and Hypotheses

The focus of this study was to determine if there is a relationship between economic abuse, severity of this type of abuse, and mental health one year or more post-relationship. The research questions and hypotheses for this study follow.

Research Question 1

RQ1. Is there a relationship between economic abuse and symptoms of depression, anxiety, and stress after a romantic relationship where economic abuse was present?

RQ_{1a}. Is there a relationship between economic abuse and symptoms of depression after a romantic relationship where economic abuse was present?

$H1_{0a}$. There is no relationship between economic abuse and symptoms of depression in women post-relationship.

$H1_{1a}$. There is a positive relationship between economic abuse and symptoms of depression in women post-relationship.

RQ_{1b}. Is there a relationship between economic abuse and symptoms related to anxiety in women post-relationship where economic abuse was present?

$H1_{0b}$. There is no relationship between economic abuse and symptoms of anxiety in women post-relationship.

$H1_{1b}$. There is a positive relationship between economic abuse and symptoms of anxiety in women post-relationship.

RQ_{1c}. Is there a relationship between economic abuse and stress in women post-relationship where economic abuse was present?

$H1_{0c}$. There is no relationship between economic abuse and symptoms of stress in women post-relationship.

$H1_{1c}$. There is a positive relationship between economic abuse and symptoms of stress in women post-relationship.

Research Question 2

RQ2. Is there a relationship between the severity of economic abuse and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present?

RQ_{2a}. Is there a relationship between the severity of economic abuse and symptoms of depression after a relationship where economic abuse was present?

$H2_{0a}$. There is no relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present.

$H2_{1a}$. There is a positive relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present.

RQ_{2b}. Is there a relationship between the severity of economic abuse and symptoms of anxiety after a relationship where economic abuse was present?

$H2_{0b}$. There is no relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present.

$H2_{1b}$. There is a positive relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present.

RQ_{2c}. Is there a relationship between the severity of economic abuse and symptoms of stress after a relationship where economic abuse was present?

$H2_{0c}$. There is no relationship between the severity of economic abuse and symptoms of stress post-relationship where economic abuse was present.

$H2_{c}$. There is a positive relationship between the severity of economic abuse and symptoms of stress post-relationship where economic abuse was present.

RQ_{2d}. Is there a relationship between the severity of economic abuse and symptoms of depression, anxiety, and stress after a relationship with economic abuse ends?

$H2_{0d}$. There is no relationship between the overall number of economic abuse incidences and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present.

$H2_{2d}$. There is a positive relationship between the overall number of economic abuse incidences and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present.

Description of the Sample

The setting for this study was virtual. Participants completed an anonymous online survey through Survey Monkey using the SSL encryption option. This study did not ask for personally identifying information and used Survey Monkey to further protect participants' identities.

Population

The population for this study was cisgender women who experienced economic abuse in a prior intimate partner relationship one year or more prior to the completion of the survey. Participants were required to be current residents in the United States at the time they participated but were not required to be citizens of the United States to participate. Only the participant's state of residence was self-reported.

Sample

To determine the sample size for this study, a power analysis was completed using statistical software G*Power 3.1.9.7. The most recent CDC statistics for IPV were also utilized to determine the sample size for this study. This information was published in the National Intimate Partner and Sexual Violence Survey and is the most recent data provided by the CDC. The data was collected in 2016 and 2017, then published in 2022 (Leemis et al.). According to 52 million participants' self-reported experiences on the National Intimate Partner and Sexual Violence Survey 42% of women have experienced some form of IPV at least once in their lifetime.

A one-tail Pearson correlation analysis test design was used in the G*Power 3.1.9.7 software. In this test, alpha=.05 and power=.80 were used, which placed the estimated minimum sample size at N=67 (Faul et al., 2007). Because participants could stop without completing the survey, which could result in missing data, and to allow for confounding factors, the researcher was prepared to add an additional 13 participants, or 20% of the sample as survey participants had that number of participants been available and they had agreed to participate in this study (Martinez-Mesa et al., 2014). This brought the ideal sample size for this study to at least 80.

Recruitment

After IRB approval was obtained, domestic violence organizations located throughout the U.S. asked through email to share a survey link and QR code on a recruitment poster. Organizations were able to share the survey using social media accounts and groups as well as through a link printed on paper that they may share with potential participants. The link directed participants to the first page of the survey, which consisted of IRB-approved informed consent form. This form included information about how to receive help if experiencing negative effects

of participating in the study (for example, panic, fear, confusion, renewed feelings over past trauma, or other effects as reported by participants) and how to contact the university IRB and the study's author with questions or concerns. Additionally, the form stated that SSL encryption on SurveyMonkey was being used to protect participant data, and the study's author is the only person who has access to the SurveyMonkey account where the data was housed. Participant names and other personally identifying information were not collected. Participants were advised of this before they began the survey in the informed consent verbiage. Once data was collected, it was transferred to the study author's personal computer, which is not shared with others and which has a password for security. The Internet connection used by the study's author is also password protected to maintain participant privacy.

Sample Description

After data collection was completed, the dataset was exported from SurveyMonkey to SPSS (IBM, 2021) for analysis. To be included in the sample, participants had to qualify for the study and consent to participate in the study as well as complete both the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008). Completing both measurement tools allowed for the most accurate analysis of the data available in this study with respect to the study's research questions. Choosing the "prefer not to answer" option was not grounds for excluding a participant's data.

Four participants were excluded because they chose not to participate. Eighteen participants were excluded because they did not complete the SEA2 (Adams et al., 2008) and the DASS (Lovibond & Lovibond, 1995) in full. After exclusions, the total participants with complete DASS and SEA2 was 54. Imputation methods were not utilized in this study because the DASS and SEA2 data was excluded because all answers in at least one of the measurements

tools were missing, and these methods would not have reliably assisted in data analyses due to the number of missing answers for each excluded participant's data. Because the consent form and recruitment flyer, as well as the language provided by SurveyMonkey noted that the purpose of this study was to determine whether there were relationships between economic abuse and depression, anxiety, and stress in cisgender women, all participants were assumed to be cisgender women.

Demographics

To be included in this sample, participants' prior economically abusive relationships had to occur one or more years prior to completing this study. However, participants could complete the study if they were ten or more years post-relationship. Together the participant subgroups of one to two years post-relationship and three to four years post-relationship made up 50% of this participant sample. Additionally, participants who reported being 10 or more years post-relationship where economic abuse was present totaled 20.4% of the sample; Table 1 shows demographic information for this sample.

Table 1

Demographics: How Many Years Post-Separation

	Number of Years	Count	N %
Number of years which have passed since the end of the economically abusive relationship ended.	1-2 years	13	24.1%
	3-4 years	14	25.9%
	5-6 years	4	7.4%
	7-8 years	3	5.6%
	9-10 years	2	3.7%
	More than 10 years	11	20.4%
	Prefer not to answer	7	13.0%

The participant sample (n=54) for this study was made up of cisgender women who reside in the U.S. Table 2 provides detailed information about the household income level and education level of the participants, while Table 3 breaks down the location each participant reported as the state in which they reside.

Table 2

Demographics: Household Income and Education Level

		Count	N %
What is your approximate average annual household income?	$0-$24,999	13	24.1%
	$25,000-$49,999	9	16.7%
	$50,000-$74,999	9	16.7%
	$75,000-$99,999	7	13.0%
	$100,000-$124,999	7	13.0%
	$125,000-$149,999	1	1.9%
	$150,000-$174,999	1	1.9%
	$175,000-$199,999	2	3.7%
	$200,000 and up	3	5.6%
	Prefer not to answer	2	3.7%
What is the highest level of education you have completed?	Some Mid School	0	0.0%
	Middle School	0	0.0%
	Some High School	2	3.7%
	High School	7	13.0%
	Some College	15	27.8%
	AA or AS Degree	14	25.9%
	Bachelor's Degree	8	14.8%
	Trade/Voc. School	1	1.9%
	Master's Degree	5	9.3%
	Doctorate or Higher	1	1.9%
	Prefer not to answer	1	1.9%

Table 3

Demographics: State of Residence

		Count	N %
In what state or U.S. territory do you live?	Prefer not to answer	2	3.7%
	Alabama	1	1.9%
	Alaska	0	0.0%
	American Samoa	0	0.0%
	Arizona	2	3.7%
	Arkansas	1	1.9%
	California	7	13.0%
	Colorado	0	0.0%
	Connecticut	0	0.0%
	Delaware	0	0.0%
	District of Columbia (DC)	0	0.0%
	Florida	7	13.0%
	Georgia	1	1.9%
	Guam	0	0.0%
	Hawaii	0	0.0%
	Idaho	1	1.9%
	Illinois	1	1.9%
	Indiana	3	5.6%
	Iowa	0	0.0%
	Kansas	1	1.9%
	Kentucky	1	1.9%
	Louisiana	0	0.0%
	Maine	0	0.0%
	Maryland	3	5.6%
	Massachusetts	0	0.0%
	Michigan	1	1.9%
	Minnesota	2	3.7%
	Mississippi	0	0.0%
	Missouri	0	0.0%
	Montana	1	1.9%
	Nebraska	0	0.0%
	Nevada	2	3.7%
	New Hampshire	0	0.0%
	New Jersey	2	3.7%
	New Mexico	0	0.0%
	New York	1	1.9%
	North Carolina	3	5.6%

Table 3

Demographics: State of Residence

		Count	N %
In what state or U.S. territory do you live?	North Dakota	0	0.0%
	Northern Marianas Islands	0	0.0%
	Ohio	0	0.0%
	Oklahoma	1	1.9%
	Oregon	1	1.9%
	Pennsylvania	2	3.7%
	Puerto Rico	0	0.0%
	Rhode Island	0	0.0%
	South Carolina	1	1.9%
	South Dakota	0	0.0%
	Tennessee	3	5.6%
	Texas	2	3.7%
	Utah	0	0.0%
	Vermont	0	0.0%
	Virginia	0	0.0%
	Virgin Islands	0	0.0%
	Washington	1	1.9%
	West Virginia	0	0.0%
	Wisconsin	0	0.0%
	Wyoming	0	0.0%

Participants were asked which ethnicity or ethnicities best describe them. Two participants (3.7%) responded Asian or Pacific Islander, seven (13.0%) were Black or African American, 38 (70.4%) were White/Caucasian, and two (3.7%) chose the “prefer not to answer” option. Detailed results are shown in Table 4. Participants were also asked about the faith with which they identified, and their responses are shown in Table 5.

