

**Intimate Partner Violence in Community-Dwelling Long Term Older Adult Couples with
Cognitive Decline: A Scoping Review**

by

Sara Dorothy Brubaker

BA in Psychology, Ohio Wesleyan University, 2020

Submitted to the Graduate Faculty of the
School of Public Health in partial fulfillment
of the requirements for the degree of
Master of Public Health

University of Pittsburgh

2023

UNIVERSITY OF PITTSBURGH

SCHOOL OF PUBLIC HEALTH

This thesis was presented

by

Sara Dorothy Brubaker

It was defended on

April 10, 2023

and approved by

Thesis Advisor: Steven M. Albert, PhD, Professor, Behavioral and Community Health Sciences,
School of Public Health, University of Pittsburgh

Emily F. Dauria, PhD, Assistant Professor, Behavioral and Community Health Sciences, School
of Public Health, University of Pittsburgh

Amy DeGurian, MSW, Field Assistant Professor, School of Social Work, University of
Pittsburgh

Rafael Engel, PhD, Associated Professor, School of Social Work, University of Pittsburgh

Copyright © by Sara Dorothy Brubaker

2023

Intimate Partner Violence in Community-Dwelling Long Term Older Adult Couples with Cognitive Decline: A Scoping Review

Sara Dorothy Brubaker, MPH

University of Pittsburgh, 2023

Public Health Significance Intimate partner violence and cognitive decline are independent issues of great public health importance (Bonnie & Wallace, 2003), but conjointly, the importance is magnified, and older adults are in a unique position to experience both simultaneously. Cognitive decline is a possible diagnosis for older adults; therefore, it is necessary to understand the relationship between cognitive decline and intimate partner violence so that all members of the US population receive potential interventions, services, and supports.

Methods A scoping review was completed on the available literature obtained through *Medline* (Ovid) and *APA PsycInfo* (Ovid) searches. The search of *Medline* produced 271 articles and the search of *PsycInfo* produced an additional 149 unique articles totaling 420 articles available for review.

Results The literature search and review process resulted in 17 eligible articles. Authors investigated several types of abuse and violence including caregiver perpetrated, care receiver perpetrated, and the various motivations for such abuses. Intimate partner violence can transpire in all couples regardless of age, race, sexual orientation, or other demographics. Intimate partner violence in older adults can start in older adulthood, or it can begin when the couple is younger and persist into old age (Rosen et al., 2019). In couples where violence begins in older adulthood, cognitive decline in one partner and the other taking on caregiving responsibilities may be the precursor to violence (Rosen et al., 2019). Another very strong predictor of both intimate partner

violence and potentially harmful caregiver behaviors in caregivers is their perception and feelings of premorbid relationship quality and therefore premorbid relationship satisfaction (Williamson & Shaffer, 2001). Of the reviewed articles, no prevalence estimates were given, and all studies focused on heterosexual couples. Findings from this review challenge and call into question several status quo assumptions, but ultimately more research is needed.

Conclusion As research on this topic hopefully continues and increases over the coming years, researchers need to focus on the missed and marginalized populations in order to increase social justice. Intimate partner violence in older adult couples with cognitive decline is an emerging public health and an emerging social work issue.

Table of Contents

Preface.....	x
1.0 Introduction.....	1
1.1 Purpose of Study.....	2
1.2 Public Health Significance	2
2.0 Literature Review	5
3.0 Methods.....	11
3.1 Information Selection Process	11
3.1.1 Eligibility Criteria	13
3.2 Important Definitions.....	18
3.2.1 Community-Dwelling Older Adult	18
3.2.2 Intimate Partner Violence	19
3.3 Risk Factors	24
3.3.1 Aggression.....	25
3.3.2 Cognitive Decline.....	25
4.0 Results	26
4.1 Intimate Partner Violence (IPV) in Older Adults	26
4.2 Caregiver Abuse	27
4.3 Potentially Harmful Caregiver Behaviors & Quality of Care.....	27
4.4 Care Receiver Aggression.....	29
4.5 Experience of Female Caregivers with Aggressive Care Receivers.....	30
5.0 Discussion.....	33

5.1 Implications of Results	33
5.2 Social Work & Public Health Perspective.....	34
5.2.1 Health Promotion & Prevention	36
5.2.1.1 Examples of Interventions	36
5.2.2 Social Justice.....	37
5.3 Synthesis of Major Trends in Research.....	39
5.3.1 Social Ecological Model & Connection Circle.....	39
5.3.1.1 Balancing Loop 1	42
5.3.1.2 Balancing Loop 2	42
5.3.1.3 Reinforcing Loop 1	42
5.3.1.4 Reinforcing Loop 2	43
5.3.2 Theory of Communal Relationships.....	44
5.4 Analysis of Current Literature.....	45
5.5 Does the Presence of Cognitive Decline Mean We Should Think about Intimate Partner Violence Differently?	46
6.0 Conclusion	47
6.1 Summary of Major Findings	47
6.2 Limitations	48
6.3 Application & Recommendations for Future Steps	49
Appendix A Medline Search Strategy	50
Appendix B PsycInfo® Search Strategy	51
Appendix C Bibliographies Searched	53
Bibliography	54

List of Tables

Table 1 Database Searches	11
Table 2 Source Table 1	14
Table 3 Source Table 2	22

List of Figures

Figure 1 PRISMA Flow Chart.....	12
Figure 2 Connection Circle Legend.....	40
Figure 3 Connection Circle (Created on Kumu, 2023).....	41

Preface

Acknowledgements:

I would like to extend my utmost gratitude to Dr. Steven Albert for serving as my public health advisor for the last three years as I completed the joint MSW/MPH program and for agreeing to chair my thesis committee. Dr. Albert was instrumental in creating ease the last three years as I navigated this program. Thank you to my social work advisor as well, Amy DeGurian who connected me with great resources and two fulfilling field placements during my time in the MSW program as well as agreeing to serve as a reviewer of my MPH thesis.

Thank you to my other thesis committee members, Dr. Emily Dauria and Dr. Ray Engel for agreeing to review my thesis and share their knowledge of my topic and older adults broadly.

There are no words to fully express my thanks to Helena VonVille, the Public Health Research Librarian, for sharing her expertise in literature searching, citation management, and all the nuanced rules for scoping reviews and bibliographies. Helena's help and support were instrumental in helping me feel confident in my research and know I was using all available and relevant pieces of literature.

Completing the joint MSW/MPH program required more than academic support. I would like to end by thanking my family, friends, undergraduate advisors, and residents from my first job who supported me the last three years, and who offered to provide feedback on my thesis and attended my defense. Without the unwavering and continued support from those closest to me, these last three years would not have been possible.

Thank you.

1.0 Introduction

Intimate partner violence and cognitive decline are both issues of great public health importance (Bonnie & Wallace, 2003). Based on my literature search, intimate partner violence research appears to be primarily focused on younger populations. Twenty-four of the 428 screened articles and bibliographies were excluded because they were focused on younger populations. Additionally, the available literature often focuses on elder abuse by others like children, healthcare providers, and strangers, not a partner or spousal caregiver. Of the reviewed articles, 22 were excluded because they focused on abuse by non-intimate family members and 46 were excluded because they focused on abuse perpetrated by another non-spousal caregiver. It is important to acknowledge that intimate partner violence is not just a younger person's issue and violence against older adults is not just committed by non-spousal, intimate family and other caregivers. Intimate partner violence is possible in couples of all ages including older adults (Roberto et al., 2014). As cognitive decline is a possible diagnosis for older adults, it is necessary to understand the relationship between cognitive decline and intimate partner violence so that no segment of the population is left out of potential interventions, services, and supports.

The objective of this scoping review is to identify and characterize studies of intimate partner violence in long-term romantic dyads in which at least one partner has cognitive decline and at least one partner is over 60 years of age, and the couple resides in the United States. My master's thesis will address the research question: What is the relationship between cognitive decline and intimate partner violence in community-dwelling older adult long-term romantic partnerships? I hypothesize that, in community-dwelling older adult long-term romantic

partnerships, the presence of cognitive decline increases the likelihood of intimate partner violence.

1.1 Purpose of Study

This master's thesis is a synthesis of information from the presently available literature on the topics of intimate partner violence, cognitive decline, and the impact one has on the other. In an overview of the literature, I will formulate a greater understanding of the relationship between cognitive decline and intimate partner violence in community-dwelling older adult long-term romantic partnerships. Following a review and identification of the interplay between cognitive decline and intimate partner violence, areas for future research will be identified.

1.2 Public Health Significance

The public health significance of the relationship between cognitive decline and intimate partner violence cannot be understated. Individually, these two topics are important to understand, but conjointly, the importance is magnified. Presently, there is an unfortunate lack of attention paid to these topics by researchers, policy makers, social service and medicine providers, and criminal justice systems (Rosen et al., 2019). Part of the reason for this lack of attention is a lack of research. There are several possible reasons for this lack of research including ageism, biases, an assumption that intimate partner violence does not occur in older adults, and broadly, a lack of federal dollars dedicated to this research and policy development (Corvo, 2014; Roberto et al., 2014).

Unfortunately, intimate partner violence does not have a nationally integrated, publicly funded framework for conducting research and building empirical knowledge (Corvo, 2014). The National Institutes for Alcohol Abuse and Alcoholism (NIAAA) and National Institutes of Mental Health (NIMH) are two effective empirical-knowledge building frameworks that can serve as examples should a National Institute for intimate partner violence be created.

There are countless other reasons that intimate partner violence in older adult long-term romantic partnerships is a pressing public health issue. First, mistreatment and other forms of abuse are seen in almost 50% of older adults with dementia, a type of cognitive decline (Wiglesworth et al., 2010). Additionally, people with Alzheimer's disease, another type of cognitive decline, are twice as likely to be physically abused than any other community-dwelling older adult (Paveza et al., 1992). When it comes to informal caregiving, that is, caregiving by a family member or friend of the care receiver, the care is unpaid and happens within the home (CDC,2022). According to the Centers for Disease Control and Prevention, the care provided by these unpaid, informal caregivers amounts to approximately \$470 billion per year (2021).

The older adult population is projected to grow as the baby boom generation ages, and therefore the proportion of the population with Alzheimer's disease and other related dementias will grow, and they may require the assistance of a caregiver (CDC, 2020). This growth is expected to be accompanied by a significant increase in intimate partner violence in older adult couples (Roberto et al., 2014). The number of people ages 65 and older is expected to double by 2030 from what it was in 2000, amounting to 71 million people over 65 (CDC, 2022). In 2020, approximately 5.8 million Americans were living with Alzheimer's disease, a statistic expected to reach 14 million by the year 2060 (CDC, 2020). Between the years 2015 and 2020, the number of caregivers in the United States grew from 43.5 million to 53 million, and this number is only expected to

continue growing and therefore, 1 in every 6 non-caregivers can anticipate becoming a caregiver in the next 2 years (CDC, 2021). For all of these reasons and many others, it is important that cognitive decline and intimate partner violence as a combined issue become a public health priority to minimize caregiver stress and reduce the risk of abuse between spousal caregivers and care receivers.

2.0 Literature Review

Despite the topic of intimate partner violence being well-researched, the majority of this research appears to be focused on younger populations and lacks the inclusion of cognitive decline as a factor that affects the violence. It is possible for cognitive decline to affect intimate partner violence in several ways. First, a person with cognitive decline may display aggressive behaviors (Hansen et al., 2020). Second, being a caregiver to someone with cognitive decline can be stressful (Calasanti & King, 2007; CDC, 2021; Rosen et al., 2019) and stress is often a precursor to engaging in potentially harmful caregiver behaviors including verbal or physical acts of violence (Christie et al., 2009; Roberto et al., 2013). The lack of research on older adult couples' experiences of intimate partner violence with the added challenges of cognitive decline has led to a lack of understanding and awareness. In addition to research focusing on younger populations (Montminy, 2005), the idea of intimate partner violence still affecting people in later life is often overlooked. When this "invisible" and unpalatable topic is brought to the public's attention people do not want to acknowledge that older adults are vulnerable to such abuses in their own homes (Roberto et al., 2014). There are books, movies, and public policy focused on elder abuse by non-spousal caregivers, but less is written and centered on the issue of spousal abuse.

