

Understanding What Eldercare Means for Employees and Organizations: A Review and Recommendations for Future Research

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ABSTRACT

The purpose of this article is to provide a contemporary, globally focused, multidisciplinary review of the existing literature on eldercare responsibilities and the implications of these responsibilities for working adults and organizations, taking a multilevel perspective. Two major reviews of the impact of eldercare responsibilities on work for employed informal caregivers have been conducted in the past 25 years. However, an update to the extant literature is warranted given that prior reviews have not taken a holistic perspective in understanding eldercare for employees and organizations. In addition, a number of empirical articles about work and informal elder caregiving have been published across multiple disciplines since these reviews were written. Utilizing and extending the work in prior reviews, we propose a model to serve as an organizing framework for understanding the informal eldercare process. Our model includes antecedents to—and consequences of—informal eldercare responsibilities and identifies components of a feedback loop. We also include a discussion of the resources available at the individual, family/social, organizational, and community levels that are available and useful in managing informal elder caregiving and paid employment. Finally, we identify gaps in the extant literature and provide recommendations for future research.

According to the most recent census statistics, there are approximately 48 million U.S. citizens aged 65 years and older, an increase of 1.6 million since 2014 (Mather, Jacobsen, & Pollard, 2015; Ortman, Velkoff, & Hogan, 2014). These estimates are expected to exponentially increase by the year 2020 as the first wave of baby boomers (those born between 1946 and 1964) continue to move into that demographic category. Furthermore, due to dramatic increases in life expectancy throughout the world in the past few decades, growth in the aging population is a worldwide trend (Kotsadam, 2011). Globally, recent statistics indicate that approximately 8.5% of the population is aged 65 or older (617.1 million), with these estimates expected to increase to nearly 17% by 2050 (1.5 billion; He, Goodkind, & Kowal, 2016). Longevity trends unfortunately have also increased the prevalence of chronic illness and disability among elderly individuals, leaving family members to manage the care for their elders (Neal & Hammer, 2007).

Eldercare responsibilities, specifically informal (i.e., unpaid) care of the elderly by family and friends, have become increasingly common, with research suggesting that 34.2 million adults in the United States provide caregiving to someone 50 years and older (AARP, 2015). Importantly, more often than not, family caregivers are left to manage their paid work as well as informal elder caregiving, which can

be made more difficult when there is relatively little assistance or support. Recent estimates suggest that approximately 25 million working adults provide elder caregiving, which equates to one in six workers, and about 7 million working elder caregivers are also parents to children under 18 (Bureau of Labor Statistics, 2015). These numbers are expected to increase dramatically as persons aged 65 and older will comprise nearly 30% of the U.S. adult population in 2050 (U.S. Census Bureau, 2014). The U.S. trend is reflected globally, as the percentage of elder dependents worldwide is expected to increase from 17% in 2015 to 30% by 2050 (He et al., 2016). Eldercare responsibilities often fall on workers as they themselves are aging, and many employees (i.e., the so-called “sandwich generation”) experience the dual responsibilities of child- and eldercare, leaving them overly burdened with the demands of multiple roles. Furthermore, workers that have both eldercare and childcare responsibilities are becoming more common as the average age of first births is increasing. Such additional caregiving demands have a range of potentially negative psychosocial and economic consequences, not only on the employee, but on her or his workplace as well. The consequences of managing eldercare responsibilities (often in tandem with childcare responsibilities) for a workforce that is itself aging have begun to garner attention in the industrial/organizational

psychology and organizational behavior research arenas as well as other disciplines such as family studies, social gerontology, and occupational health.

Notably, only two reviews of the informal eldercare and work literature have been conducted within the prior 25 years (Calvano, 2013; Tennstedt & Goneya, 1994). This is in stark contrast to the plethora of reviews on childcare and work that focus on working parents and their experiences of work–life balance or work–life conflict (e.g., Armstad, Meier, Fasal, Elfering, & Semmer, 2011; Aryee, Srinivas, & Tan, 2005; Kossek & Ozeki, 1998; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). It is still the case that the impact of child caregiving on individual and work outcomes is more prevalent in the literature, regardless of the evidence that eldercare is a growing concern for many employees. Therefore, more research is needed on understanding the impact of informal elder caregiving on the work–life interface.

The review conducted by Tennstedt and Goneya (1994) was in efforts to demonstrate to corporate America the prevalence of elder caregiving and the intersection of providing elder caregiving on work outcomes for U.S. employers. Calvano's (2013) review took a less U.S.-focused approach in updating and examining the limitations and advances in the intersection of elder caregiving and individual and work outcomes for the employee. Together, these two prior reviews provide considerable evidence that simultaneously providing informal, familial elder caregiving and working holds consequences for the individual employee and employing organizations (Calvano, 2013; Tennstedt & Goneya, 1994). Notably, neither Tennstedt and Goneya (1994) nor Calvano (2013) discussed theoretical advances in understanding the impact of eldercare on the individual and organization, nor did they make any attempt to provide a theoretically grounded, conceptual framework that advances the eldercare and work literature. Furthermore, a number of empirical articles about eldercare and work have been published across multiple disciplines since these review articles were written.

The purpose of this article is to provide a contemporary, globally focused, multidisciplinary review of the existing literature on eldercare responsibilities and the implications of these responsibilities for working adults and organizations. Utilizing and extending the work of past reviews, we integrate informal elder caregiving into a model within a unifying theoretical framework for understanding the impacts of eldercare on individual, work, and labor supply outcomes. Specifically, we include consideration of the literature streams discussing psychosocial, organizational, contextual, and economic impacts for the employee and the workplace. Understanding the antecedents to, and consequences of, simultaneously providing elder caregiving and working, as well as the availability of resources that impact these relationships is not only important for increasing our knowledge of what eldercare means for the employee and the organization but may also contribute to the advancement of solutions to aid this growing segment of the global workforce. It is important to note that this review is limited to impacts of informal eldercare arrangements, or care provided informally by family members (as is most often the case) and friends; we only tangentially review formal eldercare (i.e., paid care provided by a professional), and we do so only in relation to informal elder care arrangements. If interested in formal eldercare or the intersection of formal and informal eldercare, a number of reviews have been published on the topic (Cohen-Mansfield, 1995; Hannan, Norman, & Redfern, 2001; Hodgkin, 2014; Holst & Skär, 2017; Kemp, Ball, & Perkins, 2013; Monahan &

Hopkins, 2002; Pekkarinen, Sinervo, Perälä, & Elovainio, 2004; Pitfield, Shahriyarmolki, & Livingston, 2011).

We begin by reviewing methodological considerations in the conceptualization and understanding of eldercare. Then, we present a theoretically grounded conceptual model for demonstrating how eldercare responsibilities and demands influence individual, work, and labor supply outcomes. We review what is known about the determinants of eldercare responsibilities and demands, the nature of the responsibilities and demands associated with eldercare, and the contextual variables that influence the types of care individuals are likely to take on. We then consider why eldercare is problematic, discussing the outcomes that have been reported by those with eldercare responsibilities, including individual outcomes such as physical and psychological health and well-being; work outcomes such as work performance, absence, and prolonged or shortened working lives; organizational outcomes such as turnover and early departure from the workplace; and labor supply outcomes such as career disruptions and labor market participation. Furthermore, we review factors that are known to affect the impact of eldercare on outcomes. Then, we review resources available at the individual, family/social, organizational, and community levels for aiding employed informal elder caregivers in managing eldercare responsibilities and paid employment. Lastly, we identify gaps in the research literature and provide recommendations for future research. It is important to note that the topic of informal eldercare is one that crosses multiple disciplines, including psychology, family studies, social gerontology, and occupational health; thus, our review draws on and integrates relevant research published in all of these domains.

LITERATURE REVIEW METHODOLOGY

The literature on informal eldercare crosses multiple disciplines and, as described in the previous section, has been tied to a variety of diverse outcomes. As previously indicated, two major reviews that have been conducted on the influence of eldercare on work for employees include a 1994 review of the research to date by Tennstedt and Goneya, and a 2013 review by Calvano of the relevant literature between 1994 and 2012. Extending the work identified in the 1994 and 2013 reviews, we conducted a search of relevant research on eldercare responsibilities and individual and organizational outcomes published between 2013 and present; we also identified several relevant studies that were excluded from the 1994 and 2013 reviews (i.e., Edwards, Zarit, Stephens, & Townsend, 2002; Hashizume, 2010; Kramer & Kipnis, 1995; Pavalko & Henderson, 2006). To provide structure for our review, we limited our search to qualitative, mixed-method, and quantitative studies utilizing samples of employees who have eldercare responsibilities.

Search Strategy

An electronic search of studies published between 2013 and August 2017 was conducted. The electronic databases searched included: PsycInfo, PsycArticles, PubMed, and Elsevier. Descriptors used included: informal eldercare OR eldercare demands OR eldercare responsibilities AND work OR employees OR organization AND gender, socioeconomic status (SES), race/ethnicity, culture, sandwich generation, occupation, stress, strain, physical health, psychological health, emotional health, positive outcomes, negative outcomes,

retirement, economic strain, need to work, FMLA, work–family policies, work–family legislation, work–family and family–work conflict, work–family and family–work facilitation, and work–family and family–work empowerment.

Criteria for Selecting Studies

Qualitative, mixed-method, and quantitative studies were included in the review. Only studies based on informal eldercare demands and responsibilities with employed sample populations were considered in the review of the impacts of eldercare on individual and organizational outcomes, and the factors known to affect the impact of eldercare on these outcomes. An additional 20 empirical studies that met these criteria, published since the time of the last published review (Calvano, 2013) were identified. Sources and characteristics of these studies are summarized in Table 1. These studies represent research carried out in a diverse array of countries, published in journals representing both disciplinary and multidisciplinary perspectives. In addition, some articles that did not meet the selection criteria, such as conceptual or theoretical articles, and those identified by Calvano (2013) and Tennstedt and Goneya (1994), were used to provide contextual understanding and substance to various sections throughout this review article (e.g., local resources for managing eldercare responsibilities).

CONCEPTUALIZING AND OPERATIONALIZING ELDERCARE

The research conducted on eldercare has primarily measured eldercare as binary and unidimensional (i.e., an employee either does provide eldercare or does not; Calvano, 2013). Much of what we know regarding employed informal elder caregivers and individual and work outcomes has been dependent on findings from large national surveys where researchers are limited in how eldercare is operationalized and measured. However, the personal and organizational impacts of elder-caregiving responsibilities for employees are dependent on the nature of the eldercare being provided, the time needed to meet the responsibilities of eldercare, and the relationship between the caregiver and care recipient (e.g., positive vs. strained relationship). Failure to recognize distinctions in categories and levels of eldercare in operationalizations of eldercare responsibilities has likely contributed to inconclusive findings regarding the impact of eldercare on employee and organizational outcomes.

Fortunately, in recent years, researchers have begun to include more multidimensional indices of eldercare including the number of hours of eldercare provided on average per week, the nature of the care provided, the primary reasons for providing eldercare, whether the caregiver resides with the elder, and whether the caregiver has primary versus shared responsibility (e.g., Dugan et al., 2016; Greaves, Parker, Zacher, & Jimmieson, 2015; Zacher & Schulz, 2015), leading to a richer understanding of the nature and influence of eldercare responsibilities and demands. However, while researchers have begun to include more multifaceted indices of elder caregiving, many include an index of eldercare responsibilities based on a subset of the aforementioned list, which is not consistent across researchers. Calvano (2013) noted in her review that “the absence of a uniform, multidimensional measure of eldercare makes it difficult to compare and draw conclusions about research results” in the employed informal eldercare community (p. 208).

To keep moving the science forward on the impacts of elder caregiving on employee individual and work outcomes, researchers need to take a comprehensive, multifaceted approach to conceptualizing and operationalizing eldercare. A good starting point for researchers should be the development and validation of a uniform, multidimensional measure of eldercare, to include the following: estimated number of hours of care provided, primary versus shared care responsibilities, the type of care provided (“hands-on” vs. “managerial”; if providing both types of care, estimated time allotment to each type), residential location of elder (i.e., living in their own home, living with elder caregiver, living in an assisted care facility), health status and functional capacity of the elder, and affective evaluation of caregiving (i.e., feeling that the caregiving experience is satisfying). By consistently indexing the aforementioned features of informal eldercare, researchers will be better able to pinpoint the dimensions of elder caregiving that influence individual and work outcomes, with the added benefit of being able to compare and contrast results across studies. We cannot conclude that simultaneously working while providing informal elder caregiving is a “burden” without first understanding the dimensions of elder caregiving that contribute to individual and employee “burden.”

A CONCEPTUAL MODEL OF ELDERCARE

To organize and facilitate an evidence-based understanding of simultaneously providing informal elder caregiving and working, we propose a conceptual model, grounded in conservation of resources (COR) theory, that describes antecedents and consequences of elder caregiving, as well as resources at the individual, family/social, organizational, and community levels that can aid employed informal elder caregivers in managing their dual roles. We take a multilevel approach to understanding the influence of informal elder caregiving on outcomes; our model includes outcomes at the individual, work, and labor supply levels that are impacted or affected by informal elder caregiving. This model, illustrated in Figure 1, provides an over-arching framework for organizing our review.