Table 4

Demographics: Ethnicity

		Count	N %
Which race/ethnicity best describes you? (Please choose only one.)	Multiple ethnicity / Other (please specify)	0	0.0%
	American Indian or Alaskan Native	0	0.0%
	Asian / Pacific Islander	2	3.7%
	Black or African American	7	13.0%
	Hispanic	5	9.3%
	White / Caucasian	38	70.4%
	Prefer not to answer	2	3.7%
		54	100%

Table 5

Demographics: Religious Affiliation

	Count	N %
Protestant	3	5.6%
Catholic	5	9.3%
Christian	14	25.9%
Jewish	0	0.0%
Muslim	1	1.9%%
Buddhist	1	1.9%
Hindu	0	0.0%
Native American religions	0	0.0%
Inter/Non-denominational	5	9.3%
No religious affiliation	15	27.8%
Prefer not to answer	3	5.6%
Spiritualism	1	1.9%
Christian and Inter/Non-denominational	2	3.7%
Catholic and Inter/Non-denominational	1	1.9%
Christian and Inter/Non-denominational and no religious affiliation	1	1.9%
Protestant and Divine Feminism	1	1.9%
Spiritual and no religious affiliation	1	1.9%

Participants were asked about their employment status. Employment status varied, with three (5.6%) choosing “Prefer not to answer,” 20 (37.0%) choosing “Working full-time,” 10 (18.5%) choosing “Working part-time,” six (11.1%) choosing “Not employed but looking for work,” one (1.9%) “Not employed and not looking for work,” seven (13.0%) “retired,” three (5.6%) “Disabled and not able to work,” one (1.9%) “Caring for children in their home,” two (3.7%) “Caring for a disabled child or adult in their home,” and one (1.9%) “Caring for a family member who is not their child but is disabled,” as shown in Table 6.

Table 6

Demographics: Employment Status

		Count	N %
Which of the following categories best describes your employment status?	Employed, working full-time	20	37.0%
	Employed, working part-time	10	18.5%
	Not employed, looking for work	6	11.1%
	Not employed, NOT looking for work	1	1.9%
	Retired	7	13.0%
	Disabled, not able to work	3	5.6%
	Caring for children and the home	1	1.9%
	Caring for my disabled child or adult child	2	3.7%
	Caring for a disabled family member who is not my child	1	1.9%
	Prefer not to answer	3	5.6%

Participants were also asked how many children they were financially responsible for at the time of the survey. Out of the 54 participants, 22 (40.7%) reported not being financially responsible for any children, while six (11.1%) participants chose "N/A (Prefer not to answer)." Additionally, 10 (18.5%) participants reported being financially responsible for one child, 10 (18.5%) participants reported being financially responsible for two children, four (7.4%) participants reported being financially responsible for three children, one participant (1.9%) reported being financially responsible for five children, and one (1.9%) participant reported being financially responsible for eight children. Table 7 provides the percentage breakdown of this demographic data.

Table 7

Demographics: Number of Children for Which Each Participant is Financially Responsible

	Number of Children	Count	N %
Number of children for whom you are financially responsible. If you prefer not to answer, please mark this question by typing NA.	0	22	40.7%
	1	10	18.5%
	2	10	18.5%
	3	4	7.4%
	5	1	1.9%
	8	1	1.9%
	N/A (Prefer not to answer)	6	11.1%

Economic Abuse Frequency

Participants were asked about the incidence of economic abuse they experienced in the SEA2 (Adams et al., 2008), which measures behaviors such as economic control and economic exploitation. All participants experienced at least one type of economic abuse and severity, as measured by the type and frequency of incidents experienced by participants. Table 8 provides the data from this measurement tool.

Table 8

SEA2 Items (Adams et al., 2008)

		Count	N %
Keep you from having the money you needed to buy food, clothes, or other necessities	0 – Never	16	29.6%
	1 - Hardly Ever	6	11.1%
	2 – Sometimes	13	24.1%
	3 – Often	8	14.8%
	4 - Very Often	10	18.5%
	Prefer not to answer	1	1.9%
Keep financial information from you	0 – Never	11	20.4%
	1 - Hardly Ever	6	11.1%
	2 – Sometimes	5	9.3%
	3 – Often	7	13.0%
	4 - Very Often	24	44.4%
	Prefer not to answer	1	1.9%
Decide how you could spend money rather than letting you spend it how you saw fit	0 – Never	9	16.7%
	1 - Hardly Ever	7	13.0%
	2 – Sometimes	15	27.8%
	3 – Often	13	24.1%
	4 - Very Often	9	16.7%
	Prefer not to answer	1	1.9%
Make you ask him/her for money	0 – Never	14	25.9%
	1 - Hardly Ever	6	11.1%
	2 – Sometimes	10	18.5%
	3 – Often	7	13.0%
	4 - Very Often	16	29.6%
	Prefer not to answer	1	1.9%
Hide money so that you could not find it	0 – Never	18	33.3%
	1 - Hardly Ever	4	7.4%
	2 – Sometimes	14	25.9%
	3 – Often	4	7.4%
	4 - Very Often	13	24.1%
	Prefer not to answer	1	1.9%

Table 8

SEA2 Items (Adams et al., 2008)

		Count	N %
Demand that you give him/her receipts or change when you spent money	0 – Never	19	35.2%
	1 - Hardly Ever	8	14.8%
	2 – Sometimes	9	16.7%
	3 – Often	9	16.7%
	4 - Very Often	8	14.8%
	Prefer not to answer	1	1.9%
Keep you from having a job or going to work	0 – Never	21	38.9%
	1 - Hardly Ever	5	9.3%
	2 – Sometimes	12	22.2%
	3 – Often	4	7.4%
	4 - Very Often	11	20.4%
	Prefer not to answer	1	1.9%
Make you use your money to buy him/her things or pay his/her bills when you didn't want to	0 – Never	18	33.3%
	1 - Hardly Ever	4	7.4%
	2 – Sometimes	10	18.5%
	3 – Often	10	18.5%
	4 - Very Often	11	20.4%
	Prefer not to answer	1	1.9%
Spend his/her money however he/she wanted while your money went to pay for necessities	0 – Never	13	24.1%
	1 - Hardly Ever	2	3.7%
	2 – Sometimes	13	24.1%
	3 – Often	10	18.5%
	4 - Very Often	15	27.8%
	Prefer not to answer	1	1.9%
Take out a loan or buy something on credit in your name without your permission	0 – Never	33	61.1%
	1 - Hardly Ever	5	9.3%
	2 – Sometimes	5	9.3%
	3 – Often	5	9.3%
	4 - Very Often	5	9.3%
	Prefer not to answer	1	1.9%

Table 8

SEA2 Items (Adams et al., 2008)

		Count	N %
Make you take out a loan or buy something on credit when you didn't want to	0 – Never	24	44.4%
	1 - Hardly Ever	8	14.8%
	2 – Sometimes	11	20.4%
	3 – Often	4	7.4%
	4 - Very Often	6	11.1%
	Prefer not to answer	1	1.9%
Put bills in your name, leaving you to pay them	0 – Never	22	40.7%
	1 - Hardly Ever	6	11.1%
	2 – Sometimes	8	14.8%
	3 – Often	8	14.8%
	4 - Very Often	8	14.8%
	Prefer not to answer	2	3.7%
Force or pressure you to give him/her your savings or other assets	0 – Never	18	33.3%
	1 - Hardly Ever	6	11.1%
	2 – Sometimes	13	24.1%
	3 – Often	6	11.1%
	4 - Very Often	7	13.0%
	Prefer not to answer	4	7.4%
Steal your property	0 – Never	24	44.4%
	1 - Hardly Ever	4	7.4%
	2 – Sometimes	11	20.4%
	3 – Often	4	7.4%
	4 - Very Often	8	14.8%
	Prefer not to answer	3	5.6%

Incidences of Depression, Anxiety, and Stress Symptoms

Participants reported their levels of depression, anxiety, and stress symptoms at the time of their participation in this study using the DASS (Lovibond & Lovibond, 1995). The list of responses by percentage is found in Tables 9 and 10 below as a summary of the data from the DASS (Lovibond & Lovibond, 1995) completed by participants of this study.

Table 9

DASS: Page One Items (Lovibond & Lovibond, 1995)

		Count	Column N %
I found myself getting upset by quite trivial things	0 Did not apply to me at all	7	13.0%
	1 Applied to me to some degree, or some of the time	28	51.9%
	2 Applied to me to a considerable degree, or a good part of time	6	11.1%
	3 Applied to me very much, or most of the time	12	22.2%
	Prefer not to answer	1	1.9%
I was aware of dryness of my mouth	0 Did not apply to me at all	16	29.6%
	1 Applied to me to some degree, or some of the time	11	20.4%
	2 Applied to me to a considerable degree, or a good part of time	14	25.9%
	3 Applied to me very much, or most of the time	12	22.2%
	Prefer not to answer	1	1.9%
I couldn't seem to experience any positive feeling at all	0 Did not apply to me at all	12	22.2%
	1 Applied to me to some degree, or some of the time	15	27.8%
	2 Applied to me to a considerable degree, or a good part of time	15	27.8%
	3 Applied to me very much, or most of the time	11	20.4%
	Prefer not to answer	1	1.9%
I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0 Did not apply to me at all	22	40.7%
	1 Applied to me to some degree, or some of the time	11	20.4%
	2 Applied to me to a considerable degree, or a good part of time	12	22.2%
	3 Applied to me very much, or most of the time	8	14.8%
	Prefer not to answer	1	1.9%

Table 9
DASS: Page One Items (Lovibond & Lovibond, 1995)

		Count	Column N %
I just couldn't seem to get going	0 Did not apply to me at all	7	13.0%
	1 Applied to me to some degree, or some of the time	15	27.8%
	2 Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 Applied to me very much, or most of the time	20	37.0%
	Prefer not to answer	1	1.9%
I tended to over-react to situations	0 Did not apply to me at all	11	20.4%
	1 Applied to me to some degree, or some of the time	16	29.6%
	2 Applied to me to a considerable degree, or a good part of time	10	18.5%
	3 Applied to me very much, or most of the time	16	29.6%
	Prefer not to answer	1	1.9%
I had a feeling of shakiness (e.g., legs going to give way)	0 Did not apply to me at all	18	33.3%
	1 Applied to me to some degree, or some of the time	13	24.1%
	2 Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 Applied to me very much, or most of the time	13	24.1%
	Prefer not to answer	1	1.9%
I found it difficult to relax	0 Did not apply to me at all	7	13.0%
	1 Applied to me to some degree, or some of the time	14	25.9%
	2 Applied to me to a considerable degree, or a good part of time	13	24.1%
	3 Applied to me very much, or most of the time	18	33.3%
	Prefer not to answer	2	3.7%

Table 9
DASS: Page One Items (Lovibond & Lovibond, 1995)

		Count	Column N %
I found myself in situations that made me so anxious I was most relieved when they ended	0 Did not apply to me at all	10	18.5%
	1 Applied to me to some degree, or some of the time	14	25.9%
	2 Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 Applied to me very much, or most of the time	17	31.5%
	Prefer not to answer	2	3.7%
I felt that I had nothing to look forward to	0 Did not apply to me at all	12	22.2%
	1 Applied to me to some degree, or some of the time	10	18.5%
	2 Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 Applied to me very much, or most of the time	19	35.2%
	Prefer not to answer	2	3.7%
I found myself getting upset rather easily	0 Did not apply to me at all	9	16.7%
	1 Applied to me to some degree, or some of the time	15	27.8%
	2 Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 Applied to me very much, or most of the time	19	35.2%
	Prefer not to answer	2	3.7%
I felt that I was using a lot of nervous energy	0 Did not apply to me at all	11	20.4%
	1 Applied to me to some degree, or some of the time	10	18.5%
	2 Applied to me to a considerable degree, or a good part of time	15	27.8%
	3 Applied to me very much, or most of the time	14	25.9%
	Prefer not to answer	4	7.4%

