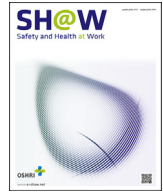




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## Review Article

## Balancing and Conflict Between Work and Family Life of Sandwiched Caregivers: A Scoping Review

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## ABSTRACT

The aim of this scoping review was to advance our understanding of the balancing and conflict between work and family life experienced by sandwiched caregivers. Five online databases (CINAHL, MEDLINE, PubMed, SCOPUS, and Cochrane Library) were systematically searched between 20 Apr 2024 and 11 July 2024 for articles written in English and published between 1999 and July 2024, focused on the impact factors on work–family life balance and/or conflict of sandwiched caregivers. These database searches identified 58 citations, which resulted in 46 unique articles following the removal of duplicates. Title and abstract screening were identified for full-text review, twenty of these were excluded at full-text review, and leaving 13 articles for inclusion. We identified and categorized them into three key themes: (1) conflicts between work and family life and (2) impact of conflicts between work and family life on psychological well-being and (3) coping with conflicts between work and family life. The literature reviews suggested that the balance and conflict between work and family life were associated with work hours, flexibilities in work and workplace, and partner support in the sandwiched caregivers. Especially, flexible work arrangements and maintaining social connection were the stress-coping strategies for balancing work and family life. In an aging society, building a truly supportive and flexible workplace culture, along with increasing and utilizing formal care services for child-rearing and aged care, is more effective in promoting the well-being of sandwiched caregivers.

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## 1. Introduction

Sandwich generation is a term for multigenerational caregivers who provide care, financial support, and emotional support for both their children and aging parents. Miller (1981) described as “Sandwiched caregivers who have a parent aged 65 years or older and are either raising at least one child younger than 18” [1]. Recently, sandwiched caregivers have become increasingly common worldwide [2,3], with background factors to this trend, including longer life expectancy, delayed marriage, and child-bearing [4].

According to the 2015 National Study of Caregiving in the U.S., a quarter of adult child caregivers (24.3%) were sandwiched caregivers [5], with the majority of these caregivers being in their 40s

[6]. Many sandwiched caregivers tend to be dual-earner couples and are faced with juggling their outside work and family responsibilities, including both childcare and eldercare [5,7]. According to the research by Hammer and Neal (2008), working sandwiched couples had between one and five children aged 18 or younger living at home, with an average of 1.8 children [8]. Additionally, their findings indicated that wives spent significantly more hours per week providing care to their parents and/or in-laws compared to husbands.

Similar to Europe and North America, the impact of sandwich caregiving on marital and life satisfaction among middle-aged couples is a significant social issue in East Asia [9,10]. According to Tan (2018), based on the 2006 East Asian data, the percentage of co-residing with both parents and children among sandwiched couples

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aged 30–59 was 24.3% in Taiwan, 21.4% in Japan, 16.1% in China, and 8.2% in the Republic of Korea [9]. The stress of sandwich caregiving is associated with lower life and marital satisfaction [9]. In East Asia, caregiving for older relatives is based on traditional cultural practices. The pattern of caregiving in Japanese tradition expects the wife of the oldest son to care for her parents-in-law as well as disabled relatives until their death [11]. Meanwhile, in China and Taiwan, the pattern of caregiving shows a tendency for sons to provide financial and domestic caregiving support to their parents [9].

For adult children or sons/daughters-in-law caring for older parents, having more children under age 18, a full-time job, and fewer family members living with them significantly increases work and caregiving role strain [12]. Experiencing work and caregiving role strain, work interruptions, and time-based conflict are more likely to lead to conflicts between work and life (work–life conflict) [13,14]. Work–life conflict is defined as a type of inter-role stress that results from incompatible demands in the work and family domains [14]. Employees who juggle both childcare and eldercare responsibilities, but fail to effectively manage their time, finances, and physical and emotional energies to meet the demands of their roles as parents, spouses, caregivers, and paid employees, often face work–life conflict [15,16].

