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Risk Factors for Elder Abuse and Neglect: A Review of the Literature

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Abstract

Elder abuse is a global problem gaining recognition due to its severe impact on victims and the ageing population. Increased recognition has led to the investigation of perpetrator and victim characteristics that increase the risk of elder abuse. The identification of such risk factors can assist practitioners in preventing abuse, determining the risk of continued elder abuse and, where factors are dynamic, can be targets for risk management. This literature review identifies and describes perpetrator and victim risk factors for elder abuse with the goal of informing professional practice and providing the basis for an empirically derived risk assessment instrument for elder abuse. Electronic searches identified 198 studies that met the eligibility criteria. The studies reviewed provide evidence supporting eight risk factors related to the perpetrator that increase their risk of continued elder abuse and eight victim vulnerability factors that place the victim at heightened risk of elder abuse. Hypotheses raised by researchers to account for the associations are outlined. The practical utility of the risk and vulnerability factors are described. The need for and approach to developing a structured method to assess and manage elder abuse risk based on the empirically supported risk and vulnerability factors is discussed.

Keywords: Risk factor; elder abuse perpetrator; elder abuse victim; elder mistreatment; elder neglect; abuse of older persons

Public Significance Statement

Empirically supported dynamic risk factors for elder abuse are identifiable for perpetrators and victims of abuse in the existing research literature. These risk factors can be utilised by professionals to inform their practice and target risk management efforts.

Introduction

Elder abuse, although not a new phenomenon, has only recently been the subject of rigorous scientific study and specialized health and criminal justice attention and intervention. The research literature on elder abuse spans many areas of practice, from medical to psychological to social work, as do expanding services and policies related to elder abuse prevention. Of great utility for practitioners (e.g., psychologists, social workers, health care workers, criminal justice professionals) within that research literature is the identification of factors that are associated with increased risk of elder abuse. Identifying risk factors can help to guide practitioners in identifying cases at risk of elder abuse and factors that if mitigated through case management could reduce risk (Douglas, Hart, Groscup, & Litwack, 2013; Hart, 2008).

A unified definition of elder abuse continues to elude the field. However, there is some consensus regarding the components that constitute elder abuse. They include: (1) a single or repeated act of commission or omission, (2) that occurs within a relationship of trust, and (3) causes harm or distress to an older person (Centers for Disease Control and Prevention, 2016). Instances of abuse toward older adults perpetrated by a stranger (e.g., theft, fraud) are therefore not considered elder abuse by this definition. The research literature examining elder abuse has generally differentiated between abuse committed toward older adults by strangers and elder abuse perpetrated by individuals known to the victim, where in the latter relationship it is reasonable to expect that the other person "can or should be relied upon to protect the interests of an older adult and/or provide for an older adult's care" (Centers for Disease Control and Prevention, 2016, p. 28). This distinction is significant since the nature of the abuse perpetrated, the risk factors for abuse, and the appropriate methods of case intervention differ for the two types of abusive behavior.

Elder abuse can take one of five general forms: physical abuse, psychological/emotional abuse, sexual abuse, financial abuse, and neglect (Centers for Disease Control and Prevention, 2016; Lachs & Pillemer, 2015). The World Health Organization provides definitions for each of these forms of abuse: physical abuse is the "the infliction of pain or injury, physical coercion, or physical or drug induced restraint"; psychological or emotional abuse is "the infliction of mental anguish"; financial abuse is "the illegal or improper exploitation or use of funds or resources of the older person"; sexual abuse is the "non-consensual sexual contact of any kind with the older person"; and neglect is "the refusal or failure to fulfil a caregiving obligation", that "may or may not involve a conscious and intentional attempt to inflict physical or emotional distress on the older person" (Wolf et al., 2002, p. 127). Within the present paper, the term *elder abuse* will be used to refer to all five of these. Persons known, suspected, or alleged to be responsible for the elder abuse will be referred to as *perpetrators*. Similarly, those individuals who experience elder abuse will be referred to as *victims*.

Elder abuse can result in psychological damage, financial devastation, and physical harm including death; indeed, elder abuse victims experience a mortality rate three times higher than that of non-victims (Dong, 2005; Lachs, Williams, O'Brian, Pillemer, & Charlson, 1998). A recent meta-analysis found a pooled prevalence rate of 15.7% (Yon, Mikton, Gassoumis, & Wilber, 2017) and a representative national sample from the United States found that 1.7% of older adults were victims of more than one type of abuse in the past year (Williams, Racette, Mernandez-Tejada, & Acierno, 2017). However, Lachs and Berman (2011) found that for every reported case another 23.5 cases go without referral or services, suggesting that they are unreported, with cases of neglect being the least serviced (1 for every 57.5 cases).

In 2003, it was estimated that elder abuse research lagged some 10 to 30 years behind comparable research on other forms of family violence, such as child abuse and intimate partner violence (Dyer, Connolly, & McFeeley, 2003). The research in this area has now finally reached a critical mass to provide sufficient empirical evidence to identify key variables or risk factors that are related to an increased risk of future elder abuse. Risk factors are important to identify because they help us to understand why elder abuse occurs (Anetzberger, 2013). Crucial to practitioners working with older adults, or on cases of elder abuse, is that once identified, risk factors can also become targets for change or risk management. Although risk factors may help predict whether elder abuse will occur in the future, their true value is that, if mitigated through risk management, they can help to prevent future abuse (Douglas et al., 2013; Hart, 2008).

Risk factors can be broadly categorized as either static or dynamic (see Andrews & Bonta, 2010). Static risk factors are fixed variables that generally do not change and include mostly historical factors such as history of violence and criminality. Dynamic risk factors, on the other hand, are risk factors that can be changed or modified through short or long-term interventions (Douglas & Skeem, 2005). Although both static and dynamic risk factors predict future violence, dynamic risk factors also play a critical role in violence risk management as they can serve as effective targets for intervention (Andrews, 2012; Douglas & Skeem, 2005; Hart, 2008). For example, substance abuse is a dynamic risk factor for violence that can be mitigated through risk management strategies such as substance abuse treatment, medication, and court imposed restrictions on behavior.

Utilizing empirically derived dynamic risk factors to assess and manage violence risk is customary and long considered best practice in fields related to elder abuse such as intimate partner violence (Douglas & Otto, 2010). Within the area of intimate partner violence,

comprehensive literature reviews of risk factors for abuse have led to the development of risk assessment instruments that can aid practitioners in their assessment and management of risk for future intimate partner violence (Nicholls, Pritchard, Reeves, & Hilterman, 2013). Some examples include the Spousal Assault Risk Assessment guidelines, Version 3 (SARA V3; Kropp & Hart, 2015) and the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER; Kropp, Hart, & Belfrage, 2010). These structured methods of violence risk assessment, when contrasted against practitioners using only their own judgement or intuition, have been shown to improve the accurate prediction of future violence (Helmus & Bourgon, 2011; Nicholls et al., 2013; Singh, Grann, & Fazel, 2011). Further, they have also been shown to decrease the likelihood of future violence (Belfrage et al., 2012; Guy, Packer, & Warnken, 2012)

At present, there is no published empirically-based structured method for assessing and managing elder abuse. The function of most currently available tools is screening for or detecting the presence of elder abuse not assessing risk of harm (e.g., the Elder Assessment Instrument, Fulmer, 2003; also see Spencer, 2009 for a review). This means that the current tools assume a lack of reporting (by victims or others) and assist the user in uncovering or identifying the presence of abuse. Thus, because these instruments are designed to detect abuse, once abuse has been identified, practitioners are left to use their professional/clinical judgement alone to determine the risk of continued elder abuse and appropriate risk management strategies to prevent abuse. Utilising clinical judgement alone, known within the field of risk assessment as unstructured professional judgement is considered to be a first-generation approach to risk assessment and has been widely discredited as being unreliable and invalid (Ægisdóttir et al., 2006; Monahan, 1981; see also Douglas et al., 2013; Heilbrun, Yasuhara, & Shah, 2010). Unstructured professional judgment has also been criticized for being potentially unethical due to

the lack of accountability and transparency in the decision-making process (Douglas et al., 2013; Heilbrun et al., 2010). Some advances in structured violence risk assessment have been made within Adult Protective Services in the United States. However, the available (Sommerfeld Henderson, Snider, & Aarons, 2014) and proposed (Park, Johnson, Flasch, & Bogie, 2010) instruments are standardized for use within Adult Protective Services meaning they are standardized for individuals age 18 or older and include self-neglect and are therefore not specific to elder abuse.