Table 9
DASS: Page One Items (Lovibond & Lovibond, 1995)

		Count	Column N %
I felt sad and depressed	0 Did not apply to me at all	9	16.7%
	1 Applied to me to some degree, or some of the time	12	22.2%
	2 Applied to me to a considerable degree, or a good part of time	14	25.9%
	3 Applied to me very much, or most of the time	17	31.5%
	Prefer not to answer	2	3.7%
I found myself getting impatient when I was delayed in any way (e.g., elevators, traffic lights, being kept waiting)	0 Did not apply to me at all	11	20.4%
	1 Applied to me to some degree, or some of the time	16	29.6%
	2 Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 Applied to me very much, or most of the time	14	25.9%
	Prefer not to answer	2	3.7%
I had a feeling of faintness	0 Did not apply to me at all	28	51.9%
	1 Applied to me to some degree, or some of the time	11	20.4%
	2 Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 Applied to me very much, or most of the time	4	7.4%
	Prefer not to answer	2	3.7%
I felt that I had lost interest in just about everything	0 Did not apply to me at all	11	20.4%
	1 Applied to me to some degree, or some of the time	13	24.1%
	2 Applied to me to a considerable degree, or a good part of time	10	18.5%
	3 Applied to me very much, or most of the time	18	33.3%
	Prefer not to answer	2	3.7%

Table 9
DASS: Page One Items (Lovibond & Lovibond, 1995)

		Count	Column N %
I felt I wasn't worth much as a person	0 Did not apply to me at all	18	33.3%
	1 Applied to me to some degree, or some of the time	7	13.0%
	2 Applied to me to a considerable degree, or a good part of time	13	24.1%
	3 Applied to me very much, or most of the time	14	25.9%
	Prefer not to answer	2	3.7%
I felt that I was rather Touchy	0 Did not apply to me at all	11	20.4%
	1 Applied to me to some degree, or some of the time	18	33.3%
	2 Applied to me to a considerable degree, or a good part of time	12	22.2%
	3 Applied to me very much, or most of the time	8	14.8%
	Prefer not to answer	5	9.3%
I perspired noticeably (e.g., hands sweaty) in the absence of high temperatures or physical exertion	0 Did not apply to me at all	27	50.0%
	1 Applied to me to some degree, or some of the time	11	20.4%
	2 Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 Applied to me very much, or most of the time	4	7.4%
	Prefer not to answer	1	1.9%
I felt scared without any good reason	0 Did not apply to me at all	21	38.9%
	1 Applied to me to some degree, or some of the time	13	24.1%
	2 Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 Applied to me very much, or most of the time	7	13.0%
	Prefer not to answer	2	3.7%

Table 9
DASS: Page One Items (Lovibond & Lovibond, 1995)

		Count	Column N %
I felt that life wasn't worthwhile	0 Did not apply to me at all	17	31.5%
	1 Applied to me to some degree, or some of the time	15	27.8%
	2 Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 Applied to me very much, or most of the time	11	20.4%
	Prefer not to answer	2	3.7%

Table 10

DASS: Page Two Items (Lovibond & Lovibond, 1995)

		Count	N %
I found it hard to wind Down	0 - Did not apply to me at all	9	16.7%
	1 - Applied to me to some degree, or some of the time	18	33.3%
	2 - Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 - Applied to me very much, or most of the time	17	31.5%
	Prefer not to answer	1	1.9%
I had difficulty in swallowing	0 - Did not apply to me at all	30	55.6%
	1 - Applied to me to some degree, or some of the time	9	16.7%
	2 - Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 - Applied to me very much, or most of the time	4	7.4%
	Prefer not to answer	2	3.7%
I couldn't seem to get any enjoyment out of the things I did	0 - Did not apply to me at all	11	20.4%
	1 - Applied to me to some degree, or some of the time	16	29.6%
	2 - Applied to me to a considerable degree, or a good part of time	6	11.1%
	3 - Applied to me very much, or most of the time	19	35.2%
	Prefer not to answer	2	3.7%
I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	0 - Did not apply to me at all	16	29.6%
	1 - Applied to me to some degree, or some of the time	17	31.5%
	2 - Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 - Applied to me very much, or most of the time	9	16.7%
	Prefer not to answer	3	5.6%

Table 10

DASS: Page Two Items (Lovibond & Lovibond, 1995)

		Count	N %
I felt down-hearted and Blue	0 - Did not apply to me at all	11	20.4%
	1 - Applied to me to some degree, or some of the time	11	20.4%
	2 - Applied to me to a considerable degree, or a good part of time	13	24.1%
	3 - Applied to me very much, or most of the time	17	31.5%
	Prefer not to answer	2	3.7%
I found that I was very irritable	0 - Did not apply to me at all	12	22.2%
	1 - Applied to me to some degree, or some of the time	15	27.8%
	2 - Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 - Applied to me very much, or most of the time	14	25.9%
	Prefer not to answer	2	3.7%
I felt I was close to panic	0 - Did not apply to me at all	14	25.9%
	1 - Applied to me to some degree, or some of the time	15	27.8%
	2 - Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 - Applied to me very much, or most of the time	14	25.9%
	Prefer not to answer	2	3.7%
I found it hard to calm down after something upset me	0 - Did not apply to me at all	13	24.1%
	1 - Applied to me to some degree, or some of the time	15	27.8%
	2 - Applied to me to a considerable degree, or a good part of time	13	24.1%
	3 - Applied to me very much, or most of the time	11	20.4%
	Prefer not to answer	2	3.7%

Table 10

DASS: Page Two Items (Lovibond & Lovibond, 1995)

		Count	N %
I feared that I would be "thrown" by some trivial but unfamiliar task	0 - Did not apply to me at all	21	38.9%
	1 - Applied to me to some degree, or some of the time	12	22.2%
	2 - Applied to me to a considerable degree, or a good part of time	8	14.8%
	3 - Applied to me very much, or most of the time	11	20.4%
	Prefer not to answer	2	3.7%
I was unable to become enthusiastic about anything	0 - Did not apply to me at all	11	20.4%
	1 - Applied to me to some degree, or some of the time	17	31.5%
	2 - Applied to me to a considerable degree, or a good part of time	7	13.0%
	3 - Applied to me very much, or most of the time	17	31.5%
	Prefer not to answer	2	3.7%
I found it difficult to tolerate interruptions to what I was doing	0 - Did not apply to me at all	12	22.2%
	1 - Applied to me to some degree, or some of the time	19	35.2%
	2 - Applied to me to a considerable degree, or a good part of time	13	24.1%
	3 - Applied to me very much, or most of the time	8	14.8%
	Prefer not to answer	2	3.7%
I was in a state of nervous tension	0 - Did not apply to me at all	11	20.4%
	1 - Applied to me to some degree, or some of the time	14	25.9%
	2 - Applied to me to a considerable degree, or a good part of time	15	27.8%
	3 - Applied to me very much, or most of the time	13	24.1%
	Prefer not to answer	1	1.9%

Table 10

DASS: Page Two Items (Lovibond & Lovibond, 1995)

		Count	N %
I felt I was pretty worthless	0 - Did not apply to me at all	17	31.5%
	1 - Applied to me to some degree, or some of the time	13	24.1%
	2 - Applied to me to a considerable degree, or a good part of time	9	16.7%
	3 - Applied to me very much, or most of the time	14	25.9%
	Prefer not to answer	1	1.9%
I was intolerant of anything that kept me from getting on with what I was doing	0 - Did not apply to me at all	16	29.6%
	1 - Applied to me to some degree, or some of the time	17	31.5%
	2 - Applied to me to a considerable degree, or a good part of time	8	14.8%
	3 - Applied to me very much, or most of the time	9	16.7%
	Prefer not to answer	4	7.4%
I felt terrified	0 - Did not apply to me at all	21	38.9%
	1 - Applied to me to some degree, or some of the time	8	14.8%
	2 - Applied to me to a considerable degree, or a good part of time	11	20.4%
	3 - Applied to me very much, or most of the time	9	16.7%
	Prefer not to answer	5	9.3%
I could see nothing in the future to be hopeful about	0 - Did not apply to me at all	14	25.9%
	1 - Applied to me to some degree, or some of the time	13	24.1%
	2 - Applied to me to a considerable degree, or a good part of time	7	13.0%
	3 - Applied to me very much, or most of the time	18	33.3%
	Prefer not to answer	2	3.7%

Table 10

DASS: Page Two Items (Lovibond & Lovibond, 1995)

		Count	N %
I felt that life was meaningless	0 - Did not apply to me at all	17	31.5%
	1 - Applied to me to some degree, or some of the time	18	33.3%
	2 - Applied to me to a considerable degree, or a good part of time	4	7.4%
	3 - Applied to me very much, or most of the time	13	24.1%
	Prefer not to answer	2	3.7%
I found myself getting agitated	0 - Did not apply to me at all	12	22.2%
	1 - Applied to me to some degree, or some of the time	13	24.1%
	2 - Applied to me to a considerable degree, or a good part of time	16	29.6%
	3 - Applied to me very much, or most of the time	11	20.4%
	Prefer not to answer	2	3.7%
I was worried about situations in which I might panic and make a fool of myself	0 - Did not apply to me at all	22	40.7%
	1 - Applied to me to some degree, or some of the time	14	25.9%
	2 - Applied to me to a considerable degree, or a good part of time	8	14.8%
	3 - Applied to me very much, or most of the time	8	14.8%
	Prefer not to answer	2	3.7%
I experienced trembling (e.g., in the hands)	0 - Did not apply to me at all	22	40.7%
	1 - Applied to me to some degree, or some of the time	10	18.5%
	2 - Applied to me to a considerable degree, or a good part of time	10	18.5%
	3 - Applied to me very much, or most of the time	10	18.5%
	Prefer not to answer	2	3.7%

Table 10

DASS: Page Two Items (Lovibond & Lovibond, 1995)

		Count	N %
I found it difficult to work up the initiative to do Things	0 - Did not apply to me at all	9	16.7%
	1 - Applied to me to some degree, or some of the time	15	27.8%
	2 - Applied to me to a considerable degree, or a good part of time	13	24.1%
	3 - Applied to me very much, or most of the time	16	29.6%
	Prefer not to answer	1	1.9%

Summary of the Results

This section reviews the results from the present study. Tables are included throughout this text. Each research question and hypothesis has been reviewed including descriptive statistics and whether each null hypothesis was accepted or rejected.

Research Question 1

SPSS (2021) was utilized to complete a one-tail bivariate Pearson correlation where a=.05 to examine the relationship of the type of economic abuse and how each type relates to depression, anxiety, and stress symptoms after a romantic relationship where abuse was present as self-reported by participants using the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008). Due to the nonlinear analysis results, as was expected due to the often nonlinear results found in prior studies of depressions symptoms, anxiety symptoms, and stress symptoms, Spearman's Rank Correlation Coefficient analyses were run for all variables (Galatzer-Levy, Huang, & Bonanno, 2018; Gregson & Guastello, 2011; Pincus et al., 2019; Pincus & Metten, 2010). This question was broken down into multiple sub-questions to assist with clarity of results.