Currently, there are several ways to conceptualize intimate partner violence and its relationship with cognitive decline and caregiving. First, the caregiver stress framework describes caregivers who sacrifice their own health needs in order to better serve their care-receiving partner (Beach et al., 2005). The stress of caregiving may lead to increased intimate partner violence perpetration following care gradually declining in quality as a result of the caregiver's physical and mental weakening (Schulz & Martire, 2001). There are many reasons caregivers may put their

care receiver first. Some caregivers care with the primary goal of allowing their care receiver to continue residing in the community, rather than a nursing home or other institutional setting (Beach et al., 2005). Occasionally, female caregivers feel an obligation to care for their spouse, or perhaps they feel called to maintain a cohesive partnership and see caregiving as the main step to achieve preservation (Band-Winterstein & Avieli, 2019).

Another way to conceptualize intimate partner violence in relationships with cognitive decline is through an evaluation of the quality of care being provided. When caregivers become mentally and/or physically fatigued, the care they provide can decline in quality (Schulz & Martire, 2001). This lower quality of care can lead to neglect and abuse of the care receiver (Schulz & Martire, 2001).

Finally, power relations are another way to conceptualize intimate partner violence in these relationships. Intimate partner violence perpetration is often fallaciously described as merely a maladaptive and destructive coping mechanism (Corvo, 2014). While intimate partner violence or domestic violence can be understood in this way, it is not the only way. When couples have clearly delineated power dynamics, they may internalize such dynamics to a degree that they are imperceptible to the dyad members (Roberto et al., 2014). When this occurs, it takes some type of disruption to the status quo, such as cognitive decline, to help the dyad understand the power dynamics (Montminy, 2005). Disrupting power relations may lead to increased or initiated intimate partner violence perpetration depending on how the dyad members react and conceptualize their partner's cognitive decline.

When discussing intimate partner violence, there are several concepts that are used synonymously despite the concepts being very different. Two such are domestic violence and elder abuse. Domestic violence is essentially synonymous with intimate partner violence.

Vinton (1991) equates domestic violence with the “battered woman” image. This “battered woman” image comes from feminist analyses completed with the goal of understanding the gender-based dynamics of power and control in which women are more frequently victims of domestic violence while men are more frequently perpetrators (Vinton, 1991). Research on this conceptualization of intimate partner violence as domestic violence frequently focuses on younger women’s experiences in intimate relationships (Montminy, 2005).

Elder abuse is understood as a more specific type of violence, but it is not always between intimate partners. Elder abuse can be described as any form of mistreatment against older adults by any number of perpetrators including familial, professional, peer, or spousal caregivers (Vinton, 1991). Due to elder abuse, domestic violence, and intimate partner violence being used interchangeably, there is a misleading amount of literature on these topics.

Intimate partner violence is accompanied by several assumptions that exacerbate the misconceptions and further the lack of awareness on the breadth of such violence. First, while females are more at risk than males for intimate partner victimization, they are not always the victim, females are sometimes the perpetrators of intimate partner violence (Rosen et al., 2019). In a study of caregivers in heterosexual relationships with their care receiver, individuals of all genders self-reported abusive behavior toward their care receiver during their relationship (Cooney et al., 2006). When older women are victims of intimate partner violence, they are often categorized as dependent on their partner and resistant to help (Band-Winterstein & Eisikovits, 2009). Despite there being differences in younger versus older women’s experiences of intimate partner violence, the desire to be freed from abuse is the same (Band-Winterstein & Eisikovits, 2009). Unfortunately, while the desire is there, older women can become entrapped in violent relationships. There are several factors that contribute to this entrapment, but age-related physical

factors like inability to live alone, or needing assistance with activities of daily living; and age-related social factors like a lack of pension or independent and sustaining sources of income, and lack of work, are among the top (Band-Winterstein & Eisikovits, 2009).

A second assumption people may have about intimate partner violence in older adults with cognitive decline is that the caregiver is the abuser, and the care receiver is also the abuse receiver. This is not always the case, care recipients sometimes demonstrate cognitive decline or dementia related aggressive behaviors like verbal attacks, threats to harm others, property destruction, and actual violence (Band-Winterstein & Avieli, 2019; Hansen et al., 2020). Care receiver inflicted abuse on their spousal caregiver may be a new behavior that accompanies a cognitive decline diagnosis, or it may be lifelong violence that changes form, frequency, or method following a diagnosis (Band-Winterstein & Avieli, 2019).

The effects of intimate partner violence are vast and potentially severe. People who are abuse or battered have been found to be at much greater risk for various mental and physical health problems (Leung et al., 2006). Researchers have found a direct correlation between frequency of exposure to head trauma and severity of anatomical pathology (Roberts, 1988). In addition to depression (Coyne et al., 1993; Homer & Gilleard, 1990; Paveza et al., 1992), anxiety (Compton et al., 1997), PTSD (Leung et al., 2006), and worse health outcomes (Schulz et al., 1995), women who are battered by a partner have a greater likelihood of developing Alzheimer's Disease (Leung et al., 2006). The reason for this correlation is repeated head trauma. Repeated head trauma leading to chronic type Alzheimer's Disease is also seen in epidemiological evaluations of boxers and football players (Omalu et al., 2005; Roberts et al., 1990). Repeated head trauma is commonly observed in the context of domestic violence, especially in batterers who target the head (Leung et al., 2006; Perciaccante et al., 1999).

Overall, while little is known about intimate partner violence in older adult couples with cognitive decline, the issue is present and the need for greater understanding is growing. Currently, in the United States, there are approximately 4 million people diagnosed with dementia, a type of cognitive decline, and this number is expected to grow to 14 million people by the year 2050 (Herbert et al., 2001). Individuals with cognitive decline like Alzheimer's disease or related dementias frequently require assistance from a caregiver (CDC, 2019). For spousal or non-spousal caregivers, providing the needed care to someone with cognitive decline comes with significant emotional and physical health challenges, including but not limited to, poor self-rated health, poor physical health, and depression (Beach et al., 2005; CDC, 2021).

Presently, there are countless gaps in the literature discussing intimate partner violence in older adult long-term romantic partnerships when the care recipient is experiencing cognitive decline. When looking at quality of care, there is little research on how caregiver physical and mental health quality may impact quality of care provided to care receivers (Beach et al., 2005). When there is literature on this topic, studies often rely on data obtained from service-based or clinical settings and therefore leave out community-dwelling members of the older adult population (Bonnie & Wallace, 2003). Data from these settings also focus on non-spousal and non-intimate caregivers, leaving out abuse by spousal-caregivers. This is not a new problem, in fact, since the 1970s, public policy in the United States has accepted intimate partner violence as customary, referring back to patriarchal gender expectations and power relations (Corvo, 2014).

I will attempt to fill some of the vast knowledge gaps in the understanding of intimate partner violence in older adult couples with cognitive decline. To achieve this goal, definitions of older adult couples, intimate partner violence, and cognitive decline will be assessed to devise a

concise definition of the overall issue. Additionally, I will attempt to address the specific ways in which intimate partner violence is affected by cognitive decline in spousal relationships.

3.0 Methods

3.1 Information Selection Process

To obtain studies for review, *Medline* (Ovid) and APA *PsycInfo* (Ovid) were searched by a health sciences librarian with systematic review experience. The date of the last search was 8 February 2023. Concepts and key terms that made up the searches were: cognitive decline and intimate partner violence. Limiters were added for language and geographic location. The initial *Medline* search was developed using a combination of Medical Subject Heading (MeSH) terms and title, abstract, and keywords. The search was then adapted to search *PsycInfo*. Duplicated studies were removed after the initial search using the AED method. Appendices A and B have all search strategies and data related to each search.

Table 1 Database Searches

Table	Vendor/ Interface	Database	Date searched	Database update	Searcher(s)
1a	OR Ovid	Medline	February 8, 2023	1946 to February 07, 2023	Helena M. VonVille; Sara Brubaker
1b	Ovid	APA PsycInfo®	February 8, 2023	1806 to January 05, 2023	Helena M. VonVille; Sara Brubaker

An Excel workbook was used for study selection after searches had been completed and all unique citations were added to the appropriate worksheet. I assessed each title and abstract to determine if it should be excluded (with a single reason provided) or go to full text review. The

full text of non-excluded articles was retrieved, and an exclude/include decision recorded in the Excel workbook. Figure 1 displays the PRISMA flowchart that resulted from the article selection process.

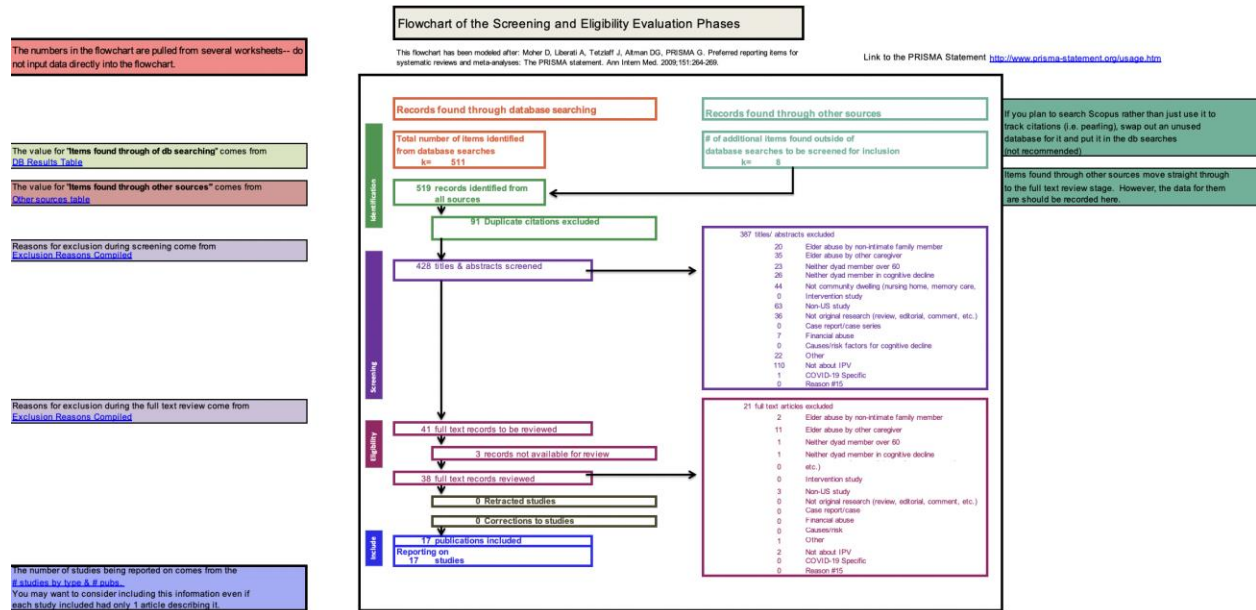


Figure 1 PRISMA Flow Chart

The search of *Medline* produced 271 articles and the search of *PsycInfo* produced an additional 149 unique articles. Ultimately, following review using the Excel workbook, 17 total articles were kept for review.

EndNote (Clarivate) was used to store all citations found in the search process and to check for duplicates not found during the search process. Search strategies and results were tracked using an Excel workbook designed specifically for 1-person reviews (VonVille, 2023). A final search was conducted of 8 eligible bibliographies (See Appendix C).

3.1.1 Eligibility Criteria

For a study to be considered for inclusion in this scoping review, the following eligibility criteria were applied. The study had to include dyads living in the United States. At least one member of the dyad had cognitive decline and at least one member was over the age of 60. The study needed to focus on intimate partner violence. This violence could be bi-directional or inflicted by either partner. Studies of elder abuse from non-intimate family members such as children were excluded. Studies of elder abuse from non-spousal caregivers were also excluded. Studies of cognitive impairment resulting from traumatic brain injury were excluded. The study needed to include participants who were community dwelling, i.e., live at home. Any study of older adults living in nursing homes or residential facilities were excluded. Observational studies, such as cohort and cross-sectional studies, as well as qualitative studies were included. Interventional and mixed methods studies were excluded.

Included studies needed to be published in a research journal; comments, editorials, dissertations, conference proceedings, books, and reports were excluded. Only those articles published in English were considered for inclusion.