Theoretical Background

There are several theoretical perspectives that are helpful in conceptualizing how informal eldercare caregiving influences individual, work, and labor supply outcomes. For example, when conceptualizing how employment outside the home may help to ameliorate the negative relationship between eldercare demands and the psychological and physical well-being for employees, role enhancement theory, spillover theory, role enrichment theory, and the demands and resources approach to role conflict may provide understanding and/or have been used in prior research. Role enhancement theory states that involvement in multiple roles helps to improve individuals’ self-esteem and mental health (Moen, Robison, & Dempster-McClain, 1995). Spillover theory states that what happens in one domain or role can spill over into other domains or roles, including both positive and negative spillover (Wilensky, 1960). Role enrichment theory states that experiences at home can enrich one’s work life and vice versa (Greenhaus & Powell, 2006). Finally, the demands and resources approach to role conflict (Voydanoff, 2005) suggests that the appraisal of work–life fit can be positive or negative depending on how individuals view the resources available to them to meet the demands of certain roles. For example, if individuals feel that they have the resources

Table 1. Articles Examining Individual, Work, and Labor Supply Outcomes for Employed Elder Caregivers 2013–2017

Journal	Author(s)	Year	Methodology	Sample	Country	Key Findings
<i>Journal of Gerontological Social Work</i>	Brown and Pitt-Catsouphes	2013	Quantitative	2008 National Study of the Changing Workforce	United States	Work overload and work hours are positively associated with higher perceptions of work-to-family conflict for intermittent and regular caregivers; supervisor support, family supportive environment, and access to flexibility have a positive association with lower perceptions of work-to-family conflict; access to workplace flexibility policies has a strong, positive effect on reduction of work-to-family conflict for intermittent caregivers
<i>Research on Aging</i>	Lahaie and colleagues	2013	Quantitative	Work, Family, and Community Nexus Survey	United States	Women, Hispanics, and first-generation immigrant caregivers report unsupportive work cultures, less schedule flexibility, and less access to paid vacation leave; women and first-generation immigrant caregivers report quitting work, retiring early, or reducing work hours involuntarily because of caregiving
<i>Health Economics</i>	Schneider, Trukeschitz, Mühlmann, and Ponocny	2013	Quantitative	Population-based sample of caregivers of individuals 60+ years receiving federal long-term care	Austria	Female caregivers report that time-based conflicts between work and elder caregiving is positively associated with intended job change; flexible work arrangements facilitate the attachment of female caregivers to their jobs and the labor market; male caregivers reported intention to leave the job market when the caregiving role involved physical care burden
<i>Journals of Gerontology, Series B: Psychological Sciences and Social Sciences</i>	Trukeschitz, Schneider, Mühlmann, and Ponocny	2013	Quantitative	Population-based sample of caregivers of individuals 60+ years receiving federal long-term care	Austria	Subjective care burden associated with informal elder caregiving was positively associated with work-related strain; obligation to make up hours associated with informal elder caregiving and job insecurity were positively associated with work-related strain; skill in one's job and high job motivation are associated with less work-related strain for informal caregivers; informal elder caregivers with opportunities to engage in leisure activities experienced less work-related strain
<i>Journal of Health Economics</i>	Van Houtven, Coe, and Skira	2013	Quantitative	9 waves from the Health and Retirement Study (1992–2008)	United States	Gender is associated with reduction in work hours and lower wages for female elder caregivers; there is a modest decrease in working for male caregivers who provide assistance with personal care activities

Table 1. Continued

Journal	Author(s)	Year	Methodology	Sample	Country	Key Findings
<i>Journal of Family Economic Issues</i>	Zuba and Schneider	2013	Quantitative	Fourth European Working Condition Survey	27 E.U. countries, including Norway, Switzerland, Croatia, and Turkey	Informal elder caregiving is associated with more work-to-family conflict than noncaregivers; coworker social support moderates the effect of work-to-family conflict for caregivers, while work overload contributes to greater feelings of work-to-family conflict for caregivers
<i>BMC Public Health</i>	Do, Cohen, and Brown	2014	Quantitative	2009 Behavioral Risk Factor Surveillance System Survey	United States	Sandwich caregivers experience significantly worse self-reported health; lower income white sandwich caregivers report significantly worse self-reported health than their non-White counterparts
<i>Canadian Journal of Aging</i>	Proulx and Le Bourdais	2014	Quantitative	General Social Survey Cycles 20 and 21	Canada	Labor market exit is greatest for women employed full-time and providing parent or parent-in-law care; women and men with no children or adult children exhibit a greater probability of labor market exit
<i>Women's Health Issues</i>	Juratovac and Zausziewski	2014	Quantitative	Sample of caregivers of community-dwelling older adults recruited locally	United States	Eldercare task time and difficulty, and lower care recipient functional health were significantly associated with greater physical and mental effort for employed informal elder caregivers; greater mental effort and workload associated with eldercare tasks, and lower rated self-assessed health of the caregiver were significantly associated with greater caregiver depressive symptoms
<i>Latin American Journal of Economics</i>	Van Gasteren and Naranjo	2015	Quantitative	Mexican Health and Aging Study	Mexico	Care needs of the elder determine caregiving activities; female caregivers who started working at a young age are more likely to stay employed
<i>The International Journal of Aging</i>	Greaves, Parker, Zacher, and Jimmieson	2015	Quantitative	Sample recruited from local businesses	Australia, United States, and India	Higher core self-evaluations among employed informal elder caregivers was associated with significantly lower intention to turnover when supervisor support is low; increased satisfaction from work and decreased emotional exhaustion from work significantly mediated the relationship between core self-evaluation and turnover intentions

Table 1. Continued

Journal	Author(s)	Year	Methodology	Sample	Country	Key Findings
<i>Gender, Work, and Organization</i>	Jacobs and Padavic	2015	Qualitative	Snowball sample recruited based on personal relationship of first author	United States	Managing paid employment and informal elder caregiving is especially difficult for low-wage female workers; caregiving is made more difficult by unpredictable schedules; insufficient work hours and work hour reductions as punishment for caregiving contribute to low-wage workers' financial strain
<i>Journal of Family Issues</i>	Tement and Korunka	2015	Quantitative	Sample recruited from variety of businesses	Slovenia	Sandwich caregivers experience greater work-to-family conflict than noncaregivers; there's a marginally significant interaction between workload and sandwich caregivers on work-to-family conflict, such that sandwich caregivers with higher workloads experience greater work-to-family conflict; there's a marginally significant interaction between autonomy and elder caregivers on work-to-family enrichment, such that elder caregivers who experience more autonomy in their work role experience higher levels of work-to-family enrichment
<i>Journal of Managerial Psychology</i>	Zacher and Schulz	2015	Quantitative	Sample recruited from a health insurance company	Germany	Informal elder caregivers experience more work-to-family conflict than noncaregivers; flextime and schedule control significantly reduce work-to-family conflict for caregivers and noncaregivers; absenteeism is greater for elder caregivers over noncaregivers; caregivers reporting more work overload experience greater work-to-family conflict
<i>Community, Work & Family</i>	Brown and Pitt-Catsouphes	2016	Quantitative	2008 National Study of the Changing Workforce	United States	Work-to-family conflict mediates the relationship between perceived stress and perceived flexibility control for employed caregivers, this effect was stronger for men; work-to-family conflict fully mediates the relationship between perceived stress and perceived access to flexible work options
<i>Community, Work & Family</i>	Dugan, Fortinsky, Barnes-Farrell, Kenny, Robison, Warren, and Cherniak	2016	Quantitative	Sample recruited from 6 manufacturing companies in Connecticut	United States	Older workers are more likely to report eldercare demands; having eldercare demands is associated with greater depressive symptoms and greater family-to-work conflict; more time involved in eldercare is associated with greater depressive symptoms; providing assistance with personal care is associated with greater family-to-work conflict

Table 1. Continued

Journal	Author(s)	Year	Methodology	Sample	Country	Key Findings
<i>The Leadership Quarterly</i>	Kalysh, Kulik, and Perera	2016	Quantitative	Organizational reports from Workplace Gender Equality Agency	Australia	Presence of family-friendly workplace policies facilitates women in management roles for those with caregiving (i.e., elder caregiving, child caregiving) duties
<i>Journal of Vocational Behavior</i>	Bainbridge and Brody	2017	Quantitative	Carers NSW Survey	Australia	Career disruptions and unemployment mediate the relationship between care recipient independence and employed informal caregivers' well-being; informal caregivers experience greater career disruption when there is limited workplace support
<i>Journal of Cross Cultural Gerontology</i>	Mehta and Leng	2017	Qualitative	Sample recruited through personal contacts, social service agencies, convenience sampling and snowballing	Singapore	Employed informal elder caregivers report financial, physical, emotional, and psychological stress related to their role as caregivers; use of live-in domestic workers helps employed informal elder caregivers cope with their eldercare tasks and responsibilities
<i>Journal of Cross Cultural Gerontology</i>	Pei, Luo, Lin, Keating, and Fast	2017	Quantitative	Sample recruited from 14 manufacturing companies	China	Women with more education and secure jobs are better able to manage paid employment and informal elder caregiving; absence of supportive workplace policies contributes to reports of job insecurity for elder caregivers

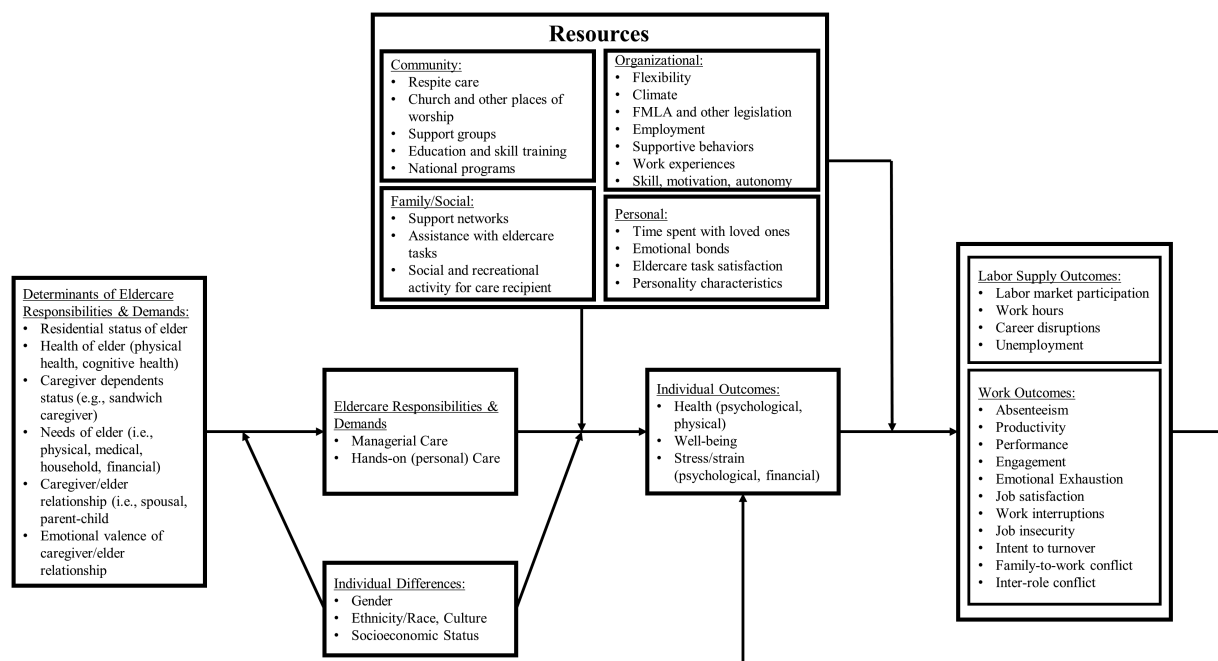


Figure 1. Conceptual model of eldercare for employed informal caregivers grounded in Conservation of Resources Theory. Note that the box containing “Resources” is primarily thought to serve as moderators between eldercare responsibilities and individual, work, and labor supply outcomes.

available to meet the demands of eldercare and work, this may be associated with more positive outcomes.

On the other hand, there are a number of theoretical perspectives that are often used to explain the negative impact of elder caregiving on outcomes. Indeed, much of the research conducted to date has primarily focused on the negative effects of eldercare, rather than positive impacts. In the sociological literature, cumulative disadvantage theory offers an understanding of how eldercare responsibilities may impact individuals, and women in particular, over their life course influencing labor supply and health outcomes. Cumulative disadvantage theory argues that school and work, as social institutions, interact with economic, social, and health trajectories over the life course, especially for women (because of their primary role in the family) which results in more negative economic and health outcomes in the later stages of life (O’Rand, 2002). For example, if an individual takes on eldercare responsibilities, it can impact their ability to work and accumulate adequate retirement savings, and/or impact their financial situation; thus, they may be at a greater economic and health disadvantage when they themselves reach retirement age. Furthermore, work–family conflict theory (Greenhaus & Beutell, 1985) suggests that conflict between the roles of employee and caregiver arise when the time devoted to, strain from, and behaviors required by, one role make it difficult to manage the requirements of another role, resulting in psychological, emotional, and/or physical strain. Role theory and the work in micro-role transitions states that individuals hold multiple roles, and the more roles that individuals hold (e.g., employee and elder caregiver), the greater the likelihood of negative consequences, especially when individuals frequently transition between roles (e.g., Ashforth, Kreiner, & Fugate, 2000; Goode, 1960). The ability to transition, and stress resulting from transitioning between roles, is dependent on a number

of factors, including the extent to which individuals prefer segmenting or integrating their roles. For example, if an individual prefers boundary segmentation, they create mental fences around their roles, and try to keep their roles separated (Ashforth et al., 2000). However, if eldercare responsibilities occur during the individuals’ work-time, this can create a source of strain as individuals struggle with simultaneously attempting to fulfill two mutually exclusive roles, the role of caregiver and employee.