Most recently, Dauenhauer and colleagues (2017) developed an instrument, The Elder Abuse Risk Assessment and Evaluation tool (EARAE), to identify changes in risk and track interventions and outcomes from initial meeting with a service agency to case closure. The EARAE was developed using "previous EAPP tools, collective expertise in elder abuse and components of published/unpublished instruments and research" (EAPP is the Elder Abuse Prevention Program) (Dauenhauer et al., 2017, p. 8). The components of the empirical research literature relied upon are unclear; the authors identify seven empirical studies in the paper. This suggests that the instrument is not based on a systematic review of the empirical literature and may instead rely more heavily on materials developed by Adult Protective Services. Given the location of the study, in New York State, this may have heightened the tool's specificity, but this specificity may limit the generalizability of the tool to other areas. The initial study of the instrument showed promise in its ability to track case change. However, because the assessment pattern does not follow an established violence risk assessment methodology (Hart, 2001), (i.e., one that establishes a link between the identification of risk factors, the determination of overall risk, and the recommendation or implementation of risk management strategies) it appears (and

the authors often refer to it as) that the EARAE is a method of tracking case outcomes and not a violence risk assessment instrument with the goal of predicting or preventing future elder abuse.

Current Study

The purpose of this literature review is to identify and describe key perpetrator risk and victim vulnerability factors for elder abuse. The intended contribution of the work is to provide practitioners working with older adults or in the area of elder abuse with a practical understanding of risk factors related to elder abuse and to provide the basis for an empirically derived risk assessment instrument for elder abuse. Therefore, a review of the literature on dynamic risk factors for elder abuse was completed to identify: (1) factors related to the perpetrator that increased their risk of engaging in continued elder abuse; and (2) factors related to the victim that placed them at increased risk of continued abuse.

Method

Search Strategy. The research databases PsychINFO and Google Scholar were used to perform the literature search. The same search terms were used in each database. The number of results identified in PsychINFO are presented after each search term used; the search terms included elder abuse and risk factor (*n* = 486); elder neglect and risk factor (*n* = 243); elder mistreatment and risk factor (*n* = 106); elder abuse and risk (*n* = 683); elder neglect and risk (*n* = 352); elder mistreatment and risk (*n* = 141); abuse of older person and risk (*n* = 371); and abuse of older person and risk factor (*n* = 263). Study titles and then abstracts were examined for relevance to the research questions. Where identified as relevant, the entire study was reviewed. The final literature search was carried out on July 15th, 2019.

Eligibility Criteria. Studies that were not in English, existed only as abstracts, or were case reports or case series were excluded from the sample. In addition, studies that examined

instances of abuse toward an older person perpetrated by a stranger were excluded. No eligibility provisions were made regarding publication date. Both quantitative and qualitative studies were included in the review.

Coding. Each included study was first coded to indicate whether it was a meta-analysis, literature review or an empirical research study. Then, each of the risk factors supported by the study was identified. The specific risk factor labels given in the studies were maintained during the coding. After all studies had been reviewed, the risk factors identified were rationally grouped into broad overarching categories through discussion and consensus by the author and two other psychologists with expertise in the areas of interpersonal violence and risk assessment. For example, specific vulnerability factors identified for victims included cognitive decline and depression; these vulnerability factors were later grouped under the heading *Mental Health Problems*. These overarching risk and vulnerability factor categories were created to condense the material and assist with comprehension and utility. A total of 16 categories were identified, eight for perpetrators and eight for victims (see Table 1). Although risk and vulnerability factors were grouped, original labels were retained to help readers appreciate the full meaning of the broad category and the range of ways that the factors may appear or manifest in cases of elder abuse. Summary criteria for each risk and vulnerability factor are presented in Table 1.

Search Outcome. A total of 198 studies were identified for inclusion in the review based on relevance and the eligibility criteria. Of these, two (1%) were meta-analyses, 34 (17%) were literature reviews and 163 (82%) were empirical studies. All 198 studies were reviewed in their entirety.

Data Presentation. As described above, the numerous risk factors identified in the review were grouped into 16 categories, but original terms are maintained in the descriptions of the risk

factors in the results section. Owing to the large number of studies available in support of each risk and vulnerability factor category, the studies referenced in the results are not exhaustive. Where a high volume of studies existed, the studies cited in the results include meta-analyses, literature reviews, more recent empirical work, and seminal studies in the field. Meta-analyses and literature reviews were included in the study to provide the reader with a synthesis of the most supported risk factors for elder abuse so as to best informed decision making around risk and management of elder abuse. In the reference list, literature reviews used in support of risk factors are denoted with an asterisk, meta-analyses are identifiable by their titles and are described further below.

Results

Overview of Studies

The studies reviewed included a range of methodologies. Some studies included large robust samples numbering in the thousands or used national data, but most studies were smaller in nature. The majority of studies used surveys and interviews, some examined case reports, and a few included comparison groups such as non-abused senior controls or non-abuser controls. As such, much of the work identified correlates of elder abuse and could not be said to have identified causes of elder abuse. For example, victim substance abuse was associated with elder abuse victimization, but it was often unknown whether the substance abuse preceded the elder abuse or if it was a form of self-medication or escapism that arose as a consequence of the elder abuse. This reflects a generally difficulty in researching this area, as longitudinal studies that would identify causality are difficult to perform due to high mortality among elder abuse victims. As shown by Lachs and colleagues (1998), victims of elder abuse are 3 times more likely to die within the nine years following abuse than non-victims.

Recently, two meta-analyses were conducted, one published (Ho, Wong, & Chiu, 2017) and one unpublished dissertation (Johansson, 2018). Although important for the advancement of the field and included herein, some caution is required when considering their weight. Ho, Wong, Chiu and Ho (2017) focused on prevalence and thus examined a sample (*n*=51) that is less than a third of the present study. Further, only one dynamic risk factor was included. Johansson (2018) examined a number of dynamic risk factors but only across 25 studies, where 17 studies was the highest number of studies on any one risk factor. In addition, only perpetrators who were also caregivers were included, thus the results do not represent all elder abuse perpetrators.

The professions of authors and the professional groups they examined varied across studies, and included mental health professionals such as psychologists, medical professionals, and social work professionals, but criminal justice studies were rare. As reported by Lachs and Pillemer (2015) there did appear to be an increase in the quality of studies over time. In recent years, there has also been a marginal increase in studies from non-Western populations, although such studies are still in the minority.