In the occupational consideration to reduce work–life conflict, some studies have recognized that flexible work arrangements and employer support (e.g. understanding the demands of caregiving situations) for employed family caregivers can mitigate work interference and work–life conflict [13,17]. Additionally, reducing work–life conflict due to care responsibilities is made possible with additional support from long-term care services. Above all, many studies on work–life balance and conflict have focused on dispersing work- and life-related burdens and strains. Duxbury et al. (2011) reported that sandwiched caregivers, who experience increased caregiving burdens due to elder care responsibilities, offset this emotional strain by having children at home [16]. The benefits from childcare responsibilities can mitigate stress or burdens due to elder caregiving, thereby reducing work–life conflict.

Sandwich caregiving does not begin with both eldercare and childcare simultaneously. Initially, it involves primarily parenting responsibilities, but over time, caregivers often take on the dual role of managing both childcare and eldercare [18]. Prior studies have reported that it is important to balance work and family life to improve work–life conflict and strain [19,20]. However, work, family caregiving, and leisure time are each a part of life. Work–life conflict and strain depend on whether individuals can continuously adapt to changes. The ability to adapt to the changing demands of both work and family roles, rather than merely balancing work and family life, is more crucial for employed family caregivers. Therefore, the purpose of this study is to advance our understanding of the balancing and conflict between work and family life experienced by sandwiched caregivers.

## 2. Method

### 2.1. Aims

The aim of this scoping review was to advance our understanding of the balancing and conflict between work and family life experienced by sandwiched caregivers.

### 2.2. Design

This study utilized a scoping review framework established by Arksey and O'Malley [21] and revised by Levac et al. [22]. A scoping review involves the following 5 stages: (1) the research questions, (2) identification of relevant studies, (3) study selection, (4)

charting the data, and (5) collating, summarizing, and reporting results. Also, this review was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) guideline [23] to show a systematic understanding and guarantee the value of the review process.

#### 2.2.1. Stage 1: the research questions

Research questions were as follows.

- What are the sources of work–family life conflict in sandwiched caregivers?
- How does one achieve a balance between work and family life in sandwiched caregivers?

#### 2.2.2. Stage 2: identification of relevant studies

A scoping literature review was conducted between 20 Apr 2024 and 11 July 2024 using 5 relevant electronic databases: CINAHL, MEDLINE, PubMed, SCOPUS, and Cochrane Library. We will start with a search framework designed using a combination of keywords in MeSH terms and adapted as needed for each database: (“sandwich caregiver” OR “sandwich generation” OR “double duty caregiving”) AND (“work-life balance” OR “work-family balance” OR “work-life conflict”). These detailed literature searches are showed by Fig. 1. Articles were included if they were written in English, reported primary research, and focused on work–life balance in sandwiched caregivers.

#### 2.2.3. Stage 3: study selection

All duplicated search results were removed. The researcher screened titles and abstracts of these studies screening based on pre-approved inclusion and exclusion criteria by three reviewers (AH, MO, TN). In cases where the relevance of the title or abstract was unclear, we reviewed the full text.