COR theory (Hobfoll, 1989, 2001) states that individuals strive to obtain, maintain, and protect valued resources, and that stress results from the (perceived or actual) loss or threat of loss of resources, impacting individual and work-related outcomes. Eldercare can be conceptualized as an actual or perceived threat to resources due to the varied demands of caregiving that influences the ability of individuals to maintain and build resource reserves. This results in negative outcomes for employees as they struggle to manage the demands of work and family (Grandey & Cropanzano, 1999).

The conceptual model we propose in Figure 1 is primarily grounded in COR theory because it is a multidisciplinary paradigm that takes into account concepts of the nested self, community, and culture in understanding the stress process (Hobfoll, 1989, 2001), which may differentially impact individuals simultaneously managing informal eldercare responsibilities and paid employment. Specifically, COR theory emphasizes that resources (and their lack) are the basis upon which individuals experience stress and strain or are able to effectively cope with stress and strain. Hobfoll (1989) defines psychological stress as “a reaction to the environment in which there is (a) the threat of a net loss of resources, (b) the net loss of resources, or (c) a lack of resource gain following the investment of resources.” Furthermore, Hobfoll (2001) asserts that resources aggregate in “resource caravans,”

the notion that having one major resource is linked with having other resources and that lacking one major resource is associated with lacking other resources. These resource caravans operate in both an immediate and life-span sense, such that having resources at a given time period likely carries over to future time periods. Resource loss and gain spirals are also possible. Loss is not only more likely for those who lack resources, but it also increases the likelihood of future losses. Similarly, having resources increases the likelihood that one will gain resources, and this in turn increases the likelihood of future resource gains.

Resources are both culturally and socioeconomically determined, and those who are economically disadvantaged suffer from resource lack. A chronic lack of resources makes individuals more vulnerable to resource loss (and significantly less likely to experience resource gain) suggesting that eldercare responsibilities and demands for individuals in lower SES households are particularly detrimental. Providing eldercare while simultaneously engaging in paid employment involves significant resource investment (i.e., time, energy), resource allocation (i.e., borrowing from family time, borrowing from work time), and potentially the loss of new opportunities due to resource insufficiency. On the other hand, resource gains may occur in the form of strengthened interpersonal bonds between caregiver and care recipient, and the intrapsychic rewards that come with helping loved ones manage and cope during the final stages of their lives. However, [Hobfoll \(2001\)](#) asserts that the loss of resources is disproportionately more salient than resource gain, and because of this resource loss spirals are more impactful. This suggests that those who provide informal elder caregiving to loved ones are more likely to experience negative outcomes as a result, and that even the potential positives of providing elder caregiving (companionship) and working (stable employment, financial resources) do not offset negative impacts on the individual employee and organization. Individuals who are able to create resource reserves and obtain resource gains may be better able to cope with resource loss associated with eldercare, buffering against the negative consequences associated with simultaneously managing informal elder caregiving and paid employment.

DETERMINANTS OF ELDERCARE RESPONSIBILITIES AND DEMANDS

The impacts of providing informal elder caregiving while simultaneously managing paid employment are not equivalent; they depend on the level of interference that elder caregiving has on the caregivers' personal and work lives, respectively. Eldercare needs may include physical, psychological, medical, household, and/or financial needs. The intensity of the elder's needs determines the demands and the effort required on the part of the caregiver ([van Gameren & Naranjo, 2015](#)). Needs are dependent on a number of factors, including: residential status of the elder; physical, psychological, and cognitive health of the elder; caregiver dependent status (e.g., whether also responsible for childcare); whether the caregiving is shared (e.g., between two adult children); the nature of the caregiver/elder relationship (i.e., spousal, parent-child), and the emotional valence of the caregiver/elder relationship. Further, informal eldercare arrangements may be short in duration, intermittent, or long-term arrangements, which can influence the type and intensity of outcomes experienced by the employee and the organization. For example, those temporarily caring for an elder recovering from surgery may experience significant time-intensive

demands over the short term as the elder recovers. Following recovery, the elder may experience more independence due to an increase in functional health, limiting the time-based demands required of the caregiver.

Features of eldercare situations that characterize an informal caregiver's experiences are wide-ranging and dynamic and influence the type and amount of responsibilities an elder caregiver takes on. Spouses and adult children are more likely to take on elder caregiving over other kin relationships ([Wolff & Kasper, 2006](#)) with social and gender norms dictating that female spousal and adult children caregivers are more likely to be involved in certain types of care (i.e., personal) over their male spousal and adult children counterparts. There is a body of research that suggests that negative outcomes associated with caregiving are felt most strongly for spousal caregivers, especially if the care recipients' cognitive health is in decline ([Barber & Pasley, 1995](#); [D. Cohen et al., 1990](#); [Ingersoll-Dayton & Raschick, 2004](#); [Pruchno & Resch, 1989](#); [Rankin, Haut, & Keefeover, 1992](#)). In a comparison of spousal and adult children caregivers, research suggests that spousal caregivers report feeling more burdened in their caregiving duties, but also more positive about the caregiving relationship than adult children caregivers ([Broese van Groenou, Boer, & Iedema, 2013](#); [Lawton, Moss, Kleban, Glicksman, & Rovine, 1991](#)). This is likely a result of adult children caregivers being sandwiched between child caregiving, career, and elder caregiving duties, more so than spousal elder caregivers, leaving them feeling overly burdened by their multiple roles.

The emotional valence of the caregiving relationship is also important to consider. [Horowitz and Shindelman \(1983\)](#) noted that, "Caregiving does not emerge with a life of its own but takes place within a historical context. Both the aged relative and the caregiver enter the relationship with a history of interactions which may either facilitate or impede the caregiving relative in his/her attempts to fulfill caregiving responsibilities" (p. 18). Research supports that positive feelings and attachment to the parent influences the type and amount of help provided by adult daughters ([Cicirelli, 1993](#)). However, while caregiving that is shared has the potential to alleviate stress and overload because no one person is providing for the entirety of needs of the elder, it can also contribute to feelings of stress if disagreements arise over care ([Kwak, Ingersoll-Dayton, & Kim, 2012](#), [Mehta & Leng, 2017](#); [Neufeld & Harrison, 2003](#)).

What's more, research suggests that work responsibilities and everyday eldercare are easier to manage when both the elder and the workplace are in close proximity ([Airey, McKie, & Backett-Milburn, 2007](#)), which reduces eldercare-related travel time. Caregivers who reside with the elder experience greater conflict and strain than those who do not ([Duxbury, Higgins, & Smart, 2011](#); [Juratovac & Zauszniewski, 2014](#); [J. A. Lee, Fooks, & Clow, 2010](#)). This is likely due to less ability of caregivers to obtain respite (i.e., a break) from the demands and responsibilities of eldercare. In a study conducted on providing eldercare (to individuals 65 and older) using data from the 2008 National Study of the Changing Workforce, 71% of respondents indicated not having enough time for their children, 63% indicated not having enough time with their spouse/partner, and 63% indicated not having enough time for themselves ([Aumann, Galinsky, Sakai, Brown, & Bond, 2010](#)).

Furthermore, caring for an elder with greater health care needs is associated with less time spent by the caregiver in valued leisure activities ([Hashizume, 2010](#); [Wolff, Spillman, Freedman, & Kasper, 2016](#)). Research suggests that those who provide care for elders with mental

or cognitive disabilities experience more stress and strain than those who care for elders with physical disabilities (Bainbridge, Cregan, & Kulik, 2006; Fredriksen-Goldsen & Scharlach, 2006). However, Utz, Lund, Caserta, and Wright (2012) found that employed elder caregivers were more satisfied with their respite time use and activities over their nonemployed counterparts. This suggests that while employed elder caregivers have less time to spend on leisure and alone time, the time they do spend away from caregiving is done strategically.

ELDERCARE RESPONSIBILITIES AND DEMANDS

Eldercare responsibilities generally fall into two categories: hands-on care (also referred to as activities of daily living, or ADLs) and managerial care (also referred to as instrumental activities of daily living, or IADLs). Hands-on care (i.e., personal care) includes tasks such as feeding, bathing, and assisting with mobility and toileting, among others; while managerial care refers to tasks such as meal preparation, making telephone calls, assisting with shopping, transportation, supervising doctors' appointments, and managing finances (Azarnoff & Scharlach, 1988; Calvano, 2015; Friedman, 1986; Laditka & Laditka, 2001; Rosenthal, Martin-Matthews, & Keefe, 2007). Both hands-on (personal) and managerial care also involve the investment of time and energy resources, however, managerial care may not involve the investment of emotional resources inherent in aiding the eldercare recipient with their personal health and hygiene. And one must consider that elders may need assistance with personal care, managerial care, or *both*; with the type and amount of care needed by the care recipient likely increasing over time. In addition, informal caregivers must often serve as decision makers as they help their loved ones navigate increasingly complex health care systems (National Academies of Sciences, Engineering, and Medicine [NASEM], 2016). The type of care and amount of time that is needed to manage eldercare responsibilities will determine the level of demand placed on the informal elder caregiver.

Although eldercare has been categorized mainly into hands-on and managerial care, further research may identify additional categories of care such as spiritual- and emotional-caregiving that can be both a burden and source of support. Eldercare responsibilities carry a significant emotional cost for caregivers, because eldercare responsibilities often come without warning and intensify over time. Eldercare often coincides with the cognitive and physical diminishment of the elder and may also involve the role reversal of a child caring for a parent (Smith, 2004), which is difficult from an emotional standpoint for both the caregiver and care recipient. Both informal elder caregiving and eldercare recipient roles involve a loss of independence, as the elder caregiving role requires time and resources in managing eldercare responsibilities, while the eldercare recipient deals with the dramatic or gradual loss of autonomy. Elder caregiving also often ends with the death of the elder, which is emotionally difficult for the invested caregiver.

On the other hand, informal elder caregivers are able to create and maintain companionship for their eldercare recipients as they age, strengthening intimacy, love, and familial bonding resources. Research supports the notion that while informal elder caregiving is associated with emotional distress, it may also be associated with increases in self-esteem, meaning of life, engagement, and pride (Kramer, 1997; Marks, 1998; Marks & Lambert, 1998; Marks, Lambert, & Choi, 2002). Qualitative interviews support that informal elder caregivers

experience feelings of appreciation and affinity, and growth and satisfaction with their roles while simultaneously experiencing high levels of stress (Eckwall & Hallberg, 2007; Grant & Nolan, 1993; Toljamo, Perala, & Laukkala, 2012).

Individual Differences Influencing Eldercare Responsibilities and Demands

Gender

Child caregiving is more equitably shared now between partners, however women still carry the brunt of the responsibility for caregiving of dependents, whether children or elders. The vast majority of research indicates that women, more than their male counterparts, are predominantly engaged in eldercare responsibilities (Bookman & Harrington, 2007; Dwyer, Folts, & Rosenberg, 1994; Kramer & Kipnis, 1995; Pinguart & Sørensen, 2005; Wolff et al., 2016). Recent estimates indicate that women provide approximately 75% of all elder caregiving (Institute on Aging, 2016). Wives provide more care to their elderly husbands than the reverse, due in part to the longer life-expectancy of women (Abel, 1991; Institute on Aging, 2016). When spousal care is not suitable or available, research suggests that adult daughters are twice as likely as adult sons to provide care for elderly parents (Kossek, DeMarr, Backman, & Kollar, 1993), with recent estimates suggesting that the parental care recipient is more often than not female (73%; AARP, 2015). For nonspousal caregivers, research suggests that female nonspousal caregivers report more negative outcomes associated with providing elder caregiving than their nonspousal male caregiver counterparts (Kramer & Kipnis, 1995), as females are likely to assist with personal care, such as bathing and toileting which requires greater emotional and physical investment in carrying out these tasks (AARP, 2015; Institute on Aging, 2016).

Women also disproportionately provide caregiving to elderly in-laws (Winfield, 1987). When it comes to assistance with daily activities, women help with hands-on (i.e., personal) care and managerial care, whereas men typically provide assistance only with managerial care (Dwyer & Seccombe 1991; Kossek et al., 1993). The disproportionate burden of care provided by females may be due in large part to social norms. "Women's predominance in [elder] caregiving results in part from the social construction of gender, traditional family roles, and societal constructs including economic arrangements" (Laditka & Laditka, 2001, p. 432).

There is also a gender by culture interaction in the experiences of women providing informal elder caregiving. For example, among Native American communities, elder caregiving is largely shouldered by women, primarily daughters (Schure & Goins, 2015). Female caregivers in China with more education and secure jobs respond better to the financial and time demands of caregiving over their less educated counterparts (Pei, Luo, Lin, Keating, & Fast, 2017). Although socio-cultural norms in Japan place an emphasis on women providing the major caregiving role (Hashizume, 2010). With regards to male caregivers, research indicates that men without siblings are more likely to be engaged in traditional-male (operationalized as managerial and outside tasks) and nontraditional-male (operationalized as assistance with personal care and other domestic tasks) elder caregiving in a sample of employed Canadian men (Campbell & Martin-Matthews, 2000). Furthermore, Campbell and Martin-Matthews' (2000) research indicates that living with the elder is significantly associated with men's participation in nontraditional-male (i.e., personal) care tasks.

Race/ethnicity and culture

Different cultures and national contexts carry with them norm-based determinants on informal elder caregiving. For example, Chinese culture emphasizes filial piety (i.e., respect and obedience to one's parents and elderly family members; Merriam-Webster), with elderly parents often residing with the oldest son (Zhang & Goza, 2006). Because of this, Chinese women provide more care for their in-laws than their biological parents. Similar to Chinese culture, Japanese culture also places a greater emphasis on filial piety and respect for older people, which calls for the responsibility of elder caregiving to fall upon family members (Hashizume, 2010; Qu, 2014). What's more, informal elder caregivers in Singapore also adhere to filial responsibility in caring for one's parents (Mehta & Leng, 2017).

