Dementia Care: Effects of Care Load and Couple Age on Perceptions of Abuse, Abuser, and Abused

by

Rachel Elyse Runac

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Science

Department of Psychology
University of Alberta

Abstract

Abuse is the intentional act, or failure to act, by a person that creates harm or risk of harm to another individual (Center for Disease Control and Prevention, 2019a). This issue is particularly relevant in healthcare scenarios because of older adults' increased vulnerability. The prevalence of elder abuse is much higher among those who have a diagnosis of dementia than those who are cognitively healthy (Pillemer, Burnes, Riffin, & Lachs, 2016). Showing leniency in perceptions of abuse, previous research has found that abuse of an older person with a cognitive disability is perceived differently than abuse of an older person with a physical disability, and it is rated as less severe (Matsuda, 2007). Other research has found that the abuser of an older person with dementia is perceived more leniently and the abused older person with dementia is perceived as more accepting (Runac, Kwong See, & Choy, 2017, 2018). One possible mechanism for these perceptions is sympathy for the increase in stress and burden associated with taking care of those with dementia (Etters, Goodall, & Harrison, 2008). Alternative explanations have considered the role of age and age-related stereotypes (dementia stereotypes) in perceptions of abuse (Runac et al., 2017, 2018). The present study examined perceptions of physical and psychological abuse, the abuser and abused, and the impact of self-reported quantity and quality of contact with older adults on perceptions. Using a vignette methodology, 156 undergraduate students were presented a scenario in which a husband caregiver was described as abusing a wife care recipient under varying care load conditions (no care load the wife is healthy, care load due to the wife's physical disability or care load due to the wife's cognitive disability). This was to examine the role of caregiver burden. In addition to manipulating care load, the current study varied the age of the couple; either the husband and wife were younger (32 and 29 respectively) or older (83 and 81 respectively). This was to examine the role of age and age-related stereotypes on perceptions.

The study was thus a three care load by two couple age between subjects design. Results indicated that perceptions of physical abuse did not differ according to couple age and care load, and in fact, psychological abuse was rated as more abusive when there was a care load. In our study there was no leniency in perception of abuse found, however perceptions of the abused and abuser illustrated a story of leniency. Showing that care load, and by inference caregiver burden, influences perceptions of abuse, compared to the no load condition, the abuser husband is perceived as less to blame in the two care conditions, that did not differ from each other. Perceptions of his feelings showed that generally when there was a care load the husband is perceived as feeling more helpless and exhausted but experiencing less rage. Suggesting a role for age stereotyping on perceptions, in the two care load conditions the abused wife was rated as more difficult to live with when described as old compared to when she is described as young. Generally, when there was a care load, the abused wife was perceived as more happy, relaxed, calm and feeling less rage. These results show that leniency in perceptions results from a complex interplay in views of the abuser and abused. Covariate analysis with the rater's reported contact quality and quantity with older people did not change the pattern of results. Overall, this study provides some insight on the role of care burden and age stereotypes as factors that may explain why abuse of persons with dementia is more prevalent. Theoretical and practical implications are discussed, as well as limitations and future research directions.

Preface

This thesis is an original work by Rachel Elyse Runac. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Ethics Board, Project Name “Perceptions of Abuse”, No. 00085581, December 21, 2018.

Acknowledgement

First, I would like to thank my supervisor, Dr. Sheree Kwong See, for her endless support and guidance during the development of my thesis and my entire graduate experience. The opportunity you gave me to explore and foster my interests in developmental science under your mentorship has been invaluable. Also, I would like to thank my committee members for their thoughtful feedback and the assistance they provided while writing my thesis.

I would also like to thank my family for their unwavering support and encouragement and for reminding me that I can achieve anything I put my mind to. Finally, to Kashton for your confidence in me and my dreams to immigrate to Canada and your continuous support and unconditional love, I cannot thank you enough.

Table of Contents

INTRODUCTION 1

LITERATURE REVIEW 4

Leniency in Perceptions of Abuse of Persons with Dementia, Abuser, and Abused 4

Caregiver Burden and Sympathy for the Abuser 5

Age and Age-Associated (Dementia) Stereotypes About the Abused 7

Contact as a Mediator of Perceptions of Abuse, Abuser, and Abused 13

Current Study and Predictions 15

METHOD 19

Participants 19

Materials 20

Procedure 23

RESULTS 24

Manipulation Check 25

Perceptions of Abuse 27

Perceptions of the Abuser and Abused 30

Contact as a Mediator of Perceptions of Abuse, Abuser, and Abused 37

DISCUSSION 37

REFERENCES 68

APPENDIX Sample of Testing Packet 79

List of Tables

Table 1. Abused and abuser vignette descriptions in the 3 Care Load x 2 Couple Age study design 20

Table 2. Mean perceptions (Standard Deviation in parentheses) of the abused wife's cognitive and physical ability as a function of care load and couple age and select univariate analyses. 51

Table 3. Factor loadings using a strict .6 inclusion criteria for physical abuse items. 52

Table 4. Mean perceptions (Standard Deviation in parentheses) for physical abuse dimensions as a function of care load and couple age. 53

Table 5. Factor loadings using a strict .6 inclusion criteria for psychological abuse items. 55

Table 6. Mean perceptions (Standard Deviation in parentheses) for psychological abuse dimensions as a function of care load and couple age. 57

Table 7. Mean perceptions (Standard Deviation in parentheses) of the abuser's (husband's) blame as a function of care load and couple age and select univariate analyses. 58

Table 8. Mean perceptions (Standard Deviation in parentheses) for difficulty to live or love the abuser (husband) as a function of care load and couple age. 59

Table 9. Mean perceptions (Standard Deviation in parentheses) for the abuser's (husband's) feelings as a function of care load and couple age and select univariate analyses. 60

Table 10. Mean perceptions (Standard Deviation in parentheses) for blame of the abused (wife) as a function of care load and couple age. 63

Table 11. Mean perceptions (Standard Deviation in parentheses) for difficulty to live or love the abused (wife) as a function of care load and couple age. 64

Table 12. Mean perceptions (Standard Deviation in parentheses) for the abused's (wife's) feelings as a function of care load and couple age and select univariate analyses. 65

Dementia Care: Effects of Care Load and Couple Age on Perceptions of Abuse, Abuser, and Abused

Abuse is the intentional act, or failure to act, by a person that creates harm or risk of harm to another individual (Center for Disease Control and Prevention, 2019a). Abuse can take several different forms, including physical, sexual, stalking, emotional or psychological, neglect, and financial or exploitation. Abuse can occur in many contexts, such as between family members (e.g., spousal abuse, child abuse) and unrelated persons in relationships differing in power (e.g., between teachers and students) (Center for Disease Control and Prevention, 2019b, 2019c).

Elder abuse refers to abuse directed towards older persons and can be intergenerational within families (e.g., abuse toward an older adult by an adult child) or in institutional settings (e.g., a younger care professional and older care recipient) or between persons within the same age cohort (e.g., abuse between older spouses; abuse of an older person in care by another person in care). Elder abuse has also been categorized in various forms, including psychological, physical, financial, sexual, and neglect (Center for Disease Control and Prevention, 2019a). While reports vary, the prevalence of elder abuse is approximately 10 percent in the general older adult population (Acierno et al., 2010; Cooper, Selwood, & Livingston, 2008; Lachs & Pillemer, 2004).

Elder abuse in institutional settings is a topic of interest because of the increased vulnerability of persons in care. Research has shown that persons in care with dementia are vulnerable due to their lack of ability to report abuse (Cooper & Livingston, 2014). The majority of persons in institutionalized long-term care live with dementia (Danila et al., 2014). Alzheimer's disease is the most common form of dementia (Wong, Gilmour, & Ramage-Morin, 2016). Currently affecting over half a million Canadians, the prevalence of Alzheimer's disease

in Canada is expected to increase to over 937,000 by 2031 (Alzheimer Society of Canada, 2018). Those with the disease often experience memory decline, behaviour and personality changes, and confusion (Wong et al. 2016). Most persons with dementia are cared for at home (Canadian Institute for Health Information, 2018a), but because of these symptoms and progression of disease, individuals with dementia often require institutionalization and thus professional caregiving.

While professional caregiving offers expertise in tending to the needs of persons with dementia, this population is at a greater risk of abusive care (Pillemer et al., 2016). The prevalence of abuse towards persons in care with dementia varies from 27.5 to 55 percent (Tronetti, 2014). This rate of abuse is disproportionately higher than the 10 percent general incidence rate of elder abuse (Lachs & Pillemer, 2015). With the prevalence of Alzheimer's dementia projected to nearly double within the next 15 years (Alzheimer Society of Canada, 2018), acknowledging and understanding the reasoning behind the growing issue of abusive behaviour towards persons with dementia, whether cared for informally at home or in professional care, is urgent.

This thesis research is aimed at understanding how factors associated with informal caregiving load and the age of caregivers/receivers influence 1) perceptions of abuse and 2) perceptions of the abused and abuser. A greater understanding of the influence of such factors might explain why abuse of older persons with dementia is more prevalent. It explores the abuse of vulnerable elders from a social cognitive perspective. Social cognition examines thinking processes in the context of social phenomenon (Fiske, 1993). In this perspective, examining others' perceptions of (beliefs about) persons involved in an exchange, in this case, an abusive exchange, can enlighten why people believe the behaviour (abuse) happens and, subsequently,

why they might engage in similar behaviours themselves. Specifically, this work seeks to further understand the finding that compared to healthy older care recipients, others think/perceive the abuse of older adults with dementia as less abusive (Matsuda, 2007) and show leniency/forgiveness in ratings of the perpetrator of abuse of an older person with dementia (Runac et al., 2017, 2018).

Focusing on the abuser in an abusive exchange, we wondered if perceivers might view abuse and the abuser as less serious because they sympathize or have more forgiveness for the abuser because caring for someone with dementia, relative to other conditions, is perceived as more difficult. Focusing on characteristics of the abused in the exchange, we wondered if perceivers might view abuse and the abuser as less serious because age-related dementia stereotypes drive a perception that older people with dementia will not remember or do not feel abuse as acutely as counterparts without a dementing disease. The abuser then is perceived not to be engaging in behaviour that has long-lasting impact or effect. Moreover, from a social cognitive perspective, this work further assumes that additional factors that influence perceptions of people in an exchange (such as greater knowledge about them afforded from contact, for example) can mediate perceptions.

The following literature review first outlines the research demonstrating leniency in perceptions of (thinking about) abuse of persons with dementia, the abuser, and the abused. Then focusing on the abuser, the literature on caregiver burden is reviewed to build a rationale that sympathy for the caregiver is a contributor to leniency in the perception of the abuser. Focusing on the abused person, research is reviewed that suggests age-related stereotypes about the abused, including dementia stereotypes since dementia tends to be age-associated, may be a contributor to leniency toward the abuser/perpetrator. The literature on what age and age-

associated stereotypes are and how these beliefs influence behaviour in social exchanges is expounded. Finally, contact with older people as a mediating variable to age stereotypical beliefs is reviewed.

Leniency in Perceptions of Abuse of Persons with Dementia, Abuser, and Abused

Research on abuse directed towards older adults (elder abuse) suggests that the abuse of older people is easily contemplated. Yon et al. (2010) measured attitudes and behaviors of undergraduate student towards older adults. Of the 206 undergraduate students surveyed, 32.1% reported they would approve of at least one abusive behavior towards an older adult. Psychological abuse (e.g. yelling, stomping out of a room, calling the older adult names) was a common form of abuse that the participants indicated they would partake in, while some suggested they would engage in physical abuse (e.g. shoving an older adult, slapping, burning or scalding the older adult). Males were significantly more likely to engage in both physical and psychological forms of abuse. Yon et al. also evaluated participants' ageist attitudes using the Fraboni Scale of Ageism (Fraboni, Saltstone, & Hughes, 1990). As a whole, ageist attitudes were positively correlated with a proclivity towards elder abuse. More specifically, emotional components of ageist beliefs were most related to an inclination towards elder abuse.

There is emerging evidence that the abuse of persons with dementia is forgiven/perceived more leniently compared to cognitively healthy abuse recipients. Matsuda (2007) evaluated perceptions of various types of abuse towards cognitively healthy and unhealthy older adults. Non-caregiving adults aged 18 through 86 were asked to assess the severity of 12 items encompassing forms of physical abuse, psychological abuse, sexual abuse, financial abuse, and neglect of care directed towards a relative with three different health statuses: In need of care with dementia, in need of care but without dementia, and relatives who do not need care or have

dementia. Physical, psychological, and economic mistreatment was evaluated as less abusive when directed towards an older adult with dementia rather than one perceived as cognitively healthy, regardless of whether the older adult needed care.

Runac et al. (2017, 2018) examined perceptions of the abused and abuser in a professional caregiving context. They had young adults rate a caregiver and care recipient depicted in an abusive caregiving episode. The episode was extracted from a surveillance video showing an actual abusive incident in a Canadian nursing home posted on the internet which involved a middle-aged female caregiver and an older adult care recipient. In one report (2017), the care recipient was described to raters as in care because of Alzheimer's dementia (cognitively unhealthy) or diabetes (cognitively healthy). Examination of ratings showed that perceived cognitive and physical competence was lower when the care recipient had dementia compared to diabetes. Importantly, the caregiver was perceived as more respectful, nurturing, competent, and benevolent when the care recipient had dementia. In a second report (2018) that added another cognitively healthy comparison (broken hip), the care recipient with dementia was perceived as lower in cognitive and physical competence and satisfaction, compared to the cognitively healthy conditions (diabetes and broken hip), and was seen as more respectful compared to the diabetes condition. Again, the caregiver was perceived more positively in the dementia condition. The set of studies is a strong demonstration that in an abusive situation, the abuser is perceived more leniently when abusing a person believed to have dementia. The researchers speculated that sympathy for the burden of caring for a person with dementia contributed to leniency in the perception of the abuser. The researchers also speculated about age-related stereotyping (dementia stereotyping) of the abused as an influence on leniency (the care recipient would not

remember abuse) but could not implicate age stereotypes directly because there was no young age comparison; in all conditions, the care recipient was older.

Caregiver Burden and Sympathy for the Abuser

Caregiving refers to the actions of a person providing for the needs, including physical, mental, emotional, or social incapabilities, of another (Hermanns & Mastel-Smith, 2012). It can happen in professional settings, but in Canada a large proportion (28%) of persons providing care are informal, unpaid caregivers providing care at home (Sinha, 2013). Because most persons with dementia live at home, a significant number of unpaid caregivers are providing care to persons with dementia; and that care is commonly provided by a spouse (Canadian Institute for Health Information, 2018b).

Whether caregiving is professional or informal (unpaid), research shows that caregivers of persons with dementia report distress and burden (Chiao, Wu, & Hsiao, 2015). Caregiver burden is defined as the physical, psychological, emotional, behavioural, and financial stress experienced by a caregiver (Adelman, Tmanova, Delgado, Dion, & Lachs, 2014). Informal caregivers of people with dementia often report high levels of mental health issues, including depression, irascibility, and anxiety (Connell, Janevic, & Gallant, 2001; van der Lee, Bakker, Duivenvoorden, & Droes, 2014). A meta-analysis performed by Vitaliano, Zhang, and Scanlan (2003) found that caregivers were more likely to suffer health problems, such as chronic illnesses, and were therefore more likely to need health services. They were also more likely to have higher stress hormones and lower antibody production in their system, compared to non-caregivers.

Creating burden, financial stress associated with Alzheimer's disease puts a sometimes insurmountable pressure on the caregiver (Canadian Institute for Health Information, 2018b).

Healthcare costs are often put on the shoulders of the informal caregivers, yet because of their caregiving responsibilities, many have to miss work to provide proper care, further deepening their financial stress (Llanque, Savage, Rosenburg, & Caserta, 2014).

Overall, caring for and dealing with the manifestation of a dementing disease (e.g., memory loss and loss in abilities for self-care) places considerable burden on the caregiver (Vandeweerd & Paveza, 2006; VandeWeerd, Paveza, Walsh, & Corvin, 2013). Burden may also explain why caregivers often rate working with older persons in care more negatively than younger persons and working with older persons with dementia as even less desirable (Kahana et al., 1996).

Summary and Link to Rationale. With respect to the perceptions of an abuser in a high load caregiving situation, the burden of care associated with the caring of an older person with dementia may sway the perception of abuse and the abuser such that the abuser receives sympathy.

Age and Age-Associated (Dementia) Stereotypes About the Abused

Theoretical Perspectives on Age Stereotypes. Stereotypes are shared, overgeneralized beliefs about stigmatized characteristics of members of a group (Rinehart, 1963). These thoughts often aid individuals in quickly interpreting a situation in order to respond appropriately without extending a great deal of effort when called upon (McGarty, Yzerbyt, & Spears, 2002). This leads to the creation of in-groups, whose similarities with other groups, or out-groups, are mitigated (Cuddy & Fiske, 2002). The stereotypes associated with the in-groups and out-groups are determined on the perceived warmth and competence of the characteristics of each group, with the out-group lacking at least one of the two dimensions (Fiske, Cuddy, Glick, & Xu, 2002). Interpretation of these stereotypes as negative or positive is based on the desirability of the

stereotyped trait. Those traits perceived as more desirable elicit positive valence while those with lesser desirability are low in valence (Jackson & Rose, 2013). While out-groups are often associated with both positive and negative stereotypes, those focused on negative valanced traits tend to be more common and pervasive (Kite, Stockdale, Whitley, & Johnson, 2005).

Stereotypes About Age. Age stereotypes are overgeneralized and rigid beliefs about older adults and the ageing process (Hummert, 1999, 2011). For younger people in North America, it is hypothesized that older people are an out-group (Fiske et al., 2002). For example, young adults characterize older adults as warm but lacking in competence. Age stereotypes about the out-group are perpetuated through representation in our society, including negative representations of age in print, television, social media, and movies (Bazzini, McIntosh, Smith, Cook, & Harris, 1997; Donlon, Ashman, & Levy, 2005; Levy, Chung, Bedford, & Navrazhina, 2014; Miller, Miller, McKibbin, & Pettys, 1999).

