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SYSTEMIC SUPPORT POLICY, WELL-BEING AND STRESS AMONG ELDER INFORMAL CAREGIVERS' INTERPERSONAL HELP IN HONG KONG

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ABSTRACT

Informal caregivers' culture in helping the Elders is vital to Hong Kong's healthcare landscape, yet their well-being and stress remain understudied. With 86.5% of unpaid caregivers being women and 21.8% of Hong Kong's population aged 65+, these unpaid caregivers face immense pressures, exacerbated by cultural norms prioritizing familial care and limited Systemic Support Policy. Existing research lacks comprehensive analyses of how support systems (family, social, financial) interact with their well-being and stress, particularly using a scientific analysis based on the SPSS Structural Equation Modelling. This study aims to examine the relationships between families, social, and financial support, well-being, and stress among Elder informal caregivers. A cross-sectional survey with purposive sampling was conducted in four Hong Kong districts between Feb–Mar 2025. Participants were 113 Elder caregivers aged 50+, predominantly women (86.7%), with an average age of 62. Specifically, it investigates how these support systems affect the well-being of Elder caregivers and whether well-being impacts the support on stress.

KEYWORDS: Caregivers' culture, systemic support policy, well-being, stress, scientific analysis, Hong Kong.

1. INTRODUCTION

In the intricate healthcare landscape of Hong Kong, informal caregivers form an essential yet often undervalued component. These caregivers, who are not compensated, play a crucial role in providing continuous support to relatives, friends, or neighbours experiencing chronic conditions, disabilities, or the challenges of aging (Happ et al., 2024; López-Hartmann et al., 2012; Roth et al., 2015). Their duties are diverse, encompassing both basic activities of daily living (ADLs) such as bathing and feeding, and more complex instrumental activities of daily living (IADLs) like managing finances and organizing transportation. This form of care-giving is distinct from the services rendered by formal caregivers—paid professionals such as nurses and social workers, whose roles are well-defined through professional training and regulatory standards (Arther, 2018).

The 2021 Hong Kong Census reveals that a significant majority of household caregivers (92.7%) and unpaid caregivers (86.5%) are women, underscoring the predominant role women play in family care-giving. This pronounced gender disparity highlights the substantial pressures faced by women in these roles and reflects deeply entrenched cultural norms that traditionally allocate care-giving responsibilities to women. Although this arrangement offers a cost-effective alternative to formal care, it also carries substantial opportunity costs, particularly for women (Yi et al., 2024). The primary recipients of this care are Elder adults, with 21.8% of Hong Kong's population being 65 years or elder as of 2023—a figure expected to rise. Among these caregivers, adult children (37.3%) and spouses (26.3%) predominantly provide care (Sau Po Centre on Ageing, n.d.).

Understanding these demographic details is crucial for crafting targeted support systems aimed at enhancing the well-being and alleviating the stress of Elder informal caregivers in Hong Kong. This foundational knowledge helps in addressing the specific needs and challenges faced by this group, ensuring they receive the necessary backing in their pivotal care-giving roles.

2. LITERATURE REVIEW

2.1. Well-being and Culture of Elder Informal Caregivers in Hong Kong

Well-being is a complex and multifaceted concept that varies across academic and professional disciplines. The World Health Organization (n.d.) defines well-being as "a positive state experienced by individuals and societies and that its not just about feeling good-it's about have the conditions to thrive" highlighting a holistic approach to health. Expanding on this, Halbreich (2021) emphasizes that well-being is achieved through a balanced integration of multiple life domains, including emotional and physical health, daily functioning, financial stability, and social relationships. This comprehensive understanding of their culture is particularly relevant when considering the well-being of informal caregivers, who face diverse and significant stressors. Sheehan et al. (2021) note that informal caregivers, especially those caring for individuals with dementia, endure elevated levels of stress and burden due to the demanding nature of managing behavioral and psychological symptoms. Recognizing these specific stressors is crucial for developing targeted interventions to support caregiver well-being. In the context of Hong Kong, the well-being of Elder informal caregivers is further challenged by demographic shifts, limited public care services, and socioeconomic pressures.

Research indicates that many caregivers experience moderate to high stress levels, as measured by tools such as the Zarit Burden Interview, alongside emotional strain and financial hardship (Labour and Welfare Bureau, 2022; Legislative Council, 2020;). These difficulties are exacerbated by low income, inflexible work conditions, and insufficient institutional support, which collectively contribute to increased risks of anxiety, depression, and overall diminished well-being among this population (Lee & Tang, 2013; Yi et al., 2024; Chan & Ng, 2022; Chan et al., 2023). Addressing these multifaceted challenges is essential to improving the quality of life for Elder informal caregivers in Hong Kong.