Risk Factors Related to the Perpetrator

Problems with Physical Health. Many empirical studies conducted over several decades have identified physical health problems as a risk factor for elder abuse perpetration (Anme, McCall, & Tatara, 2006; Beach et al., 2005; Eisikovits, Winterstein, & Lowenstein, 2004; Lachs & Pillemer, 2015; Pillemer & Finkelhor, 1989). Physical health problems have been studied and defined in diverse ways, including medical problems, disabilities and functional impairments (Anme et al., 2006; Pillemer & Finkelhor, 1989). For example, Fulmer and colleagues (2005) found that caregivers who engaged in elder neglect were more likely to report functional

impairments and unmet needs for assistance with activities of daily living (ADL) (e.g., grooming, dressing and feeding oneself) and instrumental activities of daily living (IADL) (e.g., housework, meal preparation, taking medication, managing money). Similarly, Beach and colleagues (2005) found that self-rated health status was predictive of elder abuse among spousal caregivers. Other studies have also shown that increased medical problems, more chronic health problems, and more physical symptoms (e.g., vision problems, difficulty breathing) increased the risk of elder abuse perpetration (Beach et al., 2005; Eisikovits et al., 2004). Johansson's (2018) meta-analysis suggests however that ADLs and physical impairments may be less relevant for caregivers.

Problems with Mental Health. Major mental disorder has been identified in numerous literature reviews and empirical studies as a risk factor for elder abuse perpetration, including the most lethal forms (Dunlop, Rothman, Condon, Hebert, & Martinez, 2001; Henderson, Buchanan, & Fisher, 2002; Johannesen & LoGiudie, 2013; Lachs & Pillemer 2004; Pillemer, Mueller-Johnson, Mock, Suitor, & Lachs, 2007; Schiamberg & Gans, 1999; Statistics Canada, 2007; Wolf, 2000). The rates of reported mental health problems among perpetrators of elder abuse are estimated to be between 14% and 35% (Jackson, 2016; Labrum, Solomon, & Bressi, 2015). In particular, depression has been identified as one of the most common, if not the most common, mental health problem associated with elder abuse perpetration (Homer & Gilleard, 1990; Johansson, 2018; Miller et al., 2006; Paveza et al., 1992; Pérez-Rojo, Izal, Montorio, & Penhale, 2009; Campbell Reay & Browne, 2001; Williamson & Shaffer, 2001; Wolf & Pillemer, 1989). Cognitive impairment and dementia have also commonly been identified as risk factors among perpetrators (Beach et al., 2005; Bristowe & Collins, 1989; Eisikovits et al., 2004; Miller et al., 2006). Cognitive decline may additionally be associated with elder abuse because it can

influence depression and cause declines in health, social well-being, and the ability to provide care, all of which are risk factors for elder abuse perpetration (Ferrucci et al., 1993; Kosberg, 1988).

Indirect associations between mental health problems and elder abuse perpetration have also been identified, where mental health problems contributed to the development or maintenance of other risk factors for elder abuse. For instance, provocative behavior, often caused by mental health problems like dementia, is a risk factor for the perpetration of psychological elder abuse (Wolf, Godkin, & Pillemer, 1984). Labrum and colleagues (2015) highlighted the fact that mental health problems can increase the dependency of the perpetrator on the victim, a situation that can increase the risk of elder abuse (Dunlop et al., 2001; Lachs & Pillemer, 2015). Henderson and colleagues (2002) suggest that mental health problems may also result in unrealistic expectations of older person's capabilities, which is a risk factor for elder abuse. The authors also suggest that mental health problems can limit emotional control and cause an individual to take out their emotions on an older person.

Problems with Substance Use. Substance abuse has been described as the single best predictor of elder abuse perpetration given its consistent association with elder abuse across many empirical studies and literature reviews (Conrad, Liu, & Iris, 2019; Dunlop et al., 2001; Henderson et al., 2000; Jayawardena & Liao, 2006; Jones et al., 1997; Lachs & Pillemer, 2004, 2015; Podnieks, 2008; Roberto, 2016; Schiamberg & Gans, 1999; von Heydrich, Schiamberg, & Chee, 2012; Wolf, 1997, 2000). Multiple studies suggest that older adults are at the highest risk of being abused when their caregivers have substance abuse problems (Anetzberger, Korbin, & Austin, 1994; Bristowe & Collins 1989; Homer & Gilleard 1990; Campbell Reay & Browne

2001; Wolf & Pillemer 1989). Rates of substance abuse among elder abuse perpetrators range from 20% to 50% (Jackson, 2016).

Many hypotheses have been posited to account for the association between substance abuse and elder abuse perpetration (see Henderson et al., 2002; Kravitz, 2006). First, the theft of money or property from an older person may be committed in order purchase substances. Second, substance abuse may cause dependency, where an addiction may prevent an individual from sustaining employment thereby causing them to be dependent on the older adult victim for support or necessities. Third, supporting an addiction can be a major stressor, and stress is a risk factor for elder abuse perpetration. Fourth, substance abusers are more likely to act out in abusive ways due to decreased inhibitions. Fifth, due to intoxication or the desire to obtain substances, substance abusers are more likely to make inappropriate care decisions for older adult care recipients or fail to place a priority on care.

Dependency. Although it was initially theorized that most elder abuse stemmed from the older adult's dependence on the perpetrator and the resulting caregiver stress, empirical evidence has instead shown the reverse to be true (Greenberg et al., 1990; Henderson et al., 2002; Lachs & Pillemer, 2004, 2015; Jayawardena & Liao, 2006; Pillemer & Finkelhor, 1989; Wolf, 2000; Wolf & Pillemer, 1989). Perpetrator dependence on the victim is now recognized as a dominant risk factor for elder abuse and one of the most likely explanations for elder abuse (Dunlop et al., 2001; Jones et al., 1997; Roberto, 2016; Wolf, 1997). Such perpetrator-on-victim dependency can take many forms, including financial, emotional, and functional. Financial and housing dependence are the types of dependence most commonly associated with elder abuse (Pillemer, 1985). Financial and housing dependency as well as unemployment have been identified in up to two-thirds of cases (Jackson, 2016; Pillemer, 1985). In line with these findings, other studies

identified unemployment, financial problems, and poverty as risk factors for elder abuse perpetration (Eisikovits et al., 2004; Lachs & Pillemer, 2015; Lachs, Williams, O'Brien, Hurst, & Horowitz, 1997; Roberto, 2016; von Heydrich et al., 2012). Some studies have suggested that problems with dependency may be a particularly relevant risk factor when the perpetrator is an adult child (biological or in-law) of the victim (Jayawardena & Liao, 2006; Lachs & Pillemer, 1995). In accord, Johansson's (2018) meta-analysis found that financial dependency was not a risk factor for caregivers.

There are several reasons why the association between perpetrator dependence and elder abuse exists. First, abuse may be the direct result of a perpetrator attempting to obtain resources (e.g., housing, money) from the victim upon whom they depend. Second, caregivers who rely on care recipients for financial or emotional support have been found to hold more feelings of anger, impotence, and frustration—feelings that may cause resentment and result in abuse (Curry & Stone, 1995). Third, a difficult family situation may escalate to abuse because a financially dependent adult child refuses to leave the family home (Pillemer & Finkelhor, 1989).

Problems with Stress and Coping. The feeling of being burnt-out, often referred to as caregiver stress, has been identified as a risk factor for elder abuse (Johannesen & LoGiudie, 2013; Johansson, 2018; Jones et al., 1997; Lachs & Pillemer, 1995, 2015; Roberto, 2016; Serra et al., 2018; Stall et al., 2019; von Heydrich et al., 2012; Wolf et al., 1984; Yan, Chan, & Tiwari, 2015). For instance, Wolf and Pillemer (2000) found that cases in which the perpetrator saw the victim as a source of a great deal of stress were less likely to be resolved at follow-up than cases where the victim was not seen as a source of stress. Further, cases in which there was a reduction in the stress caused by the victim were more likely to be resolved at follow-up. The influence of stress may be mediated by other factors including the perpetrator's coping abilities and

perception of the caregiver burden, as well as the quality to the relationship held between the perpetrator and the older person (Nerenberg, 2002; Serra et al., 2018). Indeed, several studies have found the perception of stress and burden to be associated with abuse, sometimes more so than objectively measured levels of burden (Anme et al., 2006; Cohen, Levin, Gagin, & Friedman, 2007; Cooper, Manela, Katona, & Livingston, 2008; Johansson, 2018; Serra et al., 2018). External stress (i.e., stress unrelated to the older person) has also been identified as a risk factor (Johansson, 2018). Some researchers hypothesize that the reason for this association is that perpetrators displace external stress onto the older person, treating them as a scapegoat (O'Malley, Everitt, O'Malley, & Campion, 1983; Palincsar & Cobb, 1982).