Positive age stereotypes elicit a sense of warmth, yet more common are those which focus on declines in physical and cognitive competence (Kite & Johnson, 1988; Kite et al., 2005; Kwong See, Hoffman, & Wood, 2005). Meta-analyses by Kite and Johnson (1988) and Kite et al. (2005) found that older adults are often characterized as lacking attractiveness, competence, and behavioural abilities. What studies and these meta-analyses show is that although there are multiple stereotypes about age, beliefs associating age with a decline in cognitive abilities (primarily memory) and physical decline are pervasive. This is clearly shown in a study by Rust and Kwong See (2010).

Rust and Kwong See (2010) compared university students' views of a typical 25-year-old and a typical 75-year-old. Students rated the individuals on multiple constructs under three domains, cognitive, social, and physical. In the cognitive domain, the young adult was viewed

higher on all the constructs dealing with memory and the ability to communicate with others. Only on the construct of wisdom was the older adult rated higher than their younger counterpart. A similar pattern was found in the physical domain, with the older adult perceived significantly lower on all constructs. It was in the social domain that the older adult, as compared to the younger adult, scored higher in helpfulness, benevolence, and storytelling abilities.

Age Stereotypes Influence Social Exchanges. The study of age stereotypes in social gerontological literature has evolved from asking questions about what age stereotypes are to how age stereotypes influence social interactions. Overall this body of work shows that stereotypes can be a filter through which behaviour is directed at others and interpreted about others.

Ageism occurs when the application of age stereotypes affects one's behavior towards an older adult (Butler, 1969). Many types of discrimination that older adults might experience have been described (Fraboni et al., 1990). These can include health problems being attributed to older age, exclusions from groups or other social activities, and overall avoidance. Another form of ageism that is often experienced by older people is patronizing talk. Patronizing talk, or elderspeak, is characterized by oversimplified, condescending, and infantizing speech when directed towards an older adult (Ryan, Hamilton, & Kwong See, 1994; Ryan, Hummert, & Boich, 1995). Often used in various situations, such as healthcare and public settings, older adults are often met with over-accommodation or belittling speech (Bugental & Hehman, 2007). These are fueled by assumptions of lower cognition, poor hearing, and despondency.

Social isolation is another manifestation of the negative stereotypes held by younger adults. Isolation was initially thought to be the natural course of normal ageing because of life events such as widowhood, retirement, and physical decline resulting in restricted activities.

However, it is now being looked at as a result of younger adults' intent of distancing themselves from older adults (Hagestad & Uhlenberg, 2005; Pillemer & Glasgow, 2000; Wethington, Pillemer,& Principi, 2016). This can occur when age is the primary determinate for eligibility of membership or participation (Bugental & Hehman, 2007; Hagestad & Uhlenberg, 2005). Thought to create appropriate groupings for the benefit of the members, segregation creates further isolation of older adults and reduces contact between age groups. In turn, it strengthens age stereotypes and ageism.

Ageism has been particularly seen in caregiving and healthcare settings. Band-Winterstein (2015) interviewed 30 nurses about the effects of ageism on the preferential and neglectful care of older adults. Results found that older adults are often left unattended while suffering from significant physical ailments and are often seen as transparent or treated as objects. Older patients received less time dedicated to treatment and recovery. Limited resources are allocated to older patients, who then are subject to poor living and treatment quality, exemplifying the opinion that money should not be spent on older patients. Kane and Kane (2005) report similar findings in the rationing of resources, lower standards of care, exclusion from medical trials, and a lack of preferential referrals for medical treatments and therapies.

Age-Associated Dementia Stereotypes. A diagnosis of dementia can occur before age 65 (early onset dementia). Estimates are that only about 3% of persons with dementia in Canada are younger than 65 (Canadian Institute for Health Information, 2018c), therefore persons with dementia are more likely to be older adults, and dementia stereotypes are thus often an extension of age stereotypes.

Those with Alzheimer's dementia (AD) are often viewed as losing their former selves and considered "as good as dead," eliciting the image not only of illness but of social death

(Gerritsen, Oyebode, & Gove, 2018; Sweeting & Gilhooly, 1997). Those with the disease are no longer seen as individuals but as members of a group with a "damaged brain" that are met with pity, fear, and stigma (Blay & Peluso, 2010; Gerritsen et al., 2018; Sabat, 2008). The driving force behind this stigma appears to be the memory loss aspect of AD. Regardless of age, college students rated sufferers of memory loss higher in perceptions of pity, lower competence, and were more fearful of the individual than when assessing the cognitively healthy targets (O'Connor & McFadden, 2012). A diagnosis of dementia is often associated with stereotypes of further declines in cognitive and social abilities yet increased physical strength, as compared to normal ageing adults (Rust & Kwong See, 2010). This assumed heightened physical prowess may be due to stories of excessive wandering or perceptions of those with dementia as dangerous (Blay & Peluso, 2010).

Stereotypes, misunderstandings, and confusion of AD symptoms are not isolated to laypersons. Healthcare workers have been shown to hold biased views and to believe inaccuracies about the disease. Nurses and social workers are sometimes unaware of dementia symptoms, such as delusions and language difficulties. Anger and animosity between the healthcare aide and the patient can form if disruptive behaviours are perceived as voluntary and not symptoms of the illness. The consequences of this misjudgment were reflected in higher scores of depression and anger towards AD patients (Shinan-Altman, Werner, & Cohen, 2014). Nursing home staff think of persons in care with dementia as aggressive, uncooperative, stubborn, resistant, and unpredictable. Furthermore, the staff believes these behaviours are deliberate versus a consequence of the disease that they have no control over (Brodaty, Draper, & Low, 2003).

Rust and Kwong See (2007) compared formal caregivers' and undergraduate students' knowledge of AD. As expected, caregivers' knowledge was significantly higher than the undergraduates' knowledge, yet their average score on the assessment was only 58.3% correct. Caregivers were also found to have more misconceptions about AD because they were more likely to provide an incorrect answer than indicate they do not know. These misconceptions could consequentially lead the caregivers to make mistakes while caring for their patients. The misconceptions and exaggerated stereotypes create a stigma around AD that is held by healthcare professionals. Healthcare professionals often delay the diagnosis of dementia or Alzheimer's, reducing the time for treatment and preparation (Vernooij-Dassen et al., 2005).

Caregivers often rate working with the elderly more negatively than caring for young adults, and the added diagnosis of cognitive impairment creates further stress and burden resulting in reservations about caring for this population and a leniency for abusive care (Kahana et al., 1996). Additionally, persons in care with dementia who report abuse can encounter scrutiny and doubt about their abusive encounters (Werner, Eiskovitits, & Buchbinder 2005). Even with evidence of mistreatment, such as bruises or injuries, a dementia status can diminish the patient's perceived credibility and cause many reports of abuse to be dismissed as confused recollections.

Summary and Link to Rationale. Leniency in the perception of an abuser may be influenced by beliefs about the abused. With respect to beliefs about an abused person with dementia, not only is the person more likely to be older such that age stereotypes apply (e.g., have poorer memory than younger persons), but age-related dementia exaggerates perceptions of loss (e.g., exaggerated memory loss compared to older persons without disease). Age-associated beliefs may sway the perception of the nature and impact of an abuser's behaviour. As previous research

has suggested (Runac et al., 2017, 2018), perceivers may assume the person with dementia will not remember or feel abuse and is thus less affected by abuse because it is only in the moment. One of the primary associations young adults hold about AD is memory loss and cognitive declines (Rust & Kwong See, 2010). The stereotype does not contemplate the more complex reality of memory in dementia. Research has also shown that while persons in care with dementia may have limited explicit memory of abusive situations, implicit memories can be observed through differences in behaviour or emotions (Burgess & Phillips, 2006).

Contact as a Mediator of Perceptions of Abuse, the Abuser, and the Abused

Age stereotyping can be influenced by factors, such as greater knowledge about ageing and older adults. While all ages hold positive and negative age stereotypes, the complexity varies across the lifespan (Hummert, Garstka, Shaner, & Strahm, 1994). This may be due to the in-group and out-group perspective of ageing. Young adults who have not experienced late adulthood rely on the stereotypes commonly portrayed in society. This is how many develop their perceptions of out-groups. Greater complexities of the stereotypes are caused by an understanding of late adulthood and an unbiased view from older adults of their own in-group (Hummert et al., 1994; Popham & Hess, 2015).

Hummert and colleagues (1994) asked young, middle, and older adults to sort characteristics of older adults into piles, each pile being one type of older adult. While the young adults pigeonholed older adults into only three positive roles, middle and older adults identified four or five subtypes of positive older adults. Young adults' perspective revolved around broad stereotypes concerning the warm grandparent and the staunch conservative. While the older participants included the same categories defined by the younger group, the two older groups added more precise categories (e.g., political activist and neighbour). This trend continued

through to negative stereotypes. Societal focus on the negatives associated with ageing was reflected in the participants' negative portrayal of late adulthood. All three age groups created more negative subtypes of older adults than positive. This underlies the thoughts that adults have stronger negative views about late adulthood than positive (Hummert, 2011).

Because greater knowledge about ageing may afford less reliance on stereotypes, research has been directed at examining the role of contact. Overall, the literature is mixed concerning the impact of contact, depending on the contact quality and quantity (Christian, Turner, Holt, Larkin, & Colter, 2014). Some research suggests that the more contact people have with older adults, the less they will rely on stereotypes to guide their beliefs. For example, Augustine and Freshman (2016) found that after spending 20 hours with older adults, gerontology students reported lower stereotyped attitudes and more positive perceptions of ageing. These more positive attitudes of ageing persisted even after a 21-month follow-up. Other research has suggested that contact may lead to more reliance in different situations (e.g., Kwong See & Nicoladis, 2009).

With respect to perceptions of dementia in healthcare settings, more contact may not lead to better outcomes. Dow et al. (2013) found that healthcare professionals specializing in geriatrics or memory declines rated abusive behaviour significantly less abusive than students. Similarly, elder abuse was seen as less abusive by general practitioners and older caregivers than those without caregiver experience (Helmes & Cuevas, 2007). A large amount of contact in a caregiving situation may provide a desensitization to caregiving techniques that may be considered rough-handling, yet necessary in difficult situations. Runac et al. (2017, 2018) found that if participants had more contact with unhealthy older adults, an abusive caregiver was perceived as more respectful, nurturing, and benevolent. This supports the notion that contact

with unhealthy older adults creates desensitization for abusive care, exemplified by nursing aides and practitioners who report mistreatment of older adults as less abusive than those whose primary contact with older adults are with healthy individuals (Dow et al., 2013; Helmes & Cuevas, 2007).

Summary and Link to Rationale. From a social cognitive perspective, perceptions of people in an exchange can be mediated by factors, such as greater knowledge about them afforded from contact. To the extent that age and age-associated stereotypes (dementia) matter in perceptions of abuse, abuser, and abused, contact with older people may be expected to mediate perceptions.

Current Study and Predictions

Victims of elder abuse are more likely to have a diagnosis of dementia than those who are not abused (Pillemer et al., 2016). Moreover, in a perception study with young raters, abuse of persons with dementia was rated less abusive (Matsuda, 2017). In another study, compared to when the care recipient was a cognitively healthy older person, the abuser of a person with dementia was perceived more leniently and the abused as more accepting (Runac et al., 2017, 2018). From a social cognitive perspective, examining perceptions of (beliefs about) persons involved in abuse may enlighten why people believe abuse happens and, subsequently, why people might engage in similar behaviour.

The current study measured 1) perceptions of abusive behaviors and 2) perceptions about the abuser and abused. It manipulated caregiving load and the age of the abuser/abused. Of the different forms of elder abuse, this study included financial, neglect, and medication abuse and generally incorporated these forms into broader categories of physical and psychological abuse. These forms of abuse overlapped our previous research and were a natural extension. As well, adding questions about other components of abuse, such as sexual abuse, added length and

complexity beyond the scope of questions we wished to address (Childs, Hayslip, Radika, & Reinberg, 2000). To examine perceptions about the abuser and abused, we asked questions about their feelings and other attributions about them.

Using a vignette methodology, participants were presented a scenario in which a husband caregiver was described as abusing a wife care recipient under varying care load conditions (no care load the wife is healthy, care load due to the wife's physical disability, care load due to the wife's cognitive disability). The no care condition in which the wife was described as healthy dictated the care setting needed to be within a community and the caregiver an informal caregiver. In addition to manipulating care load, the current study varied the age of the couple, either the husband and wife were younger (32 and 29 respectively) or older (83 and 81 respectively). Although our focus was on manipulating the age of the abused, the scenario required that the age of the abuser vary along with that of the abused, but our hypothesizing is limited to a focus on the effects of the age of the abused. The study was thus a 3 Care Load (no care load, physical disability load, cognitive disability load) x 2 Couple Age (young, old) between subjects design.

Predictions: Perceptions of Abuse

Previous research suggested that abuse of an older person with a cognitive disability is perceived differently than abuse of an older person with a physical disability, and it is rated as less severe (Matsuda, 2007). Based on this research, for the overall ratings of severity of abuse, we expected abuse under the no care load to be rated as the most severe followed by the physical disability condition and then the cognitive disability condition (this pattern: no care load > physical disability load > cognitive disability load). This pattern shows leniency in the perception of abuse.

If age stereotypes drive the leniency effect, we expected abuse to be rated most harshly when the couple was described as younger compared to older (this pattern: young > old). To uniquely show an impact of dementia stereotypes over and above age stereotypes, a Care Load x Couple Age interaction was expected such that abuse in the old cognitive disability load condition should be viewed as least severe followed by the young cognitive disability load condition, both of which should be perceived less severe than the other conditions in the design. That is, abuse will be perceived more harshly in all other conditions compared to these two conditions (this pattern: all other conditions > young/cognitive disability load > old/cognitive disability load).

Predictions: Perceptions of the Abuser

Previous research found that compared to when the older person was cognitively healthy, the abuser of an older person with dementia was perceived more leniently (less harshly) (Runac et al., 2017, 2018). If the burden of care associated with the care of an older person with dementia sways perceptions of the abuser such that the abuser receives sympathy, we expected ratings of the abuser's feelings and attributions about the abuser (extent of blame, difficult to live with/love) to show leniency in culpability (this pattern: culpability no care load > physical disability load > cognitive disability load). Leniency in the perception of an abuser (husband) may be influenced by beliefs about the person being abused (wife). If the abused is viewed through the lens of age stereotypes, we expect culpability for the abuser to be higher when the abused is young compared to old (this pattern: young > old). If uniquely, dementia as an age-associated stereotype influences perceptions of the abused, we expected culpability to be least in dementia conditions compared to other conditions (this pattern: all other conditions > young/cognitive disability load > old/cognitive disability load).

Predictions: Perceptions of the Abused

Previous research has shown that compared to a cognitively healthy older person, an abused older person with dementia is perceived as behaving more respectfully, and thus more tolerant or accepting (Runac et al., 2017, 2018). If an older person with dementia is perceived as behaving less satisfied but more respectful and thus more tolerant and accepting, this would mean the leniency pattern reflects a perception of stoicism or resiliency to abuse. We expected ratings of the abused wife's feelings to reflect stoicism (this pattern: stoicism no load< physical disability load < cognitive disability load). If age stereotyping drives leniency, we expected the abused person's feelings to be perceived as most stoic when old is compared to young (stoic young < old). If age-related dementia stereotypes drive leniency, we expected this pattern: all conditions < young/cognitive disability load < old/cognitive disability load. For the measures of attributions (blame and difficult to live with), the expectations were the same as the stoic expectations for feelings. Being more stoic and resilient to abuse may coincide with perceptions of more blame and being more difficult to live with therefore: more blame and difficult to live with no load< physical disability load < cognitive disability load; more blame, more difficultly to live with young < old; more blame, more difficultly to live with all conditions < young/cognitive disability load < old/cognitive disability load.

Predictions: Contact as a Mediator

The research is mixed with respect to the effects of contact on perceptions of ageing. We examined self-rated quantity and quality of contact with older adults as a covariate in our analysis of the perception of abuse and perceptions of the abuser and abused. We made no specific predictions but explored whether the predicted effects (above) varied when contact (quantity and quality) as a variable was covaried.

Method

Participants

Participants were recruited from the undergraduate research pool from the University of Alberta. These students were enrolled in an introductory course in psychology and received a course credit for their participation. All were native English speakers or self-rated their English proficiency as a 5 or higher on a 7-point Likert scale ranging from 1 for "Poor" to 7 for "Excellent." This screening was to ensure that all participants had an adequate understanding of the actions described and the vignettes that were used to describe the targets. Participants were also screened for any medication that would have affected their participation. To ensure participants encoded key manipulation information from the vignettes, participants were screened on the accuracy of reporting the care load manipulation (i.e., could report the wife's physical or cognitive disability) and the ages of the husband and wife in the scenario. Ages for both the husband and wife had to be reported within five years of the ages in the vignettes.

After screening, there were a total of 156 participants with an average age of 20.55 years (age range = 19-56; 62.80% female, 36.50% male, 0.60% prefer not to say). The sample was ethnically diverse (48.10% Canadian, 17.95 % East Asian, 9.62 % Southeast Asian, 7.05 % South Asian, 10.26% Middle Eastern, 3.21% European, 0.60% American, 4.49% African, 0.60% Latin American).

On an intergenerational contact questionnaire (described below), participants knew an average of 6.48 older adults and rated their average age at 70.64 years old. The perceived physical and cognitive health of these older adults was 4.58 (1.30) and 5.55 (1.21) on a 7-point Likert scale ranging from 1 for "Not at all healthy" and 7 for "Very healthy," respectively. For primary older adult contact, 56.41% of participants' contact was with their grandmother.

Materials

Vignettes. Vignettes described a husband and wife couple. Care load and presumably caregiver burden that the husband experienced in his caring role was varied from no load to two levels of higher load: burden due to the wife's physical disability and burden due to the wife's cognitive disability. Age of the couple was varied such that the couple was young or old. Target age 81 was from Runac et al. (2017, 2018). The target age 29 and the vignette descriptions of physical and cognitive disabilities were adapted from O'Connor and McFadden (2012). The wording of the vignette for the six resulting conditions is given below:

Table 1.
Abused and abuser vignette descriptions in the 3 Care Load x 2 Couple Age study design.