2.2. Impact of Well-being & Culture on Stress among Elder Informal Caregivers

The well-being of Elder informal caregivers plays a critical role in shaping their experience of stress, with higher levels of well-being serving as a protective buffer against the negative effects of care-giving demands. Research by Pinquart and Sörensen (2006) demonstrates a significant negative correlation between well-being and stress among caregivers, indicating that improvements in well-being can effectively reduce perceived stress. In Hong Kong, this relationship is particularly salient as Elder caregivers often face compounded challenges, managing their own health issues and culture while providing care. The physical and emotional strain of care-giving can exacerbate neglected personal health, contribute to chronic

conditions, and increase the risk of mental health problems, thereby diminishing their overall quality of life (Legislative Council, 2020; Guo et al., 2025). Moreover, Elder informal caregivers confront unique difficulties as they balance care-giving responsibilities with other life demands, which intensify the stress impacting both their physical and psychological well-being (Pereira et al., 2023).

Nonetheless, the presence of robust support systems—whether social, familial, or community-based—has been shown to alleviate caregiver stress and enhance well-being (Chan et al., 2023; Fung & Chan, 2025). Understanding this complex interplay between well-being, stress, and support is essential for designing effective interventions tailored to the needs of Elder informal caregivers in Hong Kong. These caregivers are vital to sustaining the health and quality of life of their care recipients, even as they face significant personal strain (Happ et al., 2024; Lopez-Hartmann et al., 2012; Roth et al., 2015). Strengthening healthcare access, financial assistance, and emotional support mechanisms will be crucial steps toward mitigating stress and promoting well-being among this vulnerable population.

2.3. Family Support Networks and Care-giving Dynamics in Hong Kong: Cultural Foundations and Contemporary Challenges

Family support networks in Hong Kong are deeply influenced by cultural norms, particularly the Confucian principle of filial piety (xiao 孝道), which imposes a moral obligation on adult children—especially daughters and spouses—to assume primary care-giving responsibilities for elderly or frail family members (Xiao et al., 2024; Yeh et al., 2013). This cultural expectation predominantly positions women as caregivers, reflecting entrenched gender roles that associate femininity with nurturing and care work (Qiu et al., 2017; Yeung & Fung, 2007). While filial piety can strengthen familial cohesion and provide caregivers with a sense of purpose, it simultaneously creates asymmetrical burdens. Caregivers often experience helplessness or social stigma if they perceive themselves as failing to meet these expectations (Chen et al., 2023).

The care-giving landscape in Hong Kong is further complicated by demographic and social transformations, including the decline of multigenerational households and the rise of nuclear family structures. Urbanization and smaller family sizes have concentrated care-giving responsibilities on fewer individuals, often Elder spouses or middle-aged children who must juggle employment alongside care-giving demands (Census and Statistics Department, 2022; Ho et al., 2007). This shift intensifies caregiver stress, as the broader support once provided by extended families diminishes. Elder caregivers, in particular, tend to prioritize family needs over their own health and social engagement, which can lead to neglect of their personal well-being (Labour and Welfare Bureau, 2022).

Informal community support mechanisms, such as peer support groups, caregiver cafés, and NGO-led programs, offer some emotional and practical relief but remain unevenly distributed across different districts (Fung & Chan, 2025; Labour and Welfare Bureau, 2022). Cultural norms emphasizing self-reliance and family privacy often discourage caregivers from seeking external assistance, as doing so may be perceived as a failure to fulfil familial duties (Yeung & Fung, 2007; Lam & Ho, 2024). Additionally, many Elder caregivers face barriers related to limited digital literacy, restricting their access to online resources and technology-based interventions, thereby reinforcing their dependence on informal networks (Legislative Council, 2020; Kim et al., 2023).

Workplace support for caregivers remains limited, with flexible working arrangements or caregiver leave offered by only a minority of employers (Gordon et al., 2012; Legislative Council Secretariat, 2020). This scarcity of support is partially rooted in cultural norms that maintain a strict separation between work and family domains, discouraging open dialogue about care-giving responsibilities in professional settings (Yeung & Fung, 2007).

The formal care-giving support system in Hong Kong is characterized by fragmentation, with services such as respite care, case management, and financial aid often under-funded and poorly coordinated (Labour and Welfare Bureau, 2022; Legislative Council, 2020). The absence of a comprehensive caregiver systemic support policy reflects a reactive rather than proactive approach, failing to address the holistic challenges faced by Elder caregivers, including age-related physical limitations and cultural stigma surrounding mental health (Pinquart & Sörensen, 2006; Leung et al., 2023). For example, the stigma associated with psychological support in Chinese culture deters many caregivers from accessing counselling services despite experiencing high levels of stress and burnout (Fung & Chan, 2025; Li et al., 2022).

Cultural values also influence the prioritization of financial versus familial support. While filial piety motivates care-giving, it can overshadow

discussions about material needs such as workplace accommodations or cash allowances (Legislative Council Secretariat, 2020). Elder caregivers frequently rely on limited social security benefits or family savings, as formal employment benefits for caregivers are scarce and cultural norms discourage public acknowledgment of financial hardship (Ho et al., 2007; Lwi et al., 2022).