##### 2.2.3.1. Inclusion criteria

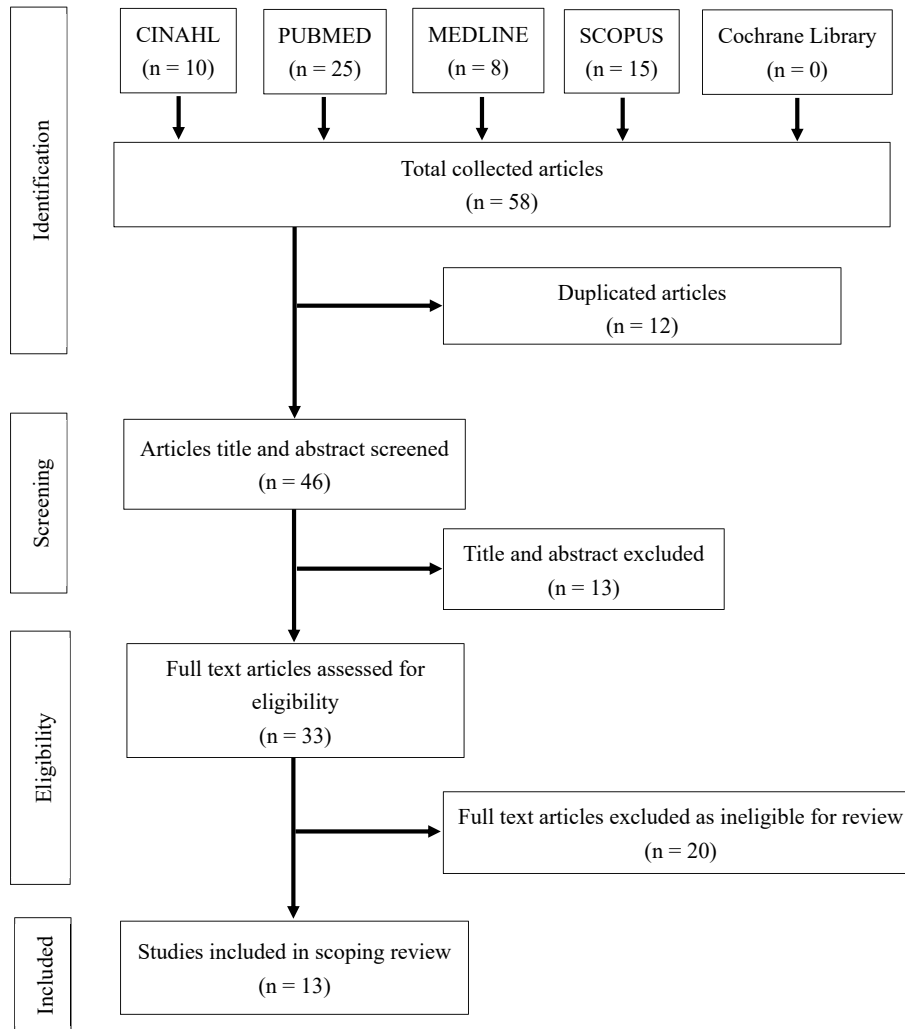
- Peer reviewed research article
- English language
- Focus on the impact factors on work–family life balance and/or conflict of sandwiched caregivers
- Studies published between 1999 and July 2024

##### 2.2.3.2. Exclusion criteria

- Editorial, opinion, commentary, conference abstracts, protocols, reviews
- Languages other than English
- Caregiving for either their children or parents
- Not related to the sandwiched caregivers

#### 2.2.4. Stage 4: charting the data

Data extraction from the literature review was shown in data table format for analyzing review, which included author(s), published year, Journal name, country, study design, aims, sample size, and key findings.



**Fig. 1.** PRISMA flow chart. PRISMA, preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews.

### 2.2.5. Stage 5: collating, summarizing, and reporting results

Characteristics of included studies were summarized into categories based on similarities and differences in the data. Patterns and themes in the data were discussed to identify the categories (1) conflicts between work and family life and (2) impact of conflicts between work and family life on psychological well-being and (3) coping with conflicts between work and family life. To ensure the robustness of the process, all authors constantly reviewed the synthesized results for the identified categories and their themes.

## 3. Results

### 3.1. Search outcome

Database searches generated a total of 58 citations, which resulted in 46 unique articles following the removal of duplicates. Title and abstract screening were independently undertaken by three authors (AH, MO, and TN), and 33 articles were identified for full-text review. Twenty of these were excluded at full-text review, leaving 13 articles for inclusion (see Fig. 1). Articles were excluded based on the information from title and abstract screening for the following main reasons: (1) they were not primary and original research articles, and/or (2) they did not refer to issues related to sandwiched caregivers who provide care for both their children and older parents.