Couple Age	Target	Care Load		
		No Load	Physical Disability Load	Cognitive Disability Load
Young	Abused (Wife)	Sarah Robbins is a physically and cognitively healthy 29-year-old woman.	Sarah Robbins is a 29-year-old woman suffering from physical paralysis. Physical paralysis symptoms include mobility loss and being confined to a wheelchair.	Sarah Robbins is a 29-year-old woman suffering from a disease. The disease symptoms include memory loss, confusion, and disorientation.
	Abuser (Husband)	Michael Robbins, a healthy 32-year-old man, is Sarah's husband.	Michael Robbins, a healthy 32-year-old man, is Sarah's husband. He has been her primary caregiver since Sarah's paralysis. His caregiving responsibilities include helping with personal activities of daily living (e.g., bathing, toileting) that Sarah can no longer complete on her own.	Michael Robbins, a healthy 32-year-old man, is Sarah's husband. He has been her primary caregiver since Sarah's diagnosis. His caregiving responsibilities include helping with personal activities of daily living (e.g., bathing, toileting) that Sarah can no longer complete on her own.

	Abused (Wife)	Sarah Robbins is a physically and cognitively healthy 81-year-old woman.	Sarah Robbins is a 81-year-old woman suffering from physical paralysis. The physical paralysis symptoms include mobility loss and being confined to a wheelchair.	Sarah Robbins is a 81-year-old woman suffering from a disease. The disease symptoms include memory loss, confusion, and disorientation.
Old	Abuser (Husband)	Michael Robbins, a healthy 83-year-old man, is Sarah's husband.	Michael Robbins, a healthy 83-year-old man, is Sarah's husband. He has been her primary caregiver since Sarah's paralysis. His caregiving responsibilities include helping with personal activities of daily living (e.g., bathing, toileting) that Sarah can no longer complete on her own.	Michael Robbins, a healthy 83-year old man, is Sarah's husband. He has been her primary caregiver since Sarah's diagnosis. His caregiving responsibilities include helping with personal activities of daily living (e.g., bathing, toileting) that Sarah can no longer complete on her own.

Perceptions of Abuse. The Severity of Violence Against Women Scale (SVWS; Marshall,1992) is a self-report instrument used to assess family violence against women with items sampling a range of mild, moderate, and severe abuse. Childs et al. (2000) adapted the SVWS scale for use in a perception study of abuse. The current study adopted Childs et al.'s (2000) 62 abusive behaviours/actions that were either physical (27 items) or psychological abuse (35 items) in order to measure perceptions of abuse.

To prevent response bias, the abusive actions were randomized, and the same order was used in all conditions. Changes were made depending on the age of the target person in the vignette and to make it appropriate for Canadian participants (e.g., spelling). For example, the psychologically abusive item "Do not bathe or dress Sarah when necessary" was changed to "Do not help Sarah with daily activities when necessary" to be more appropriate and believable for a young, healthy target. The item "stomp" was changed from a physical abuse item "stomp on" to

a psychological abuse item "stomp around" to be more appropriate for all of the abused target's health statuses. The 62 abusive behaviours/actions were categorized as either physical (26 items) or psychological abuse (36 items) in the current study. Participants rated the perceived level of abusiveness of each action taken by the husband, Michael, directed towards the wife, Sarah (e.g., Use a knife on Sarah; Lock Sarah in a room to prevent her from doing something). Abusiveness was scored on a 7-point Likert scale ranging from 1 for "Not at all abusive" to 7 for "Very abusive."

Perceptions of the Abuser and Abused. Raters were asked to judge how difficult it would be to love (no load)/ live with (physical disability load and cognitive disability load conditions) the abuser (husband) and abused (wife) and to judge how much to blame each for the abusive interactions. Ratings were made on 7-point Likert scales where 1 was "Not at all," and 7 represented "Very much." Difficulty to live with was used in the physical and cognitive disability load conditions to evaluate whether the different load conditions elicited similar levels of burden. Difficulty to love was used on the no care load conditions. Difficulty to love was used as an alternative because there was no burden being assessed that would alter perceptions of living with targets, and love offers insight into perceptions of the targets if there is no dependence between them.

Raters judged the feelings of the abuser and abused in their daily life. The 12 feeling items were presented in random order for both the abuser and abused. There were 6 items tapping positive emotions (happy, optimistic, satisfied with life, hopeful, relaxed, calm) and 6 negative emotions (isolated, exhausted, rage, guilty, irritated, helpless). These items were inspired by searching websites that described the caregiving experience and were selected to

represent that experience. The rating was on a 7-point Likert scale where 1 was "Not at all," and 7 represented "Very much."

Manipulation Check. Because it was important to verify that different levels of caregiving load and the age manipulation were perceived as intended, raters were asked to rate the abused person (wife) on measures of physical (healthy, independent, physically weak) and cognitive (confused, good memory, forgetful) functioning as manipulation checks. Ratings were made on 7-point Likert scales where 1 was "Not at all," and 7 represented "Very much."

Intergenerational Contact Questionnaire. Participants rated and described their day-to-day interactions with senior citizens. First, their interactions with older adults, in general, were measured with self-reports of the total number of older adults they know, an estimate of the age range, the average age of these individuals, and where these interactions take place. Using a 7-point Likert scale using 1 for "Not at all" to 7 for "Very," participants rated the older adults' perceived physical and cognitive health and their contact quantity (how much regular contact do you have) and quality (how positive would you rate your interactions with). Then instructed to focus on the one adult they have the most contact with, participants described this individual and then rated their contact quality and quantity, along with the older adult's cognitive and physical health.

A full sample testing booklet including the vignette, perceptions of abuse items, screening and manipulation check items, and intergenerational contact questions is provided in Appendix A.

Procedure

Participants were tested in groups of approximately 25. Once all the participants arrived they were given a brief synopsis of the study and its procedures and then instructed to read and

sign a consent form. After everyone had completed the consent form, participants were instructed to read the vignettes describing the husband and wife (the couple) and indicate they had done so on the prompt provided on the page. Participants were given two minutes to complete this task. They were then given 10 minutes to assess the abusiveness of different actions taken by the husband directed towards the wife. Participants were then instructed to complete attribution items (blame, live/love), manipulation check items, and measures of the abuser and abused feelings. Participants were given seven minutes for this task. After finishing, participants were given seven minutes to complete the Intergenerational Contact Questionnaire and then instructed to complete a demographic questionnaire, which included questions about respondent age, sex, and language proficiency. Once the packet was completed, participants were debriefed about the true nature of the study and then released. The entire testing session took approximately 45 minutes to complete. Because of the sensitive nature of the abuse items, an additional researcher was in the room to observe if participants experienced distress and to escort a participant to the University Counseling or Peer Support Centre if needed.

Results

Design and Analysis Strategy

The study had a 3 Care Load (no load, physical disability load, cognitive disability load) x 2 Couple Age (young, old) between design. Because of the number of variables and the increased chance of family-wise error from multiple analyses, a strategy was adopted to reduce data by creating composite scores from individual items, when it was reasonable to do so (data reduction). ANOVA was used to analyze single composite scores. After data reduction, if there were multiple composite dependent variables to address a research question, these were analyzed by a MANOVA followed by univariate ANOVAs with post hoc comparisons, if applicable. For

all analyses significance was set at $\alpha = .05$.

Manipulation Check. Raters were already screened for being able to report the disability of the wife and ages of husband and wife (see Participant section above). We checked to see that participants perceived the manipulations as intended. Based on responses, it was apparent participants in the cognitive care load condition perceived the wife as having memory loss or even dementia. Do raters perceive the abused wife's cognitive ability lower in the cognitive disability load condition compared to the physical disability load and no load conditions? The answer to this question is yes: perceived cognitive ability is lower in the cognitive disability load condition compared to the no load and physical disability conditions, which did not differ from each other. Do raters perceive the abused wife's physical ability lower in the physical disability load condition compared to the cognitive disability load and no load conditions? The answer to this question is partially yes: perceived physical ability was perceived equally low in the physical disability load and cognitive disability load conditions, and both were lower than the no load condition suggesting that cognitive disability was perceived as also having physical declines associated with it. Do raters expect the wife's cognitive and physical ability to be lower when described as old compared to when she is describe as young? The answer to this question is no as there was no main effect of Couple Age or interaction, indicating expected age stereotyping associating older age with lower physical and cognitive ability did not emerge. The analyses for the manipulation checks are below.

Data preparation. There were six manipulation check items. Scores on negatively worded items were recoded so that a higher score would indicate higher cognitive and physical ability. A principal component analysis with a Varimax rotation was conducted and revealed two dimensions (Cognitive Ability and Physical Ability) with eigenvalues greater than one. The

factors accounted for 49.14% and 23.99% of the variance respectively, with a total of 73.13% of the variance explained. To assure strength of the dimension, a strict .60 loading was used for inclusion. The dimensions were as expected (factor loadings in brackets): the cognitive dimension included the items forgetful (.90), good memory (.89), and confused (.80); and the physical dimension included the items physically weak (.82), independent (.81), and healthy (.78).

The scores of each item within the dimensions were averaged to create a score for cognitive ability and physical ability. A Cronbach alpha was used to evaluate the internal consistency of the two dimensions: cognitive ability score .85 and physical ability score .75. These indicate acceptable reliability (Nunnally, 1978).

Analysis. Panel A of Table 2 (p. 51) shows the means and standard deviations of the composite cognitive ability score. A 3 x 2 ANOVA on the cognitive ability composite score showed a main effect for Care Load ($F(2,149) = 61.63, p < .001, \text{partial } \eta^2 = .45$), no Couple Age effect ($F(1,149) = 1.42, p = .24, \text{partial } \eta^2 = .01$), and no interaction ($F(2,149) = .84, p = .43, \text{partial } \eta^2 = .01$). Tukey HSD post hoc analysis showed the cognitive ability of the abused wife was perceived lower in the cognitive disability load condition (M = 1.80) compared to the physical disability load condition (M = 4.42) and no load condition (M = 3.97), which did not differ from each other. The Tukey HSD post hoc mean differences can be seen in Panel A of Table 2.

Panel B of Table 2 (p. 51) shows the means and standard deviations of the composite physical ability score. A 3 x 2 ANOVA on the physical ability composite score showed main effect for Care Load ($F(2,149) = 55.76, p < .001, \text{partial } \eta^2 = .43$), no Couple Age effect ($F(1,149) = 1.06, p = .31, \text{partial } \eta^2 = .01$), and no interaction ($F(2,149) = 1.98, p =$

$.14, \text{partial } \eta^2 = .03$). Tukey HSD post hoc analysis showed physical ability of the abused wife was perceived equally low in the physical disability load condition (*M* = 2.14) and cognitive disability load condition (*M* = 2.33), both of which were lower than the no load condition (*M* = 4.21). The Tukey HSD post hoc mean differences can be found in Panel B of Table 2.

Perceptions of Abuse.

Physical Abuse. Is physical abuse perceived more harshly when care load is lower (prediction: no care > physical care > cognitive care)? Is physical abuse perceived more harshly when the couple is young compared to old (prediction: young > old)? Do dementia stereotypes further influence perceptions of abuse (all other conditions > young/cognitive disability load > old/cognitive disability load)? The answer to all three questions is no. Overall physical abuse was rated as highly abusive (means all higher than 5.7 on a 7-point scale), and perceptions of physical abuse did not differ as a function of Care Load or Couple Age, and there was no interaction. The analysis showing these results is below.

Data preparation. There were 26 items encompassing physical abuse. A principal component analysis using a Varimax rotation found seven components with an eigenvalue greater than one. These explained 30.67%, 8.61%, 7.39%, 6.17%, 5.55%, 4.78%, and 4.06% of the variance, respectively, for a total of 67.22% of the variance explained. Factor loadings for the physical abuse items can be seen in Table 3 (p. 52). After the inclusion criteria stated above was applied, the first component, that we named Punch/Use Object, included the items punch, hit with fist, and throw an object at. The second component, that we called Handle Rough, was comprised of push, shake rough, grab forcefully, and scratch. The third component, Physically Restrain, included hold down, tie to the bed to prevent from doing something, and tie to the bed to punish. The fourth component, Physically Maim, included two items, burn and kick. The fifth

component, Extended Abuse, included use club like object on, withhold food, and beat up. The sixth and seventh dimensions only comprised of one item each that fit the inclusion criteria. The items were choke for the sixth component and use knife on for the seventh component. There is debate in the literature as to what an acceptable lower level for reliability is with some indicating .5 (Peterson, 1994) and others indicating acceptable reliability as $\alpha \geq .75$ (Nunnally, 1978). Reliability on the items was above the lowest tolerable level indicated in the literature.

Analysis. Table 4 (pp. 53 - 54) shows the means and standard deviations of the composite scores for the physical abuse dimensions. A two-way 2 x 3 MANOVA was conducted to evaluate the effects of Care Load and Couple Age on dimensions of physical abuse. The assumption of homogeneity of covariance matrices was violated, as assessed by Box's M test ($p < .001$), but because of MANOVA's robustness to this violation and since the sample sizes within each cell of the design were similar, the analysis continued and Pillai's Trace was used (Laerd Statistics, 2016; Tabachnick & Fidell, 2014). No significance was found for the interaction effect, $F(14,290) = 1.11, p = .35,$ Pillai's Trace $= .10,$ partial $\eta^2 = .05$, Care Load, $F(14,290) = .81, p = .66,$ Pillai's Trace $= .08,$ partial $\eta^2 = .04$, or Couple Age, $F(7,144) = .45, p = .87,$ Pillai's Trace $= .02,$ partial $\eta^2 = .02$.

Psychological Abuse. Is psychological abuse perceived more harshly when care load is lower (prediction: no care > physical disability care > cognitive disability care)? Is psychological abuse perceived more harshly when the couple is young compared to old (prediction: young > old)? Do dementia stereotypes further influence perceptions of abuse (all other conditions > young/cognitive disability load > old/cognitive disability load)? The answer to all three questions is no. In fact, there was a main effect for Care Load but in the opposite direction as expected such that abuse was rated as less severe in the no load condition (this pattern: no care < physical

disability care = cognitive disability care). We saw this pattern in the overall means and on an individual dimension we called Patronizing Dismissiveness. These results suggest that neglecting one's caregiving duties, regardless if the care load is physical or cognitive in nature, is more abusive than when a spouse neglects a healthy individual, as dismission of responsibilities may result in further, long-lasting harm to the abused if she is unhealthy. Perceptions of psychological abuse did not differ as a function of Couple Age, and there was no interaction. The analysis for perceptions of psychological abuse is below.

Data preparation. A total of 36 items encompassed types of psychological abuse. The principal component analysis with Varimax rotation revealed seven components that had an eigenvalue greater than one. These represented 39.68%, 8.79%, 6.21%, 4.40%, 3.68%, 3.18%, and 2.85% of the variance, respectively, and in total accounted for 68.79% of the variance. Factor loadings for the psychological abuse items can be seen in Table 5 (pp. 55 - 56). After inspection of the components, the seventh component was not used as none of the factor loadings met the .60 inclusion criteria. The first component, that we called Financial and Property Abuse, included use savings without permission, sell personal property without permission, use money without her knowledge, read personal mail, prevent from receiving visitors, and threaten to destroy property. The second component, we called Patronizing and Dismissiveness, included items do not call when asked, do not visit when asked, stomp around, do not bathe / help with daily activities, and shake a finger at. Threaten to hurt, threaten to hit, and threaten someone cared about were included in the third component, called Threaten Harm. The fourth component, Threaten With Weapon or Death, included threaten to kill, threaten with a knife, threaten with a weapon, threaten to kill self around her, and act like he wants to kill her. The fifth component, Threatening Body Language, included the items make threatening gestures or faces at her and

shake fist at her. The sixth component, Psychologically Restrain, included lock in a room to punish and lock in a room to prevent her from doing something. All the components reported acceptable reliability, $\alpha \geq .69$ (Murphy & Davidshofer, 1988; Nunnally, 1978).

Analysis. A two-way 2 x 3 MANOVA was conducted to evaluate the effects of two independent variables, Care Load and Couple Age, on dimensions of psychological abuse. For the interaction between Couple Age and Care Load, there was no significant effect, $F(12,284) = .79, p = .66, \text{Wilks}' \wedge = .94, \text{partial } \eta^2 = .03.$ While evaluating simple main effects, a significant effect was found for Care Load, $F(12,284) = 5.32, p \leq .001, \text{Wilks}' \wedge = .67, \text{partial } \eta^2 = .18$, but not for Couple Age, $F(6,142) = .49, p = .82, \text{Wilks}' \wedge = .98, \text{partial } \eta^2 = .02.$ Examination of univariate ANOVAs showed a main effect for the Patronizing Dismissiveness dimension, which includes do not call when asked, do not visit when asked, stomp around, do not bathe/ help with daily activities, and shake a finger at, $F(2,147) = 9.33, p \leq .001, \text{partial } \eta^2 = .11$. Tukey HSD post hoc comparisons showed psychologically abusive items in the Patronizing Dismissiveness dimension were considered more abusive in the physical disability load condition ($M = 4.04$) or cognitive disability load condition ($M = 4.24$) as compared to the no load condition ($M = 3.18$). Tukey HSD post hoc mean differences indicate perceptions of the Patronizing Dismissiveness dimension was -0.85 (95% CI, -1.44 to -0.26) lower for the no care load condition compared to the physical care load condition ($p = .002$). Perceptions of the Patronizing Dismissiveness dimension were -1.06 (95% CI, -1.68 to -0.44) lower for the no care load condition compared to the cognitive care load condition ($p < .001$). Mean and standard deviation scores can be seen in Table 6 (p. 57).