Table 2 Source Table 1

Author (Year)	Title	Study Type	Participants	Summary
Band-Winterstein & Avieli (2019)	Women Coping With a Partner's Dementia-Related Violence: A Qualitative Study	Qualitative	Group 1: Women coping with lifelong intimate partner violence that continued with their partner's dementia. Group 2: Women coping with dementia-related violence only. Women who had not experienced IPV prior to their partner's dementia.	Two groups of women experiencing IPV were interviewed, and data were analyzed for content using explanatory methods. Data showed that a couple's relationship history has a significant impact on how women cope with dementia-related violent behaviors from their spouse.
Christie et al. (2009)	Quality of Informal Care Is Multidimensional	Qualitative	237 care recipients and their caregivers.	Researchers analyzed data from the Family Relationships in Late Life (FRILL2) Project which evaluated quality of care, psychosocial measures of depressed affect, life events, cognitive status, and perceived pre-illness relationship quality. Researchers evaluated how the observed measures influence potentially harmful behaviors (PHB) by caregivers. Data show a relationship between PHBs and exemplary care. Researchers concluded that the questionnaires used provide a brief and comprehensive instrument for assessing quality of unpaid/informal care by caregivers.
Dettmore et al. (2009)	Aggression in Persons with Dementia: Use of Nursing Theory to Guide Clinical Practice	Descriptive	N/A	A group of Registered Nurses (RNs) used the Need-Driven Dementia-Compromised Behavior (NDB) model of aggressive behaviors to describe therapeutic approaches to care. Authors define several concepts related to dementia, dementia behavior, and ways to manage said behaviors.

Hansen et al. (2020)	Caregiver Reactions to Aggressive Behaviors in Persons With Dementia in a Diverse, Community-Dwelling Sample	Explanatory Secondary Analysis of data from 2001-2004 REACH II initiative	642 dyads (person with dementia and their caregiver)	The REACH II initiative tested an intervention for caregivers and their care receivers related to aggressive behaviors and coping skills. Researchers analyzed data from this initiative and determined that reactions to aggressive care receiver behaviors varied by behavior type and race/ethnicity.
Leung et al. (2006)	Evaluating Spousal Abuse as Potential Risk Factor for Alzheimer's Disease: Rationale, Needs and Challenges	Case-Control	40 women with Alzheimer's Disease	There are many risk factors for Alzheimer's Disease, one of which is repetitive head trauma. This study examines the relationship between spousal abuse (IPV) and Alzheimer's Disease. Researchers found that approximately 20% of women with Alzheimer's Disease reported experiencing head trauma as part of intimate partner violence perpetrated by their spouse.
Roberto et al. (2014)	Intimate Partner Violence in Late Life: An Analysis of National News Reports	Qualitative Content Analysis	N/A	Researchers analyzed national newspaper reports of intimate partner violence (IPV) among older adults to identify the types of violence most frequently reported in the media and how the reporters conceptualized the abuse reports. Results showed several types of abuse ranging from physical abuse to murder-suicide. The IPV evaluated in this study was most frequently perpetrated by males, only 15% of stories described violence against men by female perpetrators. Several factors were frequently cited in reports as motivations for abuse including caregiver stress, alcohol use, and poor health of the victim. Lastly, researchers took an intersectional feminist approach to make recommendations for practitioners who work with older adults. Frequently, health and human service professionals and other community

				members find it difficult to recognize and respond to IPV between older adults which leads to a reluctance to draw attention to potentially abusive relationships without reasonable knowledge of how to handle such situations. The authors concluded that when invisible topics such as IPV are presented to the public, people are uncomfortable and reluctant to acknowledge that this unpalatable experience occurs to people within their homes.
Rosen et al. (2019)	Violence in Older Adults: Scope, Impact, Challenges, and Strategies for Prevention	Descriptive	N/A	Several forms of violence including violence towards older adults, self-directed violence, and violence perpetrated by older adults against others are discussed in this article. Additionally, prevalence rates, risk factors, and challenges for identifying, intervening, and preventing such violence are described. Authors discuss several special topics including firearms and veterans. Authors conclude the article with recommended approaches to older adult violence prevention including specific interventions based on setting (healthcare, community, Veterans Healthcare Administration, etc.).
Steadman et al. (2007)	Premorbid Relationship Satisfaction and Caregiver Burden in Dementia Caregivers	Qualitative	72 Caregivers	Premorbid, or pre-disease, relationship satisfaction was measured using psychosocial measures completed by dementia caregivers. Caregiver responses were evaluated and sorted into groups of low or high premorbid relationship satisfaction. These responses were analyzed, and results show that premorbid relationship satisfaction is negatively correlated with caregiver burden. The findings from these surveys were determined to be independent of other variables including length of caregiving, disease severity, care recipient activities of daily

				<p>living (ADL) functioning, and relationship type. These findings lead to the conclusion that premorbid relationship satisfaction can be a contributor to caregiver burden.</p>
Tronetti (2014)	Evaluating Abuse in the Patient with Dementia	Descriptive	N/A	<p>This article gives an overview of various components of intimate partner violence and elder abuse towards individuals with dementia. Some topics evaluated include dementia and the accompanying risks of abuse, dementia in the setting of domestic violence, siding with the caregiver, stages of dementia, and types of abuse.</p>
Williamson et al. (2001)	Relationship Quality and Potentially Harmful Behaviors by Spousal Caregivers: How We Were Then, How We Are Now	Longitudinal	142 Caregivers	<p>This article evaluated relationship quality and its connection to potentially harmful behaviors by caregivers towards their care receiving spouses. Using the theory of communal relationships, caregiver-care receiver relationships were evaluated for past communal behaviors, amount of help provided, relationship-based rewards, caregiver affect, and potentially harmful caregiver behaviors. Findings indicate that caregiver depression and potentially harmful caregiver behaviors are highly correlated with caregiver-care recipient relationship satisfaction.</p>

3.2 Important Definitions

In order to accurately describe the relationship between cognitive decline and intimate partner violence in community-dwelling older adult long-term romantic couples, these terms need to be defined. When it comes to intimate partner violence, there are many types and sub-definitions to differentiate. For cognitive decline, there are age related diseases, which this thesis will focus on, and there are injury inflicted challenges like traumatic brain injury which have been excluded from use for results.

3.2.1 Community-Dwelling Older Adult

Community-dwelling older adults are those who reside independently, outside of residential facilities, nursing homes, with adult children in their adult child's home, and the like (Beach et al., 2005). The reason for focusing this review on community-dwelling older adults is because the violence being evaluated is between partners, not care providers or other family members. For the purposes of this review, older adult is defined as persons aged 60 or older, as this definition is consistent with what is seen in the available literature. Long-term romantic couples, for the purposes of this study are dating, married, or domestic partners who have been together for more than 1 year and live together. Additionally, for the purpose of this study, couples being discussed must have one partner who is an older adult (i.e., over age 60) and one partner who has cognitive decline for whom the non-impaired partner acts as informal caregiver (i.e., outside caregivers are not brought in from an agency, volunteer service, etc. (CDC, 2022).

3.2.2 Intimate Partner Violence

Intimate partner violence (IPV) is defined in the literature in different ways. Some researchers define IPV as threatened, attempted, or completed physical, sexual, or emotional violence or abuse by a current or former intimate partner (Band-Winterstein & Avieli, 2019). Others define IPV as abuse occurring in the context of an intimate relationship by a current or former spouse or partner (Roberto et al., 2014). For this thesis, I have chosen to combine these definitions and define IPV as physical, sexual, emotional, or psychological abuse or violence that is threatened or inflicted on one intimate partner by the other partner. This definition remains specific in the type of relationship but stays broad in the types of abuse. Additionally, this definition, like the others, leaves out any mention of perpetrator and victim characteristics, and neglects to give a motivation for the violence.

Intimate partner violence is discussed in the literature using several other terms in addition to intimate partner violence. One study has referred to intimate partner violence in gendered terms calling it, wife assault (Leung et al., 2006). Some studies refer to domestic violence when discussing actions similar to those of intimate partner violence (Corvo, 2014; Coyne et al., 1993; Leung et al., 2006; Tronetti, 2014; Vinton, 1991;). I will use intimate partner violence.

Intimate partner violence can occur in all kinds of intimate relationships (Roberto et al., 2014). Regardless of age, sex, gender identity, sexual orientation, race, ethnicity, socioeconomic status, or any other demographic identifier (Roberto et al., 2014), any member of an intimate relationship can be the perpetrator or victim of intimate partner violence (Rosen et al., 2019). Most frequently, however, in heterosexual relationships, females are victims and males are perpetrators of intimate partner violence (Roberto et al., 2014). Based on the currently available literature and

the unfortunate lack of diversity present in studies, this thesis will evaluate intimate partner violence in older adult, heterosexual relationships.

In addition to the several terms used for intimate partner violence, there are also several types and sub-definitions of intimate partner violence. When it comes to subtypes, two frequently discussed in the literature are intimate partner terrorism and common couple violence (Roberto et al., 2014). Both intimate partner terrorism and common couple violence are forms of domestic violence or intimate partner violence that involve behaviors that physically harm, arouse fear, or prevent an individual from making their own choices and being forced to behave in a way that is consistent with the perpetrators wishes (Tronetti, 2014). The two types are very similar in that they are acts of physical or psychological violence, the difference is in the perpetrator's intent (Roberto et al., 2014). In intimate partner terrorism, the intent is to assert power and control over the relationship (Roberto et al., 2014).

There are several specific types of intimate partner violence (IPV) including psychological (Dong et al., 2014; Pittaway, 1995), physical (Dong et al., 2014), and sexual (Dong et al., 2014), as well as confinement (Dong et al., 2014), deprivation (Dong et al., 2014; Pittaway, 1995), and murder-suicide (Roberto et al., 2014). Psychological violence is the purposeful infliction of mental torment or fear on another person (Pittaway, 1995). Actions consistent with this type of IPV are verbal like name calling, yelling, insulting, and swearing; or physical like isolating or excluding from events, activities, or decision making when the victim is capable of all such things (Pittaway, 1995). These actions diminish identity, dignity, and self-worth of the victim (Pittaway, 1995). Physical abuse is purposeful infliction of pain or bodily harm to another person (Dong et al., 2014). Sexual abuse includes unwanted or unconsented touching, intercourse, or any other sexual activity (Dong et al., 2014).

Confinement may evoke similar feelings for the victim as psychological abuse. Confinement is considered any restraint or isolation of an individual, with the exception of attending medical appointments (Dong et al., 2014) or for any emergent medical need. Deprivation is the willful denial of medication, medical care, shelter, food, or other needs to another individual (Dong et al., 2014). This denial of needs puts the victim at increased risk of harm including physical, mental, or emotional harm (Dong et al., 2014). A final, but rare form of IPV is murder-suicide. Murder-suicide is frequently seen with male perpetrators and female victims and is more common in the older adult population than in younger populations (Roberto et al., 2014).

Table 3 Source Table 2

Author (Year)	Title	Definition of Violence	Definition of Dementia/Cognitive Decline
Band-Winterstein & Avieli (2019)	Women Coping With a Partner's Dementia-Related Violence: A Qualitative Study	Intimate partner violence (IPV): "Threatened, attempted, or completed physical or sexual violence or emotional abuse by a current or former intimate partner."	"A clinical syndrome related to brain disorders characterized by the development of cognitive deficits that are severe enough to interfere with daily social and occupational functioning." (from Qui & Fratiglioni, 2018)
Christie et al. (2009)	Quality of Informal care Is Multidimensional	Potentially harmful behavior (PHB): "Actions by caregivers (e.g., screaming and yelling, threatening with nursing home placement, hitting, slapping, handling roughly) that may be detrimental to care recipient welfare without being severe enough to warrant social services of legal intervention."	N/A
Dettmore et al. (2009)	Aggression in Persons with Dementia: Use of Nursing Theory to Guide Clinical Practice	Aggression: "Any physical or verbal behavior that has the effect of harming or repelling others, and includes behaviors such as hitting, kicking, and screaming."	N/A
Hansen et al. (2020)	Caregiver Reactions to Aggressive Behaviors in Persons With Dementia in a Diverse, Community-Dwelling Sample	Aggression: "An overt act, involving the delivery of noxious stimuli to (but not necessarily aimed at) another object, organism or self, which is clearly not accidental" (from Patel & Hope, 1992)	N/A
Leung et al. (2006)	Evaluating Spousal Abuse as Potential Risk Factor for Alzheimer's Disease: Rationale, Needs and Challenges	Spousal abuse with head trauma: "Having been struck in the head on 5 or more occasions with loss of consciousness (of any time duration) on 2 or more of these occasions"	N/A