The norm-based determinants of informal elder caregiving may be conflated with SES. Disproportionately more low-income individuals are nonwhite (AARP, 2001), indicating greater emotional and financial burden for ethnically and racially diverse elder caregivers. However, Hispanic and African American caregivers also report feeling more positive aspects of caring for elders with dementia than their white counterparts (Roth, Dilworth-Anderson, Huang, Gross, & Gitlin, 2015), indicating ethnic differences in the way individuals appraise their elder caregiving duties. Researchers have noted that across different national contexts, "the use of formal services seemed to be dependent on the financial situation of the caregiver and whether the caregiver was still in the labour force..." (Willemse et al., 2016, p. 274).

Socioeconomic status

It is estimated that the vast majority of care provided to elders is done informally by unpaid family and friends (Cancian & Olicker, 2000; Wolff & Kasper, 2006). Middle- and lower-class working families tend to be the hardest hit when the need to provide eldercare arises, as members of this sociodemographic group often make too much money to qualify for subsidized services yet are unable to afford care services for their elders (Bookman & Kimbrell, 2011), leaving the brunt of the responsibility of eldercare on family. Upper middle- and upper-class families, on the other hand, typically have the financial resources available to help pay for professional eldercare or respite services (Bookman & Kimbrell, 2011), alleviating the amount of time and intensity of involvement in providing eldercare responsibilities.

Summary

Taking on eldercare responsibilities is not determined by a single factor. Instead, informal elder caregiving is the result of a complex, inter-related set of factors at the individual, familial, and societal levels. One must consider where the elder lives in relation to the caregiver, the health of the elder, as well as the time that the caregiver has to dedicate to eldercare responsibilities and whether those responsibilities are shared amongst family members. As stated, eldercare can occur suddenly if there is a dramatic change in the elder's health, or gradually over time that naturally occurs with the aging process and gradual declines in physical and cognitive health.

In addition, the types of care that individuals are likely to take on are dependent on a number of factors, including gender, race/ethnicity, culture, and SES. Women disproportionately are the elder caregivers, across race/ethnicity, culture, and SES. Not only that, but ethnic minorities tend to be more economically disadvantaged, limiting access

to, and availability of, paid assistance with eldercare responsibilities. Further, different ethnicities and cultures have norm-based determinants of care for dependents, including elders. Finally, those who fall in a higher SES are likely to have more resources available to assist with the care of elders, which can protect against resource loss.

CONSEQUENCES OF PROVIDING INFORMAL ELDER CAREGIVING

It has been noted that individual well-being and work impacts of eldercare on employees are likely due to a feedback cycle, where diminished well-being due to eldercare responsibilities negatively influences work outcomes, which in turn impacts employee well-being (Tennstedt & Goneya, 1994). Because of this feedback loop, it is difficult to determine the influence and severity of the relationship between eldercare responsibilities and work outcomes (Calvano, 2013). Indeed, Tennstedt and Goneya (1994) stated that the impact of eldercare on work can be advanced by two perspectives: by examining the impacts of eldercare on the caregiver, and by examining the impacts of eldercare on work; they further stated that identifying the components of the feedback loop will lead to a clearer picture of the impact of eldercare on work outcomes for caregivers. However, as Calvano (2013) observes, "the phenomenon remains elusive due to the sheer number of outcome variables studied" (p. 208). In her review of the impact of eldercare on work outcomes, Calvano (2013) determined that outcome variables studied in the empirical research up to the time of her review fell into one of four categories (i.e., labor supply, personal health and well-being, work-life issues, and organizational impacts) and reflected the interdisciplinary nature of eldercare research. Our present review of empirical research conducted since Calvano's seminal 2013 review revealed 20 additional quantitative or qualitative studies published in the occupational health, family studies, gerontology, and psychology literatures. Outcomes of interest in these additional 20 studies were consistent with the categories of outcomes identified by Calvano (2013); specifically, outcomes can be organized into: labor supply, personal health and well-being, work-life interface, and organizational impacts.

However, in attempting to untangle the process through which eldercare impacts employee and organizational outcomes, we have reorganized outcomes associated with informal elder caregiving into individual, work, and labor supply factors. COR theory provides a theoretical rationale for the consistency in outcomes for employees simultaneously providing informal eldercare and working. Hobfoll (1989, 2001) notes that while appraisals are one way to assess resource loss, resources are not objectively determined. In other words, resource loss perceived by one individual is likely to be perceived as loss by another individual. Although informal elder caregiving can be associated with resource preservation and gain, elder caregiving is predominantly associated with gross resource loss for individuals regardless of their gender, ethnicity, culture, and SES. Energy resources, such as time and money, are the category of resources that likely strongly effect elder caregivers when lost, leading to a consistency in negative outcomes across study populations. We review these outcomes in the following sections.

Individual Outcomes

Hobfoll (2001) states that chronic stress conditions occur when there is a lack of resource gain following significant investments of resources

(i.e., time, energy, and potential lost opportunities), which is evident when one considers that informal elder caregivers have to juggle family and work responsibilities simultaneously. Calvano (2013) noted in her review that the relationship between eldercare responsibilities and employees' health and well-being outcomes is remarkably consistent. Past research has found a consistent, negative relationship of eldercare responsibilities and demands with employees' emotional and mental health and subjective well-being (e.g., Fredriksen-Goldsen & Scharlach, 2006; J. A. Lee, 1997; Stephens, Franks, & Atienza, 1997; Zacher & Winter, 2010). In a meta-analysis on the impact of caregiving on psychological and physical health, it was found that caring for elders was significantly related to increased depression and stress for caregivers, and lower levels of caregiver self-efficacy and psychological well-being (Pinquart & Sörensen, 2003). Further, it was found that when comparing elder caregivers to noncaregivers, noncaregivers were significantly more physically healthy than caregivers (Pinquart & Sörensen, 2003). In a qualitative study of eldercare responsibilities for Scottish women working in the food retail industry, many women reported feeling anxiety over the impending death of the elder being cared for (Airey et al., 2007). These findings are remarkably consistent with more current research. For example, Zacher and Schulz (2015) found that having eldercare demands was significantly associated with caregiver strain in a sample of German health insurance employees. Dugan and colleagues (2016) found that in a sample of U.S. manufacturing workers, having eldercare demands (operationalized as providing care for an elder as well as time spent caring for the elder) was significantly associated with greater depressive symptomatology, and that those providing five or more hours of care a week experienced more depressive symptoms. In a mixed-methods study on employed female informal caregivers, eldercare responsibilities, the mental effort needed to meet the eldercare demands, and poor self-assessed health were associated with greater depressive symptoms (Juratovac & Zauszniewski, 2014). Furthermore, research suggests that simultaneously caring for elders and children is significantly associated with more negative self-reported health (Do, Cohen, & Brown, 2014).

Physical demands associated with elder caregiving can exert a toll on caregivers' physical health (e.g., fatigue, caregiver health issues). Vitaliano, Zhang, and Scanlan (2003) found that caregivers of an elder with dementia have a slightly greater risk for physical health problems than noncaregivers. Further, research suggests that those in the sandwich generation (i.e. those with both childcare responsibilities and eldercare responsibilities) report significantly worse self-reported health than their counterparts with no child care responsibilities (Do et al., 2014). Other research notes that female caregivers experience more negative physical health outcomes than their male counterparts (Pinquart & Sörensen, 2006), and that residing with the elder is associated with: poor self-assessed physical health (Juratovac & Zauszniewski, 2014) and physical symptoms of stress (J. A. Lee, 1997). The MetLife Study of Working Caregivers and Employer Health Care Costs (2010) indicated that elder caregivers cost employers 8% more in healthcare expenses over noncaregiver's due largely to costs of stress-related medical conditions, not engaging in preventative care, and engaging in riskier health behaviors (e.g., alcohol and tobacco use). Others note that dimensions of caregivers' psychological health are more impacted than physical health, with impacts on physical health being relatively small (Pinquart & Sörensen, 2003).

Research supports the notion that dependent care is a source of strain (J. A. Lee, 1997); however, eldercare produces significantly more stress and strain than does childcare (Duxbury et al., 2011; Kossek, Colquitt, & Noe, 2001; MacDonald, Phipps, & Lethbridge, 2005). Contributing factors include the fact that the onset of eldercare often occurs unexpectedly and suddenly due to accident or illness (Smith, 2004), and that eldercare often intensifies over time, unlike childcare which diminishes with time (Singleton, 2000). The majority of past research has focused on the association between eldercare demands and negative emotional and personal well-being outcomes of the caregiver (e.g., stress, strain, depressive symptomatology). Research further suggests that providing eldercare results in poorer emotional health and more depressive symptoms for women in particular (J. A. Lee, Walker, & Shoup, 2001). Further, in a prospective cohort study utilizing two national surveys, Wolff and colleagues (2016) found that providing substantial help with elder health care (i.e., care coordination with medical professionals and doctors' visits, and assistance with managing medication) was associated with a greater likelihood of experiencing emotional difficulties.

Research suggests that many informal elder caregivers report that caregiving is a significant financial strain (AARP, 2015; Mehta & Leng, 2017; Spillman, Wolff, Freedman, & Kasper, 2014; Wolff et al., 2016); especially for caregivers of significantly impaired elders (Butrica & Karamcheva, 2014; Van Houtven, Coe, & Skira, 2013). This is likely a result of the hours of care needed by the elder and provided by the caregiver. Indeed, elder caregivers with significant time demands may need to cut back their work hours or leave the labor market, which has the potential to impact their own financial situations (AARP, 2015; Butrica & Karamcheva, 2014; Mehta & Leng, 2017; MetLife, 2010). Furthermore, an AARP study of caregiving costs (2016) found that some caregivers are forced to draw from their own personal savings, retirement savings, or reduce their contributions to retirement accounts to better meet the financial needs of the elder for whom they provide care. Research also suggests that a portion of caregivers for elderly adults with dementia report eating less or going hungry due to the financial strain placed on them ("Disease Facts," 2016). Y. Lee and Zurlo (2014) reported that providing eldercare is associated with lower income later in life, making it difficult to maintain basic household expenses.

Influence of individual differences on individual outcomes

The burden of elder-caregiving on women is significant. Research suggests that women report more stress from eldercare responsibilities than men (Kramer & Kipnis, 1995; Neal, Chapman, Ingersoll-Dayton, & Emlen, 1993); and that women experience more hostility and less happiness and autonomy than men when transitioning into elder caregiving roles (Marks et al., 2002). In a longitudinal cohort study, Pavalko and Henderson (2006) found that onset of care work for ill or disabled parents or spouses significantly contributed to female caregivers' feelings of distress. On a positive note, Marks and colleagues (2002) found that women transitioning into elder caregiving roles also reported a greater sense of purpose in life than noncaregiving women.

With regards to race and ethnicity, meta-analytic evidence suggests that ethnic minority caregivers are more likely than their white counterparts to have a lower socioeconomic status, and Hispanic and Asian American caregivers report greater levels of depression

than Whites and Blacks, collectively (Pinquart & Sörensen, 2005). Pinquart and Sörensen (2005) found that non-Whites report more negative physical health outcomes associated with eldercare responsibilities than Whites.

There is a paucity of research examining the impacts of informal elder caregiving on employed caregivers with nonstandard and less flexible work schedules. However, we can postulate that for those who work nonstandard shifts (i.e., work outside the daytime hours of 7 a.m. to 6 p.m.), eldercare responsibilities may interfere with health and well-being due to sleep disturbances and increased strain on family and social relationships (Barton et al., 1995; Caruso et al., 2006). Further, ongoing fatigue and stress increases the likelihood of poor health behaviors such as smoking and low physical activity which may then increase the risk of illness and injury for the employee (Bushnell, Colombi, Caruso, & Tak, 2010). The American Association of Retired People (AARP) survey findings suggest that low-income caregivers report being more stressed and overwhelmed from their caregiving responsibilities (2001). These survey findings are further bolstered by research that suggests caregivers from lower SESs experience greater caregiver distress than their higher-income counterparts (Williams, Forbes, Mitchell, Essar, & Corbett, 2003). In a sample of Canadian low-income employees, having eldercare responsibilities was significantly associated with greater caregiver distress over their higher-income counterparts (Williams et al., 2003). Research further suggests that lower socioeconomic Caucasians with elder care responsibilities and two or more children reported significantly worse health than their Caucasian counterparts without children (Do et al., 2014). For Hispanics and Blacks, negative elder- and child-caregiving impacts on self-reported health diminishes with increases in household income (Do et al., 2014), suggesting that lower SES Blacks and Hispanics may experience more negative impacts on health.

Work Outcomes

It is assumed that because working caregivers experience significantly more stress than coworkers who do not have caregiving responsibilities, this negatively impacts their productivity and performance as employees. However, as both Calvano (2013) and Zacher, Jimmieson, and Winter (2012) note, this is merely an assumption and is not supported by empirical validation. There is evidence that employees *perceive* that employees who provide eldercare are less productive (Creedon, 1987; Katz, Lowenstein, Prilutzky, & Halperin, 2011; McGowan, 2009), while other research suggests employees who experience stress over their caregiving roles *perceive* that they perform worse in their work roles due to greater work interruptions, fatigue, and worry (Brody, Kleban, Johnson, Hoffman, & Schoonover, 1987; Kim, Ingersoll-Dayton, & Kwak, 2011; Petty & Friss, 1987; Scharlach & Boyd, 1989). Whether or not employees actually perform worse or are less productive due to eldercare remains to be seen. Indeed, much of past research on eldercare and work outcomes has focused on the impact of eldercare on employee absenteeism, which does not necessarily impact productivity. Research consistently supports that elder caregiving results in missed workdays and absenteeism for employees (Anastas, Gibeau, & Larson, 1990; Barling, MacEwan, Kelloway, & Higginbottom, 1994; Beinecke & Marchetta, 1989; Goneya, 1993; C. G. Hepburn & Barling, 1996; Scharlach & Boyd, 1989; Shoptaugh, Phelps, & Visio, 2004; Wolff et al., 2016).