Effective interventions must reconcile these cultural norms with practical support measures. For instance, leveraging filial piety as a motivator for collective family engagement—such as framing respite care as a means to sustain long-term care-giving capacity—may enhance acceptance of formal services (Labour and Welfare Bureau, 2022; Fung & Chan, 2025). Community-based initiatives like Caregiver Cafés, which align with collectivist values by fostering peer interaction, have shown promise in reducing caregiver isolation and stigma (Fung & Chan, 2025). Furthermore, implementing caregiver-friendly workplace policies that recognize care-giving as a shared societal responsibility rather than a private family matter could help bridge cultural expectations with Systemic Support (Lorenz et al., 2021; Yeung & Fung, 2007).

In summary, family and social support networks in Hong Kong are deeply embedded in cultural values that both sustain and challenge caregiver well-being. While filial piety and family solidarity provide a foundational framework for care-giving, they also reinforce gender disparities; stigmatize help-seeking behaviours, and obscure structural deficiencies in support systems. Addressing these complex dynamics requires policies that respect cultural traditions while innovating to meet the evolving needs of an aging caregiver population.

2.4. Professional Commitment of Social Workers

Chui et al. (2025) explores the relationships between social workers' traits, professional identification, shared vision, job satisfaction and professional commitment in Mainland China. The study proposes that six traits of servant leaders, namely Commitment, Humility, Resilience, Integrity, Service and Teamwork, are essential for social workers. These six specific traits form a broad framework of traits of social workers, which has a significant association with social workers' shared vision and other outcomes. A questionnaire was developed and validated with Confirmatory Factor Analysis. The hypotheses in the study were all supported by the Structural Equation Model. The analysis showed that the traits of social workers have a significant positive effect on all other variables directly or indirectly through shared vision and identification of professionalism as intervening variables.

Shared vision and identification with professionalism directly affect job commitment, respectively. Additionally, shared vision also has significant direct effects on job satisfaction which in turn affects commitment. These findings can cast light on the importance of traits of social workers and shared vision, which can positively affect social workers' identification with their professionalism and effective performance. Essential Traits of social workers identified in this study may apply to the identification of potential social workers. The development of shared vision and traits of social workers are important strategies for improving the quality of service and retention of social workers.

2.5. Gaps in Hong Kong's Research Landscape

The study of support systems, well-being and stress among Elder informal caregivers in Hong Kong is a critical yet under-explored area of care-giving research. Despite the recognized pressures facing this demographic, which stem from Hong Kong's unique socio-economic and cultural landscape, there is a notable scarcity of localized studies that address these issues comprehensively. This is particularly evident in the limited use of advanced analytical methods, such as Structural Equation Modelling (SEM), to explore the complex relationships between support systems, caregiver stress and well-being (Mo et al., 2022).

Most existing research on care-giving in Hong Kong focuses on specific diseases or care-giving situations, such as dementia (Chan et al., 2023) or cancer (Chan & Ng, 2022), and often uses simpler statistical analyses. While these studies are valuable, they do not capture the broader spectrum of care-giving experiences influenced by Hong Kong's ageing population, high urban density, and blend of Eastern and Western cultural values (Zang et al., 2019). Furthermore, using SEM in this study enables a more nuanced understanding of the interdependencies and direct and indirect effects of various factors on caregivers' mental health and well-being.

3. THEORETICAL FRAMEWORK

Family Stress Theory, as outline by Boss (2002), offers a comprehensive framework for understanding stress dynamics within families, particularly in the context of care-giving. According to this theory, stress is not merely an incidental experience, but rather a dynamic process that evolves based on the interplay between stressors

and the family's ability to combat them. In the care-giving scenario, these stressors primarily consist of the demands associated with caring for a family member, ranging from physical tasks such as bathing and feeding, to emotional demands such as providing comfort and managing emotional upheaval.

According to Family Stress Theory, effectively managing these stressors hinges on a family's capacity to leverage available resources (Boss, 2002). These resources can be tangible, such as financial support to afford care services or medical expenses, or intangible, such as emotional support from other family members or a social network. The theory emphasises that the caregiver's perception of these resources also plays a crucial role. If caregivers perceive their resources as adequate and supportive, they are more likely to experience lower stress levels and higher well-being.

In summary, Family Stress Theory effectively frames the care-giving experience as a dynamic interplay of stressors and resources. It provides a valuable lens through which to view the challenges faced by caregivers, emphasising the importance of adequate support and the perception of support in managing these challenges. This theoretical framework highlights the complexities of care-giving and underscores the necessity of comprehensive support systems to ensure the health and well-being of caregivers.

3.1. Research Objectives

1. Examine the relationship between social support and stress among caregivers of the elderly:
2. Examine the impact of family support on stress among caregivers of the elderly:
3. Examine the effects of social support and family support on the psychological health and quality of life of caregivers of the elderly.