Roberto et al. (2014)	Intimate Partner Violence in Late Life: An Analysis of National News Reports	Intimate partner violence: “abuse that occurs in the context of an intimate relationship, including abuse by a current or former spouse, boyfriend, or girlfriend”	N/A
Rosen et al. (2019)	Violence in Older Adults: Scope, Impact, Challenges, and Strategies for Prevention	3 forms of violence: “violence directed toward older adults (physical or sexual elder abuse or intimate partner violence ([IPV]), self-directed violence (suicide or nonfatal self-harm), and violence perpetrated by older adults against others”	Dementia: “brain diseases causing long-term, gradual decreases in cognition and memory (Alzheimer disease is the most common type). Often accompanied by anxiety, delusions, and paranoia, all of which can lead to behavioral changes and potentially violent outbursts” (from O’Leary et al., 2005)
Steadman et al. (2007)	Premorbid Relationship Satisfaction and Caregiver Burden in Dementia Caregivers	N/A	N/A
Tronetti (2014)	Evaluating Abuse in the Patient with Dementia	Domestic violence: “a pattern of coercive (forceful) and controlling behavior that seeks to establish power and control over another person through fear and intimidation; behavior that physically harms, arouses fear, prevents an individual from doing what they wish or forces them to behave in ways they do not want?”	Dementia: “deterioration of intellectual function that ultimately leads to a decline in the ability to perform activities of daily living”
Williamson et al. (2001)	Relationship Quality and Potentially Harmful Behaviors by Spousal Caregivers: How We Were Then, How We Are Now	Potentially harmful behaviors: “behaviors that are potentially detrimental to the elder’s physical and psychological well-being” (from Steinmetz, 1988)	N/A

3.3 Risk Factors

There are several risk factors for both intimate partner violence perpetration and victimization. Common risk factors for perpetration include depression (Paveza et al., 1992), anxiety (Compton et al., 1997), low self-esteem (Pillemer & Sutor, 1992), and substance abuse (Homer & Gilleard, 1990). All of these risk factors have connections to intimate partner violence perpetration related to personal insecurities, insufficiencies, and potentially, unaddressed mental health concerns. Higher levels of caregiving commitments are also cited as a risk factor for intimate partner violence perpetration (Cooney & Mortimer, 1995). Higher levels of commitment mean that a caregiver has dedicated, either by choice or by disease process, a great number of years or energy to their caregiving duties. Two connected risk factors include being a spouse and living with the care receiver (Pillemer & Sutor, 1992). Again, these factors tie into caregiving commitment and enmeshment.

A final and more frequently studied risk factor for intimate partner violence perpetration is premorbid caregiver-care receiver relationship (Homer & Gilleard, 1990; Paveza et al., 1992; Williamson & Shaffer, 2001). Premorbid relationship is the relationship between caregiver and care receiver before the care receiver had cognitive decline and the caregiver took on the responsibility of caring. Intimate partner violence is seen less in couples who have greater premorbid relationship quality, frequently characterized by mutual responsiveness to each other's needs (Williamson & Shaffer, 2001). Members of these types of mutually responsive dyads are less likely to experience depression and therefore are less likely to engage in maladaptive or potentially abusive behaviors typical of intimate partner violence (Williamson & Shaffer, 2001).

3.3.1 Aggression

The available literature frequently discusses aggression in the context of intimate partner violence. Aggression is defined as any physical or verbal behavior that has the effect of harming or repelling others (Kolanowski, 1995). Examples of aggression are verbal abuse, property destruction, and physical assault (Hall & O'Connor, 2004). Aggression can be an act committed by either the victim or perpetrator and by the partner with cognitive decline or the one without it. When aggression is displayed by the partner with cognitive decline, it may be conceptualized as need-driven dementia-compromised behavior (Dettmore et al., 2009). Need-driven dementia-compromised behavior is understood to be a way for someone who cannot find the language to communicate any unmet needs or to notify their caregiver of pain, social isolation, boredom, or even medical conditions that need to be addressed (Dettmore et al., 2009).

3.3.2 Cognitive Decline

Cognitive decline is a broad term used to describe diseases like Alzheimer's disease and dementias. People with dementia experience cognitive impairments like decreased insight, poor judgement, and difficulty participating in daily life (Tronetti, 2014). There are several classifications of cognitive decline including mild, moderate, and severe with challenges ranging from difficulty with tasks like managing finances or medication with mild dementia, all the way to requiring 24-hour care and complete inability to make decisions regarding their safety and health with severe dementia (Tronetti, 2014). Any level of cognitive decline increases an individual's risk of abuse by an intimate partner (Paveza et al., 1992; Wiglesworth et al., 2010).

4.0 Results

4.1 Intimate Partner Violence (IPV) in Older Adults

Intimate partner violence can occur in all couples, regardless of age (Roberto et al., 2014). When intimate partner violence happens in older couples, it most frequently involves a female victim and a male perpetrator, as is consistent with IPV in other age groups (Rosen et al., 2019). The facts of intimate partner violence in older couples are relatively consistent with those of IPV in younger couples. For all age groups, the abuse can be one-sided, but it is sometimes bidirectional as well (Rosen et al., 2019).

In older adult couples, intimate partner violence can have various starting points. Abuse can occur in couples who have recently gotten together, or it can be a relationship dynamic that has been present for years (Rosen et al., 2019). Additionally, a couple can be free of intimate partner violence for their entire relationship until something happens in the relationship to disturb the couple's typical functioning (Rosen et al., 2019). An example of a disruption is a diagnosis of the development of symptoms characteristic of cognitive impairment or decline (Montminy, 2005). When one partner starts experiencing cognitive decline, the other partner may need to take on the role of caregiver and all the stressors that can potentially accompany it thus leading to the initiation of violence (Roberto et al., 2014; Rosen et al., 2019). Cognitive decline in the care recipient can also lead to that individual being trapped in the violent relationship because even if they wanted to get out of the relationship, they have likely already lost the ability to live independently (Tronetti, 2014). This entrapment leads to the care receiver having to rely on an abusive partner for assistance with activities of daily living.

Unfortunately, due to a disappointing lack of research on the topic, there is no concise, published prevalence data on intimate partner violence in community-dwelling long-term older adult romantic partnerships with cognitive decline and very little on intimate partner violence in older couples generally.

4.2 Caregiver Abuse

There are several reasons someone might abuse their care receiver, it could be caregiver stress (Roberto et al., 2014), burnout, malice, or any number of reasons. A strong predictor of late life intimate partner violence perpetration is being either a perpetrator or victim of domestic violence earlier in life (Coyne et al., 1993).

A study by Leung and colleagues (2006), was conducted with 40 women all approximately 76 years old, who had diagnosed Alzheimer's Disease. In this study, 20% of women experienced spousal abuse with significant head trauma between the 1960s and 1970s. This data was obtained through a combination of self-report and reports by family members of these women who were unable to self-report due to their cognitive decline.

4.3 Potentially Harmful Caregiver Behaviors & Quality of Care

A possible precursor to caregiver abuse is known as potentially harmful caregiver behaviors, or PHCBs. PHCBs are any action(s) by caregivers toward their care receiver that may be harmful to the care receiver's welfare (Christie et al., 2009). These behaviors can include verbal

behaviors like yelling, screaming, or threatening nursing home placement (Christie et al., 2009). These behaviors can be physical like hitting, slapping, or handling roughly (Christie et al., 2009). Regardless of the manner of PHCBs, these behaviors are characterized as potentially damaging to care receivers' welfare but are not severe enough to warrant social services or legal intervention (Christie et al., 2009).

Related to potentially harmful caregiver behaviors (PHCBs) is quality of care provided by caregivers. By definition, poor quality of care is any caregiver behavior that is possibly psychologically or physically harmful to the care receiver (Beach et al., 2005). There is a clear connection between the definitions of PHCBs and poor-quality care by caregivers. Other characterizations of care provided by caregivers are adequate, inadequate, and exemplary. Adequate care is when the care receiver always receives the help or care they need (Christie et al., 2009). Inadequate care is when the care receiver does not receive the help or care they need (Christie et al., 2009).

When a caregiver is engaging in potentially harmful caregiver behaviors (PHCBs), care is not necessarily considered inadequate (Christie et al., 2009). For example, a caregiver can meet all their care receiver's needs and provide what is, by definition, adequate care but still engage in PHCBs like hitting or yelling. PHCBs do not impede adequate care, but they certainly deny an individual from receiving care that is better than adequate.

There are protective factors for preventing caregivers from engaging in PHCBs. First, caregiver preparedness has been seen as a protective factor (Hancock et al., 2022). Caregiver preparedness can be measured using a Preparedness for Caregiving Scale which evaluates how prepared a caregiver feels to take on the role (Hancock et al., 2022).

Another protective factor for PHCBs is previously defined and is, premorbid relationship quality (Williamson & Shaffer, 2001). When caregivers are in mutually communal relationships with their care receiver prior to cognitive decline, they are likely to be less depressed, less stressed, and less likely to engage in PHCBs (Williamson & Shaffer, 2001). In the same vein, if the premorbid relationship is characterized as negative by the caregiver, they are more likely to experience depression and possibly engage in PHCBs (Williamson & Shaffer, 2001).

Although there are various risk and protective factors for potentially harmful caregiver behaviors, there is no association with caregiver demographics. The relationship between quality of care provided by caregivers and PHCBs is clear, but there is no association between caregiver age, gender, ethnicity, education, or household income (Christie et al., 2009).

4.4 Care Receiver Aggression

There are possible misconceptions that may be encountered when discussing and considering intimate partner violence in older adult partnerships with cognitive decline. For example, there may be the assumption that the caregiver is the perpetrator, and the care receiver is also the receiver of violence. Abuse in these relationships can be unidirectional: committed by one person onto the other; or bidirectional: committed by both partners towards each other, and there is no consistent definition of who is the perpetrator versus who is the victim.

In a study of 630 people with dementia, aggressive and abusive behaviors were evaluated (Hansen et al., 2020). In a one-week time period, almost 40% of these individuals displayed one or more aggressive behavior. Researchers broke down the type of aggression displayed by these individuals. Approximately 35% displayed verbal aggression, almost 9% threatened to hurt others,

and about 7% destroyed property. Very few studies highlight racial or other demographic differences, but researchers in this study found that Black or African American individuals with dementia have a 2.26 greater likelihood than White or Caucasian individuals of perpetrating these aggressive behaviors (Hansen et al., 2020).

4.5 Experience of Female Caregivers with Aggressive Care Receivers

There are very interesting findings when looking at gender differences in care receiver aggression and differences in lifelong intimate partner violence versus late-life only violence. A study by Band-Winterstein and Avieli evaluated two groups of female spousal caregivers and their experiences with caring for their husbands with cognitive decline (2019). The two groups in this study are women who have experienced lifelong intimate partner violence (Group 1) and women who began experiencing intimate partner violence once their partner began displaying cognitive decline (Group 2) (Band-Winterstein & Avieli, 2019).

Women in Group 1 are victims of spousal aggression that started early in their relationship and never stopped even after their partner started displaying cognitive decline (Band-Winterstein & Avieli, 2019). For these women, the violence they experienced never stopped, it just changed form as time went on. Women in Group 2 experienced intimate partner violence for the first time in the context of their partner's cognitive decline. For these women, they witnessed a dramatic change in their spouse's behavior concurrently with their spouse's cognitive decline (Band-Winterstein & Avieli, 2019).

For lifelong IPV victims in Group 1, they experienced a "twilight zone" of the time before and after their spouse displayed cognitive decline. For these women, there was a retrospective

realization that the violence they experienced took a different, often described as “bizarre” shift in the type and form of violence than what they experienced pre-cognitive decline. For these women, the violence they experienced before and after their spouse had cognitive decline was perceived as “normal” since they had seldom known their spouse to behave any differently. Women in this group, upon understanding that the change in their spouse’s behavior (i.e., more violent and bizarre) was attributable to cognitive decline, relinquished their spouse of responsibility, and began to blame their actions on the disease rather than the person (Band-Winterstein & Avieli, 2019).

For women in Group 2, the initiation of violence by their spouse was viewed as an abrupt violation of the dyad’s typical functioning. These women frequently cited confusion when they began experiencing abuse, but when they understood the reasons for such abuse, they were able to regain feelings of control over the situation and assign a similar blame to those in Group 1 (Band-Winterstein & Avieli, 2019).

When it came to providing care for the perpetrator, women in each group cited different motivations. For women in Group 1, the escalation of violence was viewed as a further level of deterioration in quality of their relationship overall and they were often ambivalent towards their caregiving responsibilities. For women in Group 2, the violence, while painful was not their focus once they understood why it was happening. Women in this group cared for their spouse with the motive of love and were able to forgive their spouse for the abuse (Band-Winterstein & Avieli, 2019).