For example, Anastas and colleagues (1990) found in a national survey on caregiving that approximately 15% of employees reported missing a week or more for elder caregiving and that this significantly contributed to felt conflict between the work and eldercare roles. Mentioned in Calvano's (2013) review, Barling and colleagues (1994) found that conflict between the employee and caregiver roles is associated with significant increases in psychological strain and partial absenteeism. These findings were further supported by C. G. Hepburn and Barling (1996), who found that the number of caregiving hours that employees engaged in were significantly related to both inter-role conflict and partial absenteeism. In addition, Shoptaugh and colleagues (2004) found that informal eldercare was significantly associated with greater absenteeism but did not impact job satisfaction or organizational commitment. More recently, Wolff and colleagues (2016) reported that one in five working elder caregivers reported missing work in the previous month to care for their elder. Wolff and colleagues (2016) also found that working caregivers providing substantial help with elder healthcare were three times more likely to experience work productivity loss (i.e., summary variable that includes employees' absenteeism and presenteeism). Furthermore, Zuba and Schneider (2013) found that elder caregivers were more likely to report absences due to family and health reasons over their noncaregiving counterparts.

However, as Calvano (2013) noted in her review, others have not found support for impacts of elder caregiving on work outcomes. For example, Keene and Prokos (2007) found that while employees with eldercare responsibilities experienced more stress than their noncaregiver counterparts, eldercare responsibilities did not lead to significantly more absences. Indeed, it has been found that employees with childcare responsibilities have significantly greater absences than those with eldercare responsibilities (Boise & Neal, 1996). And, although the majority of research evidence supports the notion that elder caregiving responsibilities impacts absenteeism in the work role, the evidence is not clear on whether there is a subsequent impact on productivity. Indeed, it could be that when employees with eldercare responsibilities are present at work, they are more productive in their work roles given the constraints on their time.

With regard to the work-life interface, research is fairly consistent in surmising that being employed and providing informal elder caregiving is associated with inter-role conflict and strain (e.g., Barling et al., 1994; Brown & Pitt-Catsoupes, 2013; Hashizume, 2010; C. G. Hepburn & Barling, 1996; Kramer & Kipnis, 1995; Scharlach & Boyd, 1989; Tement & Korunka, 2015; Trukeschitz, Schneider, Mühlmann, & Ponocny, 2013; Zuba & Schneider, 2013) as individuals juggle the roles of paid employment with informal eldercare (and possibly childcare) simultaneously. In examining the influence of eldercare on family-to-work outcomes, more recent research suggests that eldercare demands, and in particular, providing personal care to elders (e.g., bathing and dressing), results in greater family interference with work (Dugan et al., 2016).

However, one must consider the cultural and national context which places unique emphases on the relationship between elder caregiving and work outcomes. For example, women in Southern European countries experienced more negative employment outcomes than women in Northern European countries and Central European countries (Kotsadam, 2011).

Labor Supply Outcomes

Results from the labor supply stream (e.g., number of hours worked, labor market entry or early exit) are remarkably consistent, but often conflated with gender, race/ethnicity, culture, and SES. Research strongly suggests that having eldercare duties negatively impacts caregivers' work hours, breaks in employment, and labor market participation (i.e., delayed onset of employment or early exit from paid employment), and these results are especially true for women across different cultural contexts (Brody et al., 1987; Ettner, 1996; Hashizume, 2010; Horowitz, 1982; Kotsadam, 2011; Lahaie, Earle, & Heymann, 2013; Latif, 2006; Liu, Dong, and Zheng, 2010; McKinlay, Crawford, & Tennstedt, 1995; Pavalko & Henderson, 2006; Schneider, Trukeschitz, Mühlmann, & Ponocny, 2013; Stone, Cafferata, & Sangl, 1987; Stone & Short, 1990; Van Houtven et al., 2013). For instance, elder caregiving is associated with fewer work hours and earlier exits from the workforce for women in the United States (Ettner, 1996; Pavalko & Henderson, 2006), Canada (Latif, 2006; Proulx & Le Bourdais, 2014), the European Union (Kotsadam, 2011), and China (Liu et al., 2010). Wakabayashi and Donato (2006) found that women providing elder caregiving earlier in life significantly increased their risk of poverty later in life as a result of impacts on working hours and declining health. Furthermore, early research suggests that providing elder caregiving and managing paid employment may result in missed opportunities for career advancement (Anastas et al., 1990; Scharlach & Boyd, 1989).

For male caregivers, research suggests that working and providing elder caregiving has little effect on working hours or wages (Van Houtven et al., 2013). However, other research suggests that intentions to exit the labor market increase for male caregivers when a more substantial physical eldercare responsibility exists (Schneider et al., 2013).

As mentioned in the review by Calvano (2013), Liu and colleagues (2010) note that while caring for parents does not impact women's labor market participation or the number of hours worked in China, caring for parents-in-law has a significant, negative association on women's employment and paid work hours, which suggests that China is still a patriarchal society with traditional norms for family roles based on gender. In more recent research, analysis of data from the Work, Family, and Community Nexus survey, Lahaie, Earle, and Heymann (2013) found that for women and first-generation immigrants, providing eldercare may result in early retirement and involuntarily reducing work hours to meet the demands of caregiving. Meanwhile, van Gameren and Naranjo (2015) note that for Mexican female caregivers, working at a young age is significantly associated with their labor force participation decisions, indicating that female caregivers have a greater likelihood of working while providing informal care if they started working at a younger age.

Empirical Evidence Supporting a Feedback Loop

The conceptual framework we have proposed (Figure 1) attempts to identify the components of the feedback loop postulated by Tennstedt and Goneya (1994) and clarify the process by which eldercare responsibilities influence individual outcomes, which in turn has implications for work and labor supply outcomes. It is the outcomes identified at the work and labor supply levels that feedback to influence individual outcomes in what can become a continuous spiral of resource loss. As documented in the previous sections, research generally supports

the notion that juggling multiple roles—including eldercare and work roles—is associated with negative impacts in a variety of outcome streams (individual, work, and labor supply). Furthermore, spillover theory emphasizes that attitudes and behaviors developed in one life domain (e.g., home) can spillover to impact attitudes and behaviors in other life domains (e.g., work; Wilensky, 1960). Several empirical studies have lent support in identifying components of the feedback loop.

Supporting evidence for a feedback loop, Zacher and Winter (2010) found that caregiver strain mediated the relationship between eldercare demands and work engagement. Additionally, Zacher and colleagues (2012) found that elder caregivers' mental health explained the relationship between eldercare demands and work performance, such that more eldercare demands diminished caregivers' mental health, in turn impacting their work performance. Other research suggests that work interruptions significantly mediate the relationship between elder caregiver stress and work performance (Kim et al., 2011). Stephens, Townsend, Martire, and Druley (2001) found that experienced stress related to eldercare responsibilities is positively associated with greater perceived work-to-family conflict, which in turn negatively influences caregiver well-being. Finally, Stephens and colleagues (1997) found that negative role spillover between that of elder caregiver and employee mediated the relationship between role stress and depression.

More recent research suggests that career disruptions and unemployment mediate the relationship between care-recipient independence and caregiver well-being (Bainbridge & Brody, 2017). Greaves and colleagues (2015) found that employees' satisfaction with work significantly mediated the relationship between core self-evaluations and turnover intentions in a sample of elder caregivers. They also found that emotional exhaustion from work mediated the relationship between core self-evaluations and turnover intentions (Greaves et al., 2015). Finally, Brown and Pitt-Catsouphes (2016) found that work-to-family conflict arising from work and informal eldercare responsibilities partially explained the relationship between perceived workplace flexibility and caregiver stress.

Summary

Given our conceptualization of outcomes of informal elder caregiving for employees, we considered consequences at the individual, work, and labor supply levels. We also discussed empirical evidence to date that supports the feedback loop first postulated by Tennstedt and Goneya (1994) whereby individual health and well-being outcomes influence work- and labor supply-outcomes, which then feedback to influence individuals' health and well-being. The research is clear: simultaneously managing informal eldercare and paid employment negatively impacts a number of factors which can influence outcomes in other domains. However, methodological considerations need to be taken into account, starting with the operationalization and measurement of informal elder caregiving. The amount of time informal elder caregivers must dedicate to caregiving tasks per week (and the nature of the care provided) is an important resource that must be considered when attempting to quantify the impact of informal elder caregiving on employee's health and well-being which over time can have negative implications for their workplace and employment situation.

Additionally, much of what we know about the impact of informal elder caregiving on individual, work, and labor supply outcomes has

been limited by narrow samples. For example, samples are primarily drawn from large national surveys, where specific employment information is limited (Calvano, 2013). Of the 20 quantitative and qualitative studies conducted between 2013 and present, nine utilized large national surveys to draw their conclusions. Beyond that, much of what we know about the impact of eldercare on work outcomes has been further limited by samples that are drawn from one institution or organization (Calvano, 2013). Calvano (2013) notes that in her review of the relevant literature on elder caregiving and work outcomes, 15 of 31 articles were drawn from national samples, with 8 articles using samples from single industries or organizations, and of those 8, 7 of the samples were drawn from healthcare institutions or organizations. In our review of additional empirical studies not included in prior reviews, three samples were drawn from a list of individuals receiving federal or home-care, two utilized a manufacturing sample, and the remaining six drew their samples from universities, health insurance companies, hospitals, and various local businesses. Although the research done thus far sheds some light on the impact of eldercare on individual well-being, work, and labor supply outcomes, more is needed regarding the impact of eldercare on individual well-being, work, and labor supply outcomes for those employed in differing occupations and for those who have nonstandard or less flexible work schedules. For example, depending on one's eldercare responsibilities, there may be less of an impact on work outcomes for those individuals who work swing or night shifts because they would be more available during the day to assist in providing transportation to and from medical appointments, and financial and governmental institutions. However, as stated previously, the loss of sleep time may negatively influence informal elder caregivers' health and well-being for those employees who work nonstandard schedules.

Furthermore, it was once the case that much of the research regarding eldercare and individual and work outcomes was primarily conducted in the United States or other English-speaking countries. However, more research regarding eldercare and individual and work outcomes is now conducted in non-English speaking countries, such as China, Israel, and Germany. Although there is more research regarding eldercare globally, this research is primarily limited to the experiences of women (e.g., Kotsadam, 2011; Zeytinoglu, Cooke, & Mann, 2010).

RESOURCES IN MANAGING ELDERCARE RESPONSIBILITIES AND DEMANDS

COR theory (Hobfoll, 1989, 2001) asserts that individuals with greater resources are less vulnerable to loss (and the negative outcomes associated with loss at the individual, work, and labor supply levels) and more capable of resource gain, and that resource gain produces further gain. To manage the demands and responsibilities of eldercare, caregivers require resources at the individual, family, organizational, and community levels that can aid in establishing resource gains and reserves to more successfully manage their work, elder caregiving, and other life domain roles. It is these resources at the individual, family, organizational, and community levels that can buffer against the negative outcomes associated with managing informal elder caregiving and simultaneous paid employment. We discuss these resources at the individual, family, organizational, and community levels in turn in the following sections. Please note, these resources are also summarized in Figure 1, where they are thought to primarily moderate the

relationship between informal eldercare and individual, work, and labor supply outcomes.

Individual Resources

There are a number of resources at the individual level that are useful in understanding and determining positive outcomes for those informal elder caregivers who manage paid employment. Resources at the individual level posited to buffer against the negative outcomes associated with elder caregiving and paid employment are: companionship, time spent with loved ones, feeling valuable to others, and feeling that one's life has meaning or purpose (Hobfoll, 1998). Indeed, time spent engaging in elder caregiving also has the potential to strengthen the emotional bonds between the elder and the caregiver (Sheehy, 2010). Providing informal elder caregiving also offers the opportunity of spending quality time with elders as they age (Sheehy, 2010), which may help caregivers to better emotionally cope with the loss of their elders. In a study that used the internet to obtain qualitative accounts of informal caregivers' experiences with caregiving, Horell, Stephens, and Breheny (2015) found that attachment (i.e., how emotionally close the caregiver and elder are) played a significant role in elder caregivers' day-to-day experiences of providing care. Furthermore, satisfaction with providing eldercare tasks has been found to mitigate the relationship between eldercare responsibilities, mental health, and work performance for the informal elder caregiver (Zacher et al., 2012). Other research suggests that when informal caregivers have higher core self-evaluations, simultaneously working and providing eldercare services does not impact employees' intent to turnover (Greaves et al., 2015). This implies that stable personality characteristics of informal elder caregiver's influence perceptions regarding the ability to successfully juggle multiple roles.