3.2. Research Scientific Framework and Hypothesis

With reference to the literature review and theoretical framework is proposed for this study as shown in Figure-1. Family stress theory is applied to care-giving in the model presented. Here, family support, social support and financial support are depicted as the primary resources influencing caregiver stress and well-being. These types of support interact collectively, as well as in isolation, to influence the caregiver's ability to manage stress and maintain well-being. Family support may involve physical assistance with care-giving tasks or emotional support, while social support may include community resources or friendships that provide emotional relief and advice. Financial support mitigates the economic strain that care-giving can impose, potentially reducing stress by alleviating financial worries (Choy et al., 2025).

The model also implies that the impact of these supports on well-being and stress is cyclical and interconnected. Adequate support can enhance well-being, which can reduce perceived stress levels and create a more sustainable care-giving environment. Conversely, inadequate support can lead to increased stress, which can negatively affect the caregiver's well-being and potentially lead to burnout or health issues. The hypotheses are listed below:

Hypothesis-1 (H1): Family support positively affects the well-being of caregivers.

Hypothesis-2 (H2): Social support positively affects the well-being of caregivers.

Hypothesis-3 (H3): Financial support positively affects the well-being of caregivers.

Hypothesis-4 (H4): Well-being negatively affects the stress of caregivers.

Hypothesis-5 (H5): Family support reduces the stress levels of caregivers through the mediating effect of increased well-being.

Hypothesis-6 (H6): Social support reduces the stress levels of caregivers through the mediating effect of increased well-being.

Hypothesis-7 (H7): Financial support reduces the stress levels of caregivers through the mediating effect of increased well-being.

The research scientific model in **Figure-1** below shows the relationships of Family Support, Social Support, Finance Support with Well-being and Stress:

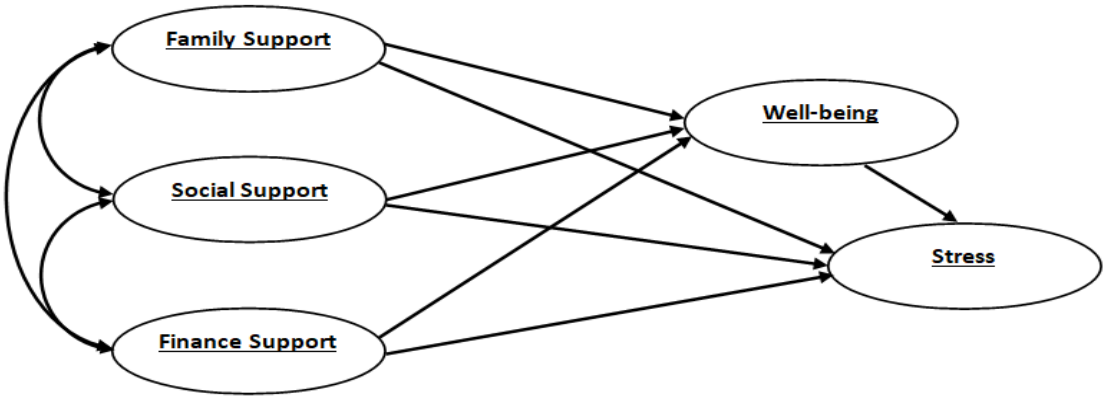

Figure 1: Theoretical Scientific Framework

3.3. Research Methodology

This study employed a quantitative methodology in the form of a cross-sectional survey to examine the experiences of elderly caregivers. Purposive sampling was used, confined to the districts of Kowloon City, Tai Po, Kwun Tong and Chai Wan. The eligibility criteria included (1) Informal caregivers, who were unpaid caregivers (family members, relatives and friends) aged 50 or over who provided care at home; (2) Care recipients were persons aged 18 or over whom were dependent on others for daily living. The survey was conducted via an online questionnaire between 1 February and 31 March 2025.

3.4. Research Design

A questionnaire developed to measure the five constructs of this study, namely, family support, social service support, financial support, well-being and stress. The development of instruments went through the following stages: 1. Review of related literature and instruments already developed; 2. Proposing constructs related to this study and defining the constructs to be measured; 3. Developing instruments according to the proposed construct and situation of social workers in Hong Kong and with reference to instruments used by other studies; 4. Seeking comments from some focused groups and professionals with relevant experience and expertise to refine the proposed instruments; 5. Collection of data to validate the instruments; 6. Confirmatory Factor Analyses for validating the instruments; 7. Using the Structural Equation Model to investigate the relationship among variables according to the proposed theoretical framework.

3.5. Measures

3.5.1. Family support (the variable is referred to as "family support" hereafter)

Family support is defined as the emotional, financial and action support given to caregivers by their family. Three items were developed in Chinese according to the definition, and literature reviewed. Two examples are "My family give me emotional support when I encounter difficulties in my role as caregivers", and "My family give me actual support when I encounter difficulties in my role as caregivers".