Perceptions of the Abuser and Abused

Blame and Difficult to Live With/ Love the Abuser (husband). For difficulty to live/love and blame, are ratings more harsh (culpability) when care load is lower (prediction: no load> physical disability load > cognitive disability load)? Are ratings more harsh when the couple is young compared to old (prediction: young > old)? Do dementia stereotypes further influence perceptions (all other conditions > young/cognitive disability load > old/cognitive disability load)? The answer to the questions and for all measures is no with the exception that as partially predicted, the abuser husband is perceived as more to blame in the no load care condition compared to the two care conditions that did not differ from each other (no load > physical disability load = cognitive disability load) showing that care load, and by inference caregiver burden, influences perceptions of abuse. The analyses answering the above questions are below.

Analysis. A 2 x 3 ANOVA was conducted to evaluate perceptions of the abuser's blame for the abuse with two independent variables, Care Load and Couple Age. The assumption of equality of variance was violated, as assessed by Levene's Test of Equality ($p < .05$), but because of ANOVA's robustness to this violation and since the sample sizes within each cell of the design were similar, the analysis continued (Jaccard, 1998; Laerd Statistics, 2016). No significant interaction was found between Couple Age and Care Load, $F(2,150) = .41, p = .66, \text{partial } \eta^2 = .01$. An analysis of main effects uncovered significance for Care Load, $F(2,150) = 8.17, p \leq .001, \text{partial } \eta^2 = .10$, but not Couple Age, $F(1,150) = .26, p = .61, \text{partial } \eta^2 < .01$. To explore the nature of the Care Load main effect, Tukey post-hoc comparisons indicated the abuser was more to blame with the no care load condition (M = 6.64) as compared to the physical care load ($M = 5.53$) and cognitive care load ($M = 5.74$) conditions. For Tukey HSD post hoc mean comparisons, refer to Table 7 (p. 58).

The perceived difficulty to live with the abuser (husband) when the abused (wife) was described as having a disability was analyzed using a 2 x 2 ANOVA with Couple Age and Care Load as independent variables. The assumption of equality of variance was violated, as assessed by Levene's Test of Equality ($p < .05$), but because of ANOVA's robustness to this violation and since the sample sizes within each cell of the design were similar, the analysis continued (Jaccard, 1998; Laerd Statistics, 2016). A significant interaction was not found, $F(1,99) = .29, p = .59, \text{partial } \eta^2 < .01$. No significant main effect for Care Load $F(1,99) = .12, p = .73, \text{partial } \eta^2 < .01$, or Couple Age, $F(1,99) = 3.13, p = .08, \text{partial } \eta^2 = .03$ was found. Panel A of Table 8 (p. 59) shows the means and standard deviation scores.

To investigate the effect of Couple Age on the perceived difficulty that exists to love the abuser when the abused is in the no care load condition, an independent samples t-test was conducted. No significance was found $t(51) = .71, p = .48$ in perceptions of the difficulty to love the abuser if the abused was healthy and described as young ($M = 6.68$) or old ($M = 6.48$). Panel B of Table 8 (p. 59) shows the means and standard deviation scores.

Abuser (husband) Feelings. On ratings of the 12 items assessing the abuser husband's feelings, do ratings show a pattern of forgiveness when care load is higher? Meaning is culpability highest in the no load condition (prediction: culpability no load > physical disability load > cognitive disability load)? Is culpability higher when the abused wife is young compared to old (prediction: culpability young > old)? Do dementia stereotypes further influence perceptions (culpability all other conditions > young/cognitive disability load > old/cognitive disability load)? The answer to the first question is generally yes. There was a main effect of Care Load overall, and in interpreting the individual items, there is a pattern of leniency/forgiveness when there was a care load: husband perceived as less helpless and less

exhausted in the no care load condition compared to the care conditions (cognitive disability=physical disability; i.e., more helpless and more exhausted in the care load conditions); less rage in the care conditions (cognitive disability=physical disability) compared to the no load condition (i.e., more rage in the no load condition). Overall there was no effect of Couple Age or interaction, so the answer to questions two and three above is no. Analyses that show these results are below.

Data preparation. There were 12 items evaluating abuser husband's feelings. Scores on negatively worded items were recoded so that a higher score would be in the same direction as positively worded items (e.g., rage was recoded so a higher score indicates less rage). Because there was no a priori thinking about how the items were related or should be grouped for the analysis we treated each item as a separate dependent variable.

Analysis. To evaluate the effects of two independent variables, Couple Age and Case Load, on the perceptions of the abuser husband's feelings, a two-way 2 x 3 MANOVA was conducted. The assumption of homogeneity of covariance matrices was violated, as assessed by Box's M test ($p < .001$), but because of MANOVA's robustness to this violation and since the sample sizes within each cell of the design were similar, the analysis continued and Pillai's Trace was used (Laerd Statistics, 2016; Tabachnick & Fidell, 2014). There was not a significant interaction between Couple Age and Care Load on the perceived feelings of the abuser husband, $F(24,280) = .72, p = .84,$ Pillai's Trace $= .12$, partial $\eta^2 = .06$. Analysis of simple main effects found significance for Care Load, $F(24,280) = 2.35, p = .001,$ Pillai's Trace $= .34,$ partial $\eta^2 = .17$, but not for age, $F(12,139) = .90, p = .55,$ Pillai's Trace $= .07,$ partial $\eta^2 = .07.$ To evaluate the simple main effects of Care Load, univariate two-way ANOVAs were run. Significance was found on three of the 12 items including rage $F(2,150) =$

$6.74, p = .002,$ partial $\eta^2 = .08$, helpless $F(2,150) = 4.93, p = .008,$ partial $\eta^2 = .06$, and exhausted $F(2,150) = 15.01, p \leq .001,$ partial $\eta^2 = .18$. Tukey HSD post hoc tests were used to evaluate the differences between the care load conditions. Tukey HSD post hoc mean differences can be found in Table 9 (pp. 60 - 62).

Blame and Difficult to Live With/Love the Abused (wife). On ratings of how difficult to live/love and blame, is there a pattern showing more blame and more difficulty living with in the high care load conditions (no load < physical disability load < cognitive disability load)? Is there more blame, more difficulty to live/love when the couple is young compared to old (young < old)? Do dementia stereotypes further influence perceptions (all other conditions more blame, more difficulty to live with < young/cognitive disability load < old/cognitive disability load)? The answer to the questions for all measures is no, with the exception that as predicted, the abused wife was rated as more difficult to live with when described as old compared to when she is described as young in the two care load conditions. This suggested that when there is a care load, there is a role for age stereotyping as contributing to perceptions of the abused person. Overall blame on the abused wife was low (all scores below 2.25 on a 7-point scale). The analyses answering the above questions are below.

Analysis. A 2 x 3 ANOVA was performed to assess the role of two independent variables, Care Load and Couple Age, on the score for how much the abused (wife) was to blame for the abusive interactions (see Table 10, p. 63). There was no significant interaction between Couple Age and Care Load, $F(2,150) = 2.83, p = .06,$ partial $\eta^2 = .04$, nor was there a main effect of Care Load $F(2,150) = .80, p = .45,$ partial $\eta^2 = .01$, or Couple Age, $F(1,150) = .09, p = .77,$ partial $\eta^2 < .01$.

To analyze the difficulty to live with the abused (wife) when she was suffering from a physical disability or cognitive disability, a 2 x 2 ANOVA was performed with two independent variables, Couple Age and Care Load. No significant interaction was found, $F(1,99) < .01, p = .96, \text{partial } \eta^2 < .01$. An analysis of simple main effects reported significance for Couple Age, $F(1,99) = 11.69, p = .001, \text{partial } \eta^2 = .11$, but not Care Load, $F(1,99) = .04, p = .84, \text{partial } \eta^2 < .01$. She was perceived as more difficult to live with when she was described as old ($M = 5.98$) compared to young ($M = 5.27$). Panel A of Table 11 (p. 64) offers the means and standard deviations of the variables.

An independent samples t-test was conducted to analyze the effect of age on the perceived difficulty to love the abused when she was described as healthy. No significance was found $t(51) = .11, p = .91$ in perceptions of difficulty to love when the abused was healthy and described as young ($M = 2.29$) or old ($M = 2.24$). See Panel B of Table 11 (p. 64) for the means and standard deviation scores of the variables.

Abused (wife) Feelings. On the 12 items assessing the abused wife's feelings about being in an abusive environment, do raters perceive more acceptance or stoicism when care load is high (prediction: stoicism no load < physical disability load < cognitive disability load)? Do raters perceive the abused person's feelings as reflecting more stoicism when the couple is older compared to young (prediction: young < old)? Do dementia stereotypes further influence perceptions (stoicism all other conditions < young/cognitive disability load < old/cognitive disability load)? The answer to the first question is generally yes. There was a main effect of Care Load overall, and looking at the individual items there is a pattern of leniency when there was a care load compared to no care load: wife being abused perceived as more happy and relaxed in the care conditions (cognitive disability = physical disability) compared to the no load

condition; less rage in the cognitive disability condition compared to the no load condition; more calmness in the physical disability condition compared to the no load condition. This shows a perceived resiliency or stoicism in perceptions of an abused person needing care. Overall, there was no effect of Couple Age or interaction, so the answer to questions two and three above is no. Analyses that show these results are below.

Data preparation. There were 12 items evaluating the abused's (wife's) feelings during her day-to-day life living with abuse. Scores on negatively worded items were recoded so that these items would be in the same direction as positively worded (e.g., rage recoded so higher score means less rage). Because there was no a priori thinking about how the items were related or should be grouped, for the analysis we treated each item as a separate dependent variable.

Analysis. A two-way 2 x 3 MANOVA was first conducted to evaluate the effects of two independent variables, Couple Age and Care Load, on 12 different emotions or feelings. The assumption of homogeneity of covariance matrices was violated, as assessed by Box's M test ($p < .001$), but because of MANOVA's robustness to this violation and since the sample sizes within each cell of the design were similar, the analysis continued and Pillai's Trace was used (Laerd Statistics, 2016; Tabachnick & Fidell, 2014). No significant interaction was found between Couple Age and Care Load, $F(24,276) = 1.03, p = .43, \text{Pillai's Trace} = .16, \text{partial } \eta^2 = .08$, but upon investigating main effects one was found for Care Load, $F(24,276) = 2.45, p < .001, \text{Pillai's Trace} = .34, \text{partial } \eta^2 = .17$, but not for Couple Age, $F(12,137) = .09, p = .34, \text{Pillai's Trace} = .09, \text{partial } \eta^2 = .09$. Follow-up univariate two-way ANOVAs were performed to investigate the simple main effects of Care Load on the perceptions of the abused wife's feelings. Of the 12 items evaluating the abused wife's feelings, significant main effects of Care Load were found for happy $F(2,148) = 9.66, p <$

$.001, \text{partial } \eta^2 = .12$, rage $F(2,148) = 5.23, p = .01, \text{partial } \eta^2 = .07$, relaxed $F(2,148) = 4.12, p = .02, \text{partial } \eta^2 = .05$, and calm $F(2,148) = 3.93, p = .02, \text{partial } \eta^2 = .05$. Tukey HSD post hoc comparisons were performed to explore the nature of the differences between the care load conditions. These Tukey HSD post hoc mean differences can be found in Table 12 (pp. 65 - 67).

Contact as Mediator of Perceptions of Abuse, Abuser, Abused

Does self-rated quantity of contact with older people and self-rated quality of that contact influence perceptions of abuse, the abuser and the abused? The answer to these questions is no. In the sample, rated quantity of contact with older adults was relatively low at 3.85 (*SD* = 1.64) on a 7-point scale. Contact quality was relatively high with an average of 6.00 (*SD* = 1.17). As indicated above, contact was with an average of 6.48 older adults with an average age at 70.64 years old.

Additional analyses were performed to evaluate the role of self-rated contact quality and quantity on perceptions of abuse, the abuser and the abused. ANCOVA and MANCOVA analyses were re-run on the analyses above for each of self-rated quantity, then quality. No significant covariate effects were found, indicating contact quality and quantity do not have a mediating role on perceptions of abuse, the abused or abuser. The results reported above did not change when contact quantity or contact quality were entered as covariates in each analysis.

Discussion

Prevalence rates of elder abuse are much higher among those who have a diagnosis of dementia than those who are cognitively healthy (Pillemer et al., 2016). Interestingly, research has found that abuse directed towards an older adult with dementia is regarded as less severe than when directed towards a cognitively healthy older adult (Matsuda, 2007). Additional studies

have found that the abuser in an abusive scenario was perceived more leniently when the abused individual had dementia, and the abused person in care with dementia was expected to be more accepting of the mistreatment (Runac et al., 2017, 2018). This research sought greater understanding of how factors associated with caregiving load and the age of the caregivers/receivers influence 1) perceptions of abuse and 2) perceptions of the abused and abuser. Understanding how these factors influence perceptions might explain why there is a high prevalence of abuse towards older adults with dementia.

Using a vignette methodology, undergraduate students were presented a scenario in which a husband was abusing his wife under varying care load conditions (no care load and the wife is healthy, physical care load from the wife's physical disability, or a cognitive care load from the wife's cognitive disability). This was to examine sympathy for caregiver burden from the increased stress associated with caring for those with dementia (Etters et al., 2008) as an influence on perceptions. Additionally, the study varied the age of the couple; either the husband and wife were described as younger (32 and 29 respectively) or older (83 and 81 respectively). This was to examine the role of age and age-related stereotypes (dementia stereotypes) on perceptions of abuse (Runac et al., 2017, 2018). The study was thus a three care load by two couple age between subjects design. Additionally, the effects of intergenerational contact were explored as possible mediators of lenient perceptions of abuse, the abuser, and the abused.

Manipulation Check

Before testing the main study hypotheses, a manipulation check, using perceptions of the wife's cognitive and physical health, was analyzed to assure participants perceived the manipulations as intended so we could accurately compare the effects of care load and couple age on perceptions of leniency. We expected the abused wife's cognitive abilities to be perceived

as lower in the cognitive care load condition compared to the physical care load or no care load conditions, as research suggests beliefs of severe cognitive decline are associated with older adults with dementia as compared to cognitively healthy older adults (Rust & Kwong See, 2010). As expected, the cognitive disability care load condition elicited lower perceptions of cognitive abilities than both cognitively healthy conditions. For the abused wife's physical abilities, we expected the wife in the physical care load condition to be rated lower than the cognitive care load and no care load conditions. Rust and Kwong See's (2010) findings that beliefs of heightened physical prowess are associated with a dementia diagnosis guided this expectation. Interestingly, both high care load conditions elicited lower perceptions of physical competence, suggesting that physical declines can be believed to co-occur with a dementia diagnosis. Another explanation for this departure of Rust and Kwong See (2010) may be because we outlined the duties of the husband caregiver, the abuser. Because the caregiver responsibilities were identical for the physical and cognitive care load conditions, the wife's physical capabilities would assume to be the same between the two high care load conditions. We also expected physical and cognitive abilities to be lower in the older conditions compared to the younger conditions. No couple age effects were seen in perceptions of cognitive or physical competence. Similar to the explanation for care load effects, when we outlined the specific physical responsibilities of the husband for each condition, no differences were found between the older and younger targets. It is possible participants focused on the given physical restrains of the target defined for both the physical and cognitive disability care load conditions instead of applying their expectations of the physical capabilities of older adults generally, therefore eliminating age effects. Overall, the results of the manipulation check told us that the participants generally perceived the manipulations as intended and we could proceed with the remainder of the analyses.

Perceptions of Abuse

To analyze the possible roles of age stereotypes and sympathy for caregiver burden on leniency in perceptions of abuse, we assessed participants' perceptions of severity on seven dimensions encompassing physical abuse and six dimensions encompassing psychological abuse. We expected a high care load would lead to more leniency in perceptions of abuse; therefore, severity ratings of both physical and psychological abuse would be lower. Similarly, showing leniency reflecting age stereotypes, the older age target would elicit lower perceptions of abusiveness as compared to a younger target. If age-related dementia stereotypes create a unique level of leniency for abuse, we expected the old, cognitive care load condition to have the lowest perceptions of severity, followed by the young, cognitive care load condition, then the remaining conditions.

There were no interactions or simple main effects of couple age and care load on perceptions of physical abuse. Inspection of the data revealed a truncated range in perceived abusiveness, with most actions observed as severely abusive. This departs from our hypotheses and Matsuda's (2007) findings of more tolerance for physical abuse when directed towards an older adult in care with dementia as compared to without dementia, regardless of needing care. Matsuda's (2007) analysis used three items to evaluate physical abuse: violent actions, physically restraining the individual against their will, and confining the person to their room. While violent acts could encompass a wide range of actions, the other two prompts could be viewed as necessary in care, for example, confining an older adult to reduce the incidence of wandering or possible falls. The physical abuse items used in the present study evaluated a broad spectrum of physically abusive actions, few of which could be viewed as necessary actions

within a caregiving situation to handle a care receiver. If more items were to be considered as situationally acceptable, significance might have been found.

As with the physically abusive items, couple age and care load did not elicit many significant results. One care load effect was found for the dimension concerning patronizing and dismissive actions. Participants found it more abusive for the abuser to neglect and patronize the abused when he was under a high physical or cognitive care load. This effect was in the opposite direction from what was hypothesized and deviates from the findings of abuse leniency in Matsuda (2007). When placed in a caregiver role, the role now forces the caregiver to take responsibility for that individual's well-being. Based on these results, neglecting those responsibilities may be perceived as not only creating psychological distress for the abused at that moment but possible detriments to their health later on. As an item representative of the dimension, ignoring a healthy wife's calls or requests would be considered rude, but if she is ill, ignoring potential emergencies might cause further harm.

While one care load effect was found within the psychological abuse dimensions, it is also imperative to look at the results to see if meaningfulness can be found in non-significant data. Particularly for physically abusive actions, ratings at the highest range of the scale indicate that abuse is always considered abuse regardless of couple age or care load. Violent acts, such as using a knife or gun on the abused wife, or kicking or burning her, could be regarded as abuse for the sake of abuse and solely reflect poorly on the perpetrator. Similarly, when visually inspecting the severity scores for the psychologically abusive actions, many of the dimensions that scored higher on the scale had little to no bearing in caregiving. This suggests that leniency, as found in Runac et al. (2017, 2018), spurs not from the perceptions of abuse but of the abuser and abused within the situation. Within an abusive situation, the action is never appropriate.