The ability to cope with stress has also been found to be associated with elder abuse, where individuals experiencing stress are at greater risk of perpetrating elder abuse compared to individuals who can successfully manage their stress (Henderson et al., 2002; Schiamberg & Gans, 1999). Henderson and colleagues (2002) explain that inexperienced caregivers may become angry or frustrated with an older person's disruptive behavior, and if they lack the knowledge of how to cope with that stress they may resort to aggression to gain control of the individual. In support of this, Serra and colleagues (2018) found that resilience acted as a protective factor against abuse.

Problems with Attitudes. Negative attitudes toward the older persons—such as ageism, intolerance of an older person's behavior, lack of empathy or understanding of the older person, and anger or reluctance regarding having to fulfill a caregiving role —have been found to be associated with elder abuse perpetration (Anme et al., 2006; Erlingsson, Carlson, & Saveman, 2003; Johannesen & LoGiudie, 2013; Kosberg, 1988; Kosberg & Nahmiash, 1996; Nerenberg, 2002; Reis & Nahmiash, 1998; Saveman & Sandvide, 2001). Several hypotheses have been

forwarded to explain why negative attitudes may lead to abusive behavior. For instance, some individuals may place less value on the care and needs of older adults because they are perceived as contributing less to society. It has also been suggested that caring for older adults is viewed with resentment in modern society. Such attitudes can then lead some to believe that abuse is deserved (Henderson et al., 2002). Henderson and colleagues (2002) hypothesized that some unrealistic expectations may be linked to the mental health problems of a perpetrator. Alternatively, they suggest that a lack of care-giving skills may result in a misinterpretation of the older person's behavior as retaliatory or stubborn and result in the caregiver becoming angry or frustrated and responding aggressively.

In addition to attitudes specific to older persons, studies have consistently found general antisocial attitudes and personality traits including the tendency to blame others, be hypercritical, hostile, impatient, have a bad temper, and have poor impulse control, to be associated with elder abuse perpetration (Anetzberger, 1987; Campbell Reay & Browne, 2001; Erlingsson et al., 2003; Johannesen & LoGiudie, 2013; Kosberg 1988; Reis & Nahmiash, 1998). Antisocial behavior (which can be indicative of attitudes), including a history of arrests, property destruction, aggression, threats, and violence, is also associated with elder abuse perpetration (Campbell Reay & Browne, 2001; Lachs & Pillemer, 1995, 2015; Pillemer & Finkelhor, 1989). Although violence may be less relevant for caregivers (Johansson, 2018).

Victimization. Being a witness to or victim of childhood family violence is common (44%) among elder abuse perpetrators (Jackson & Hafemeister, 2011). The association between childhood victimization and elder abuse perpetration can be direct as in the case of a child who is abused by their parent and once grown and stronger than that parent abuses them in an act of revenge against their former abuser. Alternatively, elder abuse may be the result of generalized

problems (e.g., problems with psychosocial adjustment) caused by victimization. Evidence for the former revenge motivated or direct cycle of abuse is limited, and much debate exists about this mode of transmission (Biggs, Phillipson, & Kingston, 1995; Schiamberg & Gans, 1999; Wolf & Pillemer, 1989). In fact, Pillemer (1986) and Anetzberger (1987) did not find an association between child abuse and later abuse by the adult-child toward the formerly abusive, and now older, parent. Some research suggests that this type of violence transmission applies more to child abuse (i.e., an individual who was abused as a child may be more likely to abuse their children) than to elder abuse (Korbin, Antezberger, & Austin, 1995).

Past victimization has been evidenced more generally as a risk factor for elder abuse perpetration across many studies. Specifically, being the victim of abuse as a child has been found to be associated with later elder abuse perpetration (Campbell Reay & Browne, 2001; Reis & Nahmiash, 1998). Being raised in a home with domestic violence, be it spousal, child abuse, or a pattern of violent interactions within the family, has also been linked to later perpetration of elder abuse (Campbell Reay & Browne, 2001; Erlingsson et al., 2003; Kosberg & Nahmiash, 1996; Schiamberg & Gans, 1999). It has been suggested that adult-children or grandchildren who witnessed or were the victims of family violence are more likely to use violent tactics learned in childhood to resolve problems in later life. Erlingsson and colleagues (2003) found that a history of family violence, where violence was a normal response to stress, is a risk factor for elder abuse, indicating that violence may be a learned coping mechanism. Similarly, Fulmer and colleagues (2005) found that caregivers who had experienced childhood neglect were more likely to perpetrate neglect compared to caregivers with no such history. The authors suggest this association might be the result of learned caregiving norms.

Problems with Relationships. Between 21% and 68% of elder abuse perpetrators have relationship problems (Jackson, 2016). Conflict with others, including social dysfunction and perpetration of intimate partner violence, has been found to be a risk factor for elder abuse (Lachs & Pillemer, 1995; Homer & Gilleard, 1990; Williamson & Shaffer, 2001). Social isolation has also been identified as common among elder abuse perpetrators (35%-53%) and along with a sense of loneliness, and a lack of social contacts has been found to be associated with perpetrating elder abuse (Anetzberger, 1987; Eisikovits et al., 2004; Kosberg, 1988; Lachs & Pillemer, 2015; Pillemer & Finkelhor, 1988; Reis & Nahmiash, 1998; Wolf, Godkin, & Pillemer, 1984, 1986). A lack of social support is also widely cited as a risk factor for elder abuse (Compton, Flanagan, & Gregg, 1997; Kosberg, & Nahmiash, 1996; Grafstrom, Nordberg, & Windblad, 1993; Lee, 2008; Phillips, 1983; Phillips, Ardon, & Briones, 2000; Pillemer & Finkelhor, 1988; Reis & Nahmiash, 1998; Wolf & Pillemer, 1989; Yan & Kwok, 2011) but may be less relevant for caregivers (Johansson, 2018).

In measuring social isolation, both Anetzberger (1987) and Cooney and Mortimer (1995) found that perpetrators of elder abuse rated themselves as more isolated than did non-abusive controls, when in fact they were no more isolated based on objective measures. Likewise, when measuring social support, researchers found that it is the perception of not receiving adequate support that is associated with abuse, not objective measures of the support obtained (Compton et al., 1997; Kravitz, 2006; Serra et al., 2018). These findings suggest that the mechanism through which social isolation and social support are risk factors is via their impact on the perceptions and feelings of the perpetrator.

Several theories have been forwarded to explain the association between isolation, a lack of support and elder abuse perpetration. First, Gottlieb (1991) proposed that when caregivers

have no one to turn to they tend to engage in fewer pleasant activities, have less control over their time, less privacy, increased stress, depression, and anger symptoms. Many of these factors are in turn risk factors for elder abuse. Second, several researchers have suggested that isolation increases risk because it decreases the likelihood of elder abuse being detected (Henderson et al., 2002; Kosberg & Nahmiash, 1996; Lachs & Pillemer, 2004). Third, isolation and a lack of support can make perpetrators feel that no one knows or cares about their abusive behavior, thus making it more likely for them to continue (Jayawardena & Liao, 2006).