Research Question 1a

A one-tail Pearson bivariate correlation analysis revealed that there was a statistically significant positive relationship between economic restriction as self-reported by participants using the SEA2 (Adams et al., 2008) and symptoms of depression as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.370, p=.003. A one-tail Pearson bivariate correlation analysis revealed that there was a statistically significant positive relationship between economic exploitation as self-reported by participants using the SEA2 (Adams et al., 2008) and symptoms of depression as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.373, p=.003. These results indicate that the more often economic restriction occurred, the higher the rate of self-reported depression symptoms in participants. See Tables 11 and 12.

Table 11

Descriptive Statistics: Economic Restriction, Economic Exploitation, and Depression Symptoms

	Mean	Std. Deviation	N
Economic Restriction	1.8730	1.27345	54
Economic Exploitation	1.4744	1.25748	54
DASS Depression Symptoms	21.0741	13.99171	54

Table 12

Pearson Correlation Coefficient: Economic Restriction, Economic Exploitation, and Depression Symptoms

		Depression Symptoms
Economic Restriction	Pearson Correlation	.370
	Sig. (1-tailed)	.003
	N	54
Economic Exploitation	Pearson Correlation	.373
	Sig. (1-tailed)	.003
	N	54

Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic restriction and symptoms of depression and found ρ=.384, p=.004. For the same reason, Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of depression and found ρ= 428, p=.001. These results indicate that the more often economic restriction and economic exploitation occurred, the higher the rate of self-reported depression symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. See Table 13 below.

Table 13

Spearman's Rho: Economic Restriction, Economic Exploitation, and Depression Symptoms

			Depression Symptoms
Spearman's rho	Economic Restriction	Correlation Coefficient	.384
		Sig. (2-tailed)	.004
		N	54
	Economic Exploitation	Correlation Coefficient	.428
		Sig. (2-tailed)	.001
		N	54

Research Question 1b

A one-tail Pearson bivariate correlation analysis found a statistically significant positive relationship between economic restriction as self-reported by participants using the SEA2 (Adams et al., 2008) and symptoms of anxiety as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.385, p=.002. These results indicate that the more often economic restriction occurred, the higher the rate of self-reported anxiety symptoms in participants.

A one-tail Pearson bivariate correlation analysis found a statistically significant positive relationship between economic exploitation as self-reported by participants using the SEA2 (Adams et al., 2008) and symptoms of anxiety as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r =.426, p<.001. These results indicate that

the more often economic exploitation occurred, the higher the rate of self-reported anxiety symptoms in participants. See Tables 14 and 15 below.

Table 14

Descriptive Statistics: Economic Restriction, Economic Exploitation, and Anxiety Symptoms

	Mean	Std. Deviation	N
Economic Restriction	1.8730	1.27345	54
Economic Exploitation	1.4744	1.25748	54
DASS Self-reported Anxiety Symptoms	15.7407	11.29065	54

Table 15

Pearson Correlation Coefficient: Economic Restriction, Economic Exploitation, and Anxiety Symptoms

		Anxiety Symptoms
Economic Restriction	Pearson Correlation	.385
	Sig. (1-tailed)	.002
	N	54
Economic Exploitation	Pearson Correlation	.426
	Sig. (1-tailed)	<.001
	N	54

Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic restriction and

symptoms of anxiety and found $\rho=.415$, $p=.002$. For the same reason, Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of anxiety and found $\rho=.483$, $p<.001$. These results indicate that the more often economic restriction and economic exploitation occurred, the higher the rate of self-reported anxiety symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. See Table 16 below.

Table 16

Spearman's Rho: Economic Restriction, Economic Exploitation, and Anxiety Symptoms

			Anxiety Symptoms
Spearman's rho	Economic Restriction	Correlation Coefficient	.415
		Sig. (2-tailed)	.002
		N	54
	Economic Exploitation	Correlation Coefficient	.483
		Sig. (2-tailed)	<.001
		N	54

Research Question 1c

A one-tail Pearson bivariate correlation analysis found a statistically significant positive relationship between economic restriction as self-reported by participants using the SEA2 (Adams et al., 2008) and symptoms of stress as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995)**,** with a correlation of r=.419, p<.001. These results indicate that the more often economic restriction occurred, the higher the rate of self-reported stress symptoms in participants.

A one-tail Pearson bivariate correlation analysis found a statistically significant positive relationship between economic exploitation as self-reported by participants using the SEA2 (Adams et al., 2008) and symptoms of stress as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.408, p=.001. These results indicate that

the more often economic exploitation occurred, the higher the rate of self-reported stress symptoms in participants. See Tables 17 and 18 below.

Table 17

Descriptive Statistics: Economic Restriction, Economic Exploitation, and Stress Symptoms

	Mean	Std. Deviation	N
Economic Restriction	1.8730	1.27345	54
Economic Exploitation	1.4744	1.25748	54
DASS Self-reported Stress Symptoms	20.4630	11.77415	54

Table 18

Pearson Correlation Coefficient: Economic Restriction and Stress Symptoms

		Stress Symptoms
Economic Restriction	Pearson Correlation	.419
	Sig. (1-tailed)	<.001
	N	54
Economic Exploitation	Pearson Correlation	.408
	Sig. (1-tailed)	.001
	N	54

Because assumptions were not met due to nonlinear data, Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic restriction and symptoms of stress and found $\rho=.371$, $p=.006$. For the same reason, Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic

exploitation and symptoms of stress and found ρ=.483, p<.001. These results indicate that the more often economic restriction and economic exploitation occurred, the higher the rate of self-reported stress symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. See Table 19 below.

Table 19

Spearman's Rho: Economic Restriction, Economic Exploitation, and Stress Symptoms

			Stress Symptoms
Spearman's rho	Economic Restriction	Correlation Coefficient	.371
		Sig. (2-tailed)	.006
		N	54
	Economic Exploitation	Correlation Coefficient	.483
		Sig. (2-tailed)	<.001
		N	54

Research Question 2

Research Question 2a

A one-tail Pearson bivariate correlation analysis was completed and found a statistically significant positive relationship between the mean of all subscales of the SEA2 (Adams et al., 2008) as self-reported by participants using the SEA2 and symptoms of depression as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.420, p<.001. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported depression symptoms in participants. See Tables 20 and 21 below.

Table 20

Descriptive Statistics: SEA2 Mean and Depression Symptoms

	Mean	Std. Deviation	N
Sea2 Mean of Total	1.7024	1.16732	54
Depression Symptoms	21.0741	13.99171	54

Table 21

Pearson Correlation Coefficient: SEA2 Mean and Depression Symptoms

		Depression Symptoms
Sea2 Mean	Pearson Correlation	.420
	Sig. (1-tailed)	<.001
	N	54

Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between the mean SEA2 score and symptoms of depression and found $\rho=.477$, $p<.001$. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported depression symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. See Table 22 below.

Table 22

Spearman's Rho: SEA2 Mean and Depression Symptoms

			Depression Symptoms
Spearman's rho	SEA2 Mean	Correlation Coefficient	.477
		Sig. (2-tailed)	<.001
		N	54

Research Question 2b

A one-tail Pearson bivariate correlation analysis found a statistically significant positive relationship between the mean of all subscales of the SEA2 (Adams et al., 2008) as self-reported by participants using the SEA2 and symptoms of anxiety as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995),with a correlation of r=.438, p<.001. These results indicate that the more often economic abuse of any type occurred, the higher the rate of self-reported anxiety symptoms in participants. See Tables 23 and 24.

Table 23

Descriptive Statistics: SEA2 Mean and Anxiety Symptoms

	Mean	Std. Deviation	N
SEA2 Mean	1.7024	1.16732	54
Anxiety Symptoms	15.7407	11.29065	54

Table 24

Pearson Correlation: SEA2 Mean and Anxiety Symptoms

		Anxiety Symptoms
SEA2 Mean	Pearson Correlation	.438
	Sig. (1-tailed)	<.001
	N	54

Because assumptions were not met due to nonlinear data, Spearman's Rank Correlation Coefficient was completed to examine the relationship between the mean SEA2 score and symptoms of anxiety and found $\rho=.480$, $p<.001$. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported anxiety symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. See Table 25 below.

Table 25

Spearman's Rho: SEA2 Mean and Anxiety Symptoms

			Anxiety Symptoms
Spearman's rho	SEA2 Mean	Correlation Coefficient	.480
		Sig. (2-tailed)	<.001
		N	54

Research Question 2c

A one-tail Pearson bivariate correlation analysis was completed found a statistically significant positive relationship between the mean of all subscales of the SEA2 (Adams et al., 2008) as self-reported by participants using the SEA2 and symptoms of stress as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.457, p< 001. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported stress symptoms in participants. See Tables 26 and 27.

Table 26

Descriptive Statistics: SEA2 Mean and Stress Symptoms

	Mean	Std. Deviation	N
SEA2 Mean	1.7024	1.16732	54
Stress Symptoms	20.4630	11.77415	54

Table 27

Pearson Correlation Coefficient: SEA2 Mean and Stress Symptoms

		Stress Symptoms
SEA2 Mean	Pearson Correlation	.457
	Sig. (1-tailed)	<.001
	N	54

Because assumptions were not met due to nonlinear data, Spearman's Rank Correlation Coefficient was completed to examine the relationship between the mean SEA2 score and symptoms of stress and found ρ=.458, p<.001. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported stress symptoms in

participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. See Table 28 below.

Table 28

Spearman's Rho: SEA2 Mean and Stress Symptoms

			Stress Symptoms
Spearman's rho	SEA2 Mean	Correlation Coefficient	.458
		Sig. (2-tailed)	<.001
		N	54

Research Question 2d

A one-tail Pearson bivariate correlation analysis was completed and found a statistically significant positive relationship between the mean of all incidences as self-reported by participants using the mean of the subscales of the SEA2 (Adams et al., 2008) as self-reported by participants using the SEA2 and symptoms of depression as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of $r=.420$, $p< .001$. Additionally, when a Spearman's Rank Correlation Coefficient analysis was completed between the mean of the subscales of the SEA2 and depression symptoms as reported using the DASS depression subscale, $\rho=.477$, $p<.001$. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported depression symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted.

A one-tail Pearson bivariate correlation analysis was completed and found a statistical significance in the positive relationship mean of all subscales of the SEA2 (Adams et al., 2008)

as self-reported by participants using the SEA2 and symptoms of anxiety as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r=.438, p<.001. Additionally, when a Spearman's Rank Correlation Coefficient analysis was completed between the mean of the subscales of the SEA2 and anxiety symptoms as reported using the DASS depression subscale, ρ=.480, p<.001. These results indicate that the more often economic abuse of any type occurred, the higher the rate of self-reported anxiety symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted.