### 3.2. Summary of included studies

Eight studies were undertaken in the USA, two in Australia, two in Malaysia, and one in Norway. Twelve employed a cross-sectional study and one employed Q methodology (combining both qualitative and quantitative research designs). Surveys were the primary methods of data collection ( $n = 13$ ), followed by a self-administered questionnaire ( $n = 4$ ), interview ( $n = 1$ ), a combination of survey and interview ( $n = 5$ ), and survey ( $n = 3$ ). Participants were 58,095 persons including 3,032 sandwiched caregivers (refer to Table 1 for description of included final studies).

### 3.3. Themes of included studies

The included studies were identified and categorized into three key themes: (1) conflicts between work and family life and (2) impact of conflicts between work and family life on psychological well-being and (3) coping with conflicts between work and family life.

### 3.4. Conflicts between work and family life

Sandwiched caregivers most frequently had a mean age range from their mid-30s to early 40s [24–27] and had higher proportions of dual-earner couples [27–29]. Previous research reported that

**Table 1**  
Summary of the included studies

Author (year)/country	Journal name	Aims	Study design	Participants	Findings
Evans KL et al. (2019)/Australia	Scand J Occup Ther	To examine how within-role characteristics and between-role interactions affect role balance in working sandwich generation women.	Cross-sectional study using self-administered questionnaire	The eighteen sandwiched caregivers	Role balance was significantly influenced by experiences in the roles of mother, self-maintainer, home maintainer, and family member, while the worker role had no effect. Enjoyment and perceived competence improved role balance in the mother and self-maintainer roles.
DePasquale N et al. (2018)/USA	Gerontologist	To compare workplace factors influencing job retention and performance between women engaged in double-duty caregiving and those involved in workplace-only caregiving. Additionally, to investigate whether spousal support serves as a work resource for wives engaged in triple-duty caregiving.	Cross-sectional study using survey data and computer-assisted personal interviews	546 who employed nursing home and married women, including 86 sandwiched caregivers	Among 546 long-term care workers, triple-duty caregivers (both children and older adults) were 16% (n = 86). Triple-duty caregivers experienced more emotional exhaustion, but showed no difference in job satisfaction, turnover intentions, or presenteeism compared to workplace-only caregivers. Spousal support reduced presenteeism among triple-duty caregivers.
Aazami, S et al. (2018)/Malaysia	Journal of Adult Development	To assess the extent of four-dimensional work-family conflict among working women in the sandwich generation.	Cross-sectional study using self-administered questionnaire	90 working women, including 30 sandwich caregivers	Sandwich generation women faced more time-based conflict and family interference with work, but caregiving for older relatives did not increase work interference with family.
Evans KL et al. (2017)/Australia	Scand J Occup Ther	To identify the most effective role balance strategies for working women in the sandwich generation from both their own and occupational therapists' perspectives.	Q methodology study (combining both qualitative and quantitative research designs) using interview	31 working sandwich generation women, and 42 occupational therapists	Working women in the sandwich generation prioritized strategies for managing a busy lifestyle with multiple responsibilities, including seeking support, maintaining relationships, prioritizing health, and effective time management. In contrast, occupational therapists emphasized strategies related to emotional well-being, setting priorities, balancing activities with rest, and delegating tasks.
DePasquale N et al. (2018)/USA	J Appl Gerontol	To explore subjective stress assessments and perceived schedule control among men working in the long-term care industry who also serve as unpaid family caregivers for children, older adults, or both.	Cross-sectional study using national survey: survey data and computer-assisted personal interviews	123 men working in nursing home facilities, including 12 sandwich caregivers	Among 123 participants, 12 triple-duty caregivers who provide care for both children and older adults. Triple-duty caregivers, who care for both children and older adults, reported higher psychological job demands, greater emotional exhaustion, and more family-to-work conflict compared to workplace-only caregivers. They also had a higher proportion of dual-earner couples. Low schedule control among triple-duty caregivers was linked to increased stress, higher turnover intentions, reduced work-to-family positive spillover, and lower job satisfaction.
Hodgdon BT & Wong JD. (2021)/USA	Int J Aging Hum Dev	To extend the literature on work and family interface by exploring the moderating role of positive work and family spillover on the association between caregiver type and multiple aspects of well-being.	Cross-sectional study using telephone interview and self-administered questionnaire	90 non-sandwich caregivers and 90 sandwich caregivers	Sandwiched caregivers experience greater negative family-to-work spillover and reduced psychological well-being compared to non-sandwiched caregivers. However, negative work-to-family spillover did not influence the relationship between caregiver type and positive affect or psychological well-being.