Caregiving self-efficacy may also be a valuable resource for employed informal elder caregivers. Caregiving self-efficacy is defined as the caregivers' ability to successfully manage the demands imposed by the caregiving situation, and influences individuals' feelings, thoughts, motivations and appraisals of the caregiving context (Gilliam & Steffen, 2006; Semiatin & O'Connor, 2012), and is derived from the general self-efficacy construct (Bandura, 1997). Although not examined specifically in an employed informal elder caregiving context, caregiving self-efficacy has been highlighted in other informal elder caregiving situations as an avenue for highlighting the positive aspects of providing eldercare. For example, in a sample of informal elder caregivers caring for loved ones with Alzheimer's disease, Semiatin and O'Connor (2012) found that caregiving self-efficacy was associated with more positive aspects of care, including feeling useful and appreciated, and finding meaning. Research has also found that informal elder caregivers' caregiving self-efficacy is associated with reduced caregiver depressive symptomology (Gilliam & Steffen, 2006; Grano, Lucidi, & Violani, 2017; Steffen, McKibbin, Zeiss, Gallagher-Thompson, & Bandura, 2002). From a resource gain perspective, elder caregivers who have a high degree of caregiving self-efficacy are more likely to experience a sense of mastery and pride in their role, which may be associated with eldercare task satisfaction, thus buffering against negative outcomes associated with informal elder caregiving, such as experiencing depressive symptomology.

Family and Social Resources

The old adage "it takes a village to raise a child," is also evident in informal elder caregiving situations in that it often requires a community of

different people interacting with the elder to provide her or him the amount or types of care needed. However, much of the research on informal elder caregiving has focused on understanding the caregiving dyad (i.e., informal elder caregiver and eldercare recipient) and the subsequent impact on caregiver health and well-being. Informal support networks that involve family, friends, neighbors and others can be instrumental in helping informal elder caregivers manage their specific eldercare tasks, can provide emotional support that protects the caregiver against adverse emotional health and well-being outcomes, and provide respite from care duties. Indeed, [Hobfoll \(2001\)](#) indicates that social support and help with everyday tasks are important resources in protecting against resource loss. Furthermore, research suggests that supportive social networks provide family caregivers with the resources necessary to cope with stressful situations ([S. Cohen, 2004](#); [Hashizume, 2010](#)), and that when no outside help is offered to the caregiver, this can significantly increase feelings of burden ([Kramer & Kipnis, 1995](#)).

In attempting to disentangle the care network for informal elder caregivers, [Sims-Gould and Martin-Matthews \(2007\)](#) found that 75% of caregivers' support network provided help with moral support, whereas 49% helped with household chores, indicating that the majority of assistance provided to informal elder caregivers by their support networks is affective in nature. Moreover, research has shown that informal elder caregivers who maintain positive social interactions with support persons can mitigate negative financial and depressive outcomes ([Clay, Roth, Wadley, & Haley, 2008](#); [Y. Lee & Zurlo, 2014](#)), and increase satisfaction with aspects of caregiving responsibilities ([C. A. Cohen, Gold, Shylman, & Zuccherro, 1994](#); [Kramer, 1993](#); [Talkington-Boyer & Snyder, 1994](#)).

Family and friends are also able to help the eldercare recipient maintain a healthy level of social and recreational activity which plays an important role in the cognitive functioning of older adults and can facilitate positive spillover effects for informal elder caregivers. Research suggests that social support has a positive association with cognitive functioning ([Holtzman et al., 2004](#); [Seeman, Lusignolo, Albert, & Berkman, 2001](#); [Yeh & Liu, 2003](#); [Zhu, Hu, & Efrid, 2012](#)). For example, research suggests that perceived support from friends ([Yeh & Liu, 2003](#)), and familial social support ([Zhu et al., 2012](#)) is associated with improved mental status and functioning in older adults. Furthermore, [Kimura, Takeda, Ohura, and Imai \(2017\)](#) found in a prospective cohort study that older adults who engage in activities with friends and recreational outings maintained more positive cognitive functioning than their counterparts who engaged in fewer social and recreational activities. The benefits of social support for both the informal elder caregiver and elder care recipient cannot be overstated.

Organizational Resources

Elder caregiving is associated with work disruptions that can facilitate the actual or perceived loss of resources; however, the unpredictability of eldercare can often be managed through flexible work arrangements. In fact, flexible work arrangements are the minimum that all companies and organizations can and should do to support their employees providing informal elder caregiving, as this can provide protection against lost resources in the home and work domains. Research supports that having flexible work arrangements helps to facilitate attachment to jobs and the labor market, as well as help maintain working hours for female caregivers ([Pavalko & Henderson, 2006](#); [Schneider](#)

[et al., 2013](#)). In a qualitative study on elder caregiving and access to formal supports, Belgian interviewees noted that simply having a flexible work schedule allowed them to more easily manage both their eldercare and work roles ([Willemse et al., 2016](#)). Flexible work arrangement policies have been shown to significantly reduce the role conflict felt by caregivers ([Brown & Pitt-Catsouphes, 2013](#); [Fredriksen & Scharlach, 1997](#); [Fredriksen-Goldsen & Scharlach, 2006](#); [Koerin, Harrigan, & Secret, 2008](#)). Furthermore, research has noted that use of flexible work arrangements significantly reduces elder caregiver stress ([Brown & Pitt-Catsouphes, 2016](#)). Additionally, [Zuba and Schneider \(2013\)](#) found that work schedule control buffered the negative impact of eldercare on the probability of employees being absent, while positive work climates buffered the impacts of eldercare on perceived work-family conflict. Furthermore, a number of states and cities have passed laws recently that give employees the "right to request" work arrangements that allow them to more effectively manage work and caregiving responsibilities. In the United States, employers in Vermont, New Hampshire, and San Francisco cannot retaliate against employees requesting flexible work arrangements ([U.S. Department of Labor, 2016](#)). The right to request flexible work schedules from employers also exists in the United Kingdom to employees who provide caregiving ([Lahaie et al., 2013](#)).

In addition, the presence of supportive work-life policies can also help working informal elder caregivers to meet the demands of the multiple roles that they must play in any given day. Recent research indicates that organizational work-life practices (e.g., flexible work arrangements) for women with caregiving responsibilities (i.e., child-and/or elder-care) facilitate more women in management roles, because organizational work-life practices can help women to reduce their work-life conflict ([Kalysh, Kulik, & Perera, 2016](#)). Similar workplace policies and protections may not be accessible to vulnerable populations or available outside the United States. [Lahaie and colleagues \(2013\)](#) found that Hispanics and first-generation immigrant caregivers have less access to paid leave, less schedule flexibility, and an unsupportive work culture making eldercare responsibilities more difficult. In addition, eldercare responsibilities influenced turnover intentions, early retirement decisions, and work hour reductions for first-generation immigrant caregivers ([Lahaie et al., 2013](#)). Also, low-income employees more often than not are employed in hourly positions where their working arrangements and employers are less flexible and less likely to provide dependent care assistance ([Jacobs & Padavic, 2015](#)). Finally, [Pei and colleagues \(2017\)](#) found that for Chinese caregivers, the absence of supportive workplace policies contributed to feelings of job insecurity and called for advancing legislative action and workplace policies to support informal caregivers in China.

Notably, research is consistent in suggesting that perceptions of supervisor and organizational support in the workplace significantly buffers the negative impacts of elder caregiving on employees' health, well-being and work outcomes ([Bainbridge & Brody, 2017](#); [Greaves et al., 2015](#); [Zacher & Schulz, 2015](#); [Zuba & Schneider, 2013](#)). Identified by [Calvano \(2013\)](#), [Zacher and Winter \(2010\)](#) found that perceived organizational support moderated the relationship between eldercare demands, strain, and work engagement; while [Kim and colleagues \(2011\)](#) found that employer support buffered the relationship between caregiver stress, work interruptions, and work performance. Further, while not identified in [Calvano's \(2013\)](#) review, [Edwards and colleagues \(2002\)](#) found that positive work experiences buffered the

negative impact of role overload on depressive symptoms in a sample of employed informal caregivers of cognitively impaired older adults. Moreover, simply having a workplace culture that values and supports workers' family lives can be especially beneficial (Bainbridge & Brody, 2017), while unsupportive work climates have been shown to exacerbate the negative impact of eldercare on employee well-being and work performance (Kossek et al., 2001).

Though it was not specifically investigated in association with employees' eldercare demands and responsibilities, Hammer, Kossek, Anger, Bodner, and Zimmerman (2011) found that training supervisors in exhibiting family-supportive behaviors was significantly associated with reduced family-to-work conflict for employees. Family supportive supervisor behaviors is a multi-dimensional construct that includes emotional support (i.e., perception of being cared for and that feelings are considered), instrumental support (i.e., response from supervisor to employees' work and family needs), role-modeling behaviors (i.e., demonstration of integration of work and family through modeling behavior), and creative work-family management (i.e., managerial initiated actions to facilitate employee effectiveness at work and at home; Hammer, Kossek, Yragui, Bodner, & Hanson, 2009). Training in family supportive supervisor behaviors may be particularly promising as an intervention for employers of informal elder caregivers, as family supportive supervisor behaviors have been associated with employees' work-family positive spillover, perceptions of balance, sleep quality and quantity, reduced turnover intentions, increased job satisfaction, and reduced family-to-work and work-to-family conflict (e.g., Crain et al., 2014; Greenhaus, Ziegert, & Allen, 2012; Hammer et al., 2009, 2011; Kossek, Pichler, Bodner, & Hammer, 2011).

Other research suggests that one's skill and job motivation can influence the negative relationship between eldercare time demands and burden on work-related strain, such that those who have more advanced skills and greater job motivation experience reductions in work-related strain (Trukeschitz et al., 2013). Furthermore, research supports that valuing one's job can facilitate continued employment for employed informal elder caregivers (Hashizume, 2010). Additionally, Tement and Korunka (2015) found marginally significant (i.e., $p < .10$) evidence suggesting that elder caregivers with greater autonomy in their work have greater levels of work-family enrichment. Finally, the simple act of being employed can mitigate the feeling of stress, strain, and burden that occurs for caregivers in the sandwich generation (Rubin & White-Means, 2009).

Government legislation around work and caregiving is another way that organizations can and/or do help working caregivers meet the demands of the multiple roles they occupy. For example, the Family Medical Leave Act (FMLA) in the United States protects many workers from termination when they take time off for caregiving when their dependents (children and elders) have medical issues that need to be addressed (i.e., doctor's appointments and hospitalizations); however, this only applies to companies with 50 or more employees. Access to unpaid family leave has been found to increase employment retention for female caregivers (Pavalko & Henderson, 2006). However, Lahaie and colleagues (2013) note that disparities exist in access to paid leave by gender and education in the United States, supporting the United States' "reliance on employers' voluntary provision of paid time off," (p. 264). Both California and New Jersey have made strides in providing access to paid leave for employees providing eldercare, with an additional 13 states expanding coverage for unpaid leave (Yang & Gimm,

2013). Of note, the majority of states offer no benefits beyond that provided by FMLA. It is notable that economic considerations need to be made when taking advantage of FMLA, because individuals who cannot afford to take unpaid leave (e.g., they may not have enough paid time off accumulated) are limited in accessing this program.

Although our example draws on policy specific to the United States, two-thirds of Organization for Economic Co-operation and Development (OECD) countries (OECD member countries are Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, South Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States) have government policies similar to FMLA in the United States, where employees have the right to protected leave from their employers to care for family members with chronic conditions or long-term care needs (Colombo, Llena-Nozal, Mercier, & Tjadens, 2011). Furthermore, like the United States, very few countries offer paid-leave services as a matter of policy. In the relatively small number of countries (e.g., The Netherlands) with regulations that include rights to paid-leave, employees are typically restricted to no more than 1-month of paid leave from their employers to engage in care needs of dependents (Colombo et al., 2011). Other forms of government support or initiatives that have been implemented or are being implemented at national levels include protection from being required to work overtime and unstable shifts (e.g., The Netherlands) and access to other forms of work-scheduling flexibilities, such as the right to request reduction in work hours (e.g., New Zealand), for those with caring responsibilities (broadly defined; Baxter & Renda, 2015). There are grounds for refusal by employers of part-time work requests in some countries (e.g., Norway), however countries such as Japan and Spain include no grounds for refusal of such requests by employees who provide dependent care (Baxter & Renda, 2015).

Community Resources

Communities offer a number of potential resources for supporting informal elder caregivers, including churches, other places of worship, and community and senior centers. These community resources could offer a number of services, such as support groups, chore services, and education and skill training. In an integrative review of the needs of informal elder caregivers, Silva, Teixeira, Teixeira, and Freitas (2013) found that the most commonly identified needs for caregivers include: information and training, professional support, effective communication from medical staff, and legal and financial support. However, research examining supports for informal caregivers through community-based interventions is scarce (with the exception of caregivers providing care to elderly Alzheimer's and dementia care recipients). In a study examining the effectiveness of three different intervention techniques for relieving caregiving stress of women who care for their elderly mothers, Donorfio, Vetter, and Vracevic (2010) found that caregivers who participated in a caregiver support group had the greatest improvement in overall mental health and reduction of stress. In a study on the support needs of caregivers of community-dwelling older adults in Chicago, respondents indicated that access to support groups and respite services were valuable in helping them to alleviate their caregiving burden (Johnson, Hofacker, Boyken, & Eisenstein,

2016). In fact, respite care is one of the most requested types of caregiver assistance.