3.5.2. Social service support (the variable is referred to as "social support" hereafter)

Social support is defined as the sufficient social service support available and interpersonal help provided. Four items were developed in Chinese according to the definition, and literature reviewed. Two examples are "I perceive the sufficiency of social service support", and "I have use the social support services".

3.5.3. Financial support (the variable is referred to as "financial support" hereafter)

Financial support is defined as the perception of sufficient financial resources to support the caregivers in taking care of their care recipients. Three items were developed in Chinese according to the definition, and literature reviewed. Two examples are: "There is enough financial support for paying the expenditures in taking care of my care recipients", and "I am disturbed by the financial problems" (Reverse coding)".

3.5.4. Well-being (the variable is referred to as "well-being" hereafter)

Well-being is defined as the feeling of satisfaction with having interest, emotional stability, and energy in life. Five items were developed in Chinese according to the literature reviewed and the definition. Two examples are "I am full of energy in life" and "I feel emotionally calm and relax".

3.5.5. Stress (the variable is referred to as "stress" hereafter)

Stress is defined as the frustration felt due to not having enough sleep, feeling physically tired and

stressed, and being not able to take care of the elderly. Six items were developed in Chinese according to the literature reviewed and adapting some items from validated stress scales. Two examples are "I always feel stressed" and "I am always physically tired".

It should be noted that before the distribution of the above questionnaires, the Research Ethics Committee of the Authors' higher education institution was consulted and approved with the following Approval Code: ESP2025002.

4. ANALYSIS & RESULTS

A purposive sample of more than 113 caregivers in Hong Kong was chosen. After cleaning the data and removing cases with incomplete responses, 113 cases were analyzed using SPSS version 28 for demographic data, as well as for confirmatory factor analysis and structural equation modeling using AMOS version 29.

4.1. Demographic Profile

A total of 113 caregivers participated in the study, including of 15 men (13.3%) and 98 women (86.7%). The average age of caregivers was 61.7 years (SD = 9.4), with a median age of 60 years old. The oldest respondent was 82 years old. Regarding their relationship to the care recipients, most were sons or daughters (50 respondents, 44.2%), followed by spouses (34 respondents, 30.1%), other relatives (20 respondents, 17.7%), and parents of the Elder caregivers (3 respondents, 2.7%). Five participants did not report their relationship to the care recipients. Care recipients ranged in age from 60 to 98 years old, with an average of 82.4 years old (SD = 9.1). Most caregivers had been in their role for one to five years (25 respondents, 56.8%), followed by those who had been in their role for six to ten years (26 respondents, 26.3%). On average, caregivers devoted 46.2 hours per week to care-giving responsibilities (SD = 41.0). The gender distribution of the caregivers closely reflects the overall care-giving population. Regarding the health status of the care recipients, 50 (50.5%) experienced mobility issues, 25 (25.3%) had cognitive impairments, and 18 (18.2%) had mental health problems.

4.2. Confirmatory Factor Analysis

A measurement model of the five constructs was confirmed with excellent goodness of fit indices (CFI= 0.986; IFI=0.987; RMSEA=0.025; p for chi square=0.254). All factor loadings are above 0.50, and most are above 0.70, which is a good initial indicator of convergent validity. The regression weights also show that all paths are statistically significant ($p < .001$, denoted by ***), further supporting the reliability of the indicators.

The Cronbach Alpha reliabilities are all above 0.753 (Finance support: 0.912; Social support: 0.784; Family support: 0.753; Well-being: 0.921; Stress: 0.888). All significant factor loadings were above 0.50, indicating good convergent validity. All constructs meet the Fornell-Larcker criterion, as the square root of each construct's AVE is greater than its correlations with other constructs. The correlations between constructs are relatively low (ranging from -0.023 to 0.505), further supporting discriminant validity. The analyses above show that the five constructs are distinct and have discriminant validity and reliability.

4.3. Means and t-test of the Five Constructs

The means of the five constructs and its deviation from the theoretical mean of 3 are reported in Table-1. All constructs except family support is not significantly different from the theoretical mean of 3. The mean of family support is 3.168, significantly higher than the theoretical mean of 3 at 0.001 levels. The result shows that there is good family support to the caregivers.

Table 1: Means and t-test of the five Constructs

Construct	Mean	Standard error	T value for comparison with the theoretical mean of 3	Significance
				Two-sided p
Family support	3.168	0.0505	3.328	0.001
Finance support	2.991	0.05691	-0.155	0.877
Social support	3.0951	0.05138	1.851	0.067
Well-being	3.0159	0.05561	0.268	0.775
Stress	3.0074	0.0509	0.142	0.885

4.4. Effects of Gender, Age and Years of Care-Giving on the Five Constructs

T-tests are used to examine whether there is any significant difference due to gender. The results show that there is no significant difference between genders. The age of caregivers, elderly, and the years of care-giving experience are divided into two groups by the median value. T-tests show that there is no significant difference between the two groups.