Vulnerability Factors Related to The Victim

Problems with Physical Health. A large number of studies have found an association between physical health problems, functional impartment (measured by the presence of ADLs and IADLs, pre-existing medical conditions, level of physical function, and frequency of health care use, or described as frailty or lower health status) and various types of elder abuse victimization (Anme et al., 2006; Brozowski & Hall 2005; Burnes et al., 2015; Cohen et al., 2007; Dong, 2015; Dong & Simon, 2015; Eisikovits et al., 2004; Erlingsson et al., 2003; Fulmer et al., 2005; Johannesen & LoGiudie, 2013; Lachs & Pillemer, 2015; Laumann, Leitsch, & Waite, 2008; Lee, 2008; Macassa et al., 2013; Schiamberg & Gans, 1999; Schiamberg et al., 2012; von Heydrich et al., 2012; Yan et al., 2015). Further, Dong, Simon, and Evans (2012), using a prospective design, found that physical function as measured through either objective assessment or self-report was associated with increased risk of elder abuse and increased risk of multiple forms of elder abuse. In addition, De Donder and colleagues (2016) found that poor physical health was associated with more severe elder abuse.

Potential reasons for the association between health problems and victimisation include the fact that physical impairment can lead to isolation, which is a vulnerability factor and can

decrease the likelihood that abuse will be detected (Roberto, 2016). Another pathway to victimisation identified by Kong and Jeon (2018) is that ADL and IADL limitations are associated with reduced victim self-esteem and increased family assistance which are associated with increased risk. Researchers generally agree that the physical health of the victim is an important vulnerability factor that should be considered in assessment (Lachs & Pillemer, 2004; Pillemer et al., 2007; Wolf, 1997). The primary reason for this is that physical health has been identified as an indicator of a victim's ability to escape harm, protect him or herself, and obtain assistance (Burnes et al., 2015; Kosberg & Nahmiash, 1996). For instance, Naughton, Drennan, and Lafferty (2014) found that older persons with impaired physical health are less aware of the term elder abuse, raising the possibility that they will be less likely to identify and report their own victimization.

Problems with Mental Health. Mental health problems of the victim, particularly depression, are vulnerability factors for elder abuse (Chokkanathan, 2018; Dong, 2015; Dong & Simon, 2012; Fulmer et al., 2005; Johannesen & LoGiudie, 2013; Yan et al., 2015). Mental health problems are also associated with increased abuse severity, and depression is a vulnerability factor for mortality (De Donder et al., 2016; Dong et al., 2011a). Reduced cognitive status (i.e., dementia, confusion, reduced memory, reduced perceptual speed, Alzheimer's disease) has also received strong empirical support as increasing the vulnerability of older adults to abuse (Dong, Simon, Rajan, & Evans, 2011b, 2014; Fulmer et al., 2005; Friedman, Avila, Rizvi, Partida, & Friedman, 2017; Johannesen & LoGiudie, 2013; Lachs et al., 1997; Roberto, 2016; Schiamberg & Gans, 1999; Serra et al., 2018; Shugarman, Fries, Wolf, & Morries, 2003; Yan et al., 2015).

Mental health problems may act as a vulnerability factor for elder abuse in several ways. For instance, mental health problems can cause the victim to not seek help or can lead to denial, isolation and self-blame that can reduce the likelihood that the victim will report abuse or that others will see the abuse (Henderson et al., 2002). There is also evidence that reduced cognition may indirectly increase the risk for elder abuse by increasing the presence of other vulnerability factors. For example, mental health problems are associated with self-neglect behavior, which is a risk factor for elder abuse (Bartley, Knight, & O'Brien, 2007; Dong et al., 2013). Cognitive issues may also have an indirect impact because they are related to vulnerability factors such as reduced physical health, high dependence, and difficult behavior (Jackson & Hafemeister, 2014; Kravitz, 2006; Coyne et al., 1993). In fact, many researchers suggest that mental health problems themselves may not be the triggering behavior for elder abuse, but instead elicit difficult behaviors that are the precipitators of the abuse (Homer & Gilleard, 1990; Jones et al., 1997; Lachs & Pillemer, 1995, 2004; Wolf 1997). Abusive caregivers report difficult behavior, particularly embarrassing, invasive and violent behavior, to be the main problem they encounter and the cause of violent feelings and stress (Anetzberger, 1987; Compton et al., 1997; Homer & Gilleard, 1990; Pillemer & Suitor, 1992; Wiglesworth et al., 2010). In support of this, Özcan, Boyacıoğlu and Sertçelik (2017) found that caregivers who were being abused were more likely to perpetrate abuse and Johansson's (2018) meta-analysis found that emotional abuse (but not physical abuse) by the victim toward the caregiver was a risk factor for elder abuse.

Problems with Substance Use. Older adults who abuse substances are at greater risk of becoming the victims of elder abuse than those who do not abuse substances (Conrad et al., 2019; Erlingsson et al., 2003; Homer & Gilleard, 1990; Johannesen & LoGiudie, 2013; Kosberg, 1988; Macassa et al., 2013). For instance, Shugarman and colleagues (2003) found that in cases

where an older person abused alcohol, the prevalence of observed signs of potential elder abuse was ten times greater than when the older person did not abuse alcohol. As such, substance abuse is generally recognized as an important vulnerability factor to consider when assessing risk for elder abuse (Peguero & Lauck, 2008; Schiamberg & Gans, 1999).

Several hypotheses have been forwarded to account for the association between substance abuse and elder abuse victimization (Henderson et al., 2002). Some suggest that the impact of substance abuse on the victim's living situation and abilities may account for the association. Henderson and colleagues (2002) suggest that an older substance abuser may be more likely to live in a less stable environment (e.g., financially, emotionally) than someone who does not abuse substances. Further, they posit that an older person may be less aware that they are receiving inadequate or harmful care because of their addiction. It has also been suggested that intoxication or the long-term effects of substance abuse can reduce a victim's ability to protect themselves, escape, seek help, recognize the extent of their injuries, or realize when a situation is unsafe or about to become abusive (Kravitz, 2006). Other hypotheses posit that the association may be the result of substance abuse promoting or co-existing with other vulnerability factors for elder abuse. Henderson and colleagues (2012) note that substance abuse may cause provocative or difficult behavior. Choi and Mayer (2000) found that older persons who abused substances were 70% more likely to engage in self-neglect, a factor that can increase the likelihood that an older adult will be targeted for abuse. Substance abuse has also been found to be associated with social isolation, another vulnerability factor for elder abuse (Ganry, Joly, Queval, & Dubreuil, 2000; Onen et al., 2005).

Dependency. Dependency as a vulnerability factor for elder abuse has been widely debated (Wolf, 2000). When research on elder abuse first began, it was commonly believed that

victim dependence led to caregiver resentment and stress, which in turn resulted in elder abuse (Quinn & Tomita, 1997). In fact, several explanatory models of elder abuse were based on this relationship (i.e., the caregiver stress model, dependency model, and web of dependency) (Jones et al., 1997; Quinn & Tomita, 1997; Wolf, 2000). Although research has since shown that victim dependence is not a predominant cause of elder abuse (Asti & Erdem, 2006; Bristowe & Collins, 1989; Compton et al., 1997; Cooney & Mortimer, 1995; Homer & Gilleard, 1990; Pérez-Rojo et al., 2009; Phillips, 1983; Pillemer, 1985; Reis & Nahmiash, 1997; Wolf & Pillemer, 1989), it is still associated with elder abuse victimization (Erlingsson et al., 2003; Jackson & Hafemeister, 2014; Johannesen & LoGiudie, 2013; Kosberg, 1988). In addition, the presence of victim dependency can impact help-seeking among victims and case management. Specifically, studies have shown that victim dependency can decrease help-seeking, the ability to defend oneself, and can increase isolation (Lachs & Pillemer, 1995; Pillemer et al., 2007). For instance, a victim who relies on the perpetrator for transportation, care, or financial assistance may be more hesitant to report abuse, knowing that the perpetrator may no longer be permitted to have contact with them. In addition, if following intervention, the victim's care needs are not being met elsewhere (e.g., through family, care services) they will be more likely to initiate or permit contact between themselves and the perpetrator which increases the risk of abuse (Wolf & Pillemer, 2000). It has also been theorized that dependency can lead to learned helplessness (Villomare & Bergman, 1981). Therefore, considering dependency as a vulnerability factor may decrease abuse by reducing victim-perpetrator contact and increasing reporting and the independence and coping skills of the victim (Jayawardena & Liao, 2006; Lachs & Pillemer, 1995; Wolf, 1997). In fact, when comparing resolved and unresolved cases of elder abuse, Wolf and Pillemer (2000) found

that cases in which there was a change in the victim-perpetrator interdependency were more likely to be resolved at follow-up than those where no change was present.