Women in both Group 1 and Group 2 were able to acknowledge the violence they were experiencing was due to their spouse’s disease. All women understood that their spouse was “no longer the same person” he used to be (Band-Winterstein & Avieli, 2019). This study provided a very interesting deep dive into the perceptions, experiences, and coping skills used by female

caregivers who are caring for a partner who perpetrates intimate partner violence with and/or without cognitive decline.

5.0 Discussion

5.1 Implications of Results

The results from this scoping review challenge and contradict the status quo assumptions in the current research and in society around intimate partner violence in older adults couples with cognitive decline. Firstly, I challenge the belief that couples “age-out” of violence or leave an abusive relationship by older adulthood. The reason for this misconception may be that much of the present literature focuses on younger populations. Without a focus on older populations experiencing intimate partner violence, an ever-growing segment of the population is under sampled. Therefore, the extent to which older individuals have left abusive relationships, or if they have remained in them is unknown, limiting knowledge of why people stay in these relationships and how the violence they experience may change over time.

Research shows that older adults do not “age-out” of violence (Band-Winterstein & Avieli, 2019). In relationships that have been characterized by violence for a long amount of time, the violence changes form but still persists into old age. Oftentimes, physical violence declines over time and is replaced by escalating forms of psychological and emotional violence (Band-Winterstein & Eisikovits, 2009). In general, all forms of violence appear to be complicated by cognitive decline.

A second assumption is that caregivers are the perpetrators of abusive towards their care receiver. While this is often the case, care receivers also display violence and aggression towards their caregiver. Abuse does not have to come from only one partner, it can be perpetrated by both partners onto each other (Rosen et al., 2019). Through examination of presently available research,

caregivers may display intimate partner violence in many forms including potentially harmful caregiver behaviors (PHCBs) (Christie et al., 2009), physical altercations involving head striking (Leung et al., 2006), psychological abuse such as exclusion and isolation (Pittaway, 1995), or as severe an act as murder or murder-suicide (Roberto et al., 2014). Care receivers can also perpetrate violence as seen in the study of women caregivers by Band-Winterstein & Avieli (2019).

One final misconception that this research has found evidence against is that in heterosexual partnerships with intimate partner violence, males are the perpetrators and females are the victims; this is not always the situation. As discussed previously, the patriarchal and gender-based assumption and image of the “battered woman” emphasizes this misconception (Vinton, 1991). Perhaps, with more research focused on older couples’ experiences with intimate partner violence, assumptions like these can be further disproven and the overall phenomenon in older adults can be better understood as the complex issue that it is.

The research question: What is the relationship between cognitive decline and intimate partner violence in community-dwelling older adult long-term romantic partnerships? requires more in-depth, original research to be answered. It appears that the relationship between cognitive decline and intimate partner violence in community-dwelling older adult long-term romantic partnerships is a complicated one. In future studies, it is important that researchers investigate the motivations for abuse alongside the time point in the couple’s relationship that the violence began.

5.2 Social Work & Public Health Perspective

When looking at the issue of intimate partner violence among older adult couples with cognitive decline through a joint public health and social work perspective, there are several areas

of significant overlap. First, in public health the World Health Organization's (WHO) definition of health seems to be the closest the profession has come to a consensus of how to define health. The WHO defines health as "the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (1948). When looking at health this way, it is clear that experiencing intimate partner violence or serving as someone's caregiver can have negative impacts on someone's health.

Based on the available literature, it is clear that intimate partner violence victimization has several negative health effects. First, suffering intimate partner violence puts individuals at increased risk for both physical and mental health problems including, but not limited to, depression (Coyne et al., 1993; Homer & Gilleard, 1990; Paveza et al., 1992), anxiety (Comptom et al., 1997), post-traumatic stress disorder (PTSD) (Leung et al., 2006), and overall worse health outcomes (Leung et al., 2006; Schulz et al., 1995). Moreover, if a person suffers head trauma as part of intimate partner violence victimization, that individual is more likely to develop Alzheimer's Disease due to a direct correlation between head trauma exposure and severe anatomical neurologic pathologies (Leung et al., 2006; Roberts, 1988).

There are also several possible negative health effects associated with being a caregiver. Referring back to the caregiver stress framework, when individuals sacrifice their own health needs to better serve their spouse, they may be putting themselves at risk of having to address worse health problems when they have the time to do so (Beach et al., 2005). For example, a caregiver may provide such extensive care for their spouse, that they put off their own healthcare needs, by the time they are able to address their health concerns, it is so bad their health concerns have become more severe or fatal. Caregiving also increases both mental and physical fatigue (Schulz & Martire, 2001) which can lead to unnecessary institutionalization of the care receiver.

Similarly, to intimate partner violence victimization, caregiving for someone with cognitive decline can lead to emotional and physical health challenges (Schulz et al., 1995). Based on these reasons, both intimate partner violence victimization and caregiving threaten the quality of someone's health.

5.2.1 Health Promotion & Prevention

Both social work and public health have a primary goal of health promotion and disease prevention. There are several ways in which public health and social work can combat the various risk factors for intimate partner violence perpetration including depression (Paveza et al., 1992), anxiety (Compton et al., 1997), low self-esteem (Pillemer & Sutor, 1992), substance abuse (Homer & Gilleard, 1990), and caregiving commitments (Cooney & Mortimer, 1995). Whether it be through community programming or individual therapy, person-centered interventions characteristic of both disciplines should be researched and implemented to better serve caregivers present and future.

5.2.1.1 Examples of Interventions

Interventions can be designed at all levels of the social ecological model. At the individual level, interventions like individual counseling to learn about and cope with the many emotions that come with caregiving like stress, anger, sadness, frustration, grief, and anxiety. At the interpersonal level, prior to the development of cognitive decline, a couple can attend couples counseling and attend regular primary care appointments together to discuss, in the presence of a trained professional, the ways in which they anticipate the next years of their relationship functioning, with or without cognitive decline. Couples can use these discussions to plan, "If one of us should

get dementia, what steps will we take? Are we open to assisted living placement? What does ‘care’ look like to us?” At the community level, providing individuals access to community-based agencies that provide respite care, caregiver supports, and other aid to caregivers can help combat caregiving stress, depression, and burnout. At the institutional level, hospitals and other healthcare agencies can provide training and preparation to their employees on the recognition and supports available to individuals suffering cognitive decline as well as abuse. Finally, at the policy level, some of the greatest impact can be made. Based on the lack of literature available to write this thesis, there is a great need for research into the topics of intimate partner violence, cognitive decline, caregiving, and all of these concepts together. Additionally, as established, caregiving comes at a tremendous cost, financially, emotionally, and physically. In order to remedy some of these effects, policy created to provide financial and other aid to caregiving individuals that can decrease the damaging effects experienced and described by the caregiver stress framework.

5.2.2 Social Justice

Another goal characteristic of both social work and public health fundamentals is social justice. Social justice and intimate partner violence among older adults with cognitive decline can be described by taking a feminist perspective. A feminist perspective of intimate partner violence relies on the principle that such violence is based in the notion of males victimizing women within a historically patriarchal system of oppression (Dobash & Dobash, 1979; Walker, 1979). While current research demonstrates that this is inaccurate, this notion is deeply rooted in United States public policy; in fact, public policy dating back to the 1970s has condoned intimate partner violence as something that is ordinary in the landscape of intimate partnerships (Corvo, 2014).

Facts like this only prolong views of male entitlement which is often sustained through the use of violence (Miedzian, 1991).

While these alarming perspectives of male entitlement and female subordination are disproven in literature, their effects are potent and visible in care expectations. Oftentimes, women are believed to have past experiences that prepare them to be caregivers (Russell, 2001). For example, women may have experience caring for children through motherhood; they may have experience caring for an ailing parent, friend, or peer; or they may be part of the 76% of healthcare workers in the United States today who are female (Day & Christnacht, 2019). Not only are women often expected to take on caring roles, but they are also more likely to have higher levels of caregiving stress due to being less likely to have social resources and supports (Pinquart & Sörensen, 2006).

Another component of caregiving that needs to be understood as an issue of social justice is the cost of informal caregiving provided by spousal caregivers. Annually, informal and unpaid caregiving costs approximately \$470 billion per year (CDC, 2021). Providing care to a loved one or spouse is very time consuming so even if someone wanted to go back to work to make up for the financial toll of caregiving, it would be difficult and likely impossible. In 2019 alone, caregivers in the United States spent approximately 18.5 billion hours caring for someone else (CDC, 2019).

One way to remedy this vast social justice issue of intimate partner violence among older adult couples with cognitive decline is by increasing research efforts to impact public policy. As previously mentioned, presently available research focuses on younger populations, already limiting the knowledge available to those who would like to understand it better. A way to increase research and impact public policy is through the creation of a national database that mimics that

of the National Institutes for Alcohol Abuse and Alcoholism (NIAAA). Currently, there is no such nationally integrated, publicly funded framework for conducting research and building empirical knowledge (Corvo, 2014), but the creation of one would provide the needed funding for conducting research as well as the database to aggregate it. Furthermore, a national institute for intimate partner violence would be able to make a greater impact on policy development.

5.3 Synthesis of Major Trends in Research

5.3.1 Social Ecological Model & Connection Circle

Several clear trends emerged in the literature on intimate partner violence among older adult couples with cognitive decline. First, the application of the social ecological framework would provide fruitful insight into the various factors contributing to intimate partner violence and the ways in which they interact with one another. A way to both visualize and describe the social ecological model applied to intimate partner violence among older adult couples with cognitive decline is through the use of a connection circle.

A connection circle is a tool of systems thinking. Systems thinking is broadly defined as a school of thought focuses on the recognition of connections and interconnections between parts of a system and creating an integrated whole (Kim, 1999). This connection circle consists of several variables that impact the behavior of intimate partner violence perpetration in older adults along with arrows connecting variables to variables and variables to the behavior. Viewing the variables in this way allows connections to be visualized and a whole (i.e., causal loop) to be created out of the parts (i.e., the behavior and variables). The causal loops that are created can be either balancing

or reinforcing. Balancing loops depict a balancing process attempting to create equilibrium amongst the variables (Kim, 1999). Reinforcing loops are dynamic systems of variables constantly impacting one another to cause the behavior and the variables that are caused by the behavior (Kim, 1999).

Below is the connection circle created to describe the interconnectedness of factors causing and caused by the behavior of intimate partner violence perpetration in older adults as well as a legend to orient the viewer to the color-coordination.

Color/Line Type	Level of Social Ecological Model
Black Outline	Behavior of Interest
Green Outline	Individual Level
Orange Outline	Interpersonal Level
Blue Outline	Community Level
Purple Outline	Structural Level
Dark Blue Line	“Increases”
Dark Red Line	“Decreases”
Yellow Line	Both Increases and Decreases (depends on other connections in loop)

Figure 2 Connection Circle Legend

Figure 3 displays a very complex connection circle with 19 variables that have cause and effect relationships with one another to increase and decrease the behavior of intimate partner violence (IPV) perpetration in older adults. This connection circle involves variables that lead to intimate partner violence perpetration independent of cognitive decline, but causal loops that involve cognitive decline and the accompanying difficulties will be highlighted.