4.5. Structural Equation Modelling (SEM)

In order to test the validity of Hypotheses 1 to 7 of this study, structural equation model is put forward according to the theoretical model for

analysis by Amos Version 29. The goodness of fit indices of the SEM Model is excellent (CFI=0.975; IFI=0.976; RMSEA= 0.032; p=0.131), providing excellent support for the theoretical model. Table-2 shows the standardized direct effects among the variables. The total variance of well-being and stress explained by the model is 35.1% and 20.0% respectively.

Table 2: Standardised Direct Effect (DE) and Total Effect (TE) between Constructs

	Family Support		Finance Support		Social Support		Well-being	
	D E	T E	DE	TE	DE	TE	DE	TE
Well-being	.251*	.251*	.291*	.291*	.200*	.200*		
Stress	ns	-.098*	ns	-.114*	ns	-.0786*	-.393*	-.393*

*p<0.001

Figure-2 shows the significant direct effects of the variables analyzed by SEM.

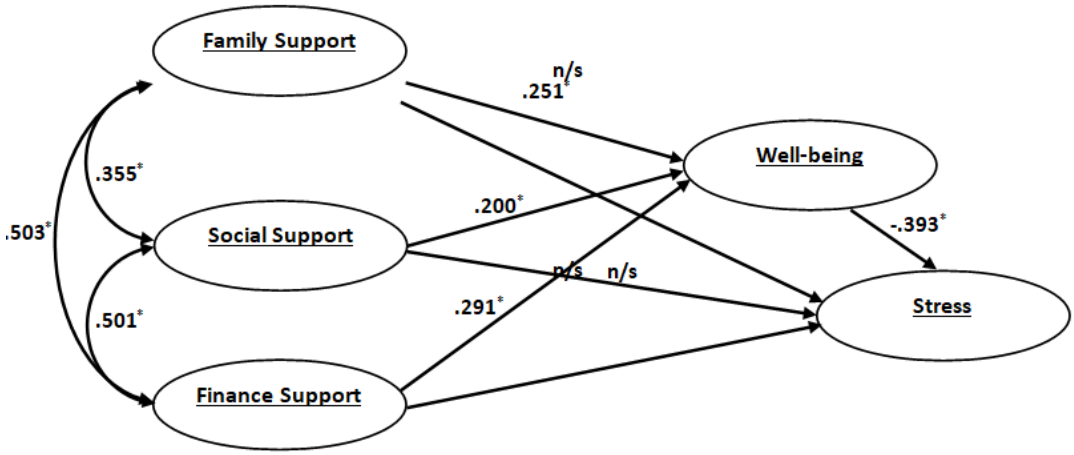

Figure 2: Results of SEM Analysis

(The above research model and its Statistical Analysis results are shown diagrammatically between the relationships of Family Support, Social Support, Finance Support with Well-being and Stress. The correlation figures (from 0 to 0.5) are results of statistical analysis.)

As shown in Figure-2 and Table-2, it can be seen that the effects of the three support variables on well-being are all significant but their effects on stress is insignificant. Table-2 reveals a significant direct and total effect of 0.251 of *Family support on Well-being*. These results support Hypothesis-1, which states that family support of caregivers will positively affect their well-being.

The significant direct and total effect of 0.200 of *Social support* on well-being provides validation for Hypothesis-2, which states that social service support of caregivers will positively affect their well-being.

The significant direct and total effect of 0.291 of *finance support* on well-being supports Hypothesis-3, which states that financial support of caregivers will positively affect their well-being.

The significant direct and total effect of -0.393 of well-being on stress supports Hypothesis-4 which states that well-being of caregivers will reduce their stress.

Table-2 reveals that Family support has no significant direct effect, but a significant total effect of -0.098 on stress through the intervening variable well-being. These results support Hypothesis-5, which states that family support of caregivers will reduce their stress through the intervening variable well-being.

Social service has no significant direct effect, but a significant total effect of -0.078 on stress through the intervening variable well-being. These results support Hypothesis-6, which states that social service support of caregivers will reduce their stress through the intervening variable well-being.

Finance support has no significant direct effect, but a significant total effect of -0.114 on stress through the intervening variable well-being. These results support Hypothesis-7, which states that finance support of caregivers will reduce their stress through the intervening variable well-being.

5. DISCUSSION

This study provides detailed insights into how support systems, psychological well-being, and stress interact among Elder caregivers in Hong Kong, framed within the city's distinctive social welfare context and cultural environment.