A one-tail Pearson bivariate correlation analysis was completed and found a statistical significance in the positive relationship mean of all subscales of the SEA2 (Adams et al., 2008) as self-reported by participants using the SEA2 and symptoms of stress as self-reported by participants utilizing the DASS (Lovibond & Lovibond, 1995), with a correlation of r =.457, p<.001. Additionally, when a Spearman's Rank Correlation Coefficient analysis was completed between the mean of the subscales of the SEA2 and depression symptoms as reported using the DASS depression subscale, ρ=.458, p<.001.

The results for each subscale are consistent with prior studies in that nonlinear analysis results, as was expected due to the often nonlinear results found in studies of depressions symptoms, anxiety symptoms, and stress symptoms, and as such Spearman's Rank Correlation Coefficient analyses were run for all variables (Galatzer-Levy, Huang, & Bonanno, 2018; Gregson & Guastello, 2011; Pincus et al., 2019; Pincus & Metten, 2010).

These results indicate that the more often economic abuse occurred, the higher the rate of self-reported stress symptoms in participants. Based on the results we reject the null hypothesis, and the alternative hypothesis is accepted. Because all three DASS (Lovibond & Lovibond, 1995) subscales when analyzed with respect to the mean SEA2 (Adams et al., 2008) results for

this participant sample show a statistically significant positive relationship, it is reasonable to assess that there is a correlation between economic abuse, the severity of abuse measured in number of incidents, and symptoms of depression, anxiety, and stress in those who experience this type of abuse.

Details of Analysis and Results

This section discusses the reliability of the scales used by the measurement tools in the present study. Additionally, correlations will be examined with regard to the significance of results.

Scale Reliability

DASS

The DASS (Lovibond & Lovibond, 1995) was used in this study to collect participants' self-reported perspective of experiences that may indicate symptoms of depression, anxiety, and stress. This measurement tool includes 42 items with 14 items per subscale. The higher the score overall, and in each subscale, the higher negative emotional stress one is undergoing. The DASS is a self-report measure and, as such, should not be used to diagnose medical conditions, such as Major Depressive Disorder. This measure does examine symptomology reported by participants and assigns a value and label to the level of symptomology in each subscale which relates to a participant's score using the following categories: normal, mild, moderate, severe, very severe.

According to Antony, Bieling, Cox, Enns, and Swinson (1998) the DASS (Lovibond & Lovibond, 1995) has internal consistency and concurrent validity with Cronbach's Alpha results as follows: Depression Scale: α=0.97, Anxiety Scale: α=0.92, Stress Scale: α=0.95. It is important to note that the sample studied included both clinical and community participants, which added confidence to the results they provided. Additionally, the authors noted that the

depression, anxiety, and stress subscales adequately separated each of the subscales and their symptoms. Moreover, Crawford and Henry (2003) studied DASS with a sample of 1711 participants and, using confirmatory factor analysis, there was high convergent and discriminant validity as well as a high rate of reliability.

SEA2

The SEA2 (Adams et al., 2020) was used to evaluate types, and severity, of economic abuse that participants experienced during their prior relationship. This measure is an updated version of the Scale of Economic Abuse created by Adams et al. (2008) and has demonstrated both reliability and validity. The SEA2 **(**Adams et al., 2008**)** includes 14 statements of behaviors that indicate economic abuse such and allows participants to self-report, using a 0 to 4 Likert Scale with 0 being "Never" and 4 being "Very Often," as to how often the 14 behaviors occurred when still with their partner (Adams et al., 2020). Convergent validity was established using regression analyses in SPSS (IBM, 2021). However, demographic variables did affect the outcomes in each subscale with $p<.05$ to $p<.01$ in the analyses completed by the measurement tool's authors. Also, construct validity was verified for this measurement tool ($p=0.050$) when examining the relationship between the restriction of economic resources and exploitation of economic resources. The authors of the SEA2 (Adams et al., 2008**)** state that the SEA2 measures what it intends to measure and is, therefore, a valid tool for examining economic abuse. The Conflict Tactics Scale (Sullivan et al., 1992), also known as the CTS, was used to compare results and found that the reliability coefficient is .95 in the participant sample used to address reliability of the SEA2 (Lucente et al., 2001; Postmus et al., 2016; Straus, 1979).

Correlations

Research Question 1

SPSS (IBM, 2021) was utilized to complete a one-tail bivariate Pearson correlation to examine the relationship of the type of economic abuse and how each score for economic abuse relates to depression, anxiety, and stress symptoms after a romantic relationship where abuse was present as self-reported by participants using the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008). The mean for the SEA2 subscales was also calculated in order to compare this data with the DASS subscale results. Research question one states: Is there a relationship between economic abuse and symptoms of depression, anxiety, and stress after a romantic relationship where economic abuse was present? This question was broken down into multiple sub-questions to assist with clarity of results.

Research Question 1a

Research question 1a asks: Is there a relationship between economic abuse and symptoms of depression in women post-relationship where economic abuse was present? The null hypothesis ($H1_{0a}$) states that there is no relationship between economic abuse and symptoms of depression in women post-relationship whereas the alternative hypothesis ($H1_{1a}$) states that there is a positive relationship between economic abuse and symptoms of depression in women post-relationship. Two one-tail Pearson bivariate correlation analysis was completed where $a = .05$. The first analysis examined the DASS self-reported depression symptom subscale data and the SEA2 (Adams et al., 2008) economic restriction subscale data and found a correlation of r=.370, p=.003. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of anxiety and found ρ=.384, p=.004.The second analysis examined the DASS self-reported depression symptom subscale and the SEA2 economic restriction subscale and found a correlation of r=.373, p=.003. Because assumptions were not met due to

nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of depression and found ρ=.428, p=.001. These results suggest that the more often economic abuse in the form of economic restriction or economic exploitation occurred, the higher the rate of self-reported depression symptoms by participants. Based on these results the null hypothesis was rejected, and the alternative hypothesis was accepted. These results suggest that the more often economic abuse in the form of economic restriction or economic exploitation occurred, the higher the rate of self-reported depression symptoms by participants. Based on these results the null hypothesis was rejected, and the alternative hypothesis was accepted.

Research question 1b

Research question 1b asks: Is there a relationship between economic abuse and symptoms of anxiety in women post-relationship where economic abuse was present? The null hypothesis ($H1_{0b}$) states that there is no relationship between economic abuse and symptoms of anxiety in women post-relationship whereas the alternative hypothesis ($H1_{1b}$) states that there is a positive relationship between economic abuse and symptoms of anxiety in women post-relationship. Two one-tail Pearson bivariate correlation analysis was completed where a=.05. The first analysis examined the DASS self-reported anxiety symptom subscale data and the SEA2 (Adams et al., 2008**)** economic restriction subscale data and found a correlation of r=.385, p=.002. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of anxiety and found ρ=.415, p=.002.The second analysis examined the DASS self-reported depression symptom subscale and the SEA2 economic restriction subscale and found a correlation of r=.426, p<.001. Because assumptions were not met due to nonlinear data, a Spearman's Rank

Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of anxiety and found ρ=.483, p<.001. These results suggest that the more often economic abuse in the form of economic restriction or economic exploitation occurred, the higher the rate of self-reported anxiety symptoms by participants. Based on these results the null hypothesis was rejected, and the alternative hypothesis was accepted.

Research Question 1c

Research question 1c asks: Is there a relationship between economic abuse and symptoms of stress in women post-relationship where economic abuse was present? The null hypothesis ($H1_{0c}$) states that there is no relationship between economic abuse and symptoms of stress in women post-relationship whereas the alternative hypothesis ($H1_{1c}$) states that there is a positive relationship between economic abuse and symptoms of stress in women post-relationship. Two one-tail Pearson bivariate correlation analyses were completed where a=.05. The first analysis examined the DASS (Lovibond & Lovibond, 1995) self-reported stress symptom subscale data and the SEA2 (Adams et al., 2008) economic restriction subscale data and found a correlation of r=.419, p<.001. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic restriction and symptoms of stress and found ρ=.371 , p=.006 The second analysis examined the DASS self-reported stress symptom subscale and the SEA2 economic exploitation subscale and found a correlation of r=.408, p=.001. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between economic exploitation and symptoms of stress and found ρ=.421, p=.002 These results suggest that the more often economic abuse in the form of economic restriction or economic exploitation

occurred, the higher the rate of self-reported stress symptoms by participants. Based on these results the null hypothesis was rejected, and the alternative hypothesis was accepted.

Research Question 2

Research question 2 asks: Is there a relationship between the severity of economic abuse and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present? This question was broken down into four sub questions for clarity of data analysis.

Research Question 2a

Research question 2a asks: Is there a relationship between the severity of economic abuse and symptoms of depression after a relationship where economic abuse was present? The null hypothesis ($H2_{0a}$) states: There is no relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present. The alternative hypothesis ($H2_{1a}$) states: There is a positive relationship between the severity of economic abuse and symptoms of depression post-relationship where economic abuse was present. A one-tail Pearson bivariate correlation analysis was completed where a=.05. This analysis examined the relationship of the mean from all SEA2 (Adams et al., 2008**)** questions from both the economic restriction and economic exploitation subscales form with the DASS (Lovibond & Lovibond, 1995) depression symptom subscale and found a statistically significant positive relationship between these two variables as self-reported by participants with a correlation of r=.420, p<.001. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between the SEA2 Economic Abuse mean and symptoms of depression and found ρ=.477, p<.001. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported depression symptoms in

participants. Based on the results the null hypothesis is rejected, and the alternative hypothesis is accepted.

Research Question 2b

Research question 2b asks: Is there a relationship between the severity of economic abuse and anxiety symptoms after a relationship where economic abuse was present? The null hypothesis ($H2_{0b}$) states: There is no relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present. The alternative hypothesis ($H2_{1b}$) states: There is a positive relationship between the severity of economic abuse and symptoms of anxiety post-relationship where economic abuse was present. A one-tail Pearson bivariate correlation analysis was completed where a=.05. This analysis compared the mean from all SEA2 (Adams et al., 2008) questions from both the economic restriction and economic exploitation subscales form with the DASS (Lovibond & Lovibond, 1995) anxiety symptom subscale and found a statistically significant positive relationship between these two variables as self-reported by participants with a correlation of $r=.438$, $p<.001$. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between the SEA2 Economic Abuse mean and symptoms of anxiety and found $\rho=.480$, $p<.001$. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported depression symptoms in participants. Based on the results the null hypothesis is rejected, and the alternative hypothesis is accepted.

Research Question 2c

Research question 2c asks: Is there a relationship between the severity of economic abuse and stress symptoms after a relationship where economic abuse was present? The null hypothesis ($H2_{0b}$) states: There is no relationship between the severity of economic abuse and symptoms of

stress post-relationship where economic abuse was present. The alternative hypothesis ($H2_{1b}$) states: There is a positive relationship between the severity of economic abuse and symptoms of stress post-relationship where economic abuse was present. A one-tail Pearson bivariate correlation analysis was completed where a=.05. This analysis compared the mean from all SEA2 (Adams et al., 2008**)** questions from both the economic restriction and economic exploitation subscales form with the DASS (Lovibond & Lovibond, 1995) stress symptom subscale and found a statistically significant positive relationship between these two variables as self-reported by participants with a correlation of r=.458, p <.001. Because assumptions were not met due to nonlinear data, a Spearman's Rank Correlation Coefficient was completed to examine the relationship between the SEA2 Economic Abuse mean and symptoms of stress and found ρ=.480, p<.001. These results indicate that the more often economic abuse occurred, the higher the rate of self-reported depression symptoms in participants. Based on the results the null hypothesis is rejected, and the alternative hypothesis is accepted.