Table 1 (continued)

Author (year)/country	Journal name	Aims	Study design	Participants	Findings
Yucel D & Fan W. (2023)/USA	Appl Res Qual Life	To explore the relationship between access to flexible working arrangements and psychological distress, examining the mediating roles of work–family conflict and enrichment, and analyzing how these relationships vary by gender and caregiving responsibilities for children or older adults.	Cross-sectional study using self-administered questionnaire	2,233 workers aged 18 to 64 years, including 112 sandwiched caregivers	In the overall sample, 112 individuals (5%) are sandwich caregivers. The benefits of a flexible workplace culture in reducing psychological distress are greater for sandwiched caregivers, particularly women. Women in the sandwich generation gain the most well-being from workplace flexibility, while caregiving obligations do not significantly affect the relationship between flexible work arrangements and psychological distress for men.
Williams K et al. (2021)/USA	PLoS One	To assess the prevalence of caregiving responsibilities, work-family conflict (WFC), and enrichment (WFE), and to identify factors linked to higher WFC and WFE scores among Registered Dietitian Nutritionists (RDNs).	Cross-sectional study using national survey: interview	1118 participants, including 93 sandwiched caregivers	9.1% of participants (n = 93) were triple-duty caregivers, providing care at work as well as both child and elder care outside of work. Triple-duty caregivers faced higher FWC than nonfamily caregivers. Those working fewer than 15 hours per week experienced less WFC than those working over 16 hours. Working 45 or more hours weekly increased WFC. Distressed marriages or partnerships were associated with higher FWC and lower FWE. Additionally, unmarried or unpartnered triple-duty caregivers experienced less FWE than those in non-distressed marriages or partnerships.
Chan CMH et al. (2023)/Malaysia	Healthcare	To analyze the characteristics of employees with childcare and eldercare responsibilities, categorized by primary, secondary, or no caregiving roles.	Cross-sectional study using online survey 2019	17,286 employees aged 18 and above, including 881 sandwiched caregivers	Among 17,286 employees, 881 were primary caregivers for both children and older adults. Men were more likely to be primary caregivers, while single employees and those with household incomes of RM3,999 or less were less likely to have caregiving responsibilities for both children and elderly persons.
Daatland SO et al. (2010)/Norway	Eur J Ageing	To examine the prevalence of mid-life individuals who are “sandwiched” between caring for older and younger family generations, to explore their adaptive strategies, and to assess the implications for their employment and well-being.	Cross-sectional study using national survey: interview and questionnaire	15,109 individuals aged 18 to 84 years, including 756 sandwiched caregivers	In the overall sample, 756 individuals (5%) are sandwich caregivers. Approximately 80% of sandwich caregivers are aged 35 to 45, with the prevalence of triple caregiving peaking in this age range. Women caring for both children and parents are less frequently employed, and those who are employed often work part-time. Higher education is linked to better well-being for both men and women. Full-time employment is associated with improved well-being. The needs of older parents do not significantly impact their children’s employment status, though daughters are more likely to work part-time.
Buffardi LC et al. (1999)/USA	J Occup Health Psychol	To assess how child-care and elder-care responsibilities affect job satisfaction and work-family balance.	Cross-sectional study using national survey	20,015 federal employees in dual-income households, including 600 sandwiched caregivers	600 employees (3%) were sandwich caregivers. Employees with multiple dependent-care responsibilities reported lower satisfaction with leave and work-family balance than those caring for just school-age children or elders. The negative impact on work outcomes was greater for multigenerational caregiving than for single-generation caregiving.