Respite refers to the “planned or emergency care provided to a child or adult with a special need in order to provide temporary relief to the family caregiver of that child or adult” (*Lifespan Respite Care Act, 2006*). Respite can be invaluable to caregivers as it offers caregivers episodic relief from their care responsibilities, which can benefit caregiver health and well-being (*Kirk & Kagan, 2015; Mehta & Leng, 2017*). In many OECD countries, respite services are paid for by family caregivers, however Denmark offers full financial support for respite services to caregivers (*Colombo et al., 2011*). Research observes that employed elder caregivers who engage in leisure activities experience less work-related strain (*Trukeschitz et al., 2013*). Research further suggests that the use of adult day care centers, a type of respite service, can significantly reduce caregivers’ stress biomarkers (*Klein et al., 2014*) and provides a feeling that the day was meaningful for both caregivers and care recipients (*Myren, Enmarker, Saur, & Hellzen, 2013*). However, respite services rely on affordable, qualified, trained, and geographically available providers who can meet a variety of diverse needs, as elder care is not a “one size fits all” phenomena (*Edgar & Uhl, 2011*). *Rose, Noelker, and Kagan (2015)* note that trained, qualified, accessible providers of respite are in short supply, with the growth in home-health and personal-care aids projected at 1% by 2020. In sum, there is not enough supply to meet the growing demand, indicating a need for novel ways to support caregiving.

There is less research on community supports and resources in managing elder caregiving compared with the research on resources and interventions available to caregivers of adults with dementia or Alzheimer’s. For example, resources and programs available to caregivers of adults with Alzheimer’s or dementia in the United States, include: REACH II, administered by numerous Veteran’s Administration (VA) sites, which provides education, support, and skill training for caregivers in an effort to improve psychosocial and well-being outcomes (*Eisdorfer et al., 2003*); and the Savvy Caregiver program, which provides education and skills training to caregivers to help them manage their stress (*K. W. Hepburn, Lewis, Sherman, & Tornatore, 2003; K. W. Hepburn, Lewis, Tornatore, Sherman, & Bremer, 2007*). The National Association of Area Agencies on Aging, which has a network of local aging programs, develops, coordinates, and delivers services in every community across the United States, providing assistance to over 8 million American citizens over 60 and their and caregivers annually. Many of these programs and intervention efforts show promise in reducing caregiver stress and negative psychosocial and well-being outcomes for caregivers by providing them support services and education (*Brodaty & Arasaratnam, 2012*), which may also buffer against negative work and labor supply outcomes. Unfortunately, less is known about the effectiveness of programs offered in community settings for individuals with general informal elder caregiving duties. Indeed, it has been noted that the “community represents a largely untapped resource for supporting families for which there are no tested interventions” (*NASEM, 2016, p. 171*).

The availability of public policies that influence the impact of elder caregiving and the distribution of services are not consistent. Many countries differ in their assisted-services provision on a continuum that ranges between informal care-led models (i.e., limited commitment to the provision of services by governments and some

[limited] provision of cash transfers for care) and services-led models (i.e., government support for the provision of elder services; *Pavolini & Ranci, 2008*). Services-led models have the primary objective of supporting regular employment for informal caregivers by assisting caregivers in meeting the care needs of their elderly dependents (*Pavolini & Ranci, 2008*). Northern European countries, such as Norway, Sweden, and the Netherlands, focus on government provision of services to support informal elder caregivers maintaining their outside employment (*Colombo et al., 2011*). While Germany, Italy, and the United States are prime examples of countries whose focus is on the informal care-led model.

However, there are some supports available for employed informal elder caregivers living in countries whose focus is on the informal care-led model. For example, in the United States, the National Family Caregiver Support Program (NFCSP) is a federally funded program that provides a range of services (e.g., information to caregivers about available services, assisting caregivers in accessing services, individual counseling, support groups, etc.) to individuals 60 and older; however, the program is implemented and distributed differently from state to state. *Koerin and colleagues (2008)* report that the NFCSP is uncoordinated and fragmented, while others note that the system lacks cohesion, adding to the obstacles faced by employed elder caregivers (*Fredriksen-Goldsen & Scharlach, 2001*).

Looking outside the United States, other countries also offer some community supports. For example, some countries and municipalities offer financial compensation for providing informal care services to the elderly, such as Austria, France, Germany, Italy, the Netherlands, and Sweden (*Da Roit & Le Bihan, 2010*). However, *Willemse and colleagues (2016)* note that when caregiver allowances were available they were seldom used due to their perceived inconsequential help in providing care (e.g., allowances were too small) or due to the excessive amount of administrative red tape required to obtain the allowance. When it comes to public policies designed to assist caregivers in responding to their elders’ needs, regardless of country of study, it is clear that communication of such programs and policies is of great importance (*Willemse et al., 2016; Wolff et al., 2016*). Indeed, arrangements that link information on public, private, and voluntary organizations can help informal elder caregivers understand available services and supports and help them to plan appropriate medical, social, and respite care services for their elderly dependents (*Colombo et al., 2011*).

Summary

Although obtaining and utilizing resources is valuable in managing informal elder caregiving and paid employment and mitigating negative outcomes, there are a number of barriers to the aforementioned resources. *Hobfoll (2001)* posits that those with fewer resources are more vulnerable to resource loss and less capable of resource gain. Low-income employees are less likely to have flexible work schedules and access to affordable paid assistance with eldercare responsibilities. This is not exclusive to low-income employees in the United States. In a qualitative study of the types of supports available to informal caregivers and their elderly dependents in Belgium, the researchers reported that access to formal supports is often hindered by the cost of the services (*Willemse et al., 2016*).

Moreover, evidence suggests that even when workplace flexibility policies are present, the frequency of informal elder caregiving

responsibilities negatively influences work-to-family conflict (Brown & Pitt-Catsouphes, 2013). This indicates that flexible work schedules should not be the only resource that employed informal elder caregivers have to rely on. Rather, familial and other social supports, both in and outside the workplace can help workers better manage their informal eldercare responsibilities, which has positive implications for the caregiver, but may also benefit eldercare recipients as well. Moreover, the utilization of church and other community and societal resources (e.g., respite services) can be beneficial. However, researchers should take note of the lack of research on community interventions assessing access to—and utilization of—educational resources and other supports for employed informal elder caregivers.

DISCUSSION

The study of eldercare is gaining increased attention, especially due to population aging, and this article provides an updated review of the empirical eldercare research to date. It integrates and builds upon past major reviews of the eldercare literature and draws from multidisciplinary sources to create a conceptual framework grounded in COR theory that elucidates what eldercare means for the employee and the organization at the individual, work, and labor supply levels. Our review yielded several overarching themes: the potentially problematic nature of eldercare, the various types of eldercare responsibilities and demands, outcomes associated with eldercare responsibilities, the people at-risk for adverse eldercare impacts, and resources available to assist with managing eldercare responsibilities at the individual, family/social, organizational, and community levels. However, more research is needed to fill existing gaps in the body of eldercare literature and extend our understanding of how eldercare impacts employees and organizations.

Despite knowledge gaps, advancements have been made in the study of eldercare. Calvano (2013) noted in her review that methodological issues in the study of eldercare must be reconciled, and to some extent researchers have taken notice. More research is focusing on a multidimensional understanding of eldercare and caregiving responsibilities that may differentially impact individual, work, and labor supply outcomes. Some researchers have made strides to provide a deeper understanding of the nature of eldercare (e.g., Dugan et al., 2016; Greaves et al., 2015; Zacher & Schulz, 2015), mainly by utilizing surveys developed for their own research questions. Unfortunately, the majority of research on eldercare still tends to be conducted with large, nationally and multinationally representative surveys where researchers have little say in how eldercare and caregiving responsibilities and demands have been operationalized.

Although the trend of moving past the use of large, national surveys in favor of the collection of researchers' own data is on the rise, the drawback is that these samples often focus on a subset of industries (i.e., healthcare), limiting generalizability of results. Researchers should seek to obtain more generalizable samples, potentially through the use of careful screening techniques in Amazon's Mechanical Turk or other crowdsourcing sites to obtain a sample of informal elder caregivers employed in a variety of industries. For a more personalized approach, researchers should seek to develop working relationships with their local senior citizen centers, meals on wheels program, and nursing home facilities, as sources of data collection for employed informal caregivers and their care recipients.

Other notable advancements include the use of stable personality characteristics as antecedents to work outcomes for those with elder caregiving responsibilities and demands. This research broadens our understanding that people are different and certain characteristics inherent to individuals serve as resources which may help them to better cope with the demands of eldercare that buffer against potentially negative work outcomes. Further, more research is utilizing comparison samples of elder caregivers, other caregivers, and noncaregivers to advance our understanding of eldercare impacts (e.g., Schneider et al., 2013; Tement & Korunka, 2015; Trukeschitz et al., 2013; Zuba & Schneider, 2013).

Calvano (2013) remarked that future research should include more longitudinal and qualitative approaches to understanding eldercare and its impacts, and researchers have begun to do this. Notably, Van Houtven and colleagues (2013) utilized nine waves from the Health and Retirement Study to understand the impacts of eldercare on employment status and work hours for men and women. Also, Jacobs and Padavic (2015) analyzed data from 17 in-depth interviews of women with low-wage jobs providing elder caregiving. Mehta and Leng (2017) also conducted a qualitative study with 30 family caregivers and 15 live-in employed caregivers to understand the experiences of formal and informal caregivers of older adults. Although these studies are a step in the right direction, more research needs to be conducted utilizing longitudinal, mixed-method, and qualitative methods to advance our understanding, which can help influence workplace and national policy decisions.

Moreover, more research utilizing mediating and moderating mechanisms in examining the nature of eldercare and its impact on individual, work, and labor supply outcomes has begun to emerge. This is helpful in elucidating the processes through which impacts of eldercare at the individual level can influence outcomes at the work and labor supply levels, which can then feedback to influence outcomes at the individual level, contributing to a continuous spiral of resource loss for the employed informal elder caregiver and their organization. Supervisor, coworker, employer, and social support are prime resources which exhibit strong buffers of the influence of eldercare demands on a variety of individual well-being and work outcomes (i.e., Bainbridge & Brody 2017; Greaves et al., 2015; Zacher & Schulz, 2015; Zuba & Schneider, 2013). More research needs to be conducted on other personal and workplace characteristics that can influence how individuals cope with the competing demands of work and informal elder caregiving.

Lastly, researchers are starting to engage in understanding eldercare responsibilities and demands on individual, work, and labor supply outcomes for a variety of employees with differing sociodemographic characteristics. For example, 3 of the 20 studies reviewed included examinations of informal employed caregivers with lower incomes (Do et al., 2014; Jacobs & Padavic, 2015; Lahaie et al., 2013); of these three, two studies also included comparisons of elder caregiving and outcomes by race/ethnicity (Do et al., 2014) and gender, education, and immigration status (Lahaie et al., 2013). This points to the fact that researchers are starting to take into account that informal elder caregiving and impacts on individual, work, and labor supply outcomes are differentially determined based on individual differences in informal elder caregivers, indicating a step in the right direction.

As stated in this review, eldercare is a varied and dynamic phenomenon, and the nature of eldercare responsibilities and demands

changes over time. Although research on the impact of informal elder caregiving on individual, work, and labor supply outcomes is starting to garner more attention, more work is needed. COR theory as an overarching theoretical framework provides a vehicle for understanding how informal elder caregiving impacts employed elder caregivers at the individual, work, and labor supply levels. COR theory also provides understanding in how resources at various levels can aid informal elder caregivers in combatting the deleterious effects associated with resource loss inherent with elder caregiving (e.g., time and energy resources). Our review article contributes to the extant literature by providing a theoretically grounded conceptual framework that highlights the process through which informal elder caregiving impacts the employee and their organization.

Recommendations for Future Research

Although a great deal of research has been conducted on eldercare, there is relatively little research focusing on informal elder caregiving in employed populations. We organized our review of the eldercare and work literature (Table 1) with the conceptual model presented in Figure 1. Returning to Figure 1, this model provides opportunities to identify areas in which our knowledge is still quite sparse. We have identified several areas in which there is a clear need for additional research. We provide recommendations for specific substantive issues to further the understanding of eldercare for employees and organizations focusing on recommendations at the individual, organizational, and societal levels. These recommendations, as well as methodological considerations discussed throughout the body of this review are summarized in Table 2.

Individual

Although there is a body of research that concludes that simultaneously providing informal elder caregiving and working results in negative outcomes, further investigation on the situational differences regarding the caregiver's eldercare and work circumstances is needed. Research should investigate in a more detailed way, the impact of different types of eldercare situations on personal and work outcomes, such as the temporal nature of eldercare including the number of hours allocated to eldercare each week, and the number of years eldercare has been provided (i.e., chronicity). The intensity of eldercare tasks, such as whether it is direct hands-on care or indirect managerial care, whether the eldercare is shared with another person (e.g., a sibling), the number of elders being cared for, and the proximity of the caregiver to the elder (e.g., living together vs. living in different states) should be considered. Furthermore, eldercare responsibilities can ebb and flow as both the intensity and nature of such demands often changes over time. Future research should seek to understand how this ebb and flow differentially impacts outcomes in the individual and work domains.

Although gender differences have been acknowledged and still warrant further examination, there are other sociodemographic differences that have yet to be examined. For example, racial, ethnic, and sociocultural differences associated with one's country of origin can influence provision of eldercare due to in-group social norms surrounding the significance, value, and treatment (i.e., social status) of elders within a social or cultural group, expectations regarding who provides elder care and the type of care provided, as well as the situation (i.e., living arrangements) under which the care is provided.

Socioeconomic differences should also be examined further given that low-income families are less able to afford paid formal eldercare services, and therefore are more likely to provide informal eldercare to family members, which can have an unfavorable effect on their jobs and income, further threatening their SES. Moreover, low-income families may have decreased access to informational resources (i.e., financial, legal) that can assist them with making more informed decisions about eldercare matters.