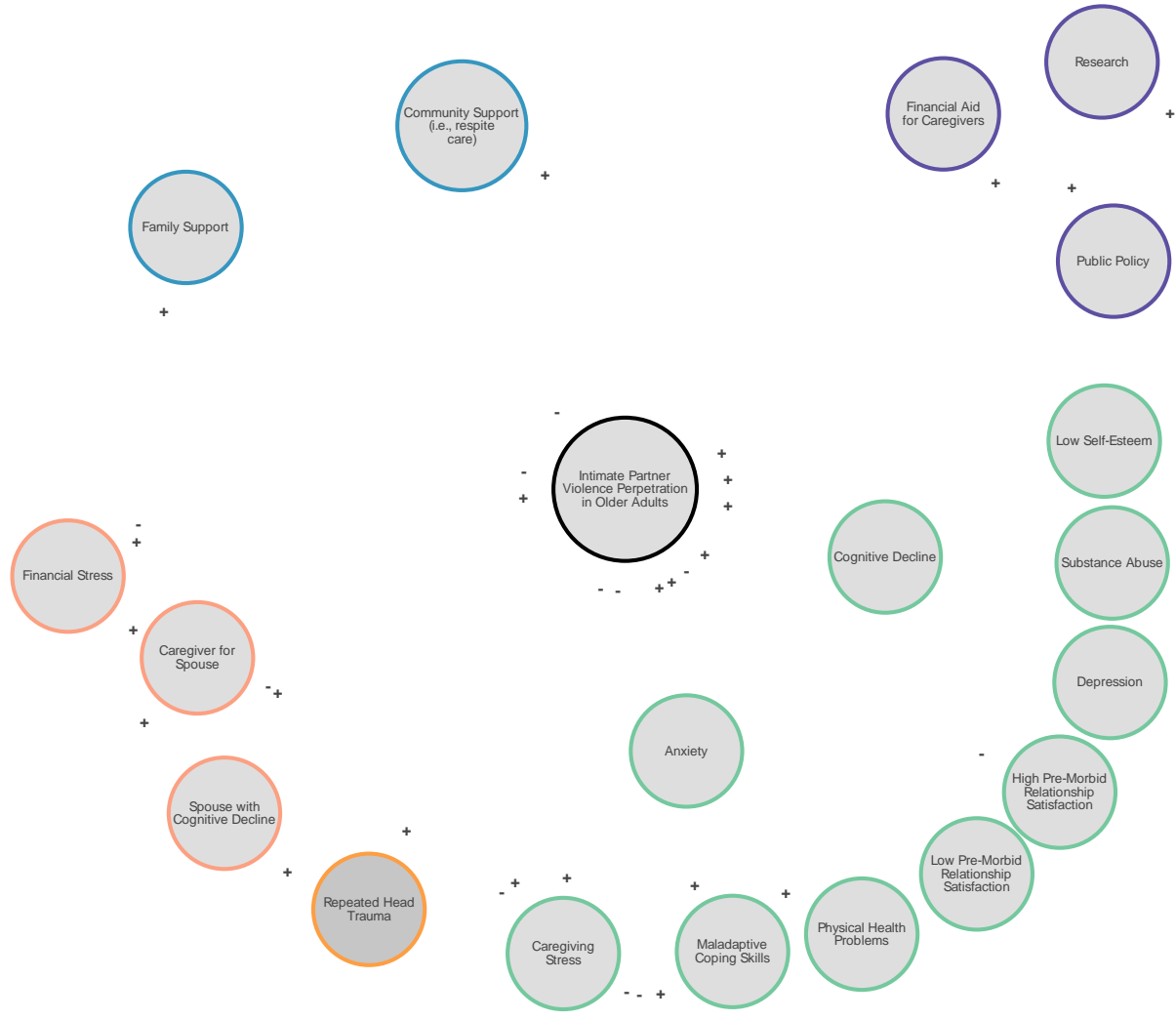


Figure 3 Connection Circle (Created on Kumu, 2023)

5.3.1.1 Balancing Loop 1

The first balancing loop consists of the variables: IPV Perpetration in Older Adults, High Premorbid Relationship Satisfaction, and Caregiver Stress. This loop can be described as follows: “As IPV perpetration increases, high premorbid relationship satisfaction decreases. As high premorbid relationship satisfaction decreases, caregiving stress increases. As caregiving stress increases, IPV perpetration increases.” The literature confirms this causal loop. As described, high premorbid relationship quality is seen as protective against intimate partner violence, and specifically, potentially harmful caregiver behaviors, by way of decreased stress and depression (Williamson & Shaffer, 2001).

5.3.1.2 Balancing Loop 2

The second balancing loop consists of the variables: IPV Perpetration in Older Adults, High Premorbid Relationship Satisfaction, Caregiver Stress, and Maladaptive Coping Skills. This loop can be described as follows: “As IPV perpetration decreases, high premorbid relationship satisfaction increases. As high premorbid relationship satisfaction increases, caregiver stress decreases. As caregiver stress decreases, maladaptive coping skills decrease. As maladaptive coping skills decrease, IPV perpetration decreases.” The literature also confirms this causal loop. Occasionally, IPV is described as a maladaptive coping skill for dealing with caregiver and other relationship stressors (Corvo, 2014). Therefore, if caregiver stress is decreased, maladaptive coping skills will be engaged in less frequently and IPV perpetration will decrease as a result.

5.3.1.3 Reinforcing Loop 1

The first reinforcing loop consists of the variables: IPV Perpetration in Older Adults, Repeated Head Trauma, Having a Spouse with Cognitive Decline, and Being a Caregiver for a

Spouse, and Caregiver Stress. This loop can be described as follows: “As IPV perpetration increases, having a spouse with cognitive decline increases. As having a spouse with cognitive decline increases, repeated head trauma increases. As repeated head trauma increases, being a caregiver for a spouse increases. As being a caregiver for a spouse increases, caregiver stress increases. As caregiver stress increases, IPV perpetration increases.” Based on the literature, IPV perpetration can increase the chances of having a partner with cognitive decline due to the connection between repeated head trauma from a batterer and Alzheimer’s Disease (Leung et al., 2006; Omalu et al., 2005; Roberts et al., 1990). Additionally, having a spouse with cognitive decline increases the chances of being a caregiver to that spouse because the majority of informal caregivers are family (CDC, 2022). Lastly, experiencing caregiver stress is a predictor of engaging in caregiver violence (Roberto et al., 2014; Williamson & Shaffer, 2001).

5.3.1.4 Reinforcing Loop 2

The second reinforcing loop consists of the variables: IPV Perpetration in Older Adults, Repetitive Head Trauma, Having a Spouse with Cognitive Decline, Being a Caregiver for a Spouse, and Financial Stress. This loop can be described as follows: “As IPV perpetration increases, repeated head trauma increases. As repeated head trauma increases, having a spouse with cognitive decline increases. As having a spouse with cognitive decline increases, being a caregiver for a spouse increases. As being a caregiver for a spouse increases, financial stress increases. As financial stress increases, IPV perpetration increases.” The relationships between IPV perpetration, having a spouse with cognitive decline, and being a caregiver for a spouse are already explained in Reinforcing Loop 1. Financial stress increases as being a caregiver increases due to the fact that caregivers are serving in unpaid roles with responsibilities totaling nearly \$470

billion per year (CDC, 2021). Financial stress, as a form of caregiver stress increases the likelihood of engaging in IPV or other harmful caregiver behaviors (Roberto et al., 2014).

5.3.2 Theory of Communal Relationships

Mentioned briefly before, the theory of communal relationships is based on the notion that caregivers in highly mutually communal relationships are less likely to experience caregiver stress and even when they do encounter it, they are less likely to attribute it to their spouse's illness condition (Williamson & Shaffer, 2000). Highly communal relationships are characterized by partners mutual concern and attentiveness to one another's needs whereas less communal relationships are characterized by few feelings of responsibility and lack of consideration to each other's needs and welfare (Williamson & Shaffer, 2001). The theory of communal relationships provides an excellent framework for understanding the interactions of premorbid relationship satisfaction, communality, caregiver stress, and intimate partner violence perpetration.

When it comes to providing care, in historically communal relationships, the idea of providing care to a spouse is viewed as a continuation of recognizing and meeting their spouse's needs knowing that their partner would do the same for them if the roles were reversed (Williamson & Shaffer, 2001) and they do not feel exploited when their partner cannot reciprocate aid (Clark & Waddell, 1985). Additionally, these individuals, upon assuming the caregiving role, may experience accompanying emotions of sadness, they are less likely to experience caregiving stress as they are more concerned with providing the necessary care to their spouse (Williamson & Shaffer, 1998).

In historically noncommunal relationships, the idea of providing care to a spouse is viewed as an obligation or duty rather than the continuation of caring for and meeting the needs of their

spouse (Williamson & Shaffer, 2000). Additionally, caregivers in these relationships are more likely to experience depressed affect and greater caregiver stress (Williamson & Shaffer, 2001).

The theory of communal relationships should be used to guide further research efforts. Several separate studies have shown a relationship between pre-illness or premorbid relationship satisfaction (Williamson & Shaffer, 2001) and risk factors for intimate partner violence like caregiver stress (Roberto et al., 2014), depressed affect (Paveza et al., 1992), anxiety (Compton et al., 1997), substance use (Homer & Gillard, 1990), and others. Fruitful information may be obtained if these factors are looked at specifically in relation to the theory of communal relationships in order to develop a better understanding of intimate partner violence among older adult couples with cognitive decline using an applicable theory.

5.4 Analysis of Current Literature

Based on this research, it is clear that the currently available research on intimate partner violence among older adult couples with cognitive decline is severely lacking and leaves out countless subpopulations that deserve to be studied. Presently, the intimate partner violence landscape is dominated by studies of younger couples, cisgender heterosexual couples, and white couples. While these populations are important to study, it is unethical for there to be such a vast disparity for all other populations. Additionally, when research is done on violence in older adults, it is frequently based in healthcare or residential senior community settings rather than on community-dwelling older adults and focuses on violence perpetrated by non-intimate, non-spousal caregivers. It is important to look into all subpopulations of the older adult population when studying intimate partner violence and cognitive decline in conjunction with one another.

5.5 Does the Presence of Cognitive Decline Mean We Should Think about Intimate Partner Violence Differently?

In short, certainly. The presence of cognitive decline, while it does not excuse violence amongst older adult partners, it unquestionably complicates it. There are various emotions associated with caring for someone with cognitive decline and caregivers need greater access to resources when they learn about their partner's decline. If people want to age-in-place, they should be able to do so. If people cannot afford to place their spouse in an assisted living facility or do not want to be separated in that way, they should, and do, have that choice. Intimate partner violence and cognitive decline are complicated enough as individual concepts, but when the two are combined, that complication compounds exponentially. Is it important to approach this issue with humility, sensitivity, and respect; and it is important to not vilify perpetrators of such violence in this population. The reasons for violence are incredibly varied and often come from a place of frustration, stress, and helplessness, not always malice or the intent to harm.

6.0 Conclusion

6.1 Summary of Major Findings

Several conclusions can be drawn about intimate partner violence in older adult couples with cognitive decline including, most importantly, that it deserves to be studied more. An important distinction that needs to be made about intimate partner violence is that it can happen in all couples regardless of age, race, sexual orientation, or other demographics. Since intimate partner violence can occur in all types of intimate partnerships (Roberto et al., 2014), it is important to study each of them separately without forgetting the similarities. Consistent among various age demographics and intimate partner violence is that most frequently victims of such violence are female, and perpetrators are male, that is the case for heterosexual couples at least (Rosen et al., 2019).

Intimate partner violence in older adults can have started in older adulthood, or it can begin when the couple is younger and persist into old age (Rosen et al., 2019). In couples where violence begins in older adulthood, cognitive decline in one partner and the other taking on caregiving responsibilities may be the precursor to violence (Rosen et al., 2019). In line with these findings is the fact that one of the strongest predictors of late life intimate partner violence is being a victim or perpetrator of domestic, or intimate partner, violence earlier in life (Coyne et al., 1993). Another very strong predictor of both intimate partner violence and potentially harmful caregiver behaviors in caregivers is their perception and feelings of premorbid relationship quality and therefore premorbid relationship satisfaction (Williamson & Shaffer, 2001).

To summarize what is found in the literature on intimate partner violence in older adult couples with cognitive decline cannot be done without acknowledging all that is missing from the literature. First, a large portion of the currently available studies leave out demographic information. I presume this to mean that if there is not demographic information included that suggests a stark lack of diversity among study samples. This is a very important observation that needs to be remedied through continued research into diverse populations and their experiences with intimate partner violence in all ages, but particularly in older adulthood. Second, most of the available studies leave out gender and sexual minority couples. Again, this is an important gap that needs to be filled in the literature. Leaving out minority couples invalidates individuals' experiences of violence in their relationships.

While there is a large gap in the presently available literature on older adults' experiences of intimate partner violence in their relationships, particularly those who also experience cognitive decline, it is important to acknowledge that there is at least some literature on this issue.

6.2 Limitations

There are several limitations to studying a topic such as this one. First, there is very limited literature available to study and this thesis research was conducted using only two database searches. While this study has one very obvious limitation, there are even more limitations to studying this phenomenon in older adults generally.

When it comes to studying intimate partner violence in older adults with cognitive decline, there are several ethical issues to consider. First, is it ethical to conduct real-time research with older adults experiencing violence and not intervene? How would one intervene? Secondly, when

researching this issue in this population, how do we ensure research is inclusive of all couples regardless of sexuality, race, ethnicity, or location? How do we connect to these individuals? These are important limitations to consider when planning future studies, studies that are out of the realm of feasibility for this thesis.