Perceptions of the Abuser

To evaluate the effects of care load and couple age on perceptions of the abuser, we asked the participants to rate the abuser's blame, how difficult it would be to love or live with the abuser, and perceptions of the abuser's day-to-day feelings. These items encompass the level of culpability the abuser has for his mistreatment. For care load we expected the abuser to be rated more culpable for his actions in the no care load conditions, followed by the physical care load, then the cognitive care load conditions. This would imply a role of sympathy for caregiver burden in perceptions of the abuser. Similarly, the older abuser would have less culpability as compared to a younger abuser, inferring age-stereotypes. If age-related dementia stereotypes create a unique level of leniency for the abuser, we expected the old, cognitive care load condition to have the lowest level of perceived culpability, followed by the young, cognitive care load condition, then the remaining conditions.

While no interactions or couple age effects were found, care load effects were observed. The abuser was viewed as significantly more to blame for the interactions when he was under no care load, as opposed to both physical and cognitive care load. As discussed, caring for older adults, particularly those who are sick, creates a burden for the caregiver who is usually a spouse or family member (Adelmann et al., 2014; Canadian Institute for Health Information, 2018b). Unfortunately, this notion can remove some of the responsibility of the abuser and place it on the abused (Herring, 2011). Our data support this notion with less blame placed on the abuser when he is under a high care load because he is viewed as bogged down by his caregiving responsibilities and, therefore, less culpable.

Looking further into attributions for abuse, the difficulty to live with or love the abuser was analyzed. No significant couple age or care load status effects or interactions were found for

how difficult it would be to love or live with him. Mean scores were high for all conditions suggesting that while his blame is lower in the high care load conditions, he is nonetheless a difficult person to be around because of his actions.

Care load effects on the abuser's day-to-day feelings reflect the participants' leniency for the abuser's culpability and their attempt to understand the abuser's motives for his abusive actions towards the abused wife. Investigating individual scores on the feelings items revealed significant care load effects for perceptions of the abuser's rage, exhaustion, and helplessness. Participants found the abuser to be more exhausted and helpless in his day-to-day life when he was under a high physical or cognitive care load, as compared to no care load. Through the null results, participants describe their perceptions of a general abuser (e.g. not hopeful, not relaxed, not calm). Items that highlight burden showed a pattern of leniency. Increased likelihood of caregiver burden has been associated with various factors, including care recipient cognitive impairment (D'Onofrio et al., 2015). Similarly, Gaugler, Davey, Pearlin, and Zarit (2000) investigated the role of dementia symptoms on various subsets of caregiver burden and found significant increases in caregiver role overload and negative impacts on a caregiver's emotional well-being. Our participants understood the weight care load places on the shoulders of the abuser. Linking perceptions of the abuser's helplessness and exhaustion to the reduced perceptions of blame for his actions, participants appear to diminish the culpability for his actions because of the overload placed on him.

While heightened exhaustion and helplessness may lend itself to increases in leniency, the participants sought further understanding of the abuser's behaviour when he had no care load. Culpability for his actions was lower for the rage item in the no care load condition as compared to the physical and cognitive care load conditions. The abuser's rage was perceived as

higher in his day-to-day life when he has no care load. Viewed as stressed and burned out, the abuser's actions are summed up as a mere "snap" rather than a reflection of his actual temperament. However, when unburdened with no care load, stress can no longer be responsible for his behaviour, so he is thought to be more of an angry individual. Lenient perceptions of the abuser appear to be a result of heightened care load, therefore, suggesting sympathy for caregiver burden as the primary mechanism behind an abuser's lower culpability for abuse towards someone in care.

Perceptions of the Abused

We measured perceptions of the abused wife's blame, how difficult it would be to love or live with her, and her day-to-day feelings. We expected the wife to be rated more stoic (show more acceptance) in the cognitive care load conditions, followed by the physical care load conditions, and the least stoic in the no care load conditions. For the couple age, we expected the abused wife would be perceived as more stoic when she was older as compared to younger. Finally, if there is a unique effect age-related dementia stereotypes have on perceptions of the abused, the wife would be perceived as most stoic in the old, cognitive care load condition followed by the young, cognitive care load condition, than the remaining conditions.

No significant interactions, couple age effects, or care load effects for the abused wife's blame were found. Inspection of the data revealed very low overall mean scores for blame across all conditions, conflicting with the idea stated above that blame shifts from the abuser to the abused when caregiver stress is used to describe the incidence of abuse (Herring, 2011). While blame shifts off of the abuser when the victim is unwell, it is not placed upon the victim but appears to be dismissed. Low average scores across all conditions emphasize that the abused is

never to blame for the abuse. Instead, the blame is placed on the abuser or dismissed as an unfortunate side-effect of the situation.

For the abused, there was no significance for difficultly to love within the no load conditions, but a couple age effect was found for the difficultly to live with in the physical and cognitive care load conditions. This was the only age effect observed in our analyses of perceptions of the abuser and abused and perceptions of abuse. When there is a care load, the undergraduate participants' age stereotypes guided their interpretation of the ease to live with an unhealthy, younger or older adult. The older abused wife was perceived as more difficult to live with as compared to when she is younger in the two care load conditions. This is in line with previous research on the age stereotypes held by young adults and the negative stigma surrounding late adulthood (Kite & Johnson,1988; Kite et al., 2005).

The abused wife's day-to-day feelings were assessed to investigate the role of age and care load on perceptions of an individual's stoicism. Investigating individual day-to-day feelings items revealed care load effects for perceptions of the abused rage, happiness, level of being relaxed, and general feeling of calm. The abused was perceived as more relaxed and happy and less full of rage when she was in the physical or cognitive care load conditions as compared to no care load. The abused wife was also viewed as more calm when she was described in the physical care load condition compared to no care load, reflecting the expectations of a more stoic abused individual if they represent a high care load on the abuser. Care recipients are often aware of the additional responsibilities and pressures placed on their caregivers, particularly if those providing care are family or loved ones. In fear of creating more burden for their caregiver, unsatisfactory or gaps in proper care may be overlooked by the care recipient (Nieuwenhuis, Beach, & Schultz, 2018). Cognizant of this, the abused wife is tolerant about the mistreatment;

therefore, she presents herself as more calm, happy, relaxed, and has less rage. This is reflected as being more stoic in the care load conditions, as they are less likely to react and display negative emotions because of abuse. If she places no care load on the abuser, then the abuse directed towards a healthy individual is viewed as unwarranted, and the abused wife is less stoic about her mistreatment. The pattern of null and significant results of the abused wife's feelings further illustrate a story of stoicism. While the abused wife is perceived as experiencing negative emotions within all health status conditions, such as hopelessness, irritation, isolation, and exhaustion, the emotions that can be outwardly portrayed to others are stifled by the abused wife if she creates a care load on her husband. Thus, she is thought to be more happy, relaxed, calm, and have less rage in the care load conditions.

Contact as a Mediator

As literature is mixed on the role and effect of intergenerational contact on perceptions of older adults and the ageing process, exploratory analyses were performed to evaluate if contact with older adults was a covariate in our analyses of perceptions of abuse and perceptions of the abuser and abused. No effect was found in any of the analyses. This is contrary to most research that suggests an effect, regardless of positive or negative, of intergenerational contact on age stereotypes (Christian et al., 2014). As stated previously, undergraduate participants generally had little contact with older adults, and their primary contact revolved around family members, specifically their grandparents. Because of this primarily familial contact, quality of contact was generally rated high. Furthermore, this lack of diversity of contact quality and quantity throughout our data may not have allowed for adequate analysis of the effects of intergenerational contact.

Conclusion

Research has found there is leniency for the abuse, the abuser, and the abused within an abusive caregiving scenario when directed towards someone with dementia (Matsuda, 2007; Runac et al., 2017, 2018), yet it was unclear the role of dementia stereotypes and possible interactions with caregiver burden. Within this study there is no leniency in perceptions of physical and psychological abuse, particularly if the abuse would never be necessary in a caregiving situation. Contrarily, abuse grounded in dismissive and patronizing action is seen as more abusive when the abuser is in a caregiving role compared to when there was no care load. It appears abuse is always abuse, particularly if neglecting one's caregiving responsibilities may result in further harm to the abused.

Focusing on perceptions of the abuser and the abused individual, roles of caregiver burden and age stereotypes offer insights into the cause for leniency. The data offer a clear connection between the perceived level of the caregiver's stress and negative feelings to the declines in his culpability and in the amount of blame he receives for his abusive actions. The bystander's sympathy for the caregiver minimizes responsibility for his abusive actions. An interplay between age and care load clarifies perceptions of the abused wife's tolerance and stoicism for her abuse when she is unhealthy. No clear delineation between the cognitive care load and the physical care load conditions places the responsibility of leniency of abuse on sympathy for caregiver burden and not stereotypes of dementia. Clarity is also given to the possible mechanisms behind dementia abuse. The findings that older people with dementia are more likely to be abused in professional care settings likely reflects the burden of caring for a person with dementia instead of care recipient age. Abuse is associated with age only because older people are more likely to be in professional care.

Limitations

These results should be interpreted with an understanding of the limitations associated with this study. English comprehension was self-reported, so knowledge of the concepts within the study was dependent on the participant's reflection of their abilities. If a participant over-estimated their English competency, their perception ratings may not have accurately reflected their actual perceptions. Participants were also recruited through the undergraduate research pool at the university as a fulfillment of their class requirements. While the selection of our study was voluntary, the participant's obligation to participate in any study may result in biased responses. The convenience-based sample of university undergraduate students may not be representative of the general population. By using undergraduate students, the age range was relatively narrow, which was exemplified by the amount of contact they had with older adults. The primary older adult contact revolves around their grandparents or other family members. Furthermore, the older adults the participants are in contact with are younger and generally contact amount is limited. The participants' limited contact may not have allowed proper evaluation of the effects of contact on perceptions of abuse directed towards an old-old adult (targets were in their 80s).

The use of the abuse scale may have influenced results, as most items pertained to non-caregiving actions. While this adaptation was thorough in evaluating various types of abuse, participants could have easily assumed the inappropriate nature of most of the abuse items applied to all. Results highlight the unacceptability of extreme violence, but this is rarely the nature of mistreatment in caregiving scenarios. A more appropriate measure would have focused on behaviours used by caregivers that could be interpreted as abuse if used on someone healthy, but necessary for someone who is ill. For example, items could include the use of restraints, hiding medication in food, and medicating to sedate the individual.

Implications and Future Directions

As our population ages and continues to live longer, the number of those seeking eldercare will no doubt increase (Dudgeon, 2010). Increased dependence on both formal and informal caregivers will grow in parallel with this phenomenon, and greater reliance on the healthcare system will be apparent. If caregiver burden associated with a high care load is a primary mechanism behind caregiver abuse, the strain on care staff in professional and informal care will undoubtedly result in more incidents of abuse. Compounded with the leniency provided by sympathy for caregiver's stress, under-reporting and dismissed cases will be standard. Aware of the detriments this has on our society, priority should be placed on alleviating the current and future burden on caregivers to assure proper caregiving practices. Furthermore, fewer incidents of abuse may result in less dependence on the healthcare system.

Further research on caregiver burden and its effect on abuse and leniency of mistreatment is essential for the oncoming wave of adults reaching late adulthood. This wave is believed to bring with it financial and healthcare stress (Bartels & Naslund, 2013), so understanding the mechanisms behind abuse may aid in a smoother transition during these changes in population demographics. Examination of possible interventions to help with burden is needed to shift this research into action. Potential future studies can evaluate whether the caregiver burden effect is also applicable to children with caregiving needs and if perceptions of abuse follow a similar course as with adults. While this study manipulated couple age, further research could also measure ageist attitudes and evaluate how they relate to perceptions of abuse. Research has shown there are cultural differences in perceptions of elder abuse, for example, Japanese and Korean Americans are more likely to be tolerant and accepting of abuse towards older adults than other cultural groups (Moon, 2000). Because Matsuda (2007) was conducted in Japan, our opposing findings may be a result of these cultural differences in perceptions. For greater

understanding of our departure from Matsuda's (2007) findings of leniency for abusive actions towards older persons with dementia, cultural differences in perceptions of abuse could be assessed. A study with participants encompassing a wider age range may offer better insight into the effects of intergenerational contact on perceptions of abuse towards old-old adults. Studies of this nature may allow greater understanding of why older adults with dementia are more likely to experience abuse in care.

Table 2.

Mean perceptions (Standard Deviation in parentheses) of the abused wife's cognitive and physical ability as a function of care load and couple age and select univariate analyses

		Panel A						
		Care Load				No Load vs. Physical Load Mean Differences	No Load vs. Cognitive Load Mean Differences	Physical Load vs. Cognitive Load Mean Differences
	Couple Age	No Care Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*			
Cognitive Ability	Young	3.92 (1.45) *N* = 28	4.68 (1.15) *N* = 25	1.99 (0.99) *N* = 24	3.56 (1.64) *N* = 77	ns	2.18**	2.62**
	Old	4.04 (1.52) *N* = 24	4.22 (1.47) *N* = 32	1.59 (0.58) N=22	3.42 (1.73) *N* = 78			
	Care Load Total	3.97 (1.47) *N* = 52	4.42 (1.35) *N* = 57	1.80 (0.83) *N* = 46	3.49 (1.68) *N* = 155			
		Panel B						
Physical Ability	Young	4.07 (1.45) *N* = 28	2.44 (1.12) *N* = 25	2.47 (0.99) *N* = 24	3.04 (1.43) *N* = 77	2.06**	1.88**	ns
	Old	4.36 (1.41) *N* = 24	1.96 (0.71) *N* = 32	2.17 (0.66) *N* = 22	2.74 (1.46) *N* = 78)			
	Care Load Total	4.21 (1.42) *N* = 52	2.14 (0.94) *N* = 57	2.33 (0.86) *N* = 46	2.89 (1.45) *N* = 155			

Notes. Based on 7-point Likert scale. Scores on negatively worded items were recoded so a higher score indicates higher cognitive and physical ability. Scores are averages across the items in each dimension. Tukey HSD post hoc mean differences are only shown for main effects that were significant. * = significance at .05 level. ** = significance at .001 level.

Table 3.
Factor loadings using a strict .6 inclusion criteria for physical abuse items.

Items	Dimension Loadings						
	Punch/Use Object	Handle Rough	Physically Restrain	Physically Maim	Extended Abuse	Choke	Use Knife
Punch	.820						
Hit With Fist	.796						
Throw Object At	.672						
Slap Face							
Slap With Palm							
Push		.740					
Shake Rough		.734					
Grab Forcefully		.657					
Scratch		.600					
Slap With Back of Hand							
Pull Hair							
Hold Down			.779				
Tie to Bed to Prevent			.748				
Tie to Bed to Punish			.610				
Spank							
Burn				.911			
Kick				.738			
Bite							
Withhold Medication							
Use Club-like Object					.741		
Withhold Food					.645		
Beat Up					.613		
Choke						.830	
Twist Arm							
Use Knife							.600
Hit With Object							

Note. Factor loadings ≥ .60 reported. Bold text indicates items included in final dimensions.

Table 4.
Mean perceptions (Standard Deviation in parentheses) for physical abuse dimensions as a function for care load and couple age.

Dimensions	Couple Age	Care Load				Reliability
		No Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*	
Punch / Use Object	Young	6.81 (0.42) *N* = 28	6.85 (0.25) *N* = 25	6.85 (0.43) *N* = 24	6.84 (0.37) *N* = 77	.79
	Old	6.95 (0.16) *N* = 25	6.86 (0.29) *N* = 32	6.83 (0.38) *N* = 22	6.88 (0.29) *N* = 79	
	Care Load Total	6.87 (0.33) *N* = 53	6.86 (0.27) *N* = 57	6.84 (.40) *N* = 46	6.86 (0.33) *N* = 156	
Handle Rough	Young	5.85 (0.94) *N* = 28	5.76 (0.80) *N* = 25	6.07 (0.85) *N* = 24	5.89 (0.85) *N* = 77	.76
	Old	6.18 (0.68) *N* = 25	5.98 (0.82) *N* = 32	5.77 (0.98) *N* = 22	5.98 (0.82) *N* = 79	
	Care Load Total	6.00 (0.84) *N* = 53	5.89 (0.81) *N* = 57	5.93 (0.90) *N* = 46	5.94 (0.84) *N* = 156	
Physically Restrain	Young	6.37 (0.64) *N* = 28	6.35 (0.64) *N* = 25	6.56 (0.90) *N* = 24	6.42 (0.73) *N* = 77	.69
	Old	6.73 (0.41) *N* = 25	6.42 (0.85) *N* = 32	6.00 (1.09) *N* = 22	6.40 (0.86) *N* = 79	
	Care Load Total	6.54 (0.57) *N* = 53	6.39 (0.76) *N* = 57	6.29 (1.02) *N* = 46	6.41 (0.80) *N* = 156	
Physically Maim	Young	6.93 (0.30) *N* = 28	6.82 (0.63) *N* = 25	6.98 (0.10) *N* = 24	6.91 (0.40) *N* = 77	.78
	Old	6.94 (0.22) *N* = 25	6.95 (0.15) *N* = 32	6.91 (0.25) *N* = 22	6.94 (0.20) *N* = 79	
	Care Load Total	6.93 (0.26) *N* = 53	6.89 (0.43) *N* = 57	6.95 (0.19) *N* = 46	6.92 (0.32) *N* = 156	
Extended Abuse	Young	6.77 (0.31) *N* = 28	6.72 (0.40) *N* = 25	6.67 (0.65) *N* = 24	6.72 (0.47) *N* = 77	.52
	Old	6.88 (0.27) *N* = 25	6.54 (0.71) *N* = 32	6.68 (0.47) *N* = 22	6.69 (0.55) *N* = 79	
	Care Load Total	6.82 (0.30) *N* = 53	6.62 (0.60) *N* = 57	6.67 (0.56) *N* = 46	6.71 (0.51) *N* = 156	
Choke	Young	6.89 (0.57) *N* = 28	6.96 (0.20) *N* = 25	6.92 (0.39) *N* = 24	6.92 (0.39) *N* = 77	N/A
	Old	6.80 (0.82) *N* = 25	6.84 (0.63) *N* = 32	6.82 (0.50) *N* = 22	6.82 (0.66) *N* = 79	
	Care Load Total	6.85 (0.69) *N* = 53	6.89 (0.49) *N* = 57	6.87 (0.40) *N* = 46	6.87 (0.54) *N* = 156	
Use Knife	Young	6.96 (0.19) *N* = 28	6.92 (0.28) *N* = 25	7.00 (0.00) *N* = 24	6.96 (0.19) *N* = 77	N/A

	Old	7.00 (0.00) *N* = 25	6.91 (0.30) *N* = 32	6.95 (0.21) *N* = 22	6.95 (0.22) *N* = 79	
	Care Load	6.98 (0.14)	6.91 (0.29)	6.98 (0.15)	6.96 (0.21)	
	Total	*N* = 53	*N* = 57	*N* = 46	*N* = 156	

Note. Based on 7-point Likert scale. Scores are averages across the items in each dimension.