Furthermore, research should seek to understand the positive processes and outcomes for employed caregivers. The work-life literature is rich with theoretical and empirical understanding of how work and life can enrich the other, however much of the attention in this literature stream is focused on caregivers to children, rather than elders. We identified one study that sought to examine the influence of job resources on work-life enrichment for employed caregivers, however, no statistically significant results were found (Tement & Korunka, 2015). Though there is contextual evidence identified in this review that elder caregiving can be a positive process for caregivers and care recipients (e.g., C. A. Cohen et al., 1994; Horell et al., 2015; Kramer, 1993; Sheehy, 2010; Talkington-Boyer & Snyder, 1994), almost no empirical work has sought to or found evidence to support a positive reciprocal relationship between caregiving and paid employment. This is a notable gap in the eldercare-work literature, as well as the work-life literature given the prevalence of elder caregiving for working adults. Although the main forms of care (i.e., hands-on, managerial) have been conceptualized, further research could reveal additional categories, such as emotional care. This kind of elaboration could form the basis for a clearer understanding of how and when informal elder caregiving has beneficial consequences for caregivers.

In addition, simultaneously managing elder caregiving and paid employment can impede recovery, the process of restoring a person's psychobiological systems to baseline levels by discontinuing effort and ceasing exposure to work demands. Over time, the inability to recover from the demands and responsibilities of multiple roles can induce chronic stress conditions and negative psychological, behavioral, and physical health outcomes. Future research should seek to understand how simultaneously managing the employee and elder caregiving roles influences and/or impedes recovery using appropriate methodology (i.e., experience sampling methodology) to understand the dynamic interplay among these relationships. In fact, recovery can be examined as an additional theoretical framework in understanding the influence of elder caregiving on work and vice versa, and as a mechanism to explain the relationship between eldercare and outcomes in nonwork domains. Moreover, recovery opportunities can be utilized as targets for interventions with employed caregivers in seeking to provide richer understanding of the influence on eldercare and individual well-being and work outcomes.

Future research on how eldercare responsibilities impact workers should include examining more specific aspects of physical health (e.g., musculoskeletal pain and other occupational health concerns) and mental health (e.g., anxiety) affected, as well as a more comprehensive examination of the various ways that providing eldercare can impact a worker's financial well-being, including the effect on workers' existing financial resources (e.g., savings, debt), their current and future income, subjective feelings of economic stress, and the effect on retirement decisions and planning. Furthermore, stable personality

Table 2. Future Research Recommendations by Category

Category	Subcategory	Recommendation
Methodological considerations	Consistent operationalization and measurement of informal elder caregiving	Development and validation of uniform, multidimensional measure of eldercare to include: time dedicated to eldercare tasks per week, types of tasks performed, shared task responsibility, and affective evaluation of caregiving duties
	Sampling	More diverse and representative employed elder caregiving samples that include differing occupations, nonstandard or less flexible work schedules, global samples that aren't limited to the experiences of women
	Study design	More qualitative, mixed methods, and intensive longitudinal designs are needed to understand the dynamics of simultaneously managing elder caregiving and paid employment
	Situation differences in caregiver's eldercare and work circumstances	Investigate different types of eldercare situations on personal and work outcomes; such as: temporal aspects of elder caregiving each week, number of years providing eldercare (chronicity), proximity of care recipient to caregiver, and shared responsibility of care
Individual-level substantive considerations	Sociodemographic differences in caregiver's eldercare and work circumstances	Investigate racial, ethnic, and other sociocultural differences associated with one's country of origin in the type, amount, and provision of elder caregiving
	Socioeconomic differences in caregiver's eldercare and work circumstances	Investigate access to, and availability and utilization of resources in managing elder caregiving and paid employment
	Positive processes and outcomes	Understand the mechanisms that facilitate a positive, reciprocal relationship between elder caregiving and work and labor supply outcomes
	Recovery processes and mechanisms	Investigate the influence simultaneously managing elder caregiving and paid employment on recovery; investigate recovery opportunities as interventions in employed elder caregiving populations
	Physical, mental, and financial health and decision making	Investigate the influence simultaneously managing elder caregiving and paid retirement decisions and planning
	Moderating influence of stable personality characteristics	Explore conscientiousness, emotional stability, grit, and resilience as individual level resources in coping with informal elder caregiving and paid employment
	Work influences on elder caregiving	Investigate the prioritization of job and employment in impacting type and nature of elder caregiving provided
	Role centrality	Investigate individual and work outcomes for informal elder caregivers on the basis of role centrality (i.e., prioritization of family role, prioritization of work role)
	Team context, work group context	Investigate the influence of elder caregiving on team functioning and outcomes (e.g., cohesion, development of shared mental models)
	Boundary conditions in workplace flexibility policies and organizational resources	Investigate the conditions which influence employed caregivers' use of existing workplace flexibility and other organizational resources (i.e., FMLA)
Organizational-level substantive considerations	Policies, initiatives, and interventions to support eldercare	E.g., supervisor training in family-supportive behaviors; return-on-investment and cost-benefit analyses of work-life policies, initiatives, and interventions

Table 2. Continued

Category	Subcategory	Recommendation
Society-level substantive considerations	Overlap in KSAs of elder caregiving and occupation	Investigate the differential work and labor supply outcomes for individuals providing elder caregiving and employed in geriatric health and human service professions
	Extended and irregular workdays	Understand the influence of shiftwork and mandatory overtime as contextual factors in the relationship between elder caregiving and individual, work, and labor supply outcomes
Society-level substantive considerations	Community resources	Understand the access to- and utilization of- community resources in ameliorating impacts of informal elder caregiving on individual, work, and labor supply outcomes for employed populations
	Neighborhood context	Understand the supports available in neighborhoods that emphasize sense of community and cohesion in managing paid employment with informal elder caregiving
	Evidence-based community interventions	Influence of different types of support (i.e., emotional, information, instrumental) on individual, work, and labor supply outcomes of employed informal elder caregivers
	Individualistic vs. collectivistic cultures	Types of supports (i.e., informal, formal) utilized in managing elder caregiving and paid employment

Note. Methodological considerations in future research is discussed in summarizing the consequences of informal elder caregiving and the overall discussion of the review, while substantive considerations at the individual, organizational, and societal levels are discussed in the section on Recommendations for Future Research.

characteristics, such as conscientiousness, emotional stability, grit, and resilience should be explored as potential moderating mechanisms in the influence of eldercare on work outcomes, as these characteristics may help individuals to better cope with the demands of their competing roles.

Although work–family conflict is bidirectional, the majority of eldercare research focuses on the impact of eldercare on work. However, it must be acknowledged that work also has an effect on eldercare, and past research has shown that the work and family domains are asymmetrically permeable, with work interfering more with family life than family life interfering with work (Frone, Russell, & Cooper, 1992). Earning a livable income and maintaining stable employment in an age of economic uncertainty means that many workers feel they need to do whatever their job requires, no matter how excessive the amount of time and energy it requires, or how porous the work–life boundaries become. This clearly has implications for workers who have the desire to personally provide eldercare to their loved ones (especially good quality eldercare which requires time and effort) and may result in workers being posed with the constrained choice of having to sacrifice care of loved ones in order to prioritize keeping their job (Hashizume, 2010). This is an area for further research.

Finally, mediating and moderating mechanisms that affect the provision of eldercare responsibilities on employee’s individual, work, and labor supply outcomes also requires further investigation. These mechanisms may operate at different levels. At the individual level, the association between a worker’s eldercare responsibilities and outcomes may be dependent on factors such as a worker’s prioritization of their family role over other life roles (i.e., family role centrality) and the closeness and meaningfulness of their relationship with the elder (i.e., relationship quality).

Organizational

As more and more employees are working in group- and team-based contexts, research should seek to examine how eldercare affects teams at work (e.g., cohesion, processes, affect, cognition). For example, future research should examine how having team or work group members with eldercare responsibilities influences team functioning. Does the absenteeism associated with employees providing elder caregiving responsibilities impact team or work group cohesion and the development of shared mental models? Is the impact of elder caregiving and work outcomes differentially determined by team or work group context? For example, work outcomes for elder caregivers employed in a team-based context may be different for action and performing teams (i.e., firefighters) over production teams.

Furthermore, research supports that the association between worker’s eldercare responsibilities and outcomes are dependent, to an extent, on the receipt of formal and informal support regarding flexible working arrangements from the employer (e.g., Schneider et al., 2013; Zacher & Schulz, 2015). However, there is research that also suggests that frequency of caregiving responsibilities is associated with negative work–family conflict regardless of the presence of flexibility policies (Brown & Pitt-Catsouphes, 2013). Future research should seek to examine the boundary conditions of the aforementioned relationship, as well as seek to understand the influence of other organizational resources in ameliorating and/or exacerbating the potential negative impacts of simultaneously working while providing informal elder

caregiving. Mentioned previously, one area that shows promise as an intervention technique in assisting employees with informal elder caregiving is training supervisors in exhibiting family-supportive behaviors, which has been shown to reduce work-to-family conflict and facilitate work–family positive spillover (Hammer et al., 2011), and may be useful in buffering against work-related strain. Additionally, researchers could examine whether the amount of paid time off (PTO) employees have impact their use of FMLA when their care recipient requires assistance with medical issues, or does the employee seek familial and other social support in caring for the elder during this time to protect against lost wages?

From an organizational perspective, the implementation of work–life policies, initiatives, and interventions aimed at supporting employees with informal elder caregiving responsibilities should be examined via return-on-investment (ROI) and cost-benefit analyses. ROI is a calculation of the most tangible financial gains/benefits that can be expected from the implementation of policies, initiatives, or interventions versus the costs of implementing the aforementioned, while cost-benefit analysis is more comprehensive and attempts to quantify both tangible financial gains/benefits and intangible costs and benefits (i.e., employee satisfaction).

Different types of occupations and work arrangements can also affect individual, work, and labor supply outcomes and merit further examination. For instance, caregivers with occupations related to geriatric health care or human services may experience less conflict between their work and caregiving role than caregivers in other types of professions because there is great overlap in knowledge, skills, and abilities needed both to perform their work and eldercare roles (i.e., the roles are not mutually exclusive). For workers with extended or irregular workdays (i.e., shiftwork, mandatory overtime), which have become increasingly common due to the 24/7 global economy, or workers with unpredictable or inflexible schedules, the provision of eldercare can be difficult, as it may be time consuming and often relies on keeping scheduled appointments that occur during regular daytime business hours, which can differentially impact individual, work, and labor supply outcomes for the employed informal elder caregiver.

Societal

There is a lack of understanding on the access to—utilization of—community resources in ameliorating the impacts of elder caregiving on individual and work outcomes. For example, research should seek to understand how the use of meal and other services offered through churches and other eldercare groups impacts employed elder caregiver's individual (e.g., stress/strain) and work (e.g., tardiness, leaving work early) outcomes. Furthermore, research should seek to understand the influence of neighborhood dynamics on individual, work, and labor supply outcomes. For example, it is likely that residing in a neighborhood with a strong sense of community and cohesion provides a variety of supports to the employed informal elder caregiver, potentially lessening negative outcomes in the individual, work, and labor supply domains.

There is also a need for evidence-based interventions aimed at balancing caregiving with employment responsibilities. Particular consideration could be given to examining other categories of elder caregivers and care recipients, in addition to the many interventions for elder caregiving that focus specially on caregivers of Alzheimer's or dementia patients. It would also be useful to understand how individual workers

cope with eldercare stress via specific forms of social support including emotional (i.e., reassurance, understanding), informational (i.e., new facts, guidance), and instrumental (i.e., hands-on or material) support.

Given that the majority of interventions utilize a psychosocial stress-process model with the focus on reducing caregiver stress and burden, more macro-level solutions (community, policy) are needed with an evaluative focus on ROI and cost-benefit analyses of these solutions. This includes research on the effect of government-sponsored initiatives and policies on elder caregiving on a national and global (i.e., income compensation for providing eldercare) scale, as well as formal eldercare insurance coverage for services and medical care for elders. Consideration of the accessibility, quality, and affordability of formal/paid help with eldercare services is also needed.

Finally, more research is needed on the differences in individual, work, and labor supply outcomes of elder caregiving between individualistic (e.g., the United States) versus more collectivistic (e.g., China) cultures. In a qualitative study examining 67 members of 20 three-generation families from the Los Angeles area, Pyke and Bengtson (1996) concluded that families that are more individualistic rely more on formal supports than on their caregiving role, whereas more collectivistic families use caregiving to construct family ties, which may result in the elder receiving more care than is wanted or needed.

CONCLUSIONS

Despite a growing stream of empirical studies on the impact of eldercare responsibilities on those to whom the burdens of eldercare frequently fall—working adult children and other family members—there remain many gaps in our knowledge of eldercare from the existing research, at a time when it is more relevant than ever. Due to population aging, steep increases are projected in both the numbers of aging employees in the workforce, as well as the number of elders needing care. Moreover, increasing wealth and income disparities, as well as decreased and insecure access to health care and public services, particularly in the United States, mean that families, communities, and employers are in need of useful information and effective solutions for addressing eldercare matters, as they are currently feeling its effects most acutely.

One of the challenges we encountered in conducting this review is that eldercare research is vast, varied, and crosses many disciplines, however the availability of research utilizing a working sample of employed informal elder caregivers is still somewhat limited. Researchers whose domain of interest lies in the work–life interface need to start taking more notice of workers who simultaneously manage paid employment and informal elder caregiving duties. The concerns for employees in managing eldercare and work are only expected to increase. Therefore, understanding what eldercare means for the employee and the organization is paramount.

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