Problems with Stress and Coping. High levels of stress and poor coping can both precede and be the result of elder abuse. With respect to the association between stress and vulnerability, Wolf and Pillemer (2000) determined that victims who found the perpetrator to be the source of a lot of stress were more likely to continue to be victimized. They also found that cases in which victims experienced a stressful life event involving the health or behavior of a family member (other than the perpetrator) were less likely to be resolved at follow-up compared to cases where such an event did not occur. In addition, Roepke-Buehler and Dong (2015) found that older adults reporting the highest level of perceived stress were three times as likely to be the victim of abuse compared to those not reporting high levels of stress.

Regarding coping and vulnerability, Comijs, Pot, Smit, Bouter, and Jonker (1998) found that few victims employed active problem-solving strategies; instead opting to withdraw from the abusive situation, terminate contact with the perpetrator, or do nothing. Elder abuse victimization was associated with having less control over problem situations, a higher tendency to react aggressively when feeling angry or frustrated, and handling problems in a passive or avoidant manner. These findings were echoed by De Donder and colleagues (2016) who found that poor coping was associated with increased elder abuse severity.

One important manifestation of a failure to cope is self-neglect. Self-neglect is behavior by an individual that threatens their health and safety and comes about through neglecting one's own needs (National Center on Elder Abuse Website, 2006). Self-neglect has been shown to increase the risk of being victimized by others (Dong, 2015). Dong and colleagues (2013) found self-neglect to be a predictor of elder abuse even after factors related to physical, psychological,

and social well-being were controlled. One hypothesis forwarded by the authors for the association is that those who engage in self-neglect do not obtain medical help until a catastrophic event has occurred and subsequently become dependent on caregivers, which is a vulnerability factor for elder abuse. Self-neglect has also been found to be associated with vulnerability factors such as problems with mental health, particularly dementia and depression (Bartley et al., 2007; Dong et al., 2013) and substance abuse (Choi & Mayer, 2000).

Problems with Attitudes. Studies have shown that attitudes held by older persons such as self-blame, excusing the abusive behavior of family members, a desire to protect the perpetrator, stoicism, self-depreciation, and apathy are risk factors for elder abuse (Henderson, et al., 2002; Jackson & Hafemeister, 2014; Kosberg, 1988). These attitudes increase the risk of harm because they can cause the victim to fail to place adequate value on their own safety, isolate themselves, deny that the abuse has occurred, fail to seek medical services, fail to report the abuse, or fail to engage in self-protective behavior (Campbell Reay & Browne, 2001; Eisikovits et al., 2004; Henderson et al., 2002). Further, such attitudes can result in the victim continuing to live with or have contact with the perpetrator and a lack of consequences for the perpetrator, all of which increase the risk of continued abuse (Jackson & Hafemeister, 2012).

Victims may hold these attitudes, deny that abuse has occurred, or be reluctant to act for many reasons. Such reasons include fear of reprisal or of being sent to a care facility, fear that the abuser (a relative) will be arrested, and fear of not being believed or helped (Henderson et al., 2002; Kosberg, 1988). Victims may also feel shame, embarrassment or responsibility for the abuse perpetrated by their adult child whom they raised (Henderson et al., 2002; Jones et al., 1997; Kosberg, 1988). Shame can also play a substantial role in cultures where a great deal of value is placed on family and caring for the older persons (Jones et al., 1997). Attitudes that

favor family loyalty and situate abuse as a private family matter can also prevent reporting and help seeking by victims (Boldy, Horner, Crouchley, Davey, & Boylen, 2005; Eisikovits et al., 2004). Poor self-image and a belief that the abuse is deserved are also reasons that some victims deny or fail to report elder abuse (Boldy et al., 2005; Kosberg, 1988).

Victimization. Prior victimization at any time during the lifespan has been shown to increase the risk of elder abuse victimization (Brozowski & Hall, 2005, 2010; Erlingsson et al., 2003; Jackson & Hafemeister, 2011; Johannesen & LoGiudie, 2013; Reis & Nahmiash 1998; Schiamberg et al., 2012). In fact, Acierno and colleagues (2010) found previous traumatic event exposure, including interpersonal and intimate partner violence, to be one of the most consistent correlates of elder abuse victimization. Several studies have tried to more specifically identify which types of victimization are vulnerability factors for elder abuse. Fulmer and colleagues (2005) found that elder abuse was associated with childhood physical abuse as well as childhood neglect. Prior intimate partner violence has also been found to be associated with elder abuse later in life (Lachs & Pillemer, 1995; Peri, Fanslow, Hand, & Parsons, 2008). To account for the association between prior victimization and elder abuse, Acierno and colleagues (2010) suggest that environments where individuals are exposed to traumatic events are likely to also contain abusive individuals over time.

Problems with Relationships. A poor relationship between the victim and the perpetrator has been consistently identified as a vulnerability factor for elder abuse (Campbell Reay & Browne, 2001; Compton et al., 1997; Cooney & Mortimer, 1995; Erlingsson et al., 2003; Henderson et al., 2002; Homer & Gilleard, 1990; Jackson & Hafemeister, 2011; Nerenberg, 2002; Serra et al., 2018; von Heydrich et al., 2012; Wolf et al., 1986). Positive relationships with adult children are not only important to parents, but also impact their health and well-being, both

of which are vulnerability factors for abuse (Bell & Bell, 2012). It is suggested that caregivers who shared a close and positive relationship with the older person become less stressed and less likely to act abusively when providing care later in life (Nerenberg, 2002; Wolf, 2000). Studies have also found the quality of the victim's other relationships to be associated with elder abuse. Older persons who have conflictual relationships with family and friends, or who have trouble relating to others are at greater risk of victimization (Boldy et al., 2005; Johannesen & LoGiudie, 2013; Reis & Nahmiash, 1998; Shugarman et al., 2003).