Table 5.
Factor loadings using a strict .6 inclusion criteria for psychological abuse items.

Items	Dimension Loadings					
	Financial / Property	Patronizing / Dismissiveness	Threaten Harm	Threaten Weapon / Death	Threatening Body Language	Psychologically Restrain
Use Savings	.859					
Sell Property	.810					
Use Money	.792					
Read Mail	.664					
Prevent Visitors	.638					
Threaten Property	.601					
Threaten to Destroy Belongings						
Threaten to Harm Things Cared About						
Force to Wear Diaper						
Do Not Knock						
Do Not Call When Asked		.812				
Do Not Visit When Asked		.781				
Stomp Around		.704				
Do Not Bathe / Help With Daily Activities		.689				
Shake Finger At		.689				
Talk About In Presence						
Drive Dangerously						
Threaten to Hurt			.801			
Threaten To Hit			.772			
Threaten Someone Cared About			.650			

Threaten To Lock In Room			
Threaten With Club-like Object			
Threaten To Kill	.833		
Threaten With Knife	.797		
Threaten With Weapon	.733		
Threaten to Kill Self	.614		
Act Like You Want To Kill	.603		
Make Threatening Gestures		.653	
Shake Fist At		.637	
Call Names			
Bully			
Lock In Room To Punish			.759
Lock In Room To Prevent			.750
Threaten To Tie To Bed			
Hit Wall Around Person			
Thrown Object Around Person			

Note. Factor loadings ≥ .60 reported. Bold text indicates items included in final dimensions.

Table 6.
Mean perceptions (Standard Deviation in parentheses) for psychological abuse dimensions as a function of care load and couple age.

Dimensions	Couple Age	Care Load				Reliability
		No Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*	
Financial / Property	Young	5.35 (1.16) *N* = 27	5.41 (1.08) *N* = 23	5.53 (1.37) *N* = 24	5.43 (1.19) *N* = 74	.90
	Old	5.65 (0.87) *N* = 25	5.12 (1.03) *N* = 32	5.10 (1.44) *N* = 22	5.28 (1.13) *N* = 79	
	Care Load Total	5.49 (1.03) *N* = 52	5.24 (1.05) *N* = 55	5.32 (1.41) *N* = 46	5.35 (1.16) *N* = 153	
Patronizing / Dismissiveness	Young	3.03 (1.33) *N* = 27	4.13 (1.33) *N* = 23	4.54 (1.48) *N* = 24	3.86 (1.51) *N* = 74	.86
	Old	3.35 (0.95) *N* = 25	3.97 (1.20) *N* = 32	3.92 (1.44) *N* = 22	3.76 (1.22) *N* = 79	
	Care Load Total	3.18 (1.16) *N* = 52	4.04 (1.24) *N* = 55	4.24 (1.48) *N* = 46	3.81 (1.36) *N* = 153	
Threaten Harm	Young	6.15 (0.91) *N* = 27	6.33 (0.65) *N* = 23	6.39 (0.67) *N* = 24	6.28 (0.76) *N* = 74	.86
	Old	6.16 (0.86) *N* = 25	6.32 (0.64) *N* = 32	6.11 (0.93) *N* = 22	6.21 (0.80) *N* = 79	
	Care Load Total	6.15 (0.88) *N* = 52	6.33 (0.64) *N* = 55	6.25 (0.81) *N* = 46	6.25 (0.78) *N* = 153	
Threaten Weapon / Death	Young	6.54 (0.81) *N* = 27	6.45 (0.63) *N* = 23	6.70 (0.62) *N* = 24	6.56 (0.70) *N* = 74	.80
	Old	6.74 (0.43) *N* = 25	6.48 (0.57) *N* = 32	6.60 (0.48) *N* = 22	6.59 (0.51) *N* = 79	
	Care Load Total	6.63 (0.66) *N* = 52	6.47 (0.59) *N* = 55	6.65 (0.55) *N* = 46	6.58 (0.61) *N* = 153	
Threatening Body Language	Young	4.74 (1.37) *N* = 27	4.78 (1.40) *N* = 23	5.10 (1.33) *N* = 24	4.87 (1.36) *N* = 74	.74
	Old	4.92 (1.42) *N* = 25	4.95 (1.19) *N* = 32	4.32 (1.44) *N* = 22	4.77 (1.35) *N* = 79	
	Care Load Total	4.83 (1.38) *N* = 52	4.88 (1.28) *N* = 55	4.73 (1.42) *N* = 46	4.82 (1.35) *N* = 153	
Psychologically Restrain	Young	6.37 (1.03) *N* = 27	6.11 (0.98) *N* = 23	6.33 (1.03) *N* = 24	6.28 (1.01) *N* = 74	.69
	Old	6.70 (0.48) *N* = 25	6.27 (0.79) *N* = 32	5.88 (1.23) *N* = 22	6.30 (0.91) *N* = 79	
	Care Load Total	6.53 (0.82) *N* = 52	6.20 (0.87) *N* = 55	6.12 (1.14) *N* = 46	6.29 (0.96) *N* = 153	

Note. Based on 7-point Likert scale. Scores are averages across the items in each dimension

Table 7.
Mean perceptions (Standard Deviation in parentheses) of the abuser's (husband's) blame as a function of care load and couple age and select univariate analyses.

		Care Load						
	Couple Age	No Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*	No Load vs. Physical Load Mean Differences	No Load vs. Cognitive Load Mean Differences	Physical Load vs. Cognitive Load Mean Differences
Abuser Blame	Young	6.61 (0.83) *N* = 28	5.76 (1.56) *N* = 25	5.75 (1.70) *N* = 24	6.06 (1.44) *N* = 77			
	Old	6.68 (0.90) *N* = 25	5.34 (1.83) *N* = 32	5.73 (1.78) N=22	5.87 (1.66) *N* = 79			
	Care Load Total	6.64 (0.86) *N* = 53	5.53 (1.71) *N* = 57	5.74 (1.72) *N* = 46	5.97 (1.55) *N* = 156	1.12**	0.90*	ns

Notes. Based on 7-point Likert scale. Tukey HSD post hoc mean differences are only shown for main effects that were significant. * = significance at .05 level. ** = significance at .001 level.

Table 8.
Mean perceptions (Standard Deviation in parentheses) for difficulty to live or love the abuser (husband) as a function of care load and couple age.

Panel A					Panel B		
		Care Load					Care Load
	Couple Age	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*		Couple Age	No Load *M (SD)*
Difficulty to Live With	Young	5.80 (1.73) *N* = 25	6.13 (1.57) *N* = 24	5.96 (1.57) *N* = 49	Difficulty to Love	Young	6.68 (0.72) *N* = 28
	Old	5.34 (1.95) *N* = 32	5.27 (2.14) *N* = 22	5.31 (2.01) *N* = 54		Old	6.48 (1.26) *N* = 25
	Care Load Total	5.54 (1.85) *N* = 57	5.72 (1.89) *N* = 46	5.62 (1.86) *N* = 103		Care Load Total	6.58 (1.01) *N* = 53

Note . Based on 7-point Likert scale.

Table 9.
Mean perceptions (Standard Deviations in parentheses) for the abuser's (husband's) feelings as a function of care load and couple age and select univariate analyses

Feeling Items	Couple Age	Care Load				No Load vs. Physical Load Mean Difference	No Load vs. Cognitive Load Mean Difference	Physical Load vs. Cognitive Load Mean Difference
		No Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*			
Calm	Young	1.82 (1.31) *N* = 28	2.52 (1.48) *N* = 25	2.25 (1.39) *N* = 24	2.18 (1.40) *N* = 77			
	Old	2.12 (1.69) *N* = 25	2.31 (1.38) *N* = 32	2.27 (1.24) *N* = 22	2.24 (1.43) *N* = 79			
	Care Total	1.96 (1.49) *N* = 53	2.40 (1.41) *N* = 57	2.26 (1.31) *N* = 46	2.21 (1.41) *N* = 156	ns	ns	ns
Hopeful	Young	2.64 (1.57) *N* = 28	2.92 (1.38) *N* = 25	2.37 (1.10) *N* = 24	2.65 (1.37) *N* = 77			
	Old	2.56 (1.39) *N* = 25	2.56 (1.39) *N* = 32	2.45 (1.71) *N* = 22	2.46 (1.56) *N* = 79			
	Care Total	2.49 (1.61) *N* = 53	2.72 (1.39) *N* = 57	2.41 (1.41) *N* = 46	2.55 (1.47) *N* = 156	ns	ns	ns
Optimistic	Young	2.68 (1.70) *N* = 28	2.48 (1.16) *N* = 25	2.37 (1.14) *N* = 24	2.52 (1.36) *N* = 77			
	Old	2.16 (1.57) *N* = 25	2.50 (1.24) *N* = 32	2.41 (1.71) *N* = 22	2.37 (1.48) *N* = 79			
	Care Total	2.43 (1.65) *N* = 53	2.49 (1.98) *N* = 57	2.40 (1.42) *N* = 46	2.44 (1.42) *N* = 156	ns	ns	ns
Relaxed	Young	2.14 (1.43) *N* = 28	2.12 (1.20) *N* = 25	2.08 (1.14) *N* = 24	2.12 (1.26) *N* = 77			
	Old	2.00 (1.38) *N* = 25	2.19 (1.15) *N* = 32	2.00 (1.11) *N* = 22	2.08 (1.21) *N* = 79			
	Care Total	2.08 (1.40)	2.16 (1.16)	2.04 (1.12)	2.10 (1.23)	ns	ns	ns

		N = 53	*N* = 57	*N* = 46	*N* = 156			
Guilty	Young	5.46 (1.73) *N* = 28	4.48 (1.64) *N* = 25	4.96 (1.83) *N* = 24	4.99 (1.76) *N* = 77			
	Old	5.20 (1.80) *N* = 25	5.06 (1.50) *N* = 32	4.82 (1.59) *N* = 22	5.04 (1.61) *N* = 79			
	Care Total	5.34 (1.75) *N* = 53	4.81 (1.57) *N* = 57	4.89 (1.70) *N* = 46	5.01 (1.68) *N* = 156	ns	ns	ns
Irritated	Young	1.54 (0.74) *N* = 28	2.04 (0.98) *N* = 25	2.00 (1.14) *N* = 24	1.84 (0.97) *N* = 77			
	Old	2.08 (1.78) *N* = 25	2.44 (1.22) *N* = 32	1.95 (1.13) *N* = 22	2.19 (1.40) *N* = 79			
	Care Total	1.79 (1.35) *N* = 53	2.26 (1.13) *N* = 57	1.98 (1.13) *N* = 46	2.02 (1.22) *N* = 156	ns	ns	ns
Rage	Young	1.25 (0.59) *N* = 28	2.32 (1.38) *N* = 25	2.67 (1.71) *N* = 24	2.04 (1.41) *N* = 77			
	Old	1.96 (1.77) *N* = 25	2.72 (1.51) *N* = 32	2.36 (1.62) *N* = 22	2.38 (1.64) *N* = 79			
	Care Total	1.58 (1.32) *N* = 53	2.54 (1.45) *N* = 57	2.52 (1.66) *N* = 46	2.21 (1.53) *N* = 156	-0.96*	-0.94*	ns
Satisfied	Young	2.32 (1.44) *N* = 28	2.36 (1.11) *N* = 25	2.38 (1.14) *N* = 24	2.35 (1.23) *N* = 77			
	Old	2.56 (1.56) *N* = 25	2.22 (1.26) *N* = 32	2.45 (1.41) *N* = 22	2.39 (1.39) *N* = 79			
	Care Total	2.43 (1.49) *N* = 53	2.28 (1.19) *N* = 57	2.41 (1.26) *N* = 46	2.37 (1.31) *N* = 156	ns	ns	ns
Helpless	Young	5.29 (1.90) *N* = 28	3.64 (1.85) *N* = 25	3.92 (1.89) *N* = 24	4.32 (2.00) *N* = 77			
	Old	4.04 (1.97) *N* = 25	3.69 (1.80) *N* = 32	3.45 (1.74) *N* = 22	3.73 (1.83) *N* = 79			
	Care Total	4.70 (2.02) *N* = 53	3.67 (1.81) *N* = 57	3.70 (1.81) *N* = 46	4.03 (1.93) *N* = 156	1.03*	1.00*	ns
Isolated	Young	4.32 (1.89) *N* = 28	3.24 (1.81) *N* = 25	3.38 (1.61) *N* = 24	3.68 (1.82) *N* = 77			

	Old	3.56 (1.87) *N* = 25	3.47 (2.02) *N* = 32	3.27 (1.49) *N* = 22	3.44 (1.82) *N* = 79			
	Care Total	3.96 (1.90) *N* = 53	3.37 (1.91) *N* = 57	3.33 (1.53) *N* = 46	3.56 (1.82) *N* = 156	ns	ns	ns
Happy	Young	2.36 (1.42) *N* = 28	2.64 (1.38) *N* = 25	2.50 (1.06) *N* = 24	2.49 (1.29) *N* = 77			
	Old	2.28 (1.49) *N* = 25	2.56 (1.39) *N* = 32	2.50 (1.63) *N* = 22	2.46 (1.48) *N* = 79			
	Care Total	2.32 (1.44) *N* = 53	2.60 (1.37) *N* = 57	2.50 (1.35) *N* = 46	2.47 (1.38) *N* = 156	ns	ns	ns
Exhausted	Young	3.93 (2.02) *N* = 28	2.20 (1.19) *N* = 25	2.46 (1.38) *N* = 24	2.91 (1.76) *N* = 77			
	Old	3.40 (1.73) *N* = 25)	1.91 (1.44) *N* = 32	2.45 (1.57) *N* = 22	2.53 (1.68) *N* = 79			
	Care Total	3.68 (1.89) *N* = 53	2.04 (1.34) *N* = 57	2.46 (1.46) *N* = 46	2.72 (1.72) *N* = 156	1.64*	1.22*	ns

Notes. Based on 7-point Likert scale. Scores of negatively worded items were recoded so a higher score indicates higher, positive perception of dimension. Scores are averages across the items in each dimension. * = significance at .05 level. ** = significance at .001 level.

Table 10.
Mean perceptions (Standard Deviation in parentheses) for blame of the abused (wife) as a function of care load and couple age.

	Couple Age	Care Load			
		No Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*
Abused Blame	Young	2.07 (1.22) *N* = 28	1.72 (0.84) *N* = 25	1.62 (1.17) *N* = 24	1.82 (1.10) *N* = 77
	Old	1.56 (0.87) *N* = 25	2.25 (1.44) *N* = 32	1.77 (1.15) N=22	1.90 (1.23) *N* = 79
	Care Load Total	1.83 (1.09) *N* = 53	2.02 (1.23) *N* = 57	1.70 (1.15) *N* = 46	1.86 (1.16) *N* = 156

Note. Based on 7-point Likert scale.

Table 11.
Mean perceptions (Standard Deviation in parentheses) for difficulty to live or love the abused (wife) as a function of care load and couple age.

Panel A					Panel B		
		Care Load					Care Load
	Couple Age	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*		Couple Age	No Load *M (SD)*
Difficulty to Live With	Young	5.24 (1.17) *N* = 25	5.29 (1.20) *N* = 24	5.27 (1.17) *N* = 49	Difficulty to Love	Young	2.29 (1.51) *N* = 28
	Old	5.97 (0.90) *N* = 32	6.00 (0.98) *N* = 22	5.98 (0.92) *N* = 54		Old	2.24 (1.48) *N* = 25
	Care Load Total	5.65 (1.08) *N* = 57	5.63 (1.14) *N* = 46	5.64 (1.10) *N* = 103		Care Load Total	2.26 (1.48) *N* = 53

Note . Based on 7-point Likert scale.

Table 12.
Mean perceptions (Standard Deviations in parentheses) for the abused's (wife's) feelings as a function of care load and couple age and select univariate analyses.