5.1. Gender Disparity in Care-giving Roles

While this study used a purposeful sampling method, the sample's gender distribution closely mirrors that of the broader caregiver population in

Hong Kong. The 2021 Population Census reported approximately 164,000 informal caregivers in Hong Kong, with a significant majority (86.5%) being women (Census and Statistics Department, 2022). This strong skew towards women caregivers is reflected in the current study's sample, suggesting that the experiences and perspectives captured here are likely representative of the predominant women caregiver population in Hong Kong. This alignment strengthens the external validity of the findings related to gender and care-giving, particularly concerning the challenges and support needs of women caregivers (Pinquart & Sörensen, 2006). However, the overrepresentation of women in both the sample and the general caregiver population highlights the need for future research to delve deeper into the gendered nature of care-giving, exploring the specific burdens, coping mechanisms, and support needs of women caregivers in Hong Kong. Further investigation into the reasons behind this gender disparity in care-giving roles is also crucial for developing targeted policies and interventions that address the unique challenges faced by women in this demanding role (Kazemi et al., 2021).

5.2. Asymmetrical Effects of Support on Well-being vs. Stress

The robust positive associations between family, social, and financial support and caregiver well-being ($\beta = 0.200–0.291$, $p < 0.001$) align with theories of social support as a protective factor for psychological health. In Hong Kong, where filial piety remains a cultural cornerstone, strong family support (mean = 3.168) likely reflects both intergenerational solidarity and communal expectations to uphold care-giving responsibilities. This aligns with qualitative studies in Chinese societies, where family networks often serve as the primary source of emotional and practical assistance for caregivers.

Notably, however, these support constructs exhibited no direct effects on stress, a paradox that may stem from two interrelated mechanisms. First, Hong Kong's targeted social policies—such as the Old Age Living Allowance (OALA) and non-means-tested Old Age Allowance (OAA)—effectively mitigate financial stressors for many caregivers. The 2023 increase in the Caregiver's Allowance to HK$3,000 (~ US$400) monthly for low-income families further buffers economic strain, potentially "flooring" financial stress at manageable levels for most participants. Thus, while financial support enhances well-being by providing resources for self-care, its role in reducing stress may be less pronounced when baseline financial needs are partially met by systemic support policy.

Second, stress among caregivers in Hong Kong may be driven by unmeasured, context-specific factors. For instance, the city's high cost of living, limited public long-term care services, and cultural stigma around seeking professional mental health support could amplify stressors unrelated to support systems. Caregivers may also face unique challenges such as navigating complex eligibility criteria for welfare schemes or balancing care-giving with full-time employment in a hyper-competitive labor market, both of which could sustain stress despite existing support networks.

5.3. The Role of Cultural and Systemic support policy Context

Hong Kong's welfare system operates within a "residual" model, where government intervention is targeted rather than universal. The OALA, for example, requires strict asset testing, potentially excluding middle-class caregivers who do not qualify for benefits but still face financial pressures. This "benefits cliff" may create inequities: while some caregivers receive financial relief, others fall into a support gap, leading to heterogeneous stress experiences not captured by the study's broad "financial support" construct. Future research could disaggregate formal (government) vs. informal (family/community) support to better isolate systemic support policy impacts.

Culturally, Hong Kong's emphasis on self-reliance and familial responsibility may discourage caregivers from acknowledging stress or seeking external help, even when support systems exist. This "culture of silence" could explain why social support (e.g., peer networks) correlates with well-being (via positive interactions) but does not directly reduce stress—caregivers may underreport stress to maintain perceived competence or avoid burdening others, creating a disconnect between subjective well-being and stress outcomes.

5.4. Well-being as a Mediator of Stress Reduction

The strong negative association between well-being and stress ($\beta = –0.393$, $p < 0.001$) underscores the importance of psychological well-being as a proximal determinant of stress levels, even when structural support is insufficient. In Hong Kong, where care-giving is often framed as a moral duty, interventions that enhance caregivers' self-efficacy, emotional regulation, and sense of purpose (all components of "well-being") may be particularly impactful. For example, integrating mindfulness programs or cognitive-behavioral therapy into

community care services could equip caregivers with tools to manage stress indirectly, complementing existing financial and social support systems.

6. IMPLIACTIONS FOR PRACTICE & SYSTEMIC SUPPORT POLICY

6.1. Integrating Holistic Cultural Support for Hong Kong's Elder Caregivers

The findings of this study highlight the critical need to establish a comprehensive, multi-dimensional support system for informal caregivers in Hong Kong. This necessity stems from the clear interconnection between caregiver well-being and the quality of care provided to Elder adults. Drawing upon the empirical evidence presented, specially, the demonstrated positive effects of family support, social services, and financial assistance on well-being ($\beta = 0.200–0.291$, $p < 0.001$) and the pivotal mediating role of well-being in alleviating stress ($\beta = –0.393$, $p < 0.001$), the following recommendations outline strategic interventions, systemic support policy advocacy, and collaborative efforts that align with existing literature.