Henle CA et al. (2019)/USA	Journal of Business and Psychology	To investigate hiring discrimination and salary decisions among equally qualified applicants with sandwiched caregiving responsibilities.	Cross-sectional study: questionnaire	240 sandwiched caregivers, and 241 primary older or child caregivers	Sandwiched caregivers were less likely to be hired and received lower starting salaries than child caregivers. They were perceived as less committed and available for work. Male sandwiched caregivers were rated as more competent than females, while female child caregivers were rated more competent than males. Female sandwiched caregivers faced more negative evaluations than males in both female- and male-dominated jobs.
DePasquale N et al. (2017)/USA	Journal of Family Issues	To assess perceived stress, psychological distress, and the strains related to work and family roles.	Cross-sectional study using national survey	823 employees, including 83 sandwiched caregivers, covering both caregiving and noncaregiving roles	A similar proportion (10%) of men and women were sandwiched caregivers (n = 83). Sandwiched caregivers were younger, more racially diverse, and more likely to be in cohabiting or married dual-earner relationships. This role predicted greater psychological distress and family-work conflict, with women reporting more conflict and less partner support than men.

cohabiting or married men and persons who had higher annual household income were associated with being the primary caregivers of both children and older parents [27,30].

Sandwiched caregivers experienced higher conflicts between work and family life than caregivers with only older care recipients [7,31,32]. Williams et al. (2021) reported that sandwiched caregivers who were employed for less than 15 hours per week in paid work did not experience conflicts between work and family life; however, those who worked more than 45 hours per week experienced more conflicts between work and family life [32]. The working sandwiched women were more likely to experience higher levels of time-based Family Interference into Work [25] than their male counterparts [27,33]. Therefore, the working sandwiched women tend to work part-time more often [29,34] and have lower commitment and availability for their work compared to their male counterparts [26]. Daatland et al. (2010) suggested that working part-time is more likely to be the result of adjustment to family obligations [29]. Conflicts between work and family care are not solely constituted by work and caregiving responsibilities, but also by marital distress and lower support from their partner. Low support from their partner and marital distress contribute to greater partner strain and more conflicts between work and family life, especially for sandwiched women compared to men [27,32]. Whereas, the sandwiched women who received greater husband support felt less obligated to work [24].

### 3.5. Impact of conflicts between work and family life on psychological well-being

Many sandwiched caregivers experienced conflicts between work and family life. Psychological distress and emotional exhaustion are the most common impacts of those conflicts on the psychological well-being of sandwiched caregivers [24,27,28,31,33]. Higher work-to-family life conflict was also associated with lower life satisfaction and burnout [32], and experiencing low schedule control was linked to lower job satisfaction and higher turnover intentions [28].

### 3.6. Coping with conflicts between work and family life

Maintaining good physical and mental health conditions is one of the key strategies for achieving balance within and between roles, and it is the strongest predictor of well-being for both men and women [29,35]. Evans et al. (2017) also reported that another key strategy for achieving balance within and between roles is maintaining social connections for formal and informal support, as well as time management [35]. Increasing schedule control is likely to reduce conflicts between work and family life [28]. Conflict and enrichment between work and family life are closely related to flexible work arrangements and workplace culture [28,33]. Yucel & Fan's research (2023) also indicated that a less flexible workplace culture increased conflict and psychological distress, whereas a more flexible workplace culture enhanced enrichment and reduced psychological distress for sandwiched women compared to men. However, flextime or flexplace alone might not be sufficient to promote well-being in the absence of family-supportive practices [33].