Research Question 2d

Research question 2d asks: Is there a relationship between the number of incidences of economic abuse and the severity of symptoms of depression, anxiety, and stress post-relationship where economic abuse was present? The null hypothesis ($H2_{0d}$) states: There is no relationship between the overall number of economic abuse incidences and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present. While the alternative hypothesis ($H2_{1d}$) states: There is a positive relationship between the overall number of economic abuse incidences and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present. A statistically significant positive relationship was found in the three DASS (Lovibond & Lovibond, 1995) subscales (depression, anxiety, and stress) when analyzed with

respect to the mean for each subscale (economic restriction and economic exploitation) used in the SEA2 (Adams et al., 2008) and the mean overall for participants' SEA2 data. As such, it is reasonable to assess that there is a correlation between economic abuse, the self-reported severity of abuse measured in number of incidents, and self-reported symptoms of depression, anxiety, and stress in those who experience this type of abuse after the relationship with the perpetrator ends.

Conclusion

Statistical analysis of the data from this study has shown a statistically significant positive relationship between each subscale in the DASS (Lovibond & Lovibond, 1995) (depression, stress, anxiety) and each subscale in the SEA2 **(**Adams et al., 2008**)** (economic restriction and economic exploitation). Additionally, the mean score of the SEA2 when examined to find if there is a relationship with each subscale in the DASS shows a statistically significant positive relationship between depression, anxiety, and stress. All null hypotheses were rejected due to these results. This indicates that though other variables may be present, there is a correlation between economic abuse, number of incidences of abuse, and self-reported symptoms of depression, anxiety, and stress in victims. These results indicate that economic abuse does pose a mental health risk for victims beyond the end of the romantic relationship where they experienced the abuse. Additionally, these results indicate that efforts to mediate the negative effects of this type of abuse are necessary to assist in resiliency and become economically stable.

CHAPTER 5. CONCLUSIONS AND RECOMMENDATIONS

Introduction

Economic abuse is a challenge to combat, as this type of abuse is not often readily visible to those outside of the victim's home and closest relationships (Kutin et al., 2017). The purpose of this study was to use quantitative data to evaluate whether there is a long-term relationship between economic abuse and self-reported symptoms of depression, anxiety, and depression. To do this, the main research question was broken into two main questions, with smaller sub-questions. The first question focused on the relationship between each subscale for the DASS (Lovibond & Lovibond, 1995) and each subscale for the SEA2 (Adams et al., 2008). The second question evaluated each DASS subscale with the mean of participants' responses on the subscales of the SEA2 when they are combined together into one master score for each participant. This chapter interprets the results from this data, examines the limitations of this study, and makes recommendations for future research of economic abuse.

Summary of the Results

Study Overview

This study focused on the self-reported symptoms of depression, anxiety, and stress among survivors of domestic abuse using the DASS (Lovibond & Lovibond, 1995), and the relationship between these symptoms and self-reported experiences of economic abuse using the SEA2 (Adams et al., 2008). The sample included 54 cisgender women who were out of the economically abusive relationship for at least one year. The focus of the study was determined by a gap in the literature regarding long-term effects of economic abuse on victims of domestic abuse. Forty-two percent, or 52 million, of women are estimated to have experienced this type of

abuse (Leemis et al., 2022). This overwhelming statistic indicates a great need to continue adding research to the available academic literature in an effort to improve the lives of victims and to learn ways to lessen and prevent all types of IPV.

Composite and Subscale Characteristics

Overview of the Measures

DASS 42

This study utilized two measurement tools to gather data regarding the relationship between economic abuse and self-reported symptoms of depression, anxiety, and stress. The DASS 42 (Lovibond & Lovibond, 1995) is a 4-point Likert Scale measurement tool that contains 42 questions, which address three subscales with 14 items each. This allowed participants to self-report their response for each question. The Dass 42 subscales are labeled depression, anxiety, and stress. Each subscale's results were calculated separately. The mean for each subscale was examined to understand the relationship of each subscale variable to each of the SEA2 subscales (Economic Exploitation and Economic Restriction) (Adams et al., 2008) and the overall mean score from the SEA2 where the items from both subscales were averaged as per the instructions from the principal author of the measurement tool study.

The DASS 42 demonstrates strong internal consistency and concurrent validity with Cronbach's Alpha results for each subscale as follows: Depression Scale: α=0.97, Anxiety Scale: α=0.92, Stress Scale: α=0.95 (Antony, Bieling, Cox, Enns, and Swinson, 1998). The authors also clarified that the depression, anxiety, and stress subscales separated each of the subscales and their symptoms adequately. Crawford and Henry (2003) showed, through confirmatory factor analysis, that there was high convergent and discriminant validity as well as a high rate of reliability in the DASS 42. See Figures 1 and 2 in Chapter 4.

SEA 2

The SEA2 (Adams et al., 2008) is also a 5-point Likert Scale measurement tool; however, this tool includes 14 items, seven for each of two subscales: Economic Restriction and Economic Exploitation. In addition to scores on each of the subscales, the SEA2 provides an overall mean score for economic abuse. To examine the relationships between these variables, the means for each subscale and the overall mean score were compared to each of the subscale means (depression, anxiety, and stress) from the DASS 42 (Lovibond & Lovibond, 1995).

This updated version of the Scale of Economic Abuse created by Adams et al. (2008) has demonstrated both reliability and validity. Convergent validity was established using regression analyses in SPSS (IBM, 2021). The authors did note that the demographic variables affected the outcomes in each subscale with $p<.05$ to $p<.01$ in the analyses completed by the measurement tool's authors. Construct validity was verified for the SEA2 ($p=0.050$) when examining the relationship between the restriction of economic resources and exploitation of economic resources (Adams, Beeble, & Gregory, 2015). The authors of the SEA2 did prove that the SEA2 measures what it intends to measure which makes this measurement tool valid for examining economic abuse. In addition, the Conflict Tactics Scale (Sullivan et al., 1992), also known as the CTS, was used to compare results and the reliability coefficient was .95 when evaluating the reliability of the SEA2 (Lucente et al., 2001; Postmus et al., 2016; Straus, 1979). See Figure 3 in Chapter 4.

Descriptive Statistics

Descriptive statistics were calculated for the data from each variable examined to answer the research questions for this study. Each variable will be explained in the subsections below and is presented in Table 19.

Dass 42: Depression Subscale

A set of descriptive statistics was calculated to provide a summary for the DASS 42 (Lovibond & Lovibond, 1995) Depression Subscale variable (n=54). The mean score for the variable was M=21.07 (SD=13.99), indicating that, on average, participants scored in the "Severe" level within this subscale. The variability of the data revealed that the standard deviation was 13.99, showing a broad spread of scores around the mean. The variance was calculated at 195.77, which is the squared value of the standard deviation. The range, which represents the difference between the highest and lowest values in this data set, was 42, with the minimum score being 0 and the maximum score being 42. In order to assess the distribution shape of the data, skewness and kurtosis were also calculated. The skewness of the data for the DASS 42 Depression Subscale data was -.06, which suggests a moderately negative skew. This means that while most data points are concentrated towards the higher end of the DASS 42 Depression subscale, some lower data points create a longer tail toward 0. The kurtosis value of this data set was -1.32, indicating the distribution is platykurtic or has a low level of extreme outliers. These descriptive statistics indicate that the distribution of the scores is approximately symmetrical, though there is a slight negative skew (-.06), with a moderate spread of data points. The kurtosis (-1.32) indicates that the data curve is platykurtic and more spread out than a normal data distribution. At the same time, no significant outliers are noted and no major deviations from normality are indicated which indicates that the sample appears to represent a typical distribution with minimal skewness.

Dass 42: Anxiety Subscale

A set of descriptive statistics was calculated to provide a summary for the DASS 42 (Lovibond & Lovibond, 1995) Anxiety Subscale variable (n=54). The mean score for the

variable was M=15.74 (SD=11.29), indicating that, on average, participants scored in the "Moderate" category in this subscale. The variability of the data revealed a standard deviation of 11.29, which describes a fairly broad spread of scores. The variance was calculated as 127.48, which is the squared value of the standard deviation. The range, which represents the difference between the highest and lowest values in a data set, was 39, with a minimum score of zero and a maximum score of 39.

To assess the distribution shape, skewness and kurtosis were also calculated. The skewness of the data for the DASS 42 Anxiety Subscale data was .35. This suggests a slight right skew, which means that the distribution has a slightly longer tail on the right than the left. The kurtosis value of -1.01 indicates that the data curve is platykurtic and more spread out than a normal data distribution. These descriptive statistics indicate that the distribution of the scores is approximately symmetrical with a slight positive skew (.35), with a slight right data point spread with no significant outliers. According to these statistics, the sample represents a typical distribution and does not deviate from normality. No significant outliers are noted and no major deviations from normality are indicated which indicates that the sample appears to represent a typical distribution with minimal skewness.

Dass 42: Stress Subscale

A set of descriptive statistics was calculated to provide a summary for the DASS 42 (Lovibond & Lovibond, 1995) Stress Subscale variable (n=54). The mean score for the variable was M=20.46 (SD=11.77), indicating that, on average, participants scored in the "Moderate" category in this subscale. The variability of the data revealed that the standard deviation was 11.77, showing a broad spread of scores around the mean. The variance was calculated as 138.63, which is the squared value of the standard deviation. The range, which represents the

difference between the highest and lowest values in a data set, was 42, with a minimum score being 0 and the maximum score being 42. To assess the distribution shape, skewness and kurtosis were also calculated. The skewness of the data for the DASS 42 Stress Subscale data was -.03, which suggests a fairly balanced skew which means that the distribution is balanced. The kurtosis value was -.84, indicating that the distribution is platykurtic and more spread out than a normal data distribution. These descriptive statistics indicate that the distribution of the scores is more spread out than a normal distribution, with no significant outliers. According to these statistics, the sample represents a typical distribution with a -.03 skew, demonstrating no significant deviations from normality

SEA2: Economic Restriction Subscale

A set of descriptive statistics was calculated to provide a summary for the SEA2 (Adams et al., 2008) Economic Restriction Subscale variable (n=54). The mean score for this variable was M=1.87 (SD=1.27), indicating that, on average, participants scored "one-Hardly Ever" but this result approached the "two-Sometimes" score in this subscale. The variability of the data revealed that the standard deviation was 1.27, showing a small spread of scores around the mean. The variance was calculated at 1.62, which is the squared value of the standard deviation. The range, which represents the difference between the highest and lowest values in a data set, was 4, with a minimum score being 0 and the maximum score being 4.