6.2. Targeted Interventions: Enhancing Well-being Enhancement and Reducing Stress

To effectively address the nuanced needs of informal caregivers in Hong Kong, targeted interventions must distinguish between enhancing well-being and reducing stress. Community-based programs such as social clubs for Elder caregivers, peer mentorship, and creative arts workshops should be developed to enhance caregiver well-being. These initiatives leverage informal social networks and align with evidence suggesting strong correlations between social support and improved psychological well-being. To address caregiver stress, which often stems from Systemic Support Policy issues such as a lack of affordable respite care, it is crucial to expand these services. This could include volunteer-led relief and short-term residential care options to help alleviate the continuous care-giving burden in Hong Kong's high-pressure environment (Legislative Council Secretariat, 2020; Leung et al., 2023).

6.3. Systemic support policy Advocacy: Strengthening Safety Nets and Promoting Exclusivity Scientifically

There are structural inequalities in financial support and improving access to mental health services. Advocacy efforts should push for universal, non-means-tested financial allowances for all informal caregivers to address the 'support gap' that currently excludes many middle-class caregivers. This approach would complement existing programs such as the Old Age Living Allowance (OALA) and Old Age Allowance (OAA), ensuring financial support is available to people of all socioeconomic backgrounds (Legislative Council Secretariat, 2023). Furthermore, public health campaigns should work to destigmatize mental healthcare, promoting it as an essential and normative service, particularly for caregivers, who traditionally rely on self-care due to cultural norms. (Leung et al., 2023).

6.4. Fostering Cross-Sector Collaboration

It is necessary to integrate healthcare providers, social services and systemic support policy frameworks in order to create a sustainable support system for Elder caregivers in Hong Kong, integrating social workers into primary healthcare teams enables them to provide direct assistance to caregivers, helping them to navigate welfare systems and address unmet psychosocial needs. This integrated approach ensures that formal support, such as financial aid and respite care, is effectively aligned with caregivers' unique needs, facilitating the transition from systemic support policy to practice (Hailu et al., 2024).

6.5. Workplace and Community Integration

In a city like Hong Kong, where many people balance work with care-giving responsibilities, supportive workplace policies are essential. Introducing paid care-giving leave and flexible working hours can significantly reduce the burden on caregivers and improve their work-life balance (Lau et al., 2019). Such measures support caregivers in managing their dual roles and interpersonal help to sustain the informal care-giving workforce. Additionally, community organizations play a pivotal role in enhancing caregiver support by providing accessible information on resources such as counseling services and financial aid. To ensure exclusivity and effectiveness in supporting Hong Kong's diverse caregiver population, outreach efforts should employ multilingual platforms and culturally sensitive programming.

7. CONCLUSION

This study advocates for a coordinated, compassionate approach to caregiver support in Hong Kong, one that recognizes caregivers not merely as care providers but as individuals requiring holistic and cultural support. By differentiating interventions for well-being and stress, advocating for inclusive policies, and fostering cross-sector collaboration, stakeholders

can create a sustainable ecosystem where caregivers thrive physically, emotionally, and mentally. These efforts are not only ethical imperatives but essential for sustaining Hong Kong's informal care-giving infrastructure amid a rapidly aging population. Prioritizing caregiver well-being today constitutes a vital investment in the quality of elderly care tomorrow, ensuring that both caregivers and care recipients receive the dignity and support they deserve.

8. LIMITATIONS OF THE STUDY

The study has several limitations. The use of purposive sampling, limited to specific districts within Hong Kong, limits the generalizability of the findings to the wider population of caregivers. The cross-sectional design captures a single point in time and cannot establish causal relationships between variables. The reliance on self-reported data through questionnaires may introduce biases related to social desirability and recall. The relatively small sample size of 113 participants may limit the statistical power of the analysis. Future research should employ larger, more representative samples and longitudinal designs to overcome these limitations and provide a more nuanced understanding of the dynamics of informal care-giving in Hong Kong. In addition, exploring the experiences of different caregiver groups, such as men caregivers and those caring for people with specific condition would enrich the understanding of care-giving challenges and inform the development of tailored support programmes.

ETHICAL APPROVAL AND CONSENT TO PARTICIPATE

The investigations were conducted in accordance with the principles outlined in the Declaration of Helsinki (1975, revised in 2013). According to point 23 of this declaration, approval must be obtained from the local Ethical Committee or Institutional Review Board (IRB) prior to conducting the research, ensuring that the study adheres to both national and international guidelines. More information can be found at:

https://www.mdpi.com/ethics#_bookmark9

Ethical approval was granted by the Research Ethics Committee of the Gratia Christian College with the details listed below. Written informed consents were obtained and recorded. This research is not involved in any tests on human bodies, there is no need for ethical approval and consent to participate.

Ethics Committee Name: Research Ethics Committee of Gratia Christian College
Approval Code : ESP2025002
Approval Date: February 10, 2025

CONSENT FOR PUBLICATION

The Authors hereby provide consent for publication by the Publisher.

COMPETING INTERESTS

The author declares NO conflict of interest. There are no other third parties in the design of the study, in the collection, analyses, or interpretation of data, in the writing of the manuscript, or in the decision to publish the results.

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