6.3 Application & Recommendations for Future Steps

While society knows that intimate partner violence occurs, they may not know that it happens even in older adults. The absence of any prevalence data on this topic only increases the misconceptions and unfamiliarity, and it prolongs the problem as a whole. Awareness of intimate partner violence in older adult couples with cognitive decline is important in remedying the problem. In addition to awareness, it is vitally important to look into and understand the risk factors. In order to make these things happen, funds need to be designated to researching interventions and implementing them to decrease caregiver stress, decrease intimate partner violence, improve older adults' quality of life, and influence public policy.

As research on this topic hopefully continues and increases over the coming years, researchers need to focus on the missed and marginalized populations in order to increase social justice. Intimate partner violence in older adult couples with cognitive decline is an emerging public health and an emerging social work issue. I recommend creating a National Institute for Intimate Partner Violence, something Corvo pointed out is absent from the intimate partner violence landscape (2014).

Appendix A Medline Search Strategy

Provider/Interface	Ovid
Database	Medline®
Date searched	February 8, 2023
Database update	1946 to February 07, 2023
Search developer(s)	Helena M. VonVille; Sara Brubaker
Limit to English	Yes
Date Range	No limit by date
Publication Types	No limit by publication type
Search filter source	Limit to US studies: https://www.yopl.info/post/ovid-medline-research-methodology-search-filters-and-a-couple-of-nifty-limits

1	battered women/ or domestic violence/ or elder abuse/ or intimate partner violence/ or spouse abuse/
2	((abuse* or abusive or batter* or coercion or mistreatment or violence or violent) adj3 (caregiver* or elder or emotional or psychological or intimate or men or partner or spousal or spouse or women)) or ipv).ti,ab,kf.
3	1 or 2
4	cognitive dysfunction/ or dementia/ or dementia, vascular/ or dementia, multi-infarct/ or alzheimer disease/ or frontotemporal lobar degeneration/ or frontotemporal dementia/ or lewy body disease/
5	(alzheimer* or (cognitive adj1 (decline or dysfunction)) or dementia or (frontotemporal adj2 degeneration) or (lewy adj1 body)).ti,ab,kf.
6	4 or 5
7	3 and 6
8	(7 and english.la.) not ((exp africa/ or exp asia/ or exp australia/ or exp canada/ or exp central america/ or exp europe/ or exp south america/) not (north america/ or exp united states/))

Appendix B PsycInfo® Search Strategy

Provider/Interface	Ovid
Database	APA PsycInfo
Date searched	February 8, 2023
Database update	1806 to January Week 5 2023
Search developer(s)	Helena M. VonVille
Limit to English	Yes
Date Range	No limit by date
Publication Types	Limit to journal articles
Search filter source	No search filter used

1	intimate partner violence/ or battered females/ or domestic violence/
2	((abuse* or abusive or batter* or coercion or mistreatment or violence or violent) adj3 (caregiver* or elder or emotional or psychological or intimate or men or partner or spousal or spouse or women)) or ipv).ti,ab,id.
3	1 or 2
4	cognitive impairment/
5	dementia/ or dementia with lewy bodies/ or vascular dementia/ or alzheimer's disease/
6	dementia/ or presenile dementia/ or senile dementia/
7	(alzheimer* or (cognitive adj1 (decline or dysfunction)) or dementia or (frontotemporal adj2 degeneration) or (lewy adj1 body)).ti,ab,id.
8	4 or 5 or 6 or 7
9	3 and 8
10	9 not ((albanian or arabic or bulgarian or catalan or chinese or croatian or czech or danish or dutch or estonian or farsi iranian or finnish or french or georgian or german or greek or hebrew or hindi or hungarian or italian or japanese or korean or lithuanian or malaysian or nonenglish or norwegian or polish or portuguese or romanian or russian or serbian or serbo croatian or slovak or slovene or spanish or swedish or turkish or ukrainian or urdu) not English).lg.
11	limit 10 to all journals
12	11 not ("342341" or "638508" or "1174773" or "1427252" or "1624711" or "1740598" or "1970008" or "2036533" or "2746181" or "3085567" or "3236346" or "3794207" or "4032675" or "6721715" or "7659656" or "7979740" or "8288821" or "8290413" or "8325529" or "8345159" or "8465884" or "8491853" or "8815051" or "8864715" or "9059428" or "9068621" or "9195281" or "9277609" or "9354870" or "9775703" or "9812132" or "10171008" or "10172302" or "10217925" or "10320427" or "10389045" or "10429644" or "10682951" or "10847248" or "10961038" or "11183107" or "11252157" or "11405310" or "11508597" or "11657640" or "11882745" or "11912679" or "11915253" or "12013707" or "12078411" or "12086242" or

"12092518" or "12114163" or "12154621" or "12590194" or "12613130" or
"12634898" or "14992971" or "15489826" or "15508550" or "15708731" or
"15804553" or "15804554" or "15954053" or "16137284" or "16326664" or
"16483889" or "16492453" or "16611612" or "16611617" or "16640013" or
"16649846" or "16770080" or "16783768" or "16803784" or "16866700" or
"16962453" or "16979089" or "17050490" or "17073057" or "17215737" or
"17290815" or "17304473" or "17352991" or "17391572" or "17407169" or
"17548782" or "17596347" or "17621366" or "17874950" or "18160115" or
"18312020" or "18637979" or "18804711" or "18847074" or "18953303" or
"18986077" or "19040788" or "19154540" or "19215808" or "19334043" or
"19469607" or "19494378" or "19573847" or "19632805" or "20078025" or
"20128538" or "20217926" or "20398118" or "20448233" or "20513860" or
"20571001" or "20619500" or "20799132" or "20840462" or "20925749" or
"21095558" or "21253927" or "21280264" or "21292057" or "21374846" or
"21418632" or "21456376" or "21511686" or "21539716" or "21906229" or
"22021861" or "22151034" or "22316980" or "22350677" or "22368445" or
"22459908" or "22737972" or "22936261" or "23158895" or "23341444" or
"23577255" or "23627429" or "23713559" or "23869816" or "23878144" or
"24162942" or "24711326" or "24743646" or "24821287" or "24853408" or
"24991140" or "25133870" or "25439635" or "25439644" or "25439645" or
"25439646" or "25490777" or "25894206" or "26026215" or "26027586" or
"26241574" or "26289685" or "26315075" or "26757183" or "27005449" or
"27023293" or "27034325" or "27097891" or "27119529" or "27159438" or
"27196391" or "27236588" or "27247138" or "27274389" or "27295575" or
"27418043" or "27550723" or "27564566" or "27644698" or "27682320" or
"27726731" or "27729818" or "27737827" or "27956063" or "28164825" or
"28270466" or "28452626" or "28452630" or "28485492" or "28678674" or
"28759804" or "29021011" or "29190530" or "29214905" or "29332552" or
"29333998" or "29369918" or "29531518" or "29561867" or "29630246" or
"29643802" or "29701938" or "29763099" or "29851550" or "29883276" or
"29969849" or "30017002" or "30086611" or "30102135" or "30409549" or
"30533948" or "30536383" or "30552916" or "30590990" or "30681781" or
"30810492" or "30912994" or "31030565" or "31097954" or "31159679" or
"31173457" or "31284567" or "31319739" or "31425586" or "31481827" or
"31589527" or "31600946" or "31616154" or "31631814" or "31695349" or
"31760911" or "31844495" or "31917460" or "32356452" or "32488667" or
"32496949" or "32733361" or "32787944" or "32820836" or "32875272" or
"33010789" or "33061330" or "33143471" or "33161764" or "33253973" or
"33572503" or "33593988" or "33727003" or "33803344" or "34096472" or
"34213643" or "34467789" or "34569947" or "34713183" or "34734777" or
"34777250" or "34819320" or "34849854" or "34937036" or "34958677" or
"34985409" or "35062119" or "35118724" or "35323913" or "35443830" or
"35484493" or "35484831" or "35578604" or "35819835" or "36135981" or
"36347263" or "36427169" or "36476103" or "36564912" or "36660894").pm.

Appendix C Bibliographies Searched

1. Band-Winterstein, T., & Avieli, H. (2019). Women Coping With a Partner's Dementia-Related Violence: A Qualitative Study. *Journal of Nursing Scholarship*, 51(4), 368-379.
2. Christie, J., Smith, G. R., Williamson, G. M., Lance, C. E., Shovali, T. E., & Silva, L. C. (2009). Quality of informal care is multidimensional. *Rehabilitation Psychology*, 54(2), 173-181.
3. Hancock, D. W., Czaja, S., & Schulz, R. (2022). The Role of Preparedness for Caregiving on the Relationship Between Caregiver Distress and Potentially Harmful Behaviors. *American Journal of Alzheimer's Disease & Other Dementias*, 37, 15333175221141552.
4. Hansen, B. R., Hodgson, N. A., Budhathoki, C., & Gitlin, L. N. (2020). Caregiver reactions to aggressive behaviors in persons with dementia in a diverse, community-dwelling sample. *Journal of Applied Gerontology*, 39(1), 50-61.
5. Leung, F. H., Thompson, K., & Weaver, D. F. (2006). Evaluating spousal abuse as a potential risk factor for Alzheimer's disease: rationale, needs and challenges. *Neuroepidemiology*, 27(1), 13-16.
6. Montminy, L. (2005). Older Women's Experiences of Psychological Violence in Their Marital Relationships. *Journal of Gerontological Social Work*, 46(2), 3-22.
7. Roberto, K. A., McCann, B. R., & Brossoie, N. (2013). Intimate partner violence in late life: an analysis of national news reports. *Journal of Elder Abuse & Neglect*, 25(3), 230-241.
8. Steadman, P. L., Tremont, G., & Davis, J. D. (2007). Premorbid relationship satisfaction and caregiver burden in dementia caregivers. *Journal of Geriatric Psychiatry & Neurology*, 20(2), 115-119.

Bibliography

- Band-Winterstein, T., & Avieli, H. (2019). Women Coping With a Partner's Dementia-Related Violence: A Qualitative Study. *Journal of Nursing Scholarship*, 51(4), 368-379. <https://doi.org/10.1111/jnu.12485>.
- Band-Winterstein, T., & Eisikovits, Z. (2009). "Aging Out" of Violence: The Multiple Faces of Intimate Violence Over the Life Span. *Qualitative health research*, 19(2), 164-180. <https://doi.org/10.1177/1049732308329305>.
- Beach, S. R., Schulz, R., Williamson, G. M., Miller, L. S., Weiner, M. F., & Lance, C. E. (2005). Risk factors for potentially harmful informal caregiver behavior [Research Support, Non-U.S. Gov't Research Support, U.S. Gov't, P.H.S.]. *Journal of the American Geriatrics Society*, 53(2), 255-261. <https://doi.org/10.1111/j.1532-5415.2005.53111.x>.
- Bonnie, R. J., & Wallace, R. B. (2003). Elder mistreatment abuse, neglect, and exploitation in an aging America. National Academies Press. <https://doi.org/10.17226/10406>.
- Calasanti, T., & King, N. (2007). Taking 'women's work' 'like a man': husbands' experiences of care work. *Gerontologist*, 47(4), 516-527. <https://doi.org/10.1093/geront/47.4.516>.
- Centers for Disease Control and Prevention (CDC). (2020, October 26, 2020). Alzheimer's Disease and Related Dementias. U.S. Department of Health & Human Services. Retrieved 2/22 from <https://www.cdc.gov/aging/aginginfo/alzheimers.htm>.
- Centers for Disease Control and Prevention (CDC). (2021, November 22, 2021). Supporting Caregivers. U.S. Department of Health & Human Services. Retrieved 2/22 from <https://www.cdc.gov/aging/publications/features/supporting-caregivers.htm>.
- Centers for Disease Control and Prevention (CDC). (2022, June 28, 2022). For Caregivers, Family and Friends. U.S. Department of Health & Human Services. Retrieved 2/22 from <https://www.cdc.gov/aging/caregiving/>.
- Centers for Diseases Control and Prevention (CDC). (2019, 10/30/2019). Caregiving for a Person with Alzheimer's Disease or a Related Dementia. Retrieved March 27 from <https://www.cdc.gov/aging/caregiving/alzheimer.htm>.
- Christie, J., Smith, G. R., Williamson, G. M., Lance, C. E., Shovali, T. E., & Silva, L. C. (2009). Quality of informal care is multidimensional [Comparative Study Multicenter Study Research Support, N.I.H., Extramural]. *Rehabilitation Psychology*, 54(2), 173-181. <https://doi.org/10.1037/a0015705>.