Feeling Items	Couple Age	Care Load				No Load vs. Physical Load Mean Difference	No Load vs. Cognitive Load Mean Difference	Physical Load vs. Cognitive Load Mean Difference
		No Load *M (SD)*	Physical Load *M (SD)*	Cognitive Load *M (SD)*	Age Total *M (SD)*			
Isolated	Young	2.07 (1.15) *N* = 28	22.32 (1.35) *N* = 25	2.54 (1.61) *N* = 24	2.30 (1.37) *N* = 77			
	Old	1.96 (1.37) *N* = 24	2.34 (1.31) *N* = 32	2.76 (1.37) *N* = 21	2.34 (1.36) *N* = 77			
	Care Total	2.02 (1.24) *N* = 52	2.33 (1.31) *N* = 57	2.64 (1.49) *N* = 45	2.32 (1.36) *N* = 154	ns	ns	ns
Exhausted	Young	2.11 (1.42) *N* = 28	2.32 (1.41) *N* = 25	2.88 (1.87) *N* = 24	2.42 (1.58) *N* = 77			
	Old	1.88 (1.42) *N* = 24	2.34 (1.10) *N* = 32	2.52 (1.50) *N* = 21	2.25 (1.33) *N* = 77			
	Care Total	2.00 (1.41) *N* = 52	2.33 (1.23) *N* = 57	2.71 (1.70) *N* = 45	2.55 (1.47) *N* = 154	ns	ns	ns
Happy	Young	1.46 (0.79) *N* = 28	2.44 (1.19) *N* = 25	2.37 (1.21) *N* = 24	2.06 (1.21) *N* = 77			
	Old	1.75 (1.39) *N* = 24	2.62 (1.26) *N* = 32	2.52 (1.21) *N* = 21	2.32 (1.33) *N* = 77			
	Care Total	1.60 (1.11) *N* = 52	2.54 (1.23) *N* = 57	2.44 (1.20) *N* = 45	2.19 (1.25) *N* = 154	-0.95**	-0.85*	ns
Rage	Young	3.50 (1.57) *N* = 28	3.76 (1.61) *N* = 25	4.33 (1.86) *N* = 24	3.84 (1.69) *N* = 77			
	Old	3.50 (1.67) *N* = 24	4.47 (1.54) *N* = 32	4.76 (1.30) *N* = 21	4.25 (1.59) *N* = 77			
	Care Total	3.50 (1.60)	4.16 (1.60)	4.53 (1.62)	4.05 (1.65)	ns	-1.03*	ns

		N = 52	*N* = 57	*N* = 45	*N* = 154			
Guilty	Young	3.39 (1.45) *N* = 28	3.08 (1.44) *N* = 25	3.96 (1.90) *N* = 24	3.47 (1.62) *N* = 77			
	Old	3.63 (1.79) *N* = 24	3.09 (1.75) *N* = 32	3.43 (1.47) *N* = 21	3.35 (1.68) *N* = 77			
	Care Total	3.50 (1.60) *N* = 52	3.09 (1.61) *N* = 57	3.71 (1.71) *N* = 45	3.41 (1.65) *N* = 154	ns	ns	ns
Optimistic	Young	2.18 (1.34) *N* = 28	2.80 (1.16) *N* = 25	2.54 (1.10) *N* = 24	2.49 (1.22) *N* = 77			
	Old	2.83 (1.71) *N* = 24	2.53 (1.14) *N* = 32	2.19 (1.29) *N* = 21	2.53 (1.38) *N* = 77			
	Care Total	2.48 (1.54) *N* = 52	2.65 (1.14) *N* = 57	2.38 (1.19) *N* = 45	2.51 (1.30) *N* = 154	ns	ns	ns
Satisfied	Young	1.93 (0.94) *N* = 28	2.44 (1.04) *N* = 25	2.08 (0.93) *N* = 24	2.14 (0.98) *N* = 77			
	Old	2.00 (1.41) *N* = 24	2.37 (1.24) *N* = 32	2.05 (0.97) *N* = 21	2.17 (1.23) *N* = 77			
	Care Total	1.96 (1.17) *N* = 52	2.40 (1.15) *N* = 57	2.07 (0.94) *N* = 45	2.16 (1.11) *N* = 154	ns	ns	ns
Irritated	Young	3.29 (1.61) *N* = 28	2.84 (1.37) *N* = 25	3.50 (1.56) *N* = 24	3.21 (1.52) *N* = 77			
	Old	2.79 (1.50) *N* = 24	3.06 (1.24) *N* = 32	2.90 (1.30) *N* = 21	2.94 (1.33) *N* = 77			
	Care Total	3.06 (1.56) *N* = 52	2.96 (1.30) *N* = 57	3.22 (1.46) *N* = 45	3.07 (1.43) *N* = 154	ns	ns	ns
Hopeful	Young	2.29 (1.41) *N* = 28	33.04 (1.21) *N* = 25	2.50 (1.06) *N* = 24	2.60 (1.27) *N* = 77			
	Old	2.96 (1.88) *N* = 24	2.56 (1.19) *N* = 32	2.24 (1.09) *N* = 21	2.60 (1.43) *N* = 77			
	Care Total	2.60 (1.66) *N* = 52	2.77 (1.21) *N* = 57	2.38 (1.07) *N* = 45	2.60 (1.35) *N* = 154	ns	ns	ns
Relaxed	Young	1.46 (0.84) *N* = 28	2.36 (1.32) *N* = 25	2.29 (1.16) *N* = 24	2.01 (1.18) *N* = 77			

	Old	1.92 (1.47) *N* = 24	2.22 (1.21) *N* = 32	2.24 (1.14) *N* = 21	2.13 (1.27) *N* = 77			
	Care Total	1.67 (1.18) *N* = 52	2.28 (1.25) *N* = 57	2.27 (1.14) *N* = 45	2.07 (1.22) *N* = 154	-0.61*	-0.59*	ns
Calm	Young	1,68 (0.98) *N* = 28	2.28 (1.14) *N* = 25	2.29 (1.12) *N* = 24	2.06 (1.10) *N* = 77			
	Old	1.87 (1.42) *N* = 24	2.53 (1.30) *N* = 32	2.29 (1.35) *N* = 21	2.26 (1.35) *N* = 77			
	Care Total	1.77 (1.20) *N* = 52	2.42 (1.22) *N* = 57	2.29 (1.22) *N* = 45	2.47 (1.38) *N* = 154	-0.65*	ns	ns
Helpless	Young	2.11 (1.37) *N* = 28	2.00 (1.26) *N* = 25	2.17 (1.27) *N* = 24	2.09 (1.29) *N* = 77			
	Old	1.92 (1.41) *N* = 24	2.00 (1.32) *N* = 32	2.33 (1.53) *N* = 21	2.06 (1.40) *N* = 77			
	Care Total	2.02 (1.38) *N* = 52	2.00 (1.28) *N* = 57	2.24 (1.38) *n* = 45	2.08 (1.34) *n* = 154	ns	ns	ns

Note. Based on 7-point Likert scale. Scores of negatively worded items were recoded so a higher score indicates higher, positive perception of dimension. Scores are averages across the items in each dimension. * = significance at .05 level. ** = significance at .001 level.

References

Acierno, R., Hernandez, M. A., Amstadter, A. B., Resnick, H. S., Steve, K., Muzzy, W., & Kilpatrick, D. G. (2010). Prevalence and correlates of emotional, physical, sexual, and financial abuse and potential neglect in the United States: The National Elder Mistreatment Study. *American Journal of Public Health*, *100*(2), 292-297.

Adelman, R. D., Tmanova, L. L., Delgado, D., Dion, S., & Lachs, M. S. (2014). Caregiver burden: A clinical review. *Journal of the American Medical Association, 311*(10), 1052-1060.

Alzheimer Society of Canada (2018). Latest information and statistics. Retrieved from https://alzheimer.ca/en/Home/Get-involved/Advocacy/Latest-info-stats

Augustin, F., & Freshman, B. (2016). The effects of service-learning on college students' attitudes toward older adults. *Gerontology & Geriatrics Education*, *37*(2), 123-144.

Band-Winterstein, T. (2015). Health care provision for older persons: The interplay between ageism and elder neglect. *Journal of Applied Gerontology*, *34*(3), NP113-NP127.

Bartels, S. J., & Naslund, J. A. (2013). The underside of the silver tsunami—older adults and mental health care. *New England Journal of Medicine*, *368*(6), 493-496.

Bazzini, D. G., McIntosh, W. D., Smith, S. M., Cook, S., & Harris, C. (1997). The aging woman in popular film: Underrepresented, unattractive, unfriendly, and unintelligent. *Sex Roles*, *36*(7-8), 531-543.

Blay, S. L., & Peluso, E. T. P. (2010). Public stigma: The community's tolerance of Alzheimer disease. *American Journal of Geriatric Psychiatry, 18*(2), 163-171.

Brodaty, H., Draper, B., & Low, L. F. (2003). Nursing home staff attitudes towards residents with dementia: Strain and satisfaction with work. *Journal of Advanced Nursing*, *44*(6), 583-590.

Bugental, D. B., & Hehman, J. A. (2007). Ageism: A review of research and policy implications. *Social Issues and Policy Review*, *1*, 173-216.

Burgess, A. W., & Phillips, S. L. (2006). Sexual abuse, trauma and dementia in the elderly: A retrospective study of 284 cases. *Victims & Offenders, 1*(2), 193-204.

Butler, R. N. (1969). Age-ism: Another form of bigotry. *The Gerontologist, 9,* 243-246.

Canadian Institute for Health Information (2018a). Dementia in home and community care. Retrieved from https://www.cihi.ca/en/dementia-in-canada/dementia-across-the-health-system/dementia-in-home-and-community-care

Canadian Institute for Health Information (2018b). Unpaid caregiver challenges and supports. Retrieved from https://www.cihi.ca/en/dementia-in-canada/unpaid-caregiver-challenges-and-supports

Canadian Institute for Health Information (2018c). Young-onset dementia. Retrieved from https://www.cihi.ca/en/dementia-in-canada/spotlight-on-dementia-issues/young-onset-dementia

Center for Disease Control and Prevention (2019a). Elder abuse: Definitions. Retrieved from https://www.cdc.gov/violenceprevention/elderabuse/definitions.html

Center for Disease Control and Prevention (2019b). Preventing child abuse & neglect. Retrieved from https://www.cdc.gov/violenceprevention/childabuseandneglect/fastfact.html

Center for Disease Control and Prevention (2019c). Preventing intimate partner violence. Retrieved from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html

Chiao, C. Y., Wu, H. S., & Hsiao, C. Y. (2015). Caregiver burden for informal caregivers of patients with dementia: A systematic review. *International Nursing Review*, *62*(3), 340-350.

Childs, H. W., Hayslip, B., Radika, L. M., & Reinberg, J. A. (2000). Young and middle-aged adults' perceptions of elder abuse. The *Gerontologist*, *40*, 75-85.

Christian, J., Turner, R., Holt, N., Larkin, M., & Cotler, J. H. (2014). Does intergenerational contact reduce ageism: When and how contact interventions actually work? *Journal of Arts and Humanities*, *3*(1), 1-15.

Connell, C. M., Janevic, M. R., & Gallant, M. P. (2001). The costs of caring: Impact of dementia on family caregivers. *Journal of Geriatric Psychiatry and Neurology*, *14*(4), 179-187.

Cooper, C., & Livingston, G. (2014). Mental health/psychiatric issues in elder abuse and neglect. *Clinics in Geriatric Medicine*, *30*(4), 839-850.

Cooper, C., Selwood, A., & Livingston, G. (2008). The prevalence of elder abuse and neglect: A systematic review. *Age and Ageing*, *37*(2), 151-160.

Cuddy, A. J. C., & Fiske, S. T. (2002). Doddering but dear: Process, content, and function in stereotyping of older persons. In T. D. Nelson (Eds.), *Ageism: Stereotyping and prejudice against older persons* (pp. 3-26). Cambridge, MA: The MIT Press; US.

Danila, O., Hirdes, J. P., Maxwell, C. J., Marrie, R. A., Patten, S., Pringsheim, T., & Jetté, N. (2014). Prevalence of neurological conditions across the continuum of care based on

interRAI assessments. *BMC Health Services Research*, *14*, 29. doi: 10.1186/2F1472-6963-14-29

Donlon, M. M., Ashman, O., & Levy, B. R. (2005). Re-vision of older television characters: A stereotype-awareness intervention. *Journal of Social Issues*, *61*(2), 307-319.

D'Onofrio, G., Sancarlo, D., Addante, F., Ciccone, F., Cascavilla, L., Paris, F., ... & Chiarini, R. (2015). Caregiver burden characterization in patients with Alzheimer's disease or vascular dementia. *International Journal of Geriatric Psychiatry*, *30*(9), 891-899.

Dow, B., Hempton, C., Cortes-Simonet, E. N., Ellis, K. A., Koch, S. H., LoGiudice, D., … Ames, D. (2013). Health professionals' and students' perceptions of elder abuse. *Australian Journal of Ageing, 32,* 48-51.

Dudgeon, S. (2010). *Rising Tide: The impact of dementia on Canadian society*. Retrieved from the Alzheimer's Society of Canada website: http://www.alzheimer.ca/~/media/Files/national/Advocacy/ASC_Rising_Tide_Full_Report_e.pdf

Etters, L., Goodall, D., & Harrison, B. E. (2008). Caregiver burden among dementia patient caregivers: A review of the literature. *Journal of the American Academy of Nurse Practitioners, 20*(8), 423-428.

Fiske, S. T. (1993). Social cognition and social perception. *Annual Review of Psychology*, *44*, 155-194.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotypes content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*(6), 878-902.

Fraboni, M., Saltstone, R., & Hughes, S. (1990). The Fraboni scale of ageism (FSA): An attempt at a more precise measure of ageism. *Canadian Journal on Aging, 9,* 56-66.

Gaugler, J. E., Davey, A., Pearlin, L. I., & Zarit, S. H. (2000). Modeling caregiver adaptation over time: The longitudinal impact of behavior problems. *Psychology and Aging*, *15*(3), 437.

Gerritsen, D. L., Oyebode, J., & Gove, D. (2018). Ethical implications of the perception and portrayal of dementia. *Dementia*, *17*(5), 596-608.

Hagestad, G. O., & Uhlenberg, P. (2005). The social separation of old and young: A root of ageism. *Journal of Social Issues*, *61*(2), 343-360.

Helmes, E., & Cuevas, M. (2007). Perceptions of elder abuse among Australian older adults and general practitioners. *Australian Journal on Aging, 26*(3), 120-124.

Hermanns, M., & Mastel-Smith, B. (2012). Caregiving: A qualitative concept analysis. *The Qualitative Report*, *17*(38), 1-18.

Herring, J. (2011). Elder abuse and stressing carers. In J. Bridgeman, H. M. Keating, & C. Lind (Eds.), *Regulating family responsibilities* (pp. 233-251). Surrey, England: Ashgate Publishing Limited.

Hummert, M. L., Garstka, T. A., Shaner, J. L., & Strahm, S. (1994). Stereotypes of the elderly held by young, middle-aged, and elderly adults. *Journal of Gerontology*, *49*(5), P240-P249.

Hummert, M. L. (1999). A social cognitive perspective on age stereotypes. In T. M. Hess & F. Blanchard-Fields (Eds.), *Social cognition and aging* (pp. 175–196). San Diego: Academic Press.

Hummert, M. L. (2011). Age stereotypes and aging. In K. W. Schaie & S. L. Willis (Eds.),

Handbook of the psychology of aging (7th ed.) (pp. 249-262). New York, NY: Elsevier.

Jaccard, J. (1998). *Interaction effects in factorial analysis of variance*. Thousand Oaks, CA: Sage Publications.

Jackson, J. W., & Rose, J. (2013). The stereotype consistency effect is moderated by group membership and trait valence. *The Journal of Social Psychology*, *153*, 51-61.

Kahana, E., Kinney, J. M., Ercher, K., Kahana, B., Tinsley, V. V., King, C., ... & Ishler, K. J. (1996). Predictors of attitudes toward three target groups of elderly persons: The well, the physically ill, and patients with Alzheimer's disease. *Journal of Aging and Health*, *8*, 27-53.

Kane, R., & Kane, R. (2005). Ageism in healthcare and long-term care. *Generations*, *29*(3), 49-54.

Kite, M. E., & Johnson, B. T. (1988). Attitudes toward older and younger adults: A meta-analysis. *Psychology and Aging*, *3*, 233-244.

Kite, M. E., Stockdale, G. D., Whitley, B. E., & Johnson, B. T. (2005). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*, *61*, 241-266.

Kwong See, S. T., Hoffman, H. G., & Wood, T. L. (2001). Perceptions of an old female eyewitness: Is the older eyewitness believable? *Psychology and Aging*, *16*, 346-350.

Kwong See, S. T., & Nicoladis, E. (2009). Impact of contact on the development of children's positive stereotyping about aging language competence. *Educational Gerontology*, *36*, 52-66.

Lachs, M. S., & Pillemer, K. (2004). Elder abuse. *The Lancet*, *364*(9441), 1263-1272.

Laerd Statistics (2016). *Statistical tutorials and software guides*. Retrieved from https://statistics.laerd.com/

Levy, B. R., Chung, P. H., Bedford, T., & Navrazhina, K. (2014). Facebook as a site for negative age stereotypes. *The Gerontologist*, *54*(2), 172-176.

Llanque, S., Savage, L., Rosenburg, N., & Caserta, M. (2014). Concept analysis: Alzheimer's caregiver stress. *Nursing Forum, 51,* 21-31.

Marshall, L. L. (1992). Development of the severity of violence against women scales. *Journal of Family Violence*, *7*(2), 103-121.

Matsuda, O. (2007). An assessment of the attitudes of potential caregivers toward the abuse of elderly persons with and without dementia. *International Psychogeriatrics*, *19*, 892-901.

McGarty, C. E., Yzerbyt, V. Y., & Spears, R. E. (2002). *Stereotypes as explanations: The formation of meaningful beliefs about social groups*. Cambridge University Press.

Miller, P. N., Miller, D. W., McKibbin, E. M., & Pettys, G. L. (1999). Stereotypes of the elderly in magazine advertisements 1956–1996. *The International Journal of Aging and Human Development*, *49*(4), 319-337.

Moon, A. (2000). Perceptions of elder abuse among various cultural groups: Similarities and differences. *Generations, 24(*2), 75-80.

Murphy, K. R. & Davidshofer, C. O. (1988). *Psychological testing: Principles and applications.* Englewood Cliffs, NJ: Prentice-Hall.

Nieuwenhuis, A. V., Beach, S. R., & Schulz, R. (2018). Care recipient concerns about being a burden and unmet needs for care. *Innovation in Aging*, *2*(3), 1-10.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: McGraw-Hill.

O'Connor, M. L., & McFadden, S. H. (2012). A terror management perspective on young adults' ageism and attitudes toward dementia. *Educational Gerontology, 38*(9), 627-643.

Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research, 21,* 381-391.