## 4. Discussion

The aim of this scoping review was to advance our understanding of the balancing and conflict between work and family life experienced by sandwiched caregivers. The literature reviews suggested that the balance and conflict between work and family life were associated with work hours, flexibilities in work and

workplace, and partner support in the sandwiched caregivers. Conflicts between work and family life are complexed these factors. Lower levels of partner support tend to lead especially to more intense work–family life conflicts and psychological distress [32]. Meanwhile, for caregivers who are sandwiched between work and family responsibilities but have adequate partner support, work–family life conflicts and strain may be reduced by work arrangements such as transitioning from full-time to part-time work or reducing work hours.

The balancing of work and family life can be achieved through flexible work arrangements; however, not everyone is able to utilize these options. According to Håkansson et al. (2019), flexible work arrangements tend to be limited to sandwiched caregivers with a high level of education and/or professional status [19]. Thus, sandwiched caregivers without higher education and/or professional status may have difficulty balancing work and family life. Maintaining social connection is also one of the stress-coping strategies. Even sandwiched caregivers who did not have flexible work arrangements, might experience reduced work–family life conflicts if they had social support networks for long-term care and childcare.

According to the Organisation for Economic Co-operation and Development (OECD) historical population data and projections (1950–2050), the speed of population aging countries (e.g. Japan, Italy, Greece, Portugal, and Finland), in particular, has varied markedly compared to other OECD countries [2]. Among countries experiencing rapid population aging, in Japan, sandwiched caregivers aged 30 to 40 comprise the majority, and the number of dual-earner couples among these caregivers has similarly experienced rapid growth [18,36]. Additionally, in Japanese household trends, households consisting of a couple or a single parent and unmarried children are the most common, accounting for one in three (35.8%) households. Meanwhile, the average number of family members per household decreased to 2.3 in 2015 [36]. This trend is no exception for the sandwich generation. Consistent with the findings of Yucel & Fan's research [33], building a truly supportive and flexible workplace culture is more effective in promoting the well-being of sandwiched caregivers. Moreover, in an aging society, it may be more important in the future for the sandwich generation to balance work and family life by increasing and utilizing formal care services for child-rearing and aged care.

This scoping review has some limitations. First, the search was limited to studies published in English, which may have resulted in the exclusion of relevant articles published in other languages. Second, this scoping review did not involve a formal assessment of methodological quality. Nevertheless, we adhered to the PRISMA-ScR guidelines to ensure rigorous and detailed reporting. We collected 13 peer-reviewed articles on work–life balance and conflict for sandwiched caregivers through a scoping review of the retrieved database. Additionally, we ensured that the key questions were systematically addressed and directly informed the focus of the review. In future studies, a wide range of caregiving and work conditions need to be considered to identify the predictive factors contributing to the imbalance between work and family life.

## 5. Conclusion

This scoping review categorized the balancing and conflict between work and family life of sandwiched caregivers into 13 components. Work–family life conflicts are related to time-based conflicts. Increasing schedule control, maintaining good health conditions and social support networks are key strategies for achieving balance within and between roles.

## CRedit authorship contribution statement

**Ayumi Honda:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Formal analysis, Data curation, Conceptualization. **Mayo Ono:** Writing – review & editing, Writing – original draft, Investigation, Data curation. **Takahiro Nishida:** Writing – review & editing, Writing – original draft, Investigation, Data curation. **Sumihisa Honda:** Writing – review & editing, Supervision, Formal analysis, Conceptualization.

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## Conflicts of interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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We utilized ChatGPT to summarize the results of the article reviews in Table 1. We complied with all AI-related policies outlined in the submission guidelines of Elsevier's AI author policy and used ChatGPT-3.5 (Japanese version: ChatGPT by OpenAI) appropriately. We carefully reviewed the AI-generated text to check for any errors, biases, inconsistencies, or knowledge gaps based on the original sources.

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