The lack of relationships, often called social isolation, and the lack of social support have been identified in many studies as increasing the risk of elder abuse victimization (Acierno et al., 2010; Buri, Daly, Hartz, & Jogerst, 2006; Dong, 2015; Grafstrom et al., 1993; Henderson et al., 2002; Jackson & Hafemeister, 2014; Lachs & Pillemer, 1995, 2004, 2015; Johannesen & LoGiudie, 2013; Phillips et al., 2000; Pillemer et al., 2007; Reis & Nahmiash, 1998; Roberto, 2016; Shugarman et al., 2003; Wolf et al., 2002). Manifestations of social isolation associated with abuse include feeling lonely or left out, living in a rural area, being widowed/divorced/separated, and a lack of formal or informal contacts (Brozowski & Hall, 2005; Burnes et al., 2015; Chokkanathan, 2018; De Donder et al., 2016; Dong & Simon, 2012; Shugarman et al., 2003; von Heydrich et al., 2012). Dong and colleagues (2011a) found that a low social network and low social engagement among victims of elder abuse was associated with mortality, regardless of the reason for the social isolation. Indeed, social support has been identified as a protective factor against elder abuse as well as a factor that increases the likelihood of case resolution (Dong & Simon, 2008, 2010; Wolf & Pillemer, 2000). Social support may decrease the likelihood of elder abuse by acting as a buffer against stress, depression, and health problems, and by increasing the likelihood that abuse will be detected

(Gottlieb, 1991; Henderson et al., 2002; Lachs & Pillemer, 1995; Pillemer 1985). Living with others does not appear to be an indicator of support or contact as several studies have identified living with others, particularly the perpetrator, as a vulnerability factor for elder abuse (Friedman et al., 2017; Lachs & Pillemer, 2015). Nevertheless, a recent meta-analysis found no relationship between living with others and the prevalence of elder abuse (Ho et al., 2017) and Johansson (2018) found living with the perpetrator was not relevant when they were a caregiver.

Discussion

Summary of Findings

A substantial amount of empirical research examining risk factors for elder abuse has accumulated in recent decades. Although the area of elder abuse remains understudied, the research to date, now gathered and synthesized, can assist professional practice. The present literature review found evidence for eight highly supported perpetrator risk factors and eight victim vulnerability factors for elder abuse. The convergence of the research literature around the factors presented is strong, with many studies, from different professional settings finding similar results over multiple decades. Adding to these findings are the hypotheses provided by researchers to explain the results. Endeavoring to explain the causal mechanisms behind the associations identified is important to the field as this indicates avenues for future research and opportunities to focus risk management through investigating and interrupting causal pathways.

It is notable that risk factors for perpetrators and vulnerability factors for victims could be similarly categorized. However, it is important to note that the descriptions of risk and vulnerability factors differed in terms of the key variables and the reasons that those variables are related to risk. For example, dependency on others is both a risk factor and a vulnerability factor. For perpetrators, dependency was typically financial, which directly resulted in financial abuse

or caused anger that led to other forms of abuse. However, for victims, dependency was related to vulnerability because it limited their help-seeking behavior and increased isolation. Thus, understanding the causal mechanisms by which risk factors impact the perpetrator and victim is crucial and will have important implications for case management.

The risk factors identified were broad, covering a range of psychological, social, biological and economic issues. The nature of the individual risk factors was also such that they could be causally related to one another within a case. For example, depression could lead to substance abuse through self medication, and substance use could lead to financial dependency on others to support an addition. It is also possible that perpetrator risk factors and victim vulnerability factors could be related within individual cases. For example, research has shown that parents of adult children who have chronic mental, physical, substance use, or stress-related problems (all perpetrator risk factors) tend to have higher levels of depression (victim vulnerability factor) than other parents (Pillemer & Suitor, 1991). Thus, risk factors present for the perpetrator can be associated with vulnerability factors for the victim. This variety of and association between risk factors suggests that there is a need for a holistic approach to the assessment and management of elder abuse. Such an approach would be in line with the widely supported theoretical framework of the ecological model (Wolf et al., 2002) developed in the 1970s and first applied to child abuse (Bronfenbrenner, 1979; Garbarino & Crouter, 1978) and later to elder abuse (Carp, 2000; Schiamberg, & Gans, 1999). The model considers the association between the individual, their relationships, the community and society in the promotion of violence (Wolf et al., 2002).

Although the literature demonstrates that vulnerability factors related to the victim can place the victim at greater risk of abuse, this in no way suggests that victims are to blame. Victims are never to blame for the perpetrator's behavior. Elder abuse is a form of targeted violence and, as

such, it is impossible to obtain a complete picture of the risks posed by the perpetrator without considering the victim's unique circumstances and vulnerabilities (Jackson, 2016). Risk factors related to the perpetrator and victim must be considered because effective intervention in elder abuse cases requires understanding the reasons behind the abusive behavior (Heisler, 1991).

Strengths and Limitations

This literature review has several strengths and limitations that should be considered. One limitation is that the review did not include all risk factors for elder abuse. This consideration was made for the purposes of space, as it was deemed more useful to provide practitioners with comprehensive reviews of each risk and vulnerability factor that could be used to support practice, rather than a longer list of risk factors that lacked depth and explanation. However, in doing so, two domains or types of risk factors were omitted from the study, both of which are important to the assessment of risk in cases of elder abuse. Those domains include risk factors related to the nature of the abuse, and the community and resources available to the victim and perpetrator. Although risk factors related to these domains have been less of a focus in the research literature, there is increasing evidence that variables related to the abuse and to the community or institution in which the perpetrator or victim reside are important considerations in determining risk for elder abuse. For instance, in relation to the nature of the abuse, elder abuse that occurs frequently is more likely to continue over time (Wolf & Pillemer, 2000). In relation to community resources, a lack of available formal and informal resources for victims and perpetrators has been identified as a risk factor for elder abuse (Anme et al., 2006; Buri et al., 2006; Jones et al., 1997; Ogioni et al., 2007; Peri et al., 2008; Phillips et al., 2000; Shugarman et al., 2003; Wang, Lin, Tseng, & Chang, 2009).

The lack of available space also limited the number of references that could be included in support of each risk and vulnerability factor. This meant that only some of the 198 studies reviewed could be cited. Nevertheless, the review is comprehensive in relation to the dynamic risk and vulnerability factors covered. Further, one of the major strengths of this literature review is that it is the largest review (i.e., includes the most studies) of risk factors for elder abuse to date.

A limitation of all current research in the area is that elder abuse is underreported (Lachs & Berman, 2011). The risk and vulnerability factors identified across studies are therefore only known to relate to cases of reported or identified abuse. It will be important for future research to identify and discover ways to dismantle barriers to elder abuse reporting (for a review see Fraga Dominguez, Storey, & Glorney, 2019) and to then replicate the findings of prior studies on risk and vulnerability factors.

The primary strength of this review is its focus on dynamic risk and vulnerability factors. Knowledge of risk factors can help to predict future abuse, however only dynamic risk factors, due to their capacity for management and change, have the potential to prevent future abuse. Thus, by increasing awareness and helping practitioners to identify dynamic risk factors for elder abuse, practitioners can have at their disposal more tools to affect change by making efforts to mitigate the risk factors presented herein.

Implications for Practice

The purpose of this literature review was to inform practice. Specifically, the risk and vulnerability factors described can be identified by practitioners who come into contact with older adults or who are directly involved in cases of elder abuse. Professionals like psychologists, physicians, nurses, social workers and police can use the identified risk and

vulnerability factors to identify situations where there is a risk of current or ongoing elder abuse. Further, because the review focused on dynamic risk and vulnerability factors, the factors identified by professionals can also function as targets for risk management. For example, a psychologist involved in a case of elder abuse could assess both the perpetrator and victim for problems with mental health or substance abuse, and where present, recommend treatment (e.g., medication, therapy) or formal care that could reduce those risk factors, thereby mitigating risk. Similarly, a police officer could recommend bail or probation conditions that would mitigate perpetrator risk factors, such as conditions that prohibit the consumption of alcohol, mandatory drug testing or conditions that required the perpetrator to obtain assessment or treatment from a mental health professional.