Pillemer, K., Burnes, D., Riffin, C., & Lachs, M. S. (2016). Elder abuse: Global situation, risk factors, and prevention strategies. *The Gerontologist, 56*(S2), S194-S205.

Pillemer, K., & Glasgow, N. (2000). Social integration and aging: Background and trends. In K. Pillemer, P. Moen, E. Wethington, & N. Glasgow (Eds.), *Social integration in the second half of life* (pp. 19-47). Baltimore: Johns Hopkins University Press.

Popham L.E., & Hess T. M. (2015) Theories of Age Stereotyping and Views of Aging. In: Pachana N. (Ed) *Encyclopedia of geropsychology* (pp. 105-112). Springer, Singapore

Rinehart, J. W. (1963). The meaning of stereotypes. *Theory Into Practice, 2*(3), 136-143.

Runac, R. E., Kwong See, S. T., & Choy, A. (2017, October). *Impact of care recipient cognitive status on perceptions of conflicts during care.* Poster session presented at the meeting of the Canadian Association on Gerontology, Winnipeg, MB.

Runac, R. E., Kwong See, S. T., & Choy, A. (2018, November). *Effects of recipient cognitive status on perceptions of mistreatment while in care.* Poster session presented at The Gerontological Society of America's Annual Scientific Meeting, Boston, MA, USA.

Rust, T. B., & Kwong See, S. (2007). Knowledge about aging and Alzheimer disease: A comparison of professional caregivers and noncaregivers. *Educational Gerontology, 33*, 349-364

Rust, T. B., & Kwong See, S. T. (2010). Beliefs about aging and Alzheimer's disease in three domains. *Canadian Journal on Aging/La Revue Canadienne du Vieillissement*, *29*, 567-575.

Ryan, E. B., Hamilton, J. M., & Kwong See, S. (1994). Patronizing the old: How do younger and older adults respond to baby talk in the nursing home? *The International Journal of Aging and Human Development*, *39*, 21-32.

Ryan, E. B., Hummert, M. L., & Boich, L. H. (1995). Communication predicaments of aging patronizing behavior toward older adults. *Journal of Language and Social Psychology*, *14*, 144-166.

Sabat, S. R. (2008). A bio-psycho-social approach to dementia. In M. D. B. Bowers (Ed.), *Excellence in dementia care: Research in practice* (pp. 70–84). Berkshire: Open University Press.

Shinan-Altman, S., Werner, P., & Cohen, M. (2014). Social workers' and nurses' illness representations about Alzheimer disease: An exploratory study. *Alzheimer Disease & Associated Disorders*, *28*, 73-78.

Sinha, M. (2013). *Portrait of caregivers, 2012*. Retrieved from https://www150.statcan.gc.ca/n1/en/pub/89-652-x/89-652-x2013001-eng.pdf?st=SDVEfvOq

Sweeting, H., & Gilhooly, M. (1997). Dementia and the phenomenon of social death. *Sociology of Health & Illness, 19*, 93–117.

Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics* (6th ed.). Harlow, England: Pearson

Tronetti, P. (2014). Evaluating abuse in the patient with dementia. *Clinics in Geriatric Medicine, 30*(4), 825–38.

van der Lee, J., Bakker, T. J., Duivenvoorden, H. J., & Dröes, R. M. (2014). Multivariate models of subjective caregiver burden in dementia: A systematic review. *Ageing Research*

Reviews, 15, 76-93.

VandeWeerd, C., & Paveza, G. J. (2006). Verbal mistreatment in older adults: A look at persons with Alzheimer's disease and their caregivers in the state of Florida. *Journal of Elder Abuse & Neglect, 17,* 11-30.

VandeWeerd, C., Paveza, G. J., Walsh, M., & Corvin, J. (2013). Physical mistreatment in persons with Alzheimer's disease. *Journal of Aging Research, 17,* 11-30.

Vernooij-Dassen, M. J., Moniz-Cook, E. D., Woods, R. T., Lepeleire, J. D., Leuschner, A., Zanetti, O., ... & Iliffe, S. (2005). Factors affecting timely recognition and diagnosis of dementia across Europe: From awareness to stigma. *International Journal of Geriatric Psychiatry*, *20*(4), 377-386.

Vitaliano, P. P., Zhang, J., & Scanlan. (2003). Is caregiving hazardous to one's physical health? A meta-analysis. *Psychological Bulletin, 129,* 946-972.

Werner, P., Eisikovits, Z., & Buchbinder, E. (2005). Lay persons' emotional reactions toward an abused elderly person. *Journal of Elder Abuse and Neglect, 17*(2), 63-76.

Wethington, E., Pillemer, K., & Principi, A. (2016). Research in social gerontology: Social exclusion of aging adults. In P. Riva & J. Eck (Eds.), *Social Exclusion: Psychological Approaches to Understanding and Reducing Impact* (177-195). Switzerland: Springer International Publishing.

Wong, S. L., Gilmour, H., & Ramage-Morin, P. L. (2016). *Alzheimer's disease and other dementias in Canada.* Retrieved from https://www150.statcan.gc.ca/n1/pub/82-003-x/2016005/article/14613-eng.htm

Yon, Y., Anderson, L., Lymburner, J., Marasigan, J., Savage, R., Campo, M., ... & Mandville-Anstey, S. A. (2010). Is ageism in university students associated with elder abuse?

Journal of Intergenerational Relationships, *8*, 386-402.

Appendix

Sample of Testing Packet

In a moment you will rate different behaviours directed towards the individual described below.
Please read the following description of the individual carefully.
You'll have 1 minute to read the description.

Sarah Robbins is a 81-year-old woman suffering from a disease. The disease symptoms include memory loss, confusion, and disorientation.

Michael Robbins, a healthy 83-year old man, is Sarah's husband. He has been her primary caregiver since Sarah's diagnosis. His caregiving responsibilities include helping with personal activities of daily living (e.g., bathing, toileting) that Sarah can no longer complete on her own.

___ (check) I have read the description of the individuals

Please do not turn the page

Questionnaire Instructions

We want to know your impression of various behaviours by Michael Robbins directed towards Sarah Robbins, the 81-year-old woman suffering from a disease. The disease symptoms include memory loss, confusion, and disorientation.

Please rate the following actions based on their abusiveness from 1 (not at all abusive) to 7 (very abusive) with the numbers between 1 and 7 representing varying degrees of abusiveness. Each action should have one number circled on the scale.

1. **Use a club like object on Sarah**

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

2. **Shake or roughly handle Sarah**

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

3. **Threaten someone Sarah cared about**

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

4. **Threaten to hurt Sarah**

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

5. **Threaten to hit Sarah**

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

6. Slap Sarah with back of hand

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

7. Do not visit Sarah when asked

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

8. Shake a finger at Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

9. Act like he wants to kill Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

10. Grab Sarah suddenly or forcefully

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

11. Threaten to tie Sarah to the bed

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

12. Do not bathe or dress Sarah when necessary

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

13. Withhold medication from Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

14. Talk about Sarah in Sarah's presence

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

15. Use a knife on Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

16. Push or shove Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

17. Use Sarah’s money without her knowledge

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

18. Drive dangerously with Sarah in the car

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

19. Act like a bully towards Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

20. Pull Sarah's hair

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

21. Threaten to destroy one of Sarah's belongings

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

22. Threaten to lock Sarah in a room

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

23. Tie Sarah to the bed to punish her

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

24. Hit Sarah with an object

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

25. Threaten Sarah with a knife or gun

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

26. Lock Sarah in a room to prevent her from doing something

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

27. Shake a fist at Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

28. Tie Sarah to a bed to prevent her from doing something

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

29. Throw, smash or break an object around Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

30. Twist Sarah's arm

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

31. Choke Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

32. Sell Sarah's personal property without her permission

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

33. Threaten Sarah with a club-like object

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

34. Beat up Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

35. Force Sarah to wear diapers if ever incontinent

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

36. Make threatening gestures or faces at Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

37. Slap Sarah around her face and head

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

38. Read Sarah's personal mail

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

39. Hold Sarah down, pin her in place

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

40. Spank Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

41. Call Sarah insulting names

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

42. Threaten to harm or damage things Sarah cared about

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

43. Punch Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

44. Threaten to kill himself around Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

45. Do not call Sarah when she asked

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

46. Stomp around Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

47. Threaten Sarah with a weapon

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

48. Lock Sarah in a room to punish

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

49. Scratch Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

50. Hit or kick a wall, door, or furniture around Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

51. Enter a room without knocking when Sarah needs privacy

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

52. Use Sarah's savings without permission

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

53. Bite Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

54. Hit Sarah with a fist

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

55. Burn Sarah with something

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

56. Kick Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

57. Throw an object at Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

58. Threaten to destroy Sarah's property

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

59. Withhold Sarah's food

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

60. Threaten to kill Sarah

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

61. Slap Sarah with the palm of his hand

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

62. Prevent Sarah from receiving visitors

Not at all Abusive						Very Abusive
1	2	3	4	5	6	7

We would like to ask you a few questions about the people involved in the interactions.

Without looking back in the booklet, please fill in the blanks.

1. Sarah Robbins was described as needing care because she has _____.

2. What age was Sarah Robbins? _____years

3. What age was Sarah's husband, Michael Robbins? _____years

Considering the previously rated interactions as a whole, please circle the one number from 1 (not at all) to 7 (very) that best represents your answer to the following questions.

1. How difficult would it be to live with Sarah Robbins?

Not at all Difficult						Very Difficult
1	2	3	4	5	6	7

2. How much to blame is Sarah Robbins for the interactions as a whole?

Not at all to blame						Very much to blame
1	2	3	4	5	6	7

3. How difficult would it be to live with Michael Robbins?

Not at all Difficult						Very Difficult
1	2	3	4	5	6	7

4. How much to blame is Michael Robbins for the interactions as a whole?

Not at all to blame						Very much to blame
1	2	3	4	5	6	7

Please circle the one number from 1 (not at all) to 7 (very) that best represents how you believe <u>Sarah Robbins is like in day-to-day life.</u>

1. Sarah Robbins is confused.

Not at all Confused						Very Confused
1	2	3	4	5	6	7

2. Sarah Robbing has good memory.

Not at all Has good memory						Very Good memory
1	2	3	4	5	6	7

3. Sarah Robbins is forgetful.

Not at all Forgetful						Very Forgetful
1	2	3	4	5	6	7

4. Sarah Robbins is physically weak.

Not at all Physically Weak						Very Physically Weak
1	2	3	4	5	6	7

5. Sarah Robbins is independent.

Not at all Independent						Very Independent
1	2	3	4	5	6	7

6. Sarah Robbins is healthy.

Not at all Healthy						Very Healthy
1	2	3	4	5	6	7

Please circle the one number from 1 (not at all) to 7 (very) that best represents how you believe <u>Sarah Robbins feels in day-to-day life with Michael</u>.

1. Sarah Robbins feels isolated.

Not at all Isolated						Very Isolated
1	2	3	4	5	6	7

2. Sarah Robbins feels exhausted.

Not at all Exhausted						Very Exhausted
1	2	3	4	5	6	7

3. Sarah Robbins feels happy.

Not at all Happy						Very Happy
1	2	3	4	5	6	7

4. Sarah Robbins is filled with rage.

Not at all Filled with rage						Very Filled with rage
1	2	3	4	5	6	7

5. Sarah Robbins feels guilty.

Not at all Guilty						Very Guilty
1	2	3	4	5	6	7

6. Sarah Robbins feels optimistic.

Not at all Optimistic						Very Optimistic
1	2	3	4	5	6	7

7. Sarah Robbins feels satisfied with life.

Not at all Satisfied with life						Very Satisfied with life
1	2	3	4	5	6	7

8. Sarah Robbins feels irritated.

Not at all Irritated						Very Irritated
1	2	3	4	5	6	7

9. Sarah Robbins feels hopeful.

Not at all Hopeful						Very Hopeful
1	2	3	4	5	6	7

10. Sarah Robbins feels relaxed.

Not at all Relaxed						Very Relaxed
1	2	3	4	5	6	7

11. Sarah Robbins feels calm.

Not at all Calm						Very Calm
1	2	3	4	5	6	7

12. Sarah Robbins feels helpless.

Not at all Helpless						Very Helpless
1	2	3	4	5	6	7

Please circle the one number from 1 (not at all) to 7 (very) that best represents how you believe <u>Michael Robbins feels in day-to-day life with Sarah</u>.

1. Michael Robbins feels calm.

Not at all Calm						Very Calm
1	2	3	4	5	6	7

2. Michael Robbins feels hopeful.

Not at all Hopeful						Very Hopeful
1	2	3	4	5	6	7

3. Michael Robbins feels optimistic.

Not at all Optimistic						Very Optimistic
1	2	3	4	5	6	7

4. Michael Robbins feels relaxed.

Not at all Relaxed						Very Relaxed
1	2	3	4	5	6	7

5. Michael Robbins feels guilty.

Not at all Guilty						Very Guilty
1	2	3	4	5	6	7

6. Michael Robbins feels irritated.

Not at all Irritated						Very Irritated
1	2	3	4	5	6	7

7. Michael Robbins is filled with rage.

Not at all Filled with rage						Very Filled with rage
1	2	3	4	5	6	7

8. Michael Robbins feels satisfied with life.

Not at all Satisfied with life						Very Satisfied with life
1	2	3	4	5	6	7

9. Michael Robbins feels helpless.

Not at all Helpless						Very Helpless
1	2	3	4	5	6	7

10. Michael Robbins feels isolated.

Not at all Isolated						Very Isolated
1	2	3	4	5	6	7

11. Michael Robbins feels happy.

Not at all Happy						Very Happy
1	2	3	4	5	6	7

12. Michael Robbins feels exhausted.

Not at all Exhausted						Very Exhausted
1	2	3	4	5	6	7

Intergenerational Contact Questionnaire

We would like you to take a moment to think about the senior citizens you have contact with on a regular basis. Please answer the following questions telling us about your experience with senior citizens in general and then one senior citizen in particular.

Please think of your <u>contact with senior citizens</u> and answer the following questions.

1. How many senior citizens do you have contact with? _____

2. How old are these people on average? _____

3. What would you estimate to be the age range of this group of seniors that you know?

   Youngest age _____ Oldest age _____

4. How much regular contact do you have with senior citizens? (Circle one number).

1	2	3	4	5	6	7
No contact at all						Very much contact

5. Where do you have contact with senior citizens? (Check all that apply).

   _____ at your home
   _____ at their homes
   _____ in your neighborhood
   _____ church
   _____ school
   _____ public places (library, mall, etc.)
   _____ hospital
   _____ other, where? _____

6. How would you rate the cognitive health of seniors you have contact with? (Circle one number).

1	2	3	4	5	6	7
Not at all healthy						Very healthy

7. How would you rate the physical health of seniors you have contact with? (Circle one number).

1	2	3	4	5	6	7
Not at all healthy						Very healthy

8. How positive would you rate your interactions with senior citizens in general? (Circle one number).

1	2	3	4	5	6	7
Not at all positive						Very positive

Now, please think of the <u>one senior citizen</u> you have the most contact with and answer the following questions with that person in mind.

1. What is your relationship to this person?

_____ relative (specify_____)
_____ friend
_____ teacher
_____ neighbor
_____ other? _____ (e.g. coach, piano teacher)

2. How old is this person? (If you do not know, estimate or guess). _____

3. What is the person's gender? _____male _____female

4. How would you rate the cognitive health of this person? (Circle one number).

1	2	3	4	5	6	7
Not at all healthy						Very healthy

5. How would you rate the physical health of this person? (Circle one number).

1	2	3	4	5	6	7
Not at all healthy						Very healthy

6. How much contact do you have with this person? (Circle one number).

1	2	3	4	5	6	7
No contact at all						Very much contact

7. Where do you primarily have contact with this person? (Check all that apply).

_____ at your home
_____ at his/her home
_____ in your neighborhood
_____ church
_____ school
_____ public places (library, mall, etc.)
_____ hospital
_____ other, where?
_____

8. What activities do you share with this senior citizen? (Check all that apply).

_____ stories
_____ physical activities (walks, sports etc.)
_____ shopping
_____ crafts
_____ provide care for senior citizen
_____ senior citizen takes care of you
_____ other, which?
_____

9. How would you rate your contact with this person? (Circle one number).

1	2	3	4	5	6	7
Not at all positive						Very positive

Please do not turn the page

Please answer the following questions about yourself.

1. What year were you born? _____ *(Year)*

2. Marital Status:
   a.) Single
   b.) Married
   c.) Divorced
   d.) Widowed

3. Sex:
   a.) Male
   b.) Female
   c.) Other
   d.) Prefer not to respond

4. Birthplace:
   a.) Canada
   b.) USA
   c.) Other Please specify which country: _____

5. Are you a native speaker of English (i.e., was English the first language that you learned)?
   a.) Yes
   b.) No If no, what age did you learn to speak English? _____*(Age)*

6. If English is **not** the first language you learned, please rate your proficiency in English by circling one number.

1	2	3	4	5	6	7
Poor			Good			Excellent

7. What language do you usually speak at home?
   a.) English
   b.) French
   c.) Other Please specify which language(s) you speak at home:_____

8. What language do you feel most comfortable speaking?
   a.) English
   b.) French
   c.) Other Please specify which language(s) you speak at home:_____

9. Circle the answer that best describes your educational background.
   a.) Less than grade 8
   b.) Completed grade 8
   c.) Some secondary school
   d.) Completed secondary school
   e.) Some college or university
   f.) Completed university
   g.) Graduate studies

10. Are you currently on any medication that you believe impaired your ability to function at your best while doing any of the tasks today?
    a.) Yes How so (e.g., less able to concentrate): _____
    b.) No

For the following questions, <u>circle the best answer</u> on the number scale.

11. How would you describe your **general health** with respect to the average person your age?

    1----------2----------3----------4----------5

    Poor Average Excellent

12. How would you describe your **ability to see** with respect to the average person your age? (With glasses or contact lenses if you wear them).

    1----------2----------3----------4----------5

    Poor Average Excellent

13. How would you describe your **ability to hear** with respect to the average person your age? (With a hearing aid if you wear one).

    1----------2----------3----------4----------5

    Poor Average Excellent