In order to assess the distribution shape of the data, skewness and kurtosis were also calculated. The skewness of the data for the SEA2 Economic Restriction Subscale data was -.04. This indicates a fairly balanced skew, which means that the distribution of data is balanced with a flatter shaped curve and lighter tails. The kurtosis value was -1.91, indicating that the distribution is platykurtic and more spread out than a normal data distribution. These descriptive

statistics indicate that the distribution of the scores is close to symmetrical, with a broad spread of data points but no significant outliers. According to these statistics, and despite the skewness of -.04 and a relatively normal distribution, the low kurtosis value shows that this sample deviates from a normal data distribution.

SEA2 Economic Exploitation Subscale

A set of descriptive statistics was calculated to provide a summary for the SEA2 (Adams et al., 2008) Economic Exploitation Subscale variable (n=54). The mean score for the variable was M=1.47 (SD=1.26), indicating that, on average, participants scored "one-Hardly Ever" with regard to this subscale. The variability of the data revealed that the standard deviation was 1.26, showing a moderate spread of scores around the mean. The variance was 1.58, which is the squared value of the standard deviation. The range, which represents the difference between the highest and lowest values in a data set, was 4, with a minimum score being zero and the maximum score being 4. To assess the distribution shape, skewness and kurtosis were also calculated. The skewness of the data for the SEA2 Economic Exploitation Subscale data was .44, which suggests a slightly positive skew. This means that the distribution has a right-skewed distribution of data points, while still nearly symmetrical. The kurtosis value was -.94, which means that there is a platykurtic, or more spread-out data distribution and fewer outliers. These descriptive statistics indicate that the distribution of the scores is close to symmetrical, although the skewness of .44 shows a slightly right-skewed or positive distribution. According to these statistics, there is a relatively normal distribution. The low kurtosis value shows that this sample deviates from a normal data distribution in that it is flatter and has lighter tails.

SEA2: Overall Mean

A set of descriptive statistics was calculated to provide a summary for the overall SEA2 (Adams et al., 2008) data variable (n=54), which included both the Economic Restriction and Economic Exploitation subscales. The mean score for the variable was M=1.70 (SD=1.17), indicating that, on average, participants scored "one-Hardly Ever" but this result approached the "two-Sometimes" score. The variability of the data revealed that the standard deviation was 1.17, showing a moderate spread of scores around the mean. The variance was calculated as 1.36, which is the squared value of the standard deviation. The range, which represents the difference between the highest and lowest values in a data set, was 4, with a minimum score being 0 and the maximum score being 4. To assess the distribution shape, skewness and kurtosis were also calculated. The skewness of the data for the SEA2 combined subscale data was .099, which suggests a moderately positive right-skewed distribution. This means that the distribution is longer on the right tail and asymmetric. The kurtosis value was -.89, indicating that the distribution is platykurtic and more spread-out than a normal data distribution, with fewer outliers. According to these statistics, the sample represents a less typical, asymmetric distribution due to the .98 skew. These descriptive statistics indicate that the distribution of the scores is evenly spread with fewer significant outliers and is a relatively normal distribution. Overall, this is a normal distribution, and the deviations are not significant enough to impact validity. See Table 29.

Table 29

Descriptive Statistics for DASS and SEA2 Variables

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DASS Depression Mean	54	42.00	.00	42.00	21.0741	13.99171	195.768	-.062	.325	-1.322	.639
DASS Anxiety Mean	54	39.00	.00	39.00	15.7407	11.29065	127.479	.353	.325	-1.014	.639
DASS Stress Mean	54	42.00	.00	42.00	20.4630	11.77415	138.631	-.032	.325	-.837	.639
SEA2 Economic Restriction Mean	54	4.00	.00	4.00	1.8730	1.27345	1.622	-.036	.325	-1.191	.639
SEA2 Economic Exploitation Mean	54	4.00	.00	4.00	1.4744	1.25748	1.581	.441	.325	-.944	.639
SEA2 Mean (all subscales)	54	4.00	.00	4.00	1.7024	1.16732	1.363	.098	.325	-.890	.639
Valid N (listwise)	54										

Discussion of the Results

The results of this study added to the knowledge about the relationships between symptoms of depression, anxiety, and stress and economic abuse on victims. The unique focus of this study was its focus on the time period one or more years after the abusive relationship ends. Research question one sought to determine whether there was a relationship between self-reported symptoms of depression, anxiety, and stress at least one year after the end of a romantic relationship where economic abuse occurred by evaluating scores on subscales from the DASS 42 (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008). Research question two sought to determine whether severity, measured by how often economic abuse occurred, was related to

self-reported symptoms of depression, anxiety, and stress at least one year after the end of a romantic relationship where economic abuse occurred by evaluating subscales from DASS 42 and SEA2. The research questions focused on the relationship between economic abuse and subsequent mental health of participants were addressed through statistical analyses of the data.

Research Question 1

Research question one asked: Is there a relationship between economic abuse and symptoms of depression, anxiety, and stress after a romantic relationship where economic abuse was present? To be certain all subscales were examined with clarity, this question was broken down into three more focused questions.

Research Question 1a

In response to RQ1a, there is a statistically significant positive relationship between self-reported symptoms of depression and experiencing economic exploitation during a past romantic relationship. There is also a statistically significant positive relationship between self-reported symptoms of depression and economic restriction in a past romantic relationship. The statistically significant positive relationship between these variables indicates that the alternative hypothesis must be accepted.

Research Question 1b

In response to RQ1b, there is a statistically significant positive relationship between self-reported symptoms of anxiety and experiencing economic exploitation during a past romantic relationship. There is also a statistically significant positive relationship between self-reported symptoms of anxiety and experiencing economic restriction in a past romantic relationship. The statistically significant positive relationship between self-reported symptoms that indicate

anxiety and both economic exploitation and economic restriction indicates that the alternative hypothesis must be accepted.

Research Question 1c

In response to RQ1c, there is a statistically significant positive relationship between self-reported symptoms of stress and experiencing economic exploitation during a past romantic relationship. There is also a statistically significant positive relationship between self-reported symptoms of stress and experiencing economic restriction in a past romantic relationship. The statistically significant positive relationship between these variables indicates that the alternative hypothesis must be accepted.

Research Question 2

Research question two asked: Is there a relationship between the severity of economic abuse and symptoms of depression, anxiety, and stress post-relationship where economic abuse was present? To be certain all subscales were compared with clarity, this question was broken down into four more focused questions.

Research Question 2a

In response to RQ2a, there is a statistically significant positive relationship between self-reported symptoms of depression and experiencing economic exploitation during a past romantic relationship. There is also a statistically significant positive relationship between self-reported symptoms of depression and experiencing economic restriction in a past romantic relationship. The statistically significant positive relationship between these variables indicates that the alternative hypothesis must be accepted.

Research Question 2b

In response to RQ2b, there is a statistically significant positive relationship between self-reported symptoms of anxiety and experiencing economic exploitation during a past romantic relationship. There is also a statistically significant positive relationship between self-reported symptoms of anxiety and experiencing economic restriction in a past romantic relationship. The statistically significant positive relationship between these variables indicates that the alternative hypothesis must be accepted.

Research Question 2c

In response to RQ2c, there is a statistically significant positive relationship between self-reported symptoms of stress and experiencing economic exploitation during a past romantic relationship. There is also a statistically significant positive relationship between self-reported symptoms of stress and experiencing economic restriction in a past romantic relationship. The statistically significant positive relationship between these variables indicates that the alternative hypothesis must be accepted.

Research Question 2d

In response to RQ2d, there is a statistically significant positive relationship between self-reported symptoms for each DASS (Lovibond & Lovibond, 1995) subscale (depression, anxiety, and stress) and number of self-reported incidents of economic exploitation and economic restriction when compiled into an overall mean score for economic abuse for each participant during a past romantic relationship using the SEA2 (Adams et al., 2008). The statistically significant positive relationship between self-reported symptoms from each DASS subscale and the overall SEA2 mean for each participant indicate stress and the overall SEA2 scores indicate that the alternative hypothesis must be accepted.

Discussion of Findings

The findings of this study reflect that of prior research which has explored economic abuse during romantic relationships and in caregiver relationships (Black, 2008; Kutin et al., 2017). This body of scientific literature regarding mental and physical health explores socioeconomic status, economic instability, and disparities in physical and mental health care, as well as negative physical and mental health outcomes that may occur when one is experiencing economic instability (Acri et al. 2017; Guerrero et al., 1998; Lanier et al., 2018; Schuler et al. 2020).

Prior research has demonstrated that economic instability is often correlated with mental health challenges such as depression, anxiety, and heightened stress. Voth Schrag (2018) discusses the correlation between economic abuse and economic hardships which create economic instability. This in turn, has been linked to negative physical and mental health outcomes: Financial challenges create barriers to receiving care and having the opportunity to take time from work or childcare duties to receive physical and mental health care (Guerrero et al., 1998; Schuler et al. 2020). Acri et al. (2017) and Lanier et al. (2018) note the link between living below the poverty level and health issues, including depression and anxiety in both adults and children. These findings point to the importance of considering ways to mediate these potential negative outcomes. Baughman (2017) explains that the higher the amount of support, the greater the chance for a positive outcome for children by lowering their chance for a decline in health. Additionally, though this study indicates the need for assistance so those who experience economic abuse can work toward being economically stable, the help received must be useful to their needs, otherwise these efforts will not be worth the resources spent on them (Cheng et al., 2016; Coley et al., 2018).

Because other forms of IPV create the potential for heightened psychological and physical health challenges, it stands to reason that economic abuse could have the same effect. When considering the gap in literature regarding long-term effects of economic abuse, it becomes apparent that examining this relationship between economic abuse and adverse health effects can be helped along by introducing the element of time. Learning about the experience of victims who have been out of their abusive relationships for at least one year yields data to help researchers and service providers better understand how long effects may occur and begin to look for ways to mediate these effects. The statistically significant results for all research questions show that although not all victims have long-lasting repercussions from economic abuse, there are enough people who experience depression, anxiety, and stress to continue researching the long-term effects of economic abuse and ways to mitigate these effects. Also, it is important to note that demographic data (with education level, income level, etc.) did not correlate with symptoms of depression, anxiety, or stress in the present study. According to the most recent CDC statistics, survey participants' self-reported experiences, 42% of women, totaling 52 million, have experienced some form of IPV at least once in their lifetime, which makes interventions and supports imperative and potentially necessary for a large number of individuals to help mediate the effects of all forms of IPV, including economic abuse, regardless of the demographics to which a person may belong (Leemis et al., 2022).

Theoretical Frameworks

Two theoretical frameworks were used to develop and understand this study. The Multi-Systems Life Course Perspective (MSLC) framework provides a whole-person view of a person's lived experiences, past and present (Barnett et al., 2019). This holistic view allows the humanization of a person regardless of the situation they are going through or the behavior they

have chosen (Christy, 2017, Murphy-Erby et al., 2010). The second framework used in this study is Routine Activity Theory. This framework focuses on criminal acts and the reason why these acts happened by focusing on three components: “potential offender, a suitable target, and the absence of a suitable guardian” (Cohen & Felson, 1979, 589). This theory provides the how and why of a situation which, when paired with MSLC, provides a well-rounded view of both the long-term building up to the person who decides to participate in a hurtful or criminal act.