- Clark, M. S., & Waddell, B. (1985). Perceptions of Exploitation in Communal and Exchange Relationships. *Journal of social and personal relationships*, 2(4), 403-418. <https://doi.org/10.1177/0265407585024002>.
- Compton, S., Flanagan, P., & Gregg, W. (1997). Elder abuse in people with dementia in Northern Ireland: Prevalence and predictors in cases referred to a psychiatry of old age service. *International Journal of Geriatric Psychiatry*, 12(6), 632-635.
- Cooney, C., Howard, R., & Lawlor, B. (2006). Abuse of vulnerable people with dementia by their carers: can we identify those most at risk? *International Journal of Geriatric Psychiatry*, 21(6), 564-571. <https://doi.org/10.1002/gps.1525>.
- Cooney, C., & Mortimer, A. (1995). Elder abuse and dementia--a pilot study [Comparative Study Research Support, Non-U.S. Gov't]. *International Journal of Social Psychiatry*, 41(4), 276-283. <https://doi.org/10.1177/002076409504100405>.
- Corvo, K. (2014). The role of executive function deficits in domestic violence perpetration. *Partner Abuse*, 5(3), 342-355. <https://doi.org/10.1891/1946-6560.5.3.342>.
- Coyne, A. C., Reichman, W. E., & Berbig, L. J. (1993). The relationship between dementia and elder abuse [Research Support, Non-U.S. Gov't]. *American Journal of Psychiatry*, 150(4), 643-646. <https://doi.org/10.1176/ajp.150.4.643>.
- Day, J. C. C., Cheridan. (2019, 8/14/2019). Women hold 76% of all health care jobs, gaining in higher-paying occupations. United States Census Bureau. U.S. Census Bureau. Retrieved March 27 from <https://www.census.gov/library/stories/2019/08/your-health-care-in-womens-hands.html>.
- Dettmore, D., Kolanowski, A., & Boustani, M. (2009). Aggression in persons with dementia: use of nursing theory to guide clinical practice [Research Support, N.I.H., Extramural Research Support, Non-U.S. Gov't]. *Geriatric Nursing*, 30(1), 8-17. <https://doi.org/10.1016/j.gerinurde.2008.03.001>.
- Dobash, R. E., & Dobash, R. (1979). *Violence against wives: a case against the patriarchy*. Free Press.
- Dong, X., Simon, M., Beck, T., & Evans, D. (2014). Decline in cognitive function and elder mistreatment: findings from the Chicago Health and Aging Project [Research Support, N.I.H., Extramural Research Support, Non-U.S. Gov't]. *American Journal of Geriatric Psychiatry*, 22(6), 598-605. <https://doi.org/10.1016/j.jagp.2012.11.004>.
- Hall, K. A., & O'Connor, D. W. (2004). Correlates of aggressive behavior in dementia. *Int Psychogeriatr*, 16(2), 141-158.
- Hancock, D. W., Czaja, S., & Schulz, R. (2022). The Role of Preparedness for Caregiving on the Relationship Between Caregiver Distress and Potentially Harmful Behaviors [Research

- Support, N.I.H., Extramural]. *American Journal of Alzheimer's Disease & Other Dementias*, 37, <https://doi.org/10.1177/15333175221141552>.
- Hansen, B. R., Hodgson, N. A., Budhathoki, C., & Gitlin, L. N. (2020). Caregiver reactions to aggressive behaviors in persons with dementia in a diverse, community-dwelling sample. *Journal of Applied Gerontology*, 39(1), 50-61. <https://doi.org/10.1177/0733464818756999>.
- Hebert, L. E., Beckett, L. A., Scherr, P. A., & Evans, D. A. (2001). Annual incidence of Alzheimer disease in the United States projected to the years 2000 through 2050. *Alzheimer Dis Assoc Disord*, 15(4), 169-173. <https://doi.org/10.1097/00002093-200110000-00002>.
- Homer, A. C., & Gilleard, C. (1990). Abuse of elderly people by their carers. *Bmj*, 301(6765), 1359-1362. <https://doi.org/10.1136/bmj.301.6765.1359>.
- Kim, D. H. (1999). *Introduction to Systems Thinking*. Pegasus Communications, Inc.
- Kolanowski, A. M. (1995). Disturbing behaviors in demented elders: a concept synthesis. *Arch Psychiatr Nurs*, 9(4), 188-194. [https://doi.org/10.1016/s0883-9417\(95\)80023-9](https://doi.org/10.1016/s0883-9417(95)80023-9).
- Kumu. (2023). [Relationship mapping software]. <https://kumu.io>.
- Leung, F. H., Thompson, K., & Weaver, D. F. (2006). Evaluating spousal abuse as a potential risk factor for Alzheimer's disease: rationale, needs and challenges. *Neuroepidemiology*, 27(1), 13-16. <https://doi.org/10.1159/000093894>.
- Miedzian, M. (1991). *Boys will be boys: breaking the link between masculinity and violence* (1st Anchor Books ed. ed.). Anchor Books.
- Montminy, L. (2005). Older Women's Experiences of Psychological Violence in Their Marital Relationships. *Journal of Gerontological Social Work*, 46(2), 3-22. https://doi.org/10.1300/J083v46n02_02.
- O'Leary, D., Jyringi, D., & Sedler, M. (2005). Childhood conduct problems, stages of Alzheimer's disease, and physical aggression against caregivers. *Int J Geriatr Psychiatry*, 20(5), 401-405. <https://doi.org/10.1002/gps.1293>.
- Omalu, B. I., DeKosky, S. T., Minster, R. L., Kamboh, M. I., Hamilton, R. L., & Wecht, C. H. (2005). Chronic traumatic encephalopathy in a National Football League player. *Neurosurgery*, 57(1), 128-134; discussion 128-134. <https://doi.org/10.1227/01.neu.0000163407.92769.ed>.
- Patel, V., & Hope, R. A. (1992). A rating scale for aggressive behaviour in the elderly – the RAGE. *Psychological medicine*, 22(1), 211-221. <https://doi.org/10.1017/S0033291700032876>.

- Paveza, G. J., Cohen, D., Eisdorfer, C., Freels, S., Semla, T., Ashford, J. W., . . . Levy, P. (1992). Severe family violence and Alzheimer's disease: prevalence and risk factors [Research Support, U.S. Gov't, P.H.S.]. *Gerontologist*, 32(4), 493-497. <https://doi.org/10.1093/geront/32.4.493>.
- Perciaccante, V. J., Ochs, H. A., & Dodson, T. B. (1999). Head, neck, and facial injuries as markers of domestic violence in women. *J Oral Maxillofac Surg*, 57(7), 760-762; discussion 762-763. [https://doi.org/10.1016/s0278-2391\(99\)90808-x](https://doi.org/10.1016/s0278-2391(99)90808-x).
- Pillemer, K., & Suitor, J. J. (1992). Violence and violent feelings: what causes them among family caregivers? [Research Support, U.S. Gov't, P.H.S.]. *Journal of Gerontology*, 47(4), S165-172. <https://doi.org/10.1093/geronj/47.4.s165>.
- Pinquart, M., & Sörensen, S. (2006). Gender Differences in Caregiver Stressors, Social Resources, and Health: An Updated Meta-Analysis. *The journals of gerontology. Series B, Psychological sciences and social sciences*, 61(1), P33-P45. <https://doi.org/10.1093/geronb/61.1.P33>. (Journals of Gerontology: Series B)
- Pittaway, E. D., Westhues, A., & Peressini, T. (1995). Risk factors for abuse and neglect among older adults. *Canadian Journal on Aging*, 14(2, Suppl 2), 20-44. <https://doi.org/10.1111/jgs.13601>.
- Qiu, C., & Fratiglioni, L. (2018). Aging without Dementia is Achievable: Current Evidence from Epidemiological Research. *J Alzheimers Dis*, 62(3), 933-942. <https://doi.org/10.3233/jad-171037>.
- Roberto, K. A., McCann, B. R., & Brossoie, N. (2014). Intimate partner violence in late life: an analysis of national news reports [Research Support, N.I.H., Extramural]. *Journal of Elder Abuse & Neglect*, 25(3), 230-241. <https://doi.org/10.1080/08946566.2012.751825>.
- Roberts, G. W. (1988). Immunocytochemistry of neurofibrillary tangles in dementia pugilistica and Alzheimer's disease: evidence for common genesis. *Lancet*, 2(8626-8627), 1456-1458. [https://doi.org/10.1016/s0140-6736\(88\)90934-8](https://doi.org/10.1016/s0140-6736(88)90934-8).
- Roberts, G. W., Allsop, D., & Bruton, C. (1990). The occult aftermath of boxing. *J Neurol Neurosurg Psychiatry*, 53(5), 373-378. <https://doi.org/10.1136/jnnp.53.5.373>.
- Rosen, T., Makaroun, L. K., Conwell, Y., & Betz, M. (2019). Violence In Older Adults: Scope, Impact, Challenges, And Strategies For Prevention [Research Support, N.I.H., Extramural Research Support, U.S. Gov't, Non-P.H.S.]. *Health Affairs*, 38(10), 1630-1637. <https://doi.org/10.1377/hlthaff.2019.00577>.
- Russell, R. (2001). In sickness and in health: A qualitative study of elderly men who care for wives with dementia. *Journal of aging studies*, 15(4), 351-367. [https://doi.org/10.1016/S0890-4065\(01\)00028-7](https://doi.org/10.1016/S0890-4065(01)00028-7).

- Schulz, R., & Martire, L. (2001). Informal caregiving to older adults: Health effects of providing and receiving care. In A. Baum, T. A. Revenson, & J. E. Singer (Eds.), *Handbook of health psychology* (pp. 477-494). Lawrence Erlbaum Associates.
- Schulz, R., O'Brien, A. T., Bookwala, J., & Fleissner, K. (1995). Psychiatric and physical morbidity effects of dementia caregiving: prevalence, correlates, and causes. *Gerontologist*, 35(6), 771-791. <https://doi.org/10.1093/geront/35.6.771>.
- Steinmetz, S. K. (1988). *Duty bound: elder abuse and family care*. Sage Publications.
- Tronetti, P. (2014). Evaluating abuse in the patient with dementia [Review]. *Clinics in Geriatric Medicine*, 30(4), 825-838. <https://doi.org/10.1016/j.cger.2014.08.010>.
- Vinton, L. (1991). Abused Older Women: Battered Women or Abused Elders? *Journal of women & aging*, 3(3), 5-19. https://doi.org/10.1300/J074v03n03_03.
- VonVille, H. M. (2023, February 8). *The Excel workbook for targeted or critical literature reviews*. Project-Name-Excel-workbook-for-targeted-reviews.xlsx. Retrieved February 15, 2023, from https://pitt-my.sharepoint.com/:x/g/personal/hev8_pitt_edu/EUVwXLujSlxGpf0NH7cONe0Bl_r36TZRtwfot3ppViOc_A?e=d7CrGL.
- Walker, L. E. (1979). *The battered woman* (1st ed. ed.). Harper & Row.
- Wiglesworth, A., Mosqueda, L., Mulnard, R., Liao, S., Gibbs, L., & Fitzgerald, W. (2010). Screening for abuse and neglect of people with dementia [Research Support, N.I.H., Extramural Research Support, Non-U.S. Gov't]. *Journal of the American Geriatrics Society*, 58(3), 493-500. <https://doi.org/10.1111/j.1532-5415.2010.02737.x>.
- Williamson, G. M., & Shaffer, D. R. (1998). Implications of communal relationships theory for understanding loss among family caregivers. In J. H. Harvey (Ed.), *Perspectives on loss: a sourcebook*. Brunner/Mazel.
- Williamson, G. M., & Shaffer, D. R. (2000). Caregiver loss and quality of care provided: Pre-illness relationship makes a difference. In J. H. Harvey & E. D. Miller (Eds.), *Loss and trauma: general and close relationship perspectives*. Brunner-Routledge.
- Williamson, G. M., & Shaffer, D. R. (2001). Relationship quality and potentially harmful behaviors by spousal caregivers: how we were then, how we are now. *The Family Relationships in Late Life Project [Research Support, Non-U.S. Gov't Research Support, U.S. Gov't, P.H.S.]*. *Psychology & Aging*, 16(2), 217-226.
- World Health Organization (WHO). (1946). *Constitution of the World Health Organization*. WHO Interim Commission.