Although the risk and vulnerability factors identified are available to be used by practitioners, the format in which empirical research is presented is not always easily translated to practice. The identification of risk and vulnerability factors through empirical study is necessary, but sometimes this format does not assist practitioners in the completion of their work. To further assist practitioners in using this and other empirical work to inform their practice we need to answer several additional questions. First, how can professionals identify these risk and vulnerability factors in practice? For this we need to develop clear definitions of each factor and provide examples of behavior that would characterize that factor. Second, how should professionals consider each factor in coming to a decision about risk? To accomplish this, professionals need to be guided in the way that each risk or vulnerability factor is to be considered and weighed and then combined to reach an overall decision about the risk for continued elder abuse. The structured professional judgement (SPJ) method of violence risk assessment provides an appropriate structure that guides professionals in the assessment of risk

(Douglas & Kropp, 2002; Hart 2001). The SPJ method could be used to format the risk factors identified herein into a violence risk assessment instrument for elder abuse. Doing so, would be akin to how the SPJ method has been used in adjacent areas such as intimate partner violence (e.g., the SARA V3; Kropp & Hart, 2015 and the B-SAFER; Kropp et al., 2010) and general violence (e.g., the HCR-20 V3; Douglas, Hart, Webster, & Belfrage, 2013).

The third question that must be answered to move from empirical literature to practice is; how should practitioners engage in risk management to mitigate the risk factors identified? The dynamic risk factors identified in this review are changeable, and thus ideal for targeted risk management. However, practitioners require guidance on how to develop management plans so as to address the risk factors while also considering different methods of risk management. Again, the SPJ method provides a framework by guiding professionals in the consideration of four basic activities: monitoring, supervision, treatment and victim safety planning (Hart, 2008). Professionals are assisted in identifying risk management strategies that align with the four activities given the risk level and the nature and relevance of risk factors identified in the case (e.g., see the SARA V3, HCR-20 V3).

To answer these questions and provide guidance for practitioners the risk and vulnerability factors identified in this review are being used to develop a violence risk assessment instrument for elder abuse. The instrument is called the Elder Abuse Risk Level Index or EARLI (XXX, YYY, & ZZZ, in preparation). The instrument utilizes the SPJ method and includes guidance for practitioners on (1) gathering case information, (2) identifying the presence of risk and vulnerability factors, (3) assessing the relevance of risk and vulnerability factors, (4) scenario planning, (5) risk management, and (6) making overall judgement regarding risk. Once complete,

empirical testing of the EARLI will be required to ensure its validity, suggested procedures for validation are available (e.g., Douglas & Kropp, 2002).

The EARLI builds upon previous instruments and fills the gaps in their provision in several ways. First, the EARLI is based on a recent review of the empirical literature, as noted not all existing instruments are based on reviews of empirical research (e.g., EARAE), and some instruments pre-date much of the available research literature from the past decade (e.g., the Hwalek-Sengstock Elder Abuse Screening Test, Neale, Hwalek, Scott, Sengstock, & Stahl, 1991). Second, the EARLI is a risk assessment instrument designed to assist evaluators in assessing the level of risk involved in a case and managing that risk with the goal of predicting or preventing future elder abuse. Most available tools are screening, or detection tools designed to identify the presence of abuse (e.g., the Elder Assessment Instrument) or are designed to track case outcomes (e.g., EARAE). Third because of the literature review that informs the tool, the EARLI can consider cases with either male or female victims, instead of only female victims like other instruments (e.g., the Vulnerability to Abuse Screening Scale, Schofield, Reynolds, Mishra, Powers, & Dobson, 2002). Fourth, also due to the broad literature review, the EARLI can be used for all victim-perpetrator relationships, as opposed to being limited to spousal violence like some other instruments (e.g., the Index of Spouse Abuse, Hudson & McIntosh, 1981). Fifth, the EARLI lists individual risk factors for elder abuse, as opposed to posing questions like some instruments (e.g., Screen for Various Types of Abuse or Neglect, American Medical Association, 1992), which provides clear targets for risk management. Sixth, the EARLI, like the present review includes a number of perpetrator risk factors to help identify risk and facilitate management. Perpetrator risk factors are uncommon in many other instruments which tend to focus on the victim or the acts of abuse (e.g., the Vulnerability to Abuse Screening Scale).

Implications for Future Research

Although research on risk factors for elder abuse has increased in recent years there is still much to be done. First, as noted above, risk factors related to the nature of abuse and the community or institution in which the perpetrator or victim reside are important to the understanding of risk, but are still underrepresented in the research literature. A comprehensive examination of such factors would also be in line with the ecological model. Second, many hypotheses have been forwarded to account for the association between the factors identified and elder abuse. Future research should test these hypotheses, to determine why these factors are related to elder abuse. Revealing the reasons for the associations will assist in mitigating risk and vulnerability factors to put an end to abuse. Third, following from this, more research is required to determine what risk management strategies reduce elder abuse. At present, there is a lack of studies that address the effectiveness of interventions; in fact, only 6.5% of elder abuse studies examined detection, assessment or intervention (Erlingsson, 2007).

Conclusion

The present literature review aimed to take practical steps toward helping practitioners identify key dynamic risk and vulnerability factors for elder abuse that could act as targets for risk management. Sixteen well-supported risk and vulnerability factors were identified and their relationship to increased risk was explored by examining various hypotheses forwarded by researchers. The results indicate that there is substantial convergence in the research literature around certain risk and vulnerability factors and this supports the idea that practitioners may now be able to rely on such information to inform their practice. Ongoing work to structure this assessment process is being undertaken in the hope of improving the assessment and management of risk for elder abuse.

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*indicates literature reviews used in the results section

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Table 1.

Summary Criteria for Elder Abuse Risk and Vulnerability Factors

Factors	Perpetrator Risk Factor Criteria	Victim Vulnerability Factor Criteria
1. Problems with physical health	• Illness such as chronic illness, physical disability, poor health and recent declines in health. • Functional impairment related to Activities and Instrumental Activities of Daily Living, such as grooming and meal preparation, respectively.	• Same criteria as perpetrators, with the added concern that victims will not be able to contact help when needed.
2. Problems with mental health	• Problems with mental and personality functioning, that can result in substantial problems with cognition, mood, and behavior. • Major mental disorder, personality disorder and cognitive impairment.	• Same criteria as perpetrators.
3. Problems with substance use	• Serious problems with health, occupational, financial, social, or legal functioning resulting from the use of illegal substances or the misuse of legal substances (e.g., alcohol, prescribed medications).	• Same criteria as perpetrators, with the additional criteria that use may impair the victim's ability to protect themselves.
4. Dependency	• Perpetrator's dependency on the victim or other individuals. • Dependency is most often related to housing and finances but can also be emotional and functional in nature.	• Victim's dependency on the perpetrator • Dependency can be functional, financial, social or emotional in nature
5. Problems with stress and coping	• Serious problems with stress related to an inability to cope with life problems. • Problems may be a reaction to unusually stressful life events, inadequate coping with normal or day-to-day life stresses, or inadequate coping with	• Serious problems with stress related to an inability to cope with life problems. • Problems may be a reaction to unusually stressful life events, abuse, or

		caregiving responsibilities.	the consequences of and reactions to impairments caused by functional, cognitive, or emotional problems. • Includes engaging in self-neglect.
6.	Problems with attitudes	• Serious problems with attitudes related to caregiving, older persons, and the rights of others. • Includes unrealistic expectations of the victim and antisocial attitudes.	• Serious problems with minimization of and inconsistent attitudes toward the perpetrator, their behavior, and the risks they pose.
7.	Victimization	• Previous abuse experienced or witnessed during childhood or adolescence.	• Previous abuse experienced or witnessed during the lifetime, other than the current episode of elder abuse by the perpetrator.
8.	Problems with relationships	• Serious problems establishing or maintaining positive, prosocial intimate (romantic) and non-intimate relationships • Includes conflictual relationships, feelings of social isolation and a lack of social support.	• Serious problems with relationships, including those with the perpetrator and other social relationships. • Includes conflictual relationships, social isolation and a lack of social support.