The study results showing statically significant positive relationships between variables relating to the DASS (Lovibond & Lovibond, 1995) subscales for depression, anxiety, and stress and the SEA2 (Adams et al., 2008) subscales for economic exploitation and economic restriction as well as to the SEA2 overall mean average score for each participant is a significant factor when considering the effects of economic abuse after a relationship ends. Lasting effects of this type of abuse may heavily influence the mental health of victim for many reasons, including continued abuse after the relationship ends, economic challenges due to prior economic abuse, and the inability to easily overcome these challenges without substantially support from support services or educational opportunities. In short, economic abuse may lead to long-term challenges that affect mental health in those who experience this type of abuse and for those whom the victim is a caregiver.

When applied to the MSLC, the results of this study can help professionals to better understand the cumulative mental health response one may have after experiencing economic abuse. According to the study results, the severity of abuse reported as measured by self-reported subscales and the overall mean scores on the SEA2 (Adams et al., 2008) is a factor that affects one’s mental health one year and more beyond the end of the relationship. This may then lead to other outcomes such as difficulty parenting, difficulty staying employed, and being at risk for

predatory loan and credit card companies which may make one's economic situation worse (Allcott et al., 2022; Karger, 2014). In short, economic abuse creates lasting challenges for some victims, and although many factors can affect one's ability to be resilient in the face of this type of abuse and the stress it causes, the trend is clear. Economic abuse is correlated with symptoms that are indicators of depression, anxiety, and stress and should be taken seriously by the court system, social service organizations, mental and physical health professionals, and the general public.

When reviewing the results of this study, it is clear that economic abuse and any potential effects from this abuse also relates to Routine Activity Theory framework as there is a "potential offender, a suitable target, and the absence of a suitable guardian" as stated by Cohen and Felson (1979, p. 589). The question remains, how might a victim of this type of abuse, or someone being targeted for this type of abuse, be empowered and supported if they want to distance themselves from the offender to remove the opportunity of being a target? The findings from the present study offer a useful tool to assist victims and those who support them in leaving the abuser and becoming more economically stable; by addressing mental health through professional and community support, victims can move forward with life after experiencing economic abuse.

Discussion of the Conclusions

This study provided results which indicate that economic abuse does have an impact on many people who experience this type of abuse as long as a decade after the end of the abusive relationship. This study helps to address the gap in the literature regarding what happens one or more years after one leaves an economically abusive romantic relationship. Prior research has

focused on what occurs during the relationship as well as topics such as elder abuse but has not explored this subtopic in order to consider any potential after-effects of this type of abuse.

The statistically significant positive relationship between the subscales of the DASS (Lovibond & Lovibond, 1995) and the SEA2 (Adams et al., 2008) responses in the economic exploitation and economic restriction subscales suggests that higher incidences of economic abuse are associated with greater self-reported symptoms of depression, anxiety, and stress symptoms. This relationship indicates that economically abusive practices such as keeping a partner from work, taking a partner's money, or making a partner ask for money for necessities can negatively affect a person's mental health. The statistically significant positive relationship between the subscales of the DASS and the means for each participant's SEA2 responses suggests that higher incidences of economic abuse are associated with greater self-reported symptoms of depression, anxiety, and stress symptoms. This relationship indicates that economically abusive practices such as requiring that receipts be shared after the victim purchases something or taking a partner's money can negatively affect a person's mental health. These results provide insight into the ways in which economic abuse may affect victims

Prior research has identified that economic instability is often correlated with mental health challenges such as depression, anxiety, and heightened stress. Voth Schrag (2018) discusses the correlation between economic abuse and economic hardships that create economic instability. This in turn has been linked to negative physical and mental health outcomes as financial challenges create barriers to receiving care and having the opportunity to take time from work or childcare duties to receive physical and mental health care (Guerrero et al., 1998; Schuler et al. 2020). Acri et al. (2017) and Lanier et al. (2018) note the link between living below the poverty level and health issues including depression and anxiety in both adults and children.

Understanding that economic abuse can affect an individual despite being years removed from the relationship where the abuse occurred is key to considering both effects of this type of abuse and ways to assist survivors. This study's data showed that demographic factors did not readily correlate with long-term effects of economic abuse on a victim's self-reported symptoms of depression, anxiety, and stress; yet, it is important to understand that these challenges can span demographic groups, so negative effects, especially long-term effects, may have still occurred relatively unnoticed.

At the same time, it is important to consider ways to mediate these potential negative outcomes. Due to the large number of women who experience at least one incidence of IPV, it is extremely important to consider ways to mediate mental health and economic challenges experienced during and after any type of IPV, economic abuse included (Leemis et al., 2022). Baughman (2017) explains that the higher the amount of support, the greater the chance for a positive outcome for children by lowering their chance for a decline in health. Additionally, although this study indicates the need for assistance so those who experience economic abuse can work toward being economically stable and to being mentally healthy to achieve their goals, the help received must be useful to their needs, otherwise these efforts will not be worth the resources spent on them (Cheng et al., 2016; Coley et al., 2018).

Limitations

This study had several limitations. The first involved demographic variables. Since this study focused on the experience of economic abuse of women by a former heterosexual partner or husband, other demographic groups that could be important to study were not included in the present study. For example, this study data did not include information about men who experience this form of IPV, those previously in same sex relationships, and those who

experienced economic abuse while engaged in multi-partner relationships. Additionally, this study did not include participants who are currently in romantic relationships with the perpetrator.

An additional limitation of this study is that longitudinal data was not collected, including whether or not economic abuse continued after the end of the relationship. and the aim of the present study was not to follow participants over time to observe changes in their economic situation. Instead, this study was designed to provide a "snapshot" of the variables under study, then utilized the data available within that snapshot to evaluate variables, research questions, and hypotheses. Another important consideration is the fact that this study utilized self-reported data: The information was supplied by participants from their point of view only, and their former partner or spouse did not have the opportunity to share their own perspectives.

Also, because this study relied on social media and domestic violence service providers and organizations to recruit participants, it was not possible to determine in advance the population demographics of those who would choose to participate, which created a sample representativeness limitation. There were also cross-cultural limitations. Any U.S. resident was eligible for the study, and there was thus no way to control for demographic variables or to create a balanced sample with regard to demographics. Further, cultural differences among participants may have influenced their views; for example, with regard to gender roles in intimate relationships, these views encompass personal choice and responsibility. How participants framed their role in their relationships and their responsibility for the abuse they experienced may have influenced their reports of the abuse they experienced, as well as their self-reported depression, anxiety, and stress (Heron et al., 2022).

Recommendations for Future Research

Future research should be conducted to build and expand upon this study. Examination of the results from the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008) results from this study have shed light on differences and similarities between the experiences of depression, stress, and anxiety symptoms of those who participated in the study sample, and indicate the needs and vulnerabilities of the women who have experienced economic abuse in their lives.

This study examined the relationship between self-reported mental health symptoms of stress, anxiety, and depression and self-reported experiences from prior economic abuse after a romantic relationship ends using the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008) and found statistically significant positive relationships between symptoms of depression, anxiety, and stress with both of the economic abuse subscales (economic restriction and economic exploitation) and the mean of the SEA2 with no clear influence of participants' demographic data on the results. This data can be used to better understand the gap in literature regarding long-term potential effects of economic abuse one to ten years after a relationship ends and future research questions which should be studied in this field. Understanding that symptoms of depression, anxiety, and stress exist in some people ten years and more after the end of an economically abusive relationship is key in choosing and implementing actionable, helpful, support for victims of this type of abuse.

The findings of this study indicate that future research regarding effective ways to assist in lessening the potential effects of economic abuse may assist victims with mental health challenges they may encounter after experiencing this type of abuse are gravely needed (Acri et al., 2017; Adams & Beeble, 2019; Antai et al., 2014). Further, having consistent opportunities due to education level, resources such as family who can assist with childcare, having strong

supportive relationships with friends and family who are supportive during stressful times, and having strong resiliency skills could all assist in mediating the potential negative influence of economic abuse (Bamishigbin et al., 2017; Barnes et al., 2020; Reeskens & Vandecasteele, 2017). Additionally, examining the ways in which a history of perpetrating economic abuse and loss of this type of power over a former partner may cause escalation in some individuals, which may include physical abuse (Abrunhosa et al., 2021; Li, 2024). Examining which types of strategies and programs yield the strongest outcomes for victims of economic abuse and how well they mediate the effects of economic abuse after a relationship ends would also be integral to this field moving forward. Further, studying the rates of economic abuse when a state child support system is used as compared to how often and in what circumstances economic abuse occurs when the state child support system is not used will assist those in the family law field to make the best decisions possible for participants in the family court system, and their children, when financial and child custody matters are addressed (Cook et al., 2023; Natalier, 2018; Voth Schrag et al., 2020).

Because the focus of this study was the experience of economic abuse of women by a former partner, several demographic groups were not studied but should be studied in the future including men and those who identify with additional genders, those in same-sex relationships or in multi-partner relationships. In addition, a longitudinal study to show how DASS (Lovibond & Lovibond, 1995) scores may change over time after economic abuse would provide helpful data to the field. As cultures have varying social structures and norms, investigating the research questions posed in this study within a variety of cultures with a larger population of participants would utilize greater sample representativeness and yield additional information to guide

policies, supports, and future research that is informed by the social norms of each culture represented in a participant sample (Postmus et al., 2020; Singh, 2020).

Moreover, it stands to reason that having opportunities due to education level, resources such as family who can assist with childcare while one works or attends school, and having strong resiliency skills could all assist in mediating the potential negative influence of economic abuse on someone (Christy-McMullin & Shobe, 2007; Postmus, Huang et al., 2012; Postmus, et al., 2012.; Voth Schrag et al., 2020). Completing future research which examines these variables will be a valuable tool in supporting those who have experienced economic abuse. Though this study did not explore these factors, these areas could be strengthened by future research.

Conclusion

The purpose of this study was to add to the body of scientific research in the area of economic abuse and mental health by exploring self-reported responses. The quantitative data collected through the measurement tools included severity of economic abuse, types of economic abuse, and self-reported symptoms that indicate depression, anxiety, or stress. These variables were analyzed and found to have a statistically significant positive relationship within each subscale of the DASS (Lovibond & Lovibond, 1995) and SEA2 (Adams et al., 2008) as well as when comparing each DASS subscale to the mean for each participant's SEA2 responses when both scales were combined (economic restriction and economic exploitation). Understanding the way rates of economic abuse and the types of economic abuse influence self-reported symptoms of depression, anxiety, and stress is an integral piece of the puzzle to effectively assist victims in mitigating economic instability mental health challenges. Additionally, the more clearly that we understand economic abuse and its relationship to mental health, the easier it will be to design and implement more effective supports for victims, including long-term mental health care. The

study results can also be used to inform law enforcement, officers of the court, and judges, giving them a better understanding of the influence of the nature and dynamics of economic abuse on child custody and child support cases. The findings of this study show that there is more to research within the realm of economic abuse than in the current data. Moving forward, it will be important to consider both victims currently experiencing this type of abuse and those who have left the relationship but who have continued challenges due to prior economic abuse. This study provides a steppingstone to more effective assistance for victims.

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