

The Impact of Caregiving Stressors on Cancer Caregivers' Well-Being

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Abstract: *This study examines the impact of various caregiving stressors on cancer caregivers. It utilises a secondary data set from the National Alliance for Caregiving to understand the impact of loneliness, burden, choice in caregiving, and health status on caregivers. After analysing the data set using different regressions, multiple trends were found. We found that both ADLs (Activities of Daily living) and IADLs (Instrumental Activities of Daily Living) were significant predictors of caregiver burden. Additionally, the study found that burden positively predicted physical strain and the relationship between them was moderated by choice. Further, we observed that loneliness had a positive relationship with the caregivers' ability to manage their own health and this relationship was mediated by emotional stress. Lastly, the impact of caregiving on caregivers' health status at the time of caregiving was found to be negative and significant.*

Keywords: caregiving stress, cancer caregivers, loneliness impact, caregiver burden, health status

1. Introduction

Do cancer caregivers experience a significant burden? As of January 2024, an estimated 4.6 million individuals were involved in at-home caregiving responsibilities for family members suffering from cancer (Mosher et al., 2024). Cancer caregiving responsibilities span a number of activities including but not limited to assisting with daily living tasks such as eating, performing nursing tasks, helping with more complex activities such as managing finances for the care recipient. These responsibilities draw on a wide range of skills and can be physically as well as emotionally demanding for caregivers. Given the critical nature of the work cancer caregivers are involved in, understanding the nuanced dynamics of how this role can impact caregivers' overall well-being is crucial for advancing healthcare policy and practice on the best practices for cancer care and recovery. Thus, the present paper aims to underscore some of these concerns by identifying relevant stressors for cancer caregivers and the impact that these stressors can have on the overall well-being of the caregivers themselves.

The Caregiving Role

Informal caregiving is broadly defined as unpaid services provided by a caregiver to patients in need of care and these services can include but are not limited to helping with personal needs and household chores, managing a person's finances, or visiting regularly to name a few (National Alliance for Caregiving, 2020; Kim et al., 2009). Feelings of hopelessness, anger, and sadness are common among caregivers of cancer patients (National Cancer Institute, 2023). Since the quality of care provided to cancer patients is a crucial determinant of recovery, it is thus important to ensure that cancer caregivers are well-supported such that they are able to cater to the needs of their care recipients. Thus, a robust support system that safeguards and enhances the overall well-being of cancer caregivers is an imperative structural element that must be embedded into healthcare systems to ensure that cancer patients' recovery journeys are well-assisted.

Theory of Caregiving Dynamics

Several theoretical principles have been advanced in the literature that address the dynamics and nuances of caregiving. The Theory of Caregiving Dynamics proposed by Williams (2007) is one such theory that outlines the underlying forces that provide the motivation for caregivers and care recipients to begin and continue a caregiving relationship. The theory defines the concepts of commitment, expectation management, and role negotiation which are the essential interacting processes that allow for the progression of caregiving through the illness trajectory. These interacting processes are in-turn supported by self-care, new insight, and role support (Williams, 2007).

Commitment involves the development of a loving connection between the caregiver and the care recipient based on the determination to overcome difficulties in the process of providing care to patients by placing care needs above all other needs while also providing a comforting environment and a positive attitude to aid recovery. The concept of self-care is closely linked with commitment as it allows for the maintenance of a supportive physical environment conducive for good health while providing outlets for letting go of frustrations and an active space to temporarily experience ordinary life away from the demands of caregiving. Self-care energises commitment to caregiving (Williams, 2007). Another essential process in the caregiving relationship is expectation management such that a desirable future is envisioned with a focus on returning to normal life by meeting the demands of the illness trajectory one day at a time. New insight grounds the process of expectation management through evolving awareness, a renewed focus on personal growth, and adopting a positive outlook by recognising the positive outcomes gained from the treatment process (Williams, 2007). Finally, role negotiation is another interacting process whereby the caregiver moves the care recipient along the illness trajectory by assisting them with a voice that helps to navigate the complexities of the healthcare process. Role support is a closely linked concept with role negotiation as it allows the caregiver to find support to perform other responsibilities, obtain helpful information, and most importantly enlist competent healthcare

professionals to meet the needs of the care recipient (Williams, 2007).

In a functional caregiving relationship, the above three interacting processes of commitment, expectation management, and role negotiation are grounded within the concepts of self-care, new insight, and role support, respectively. Essentially, caregivers are able to maintain their commitment to the caregiving relationship when their own self-care needs are met and when caregivers themselves are healthy, both physically and mentally. New insights and understanding the caregiving experience helps caregivers to manage expectations of their own as well as the care recipients. Having access to role support helps caregivers to adeptly negotiate their caregiving role and meet the demands of the caregiving process (Williams, 2007).

Impact of Caregiving: Costs and Consequences for Caregivers

Despite these underlying dynamics, the process of caregiving can be mentally and physically challenging to the caregiver at different stages of the illness trajectory. Each new stage of the treatment process presents caregivers with unique challenges. The journey of a caregiver begins with the diagnosis of cancer and most caregivers are usually thrust into their new roles with no prior training or experience (O'Mara, 2005). During the treatment process, caregivers must make several practical considerations while they adjust to their new role. These may range from renegotiating their responsibilities at work, adopting a new schedule that aligns with treatment demands, learning new nursing and caregiving skills as required in the caregiving process to name a few (Gaugler et al., 2013). Finally, towards the end of the treatment process, while caregivers may feel ready to return to their normal lives, care recipients may still require additional support to adjust back to regular life post cancer treatment (Lethborg et al., 2003). In more unfortunate cases where cancer patients approach their end-of-life stages, caregivers may require support in the form of education, counselling, and moral support to prepare them for the process of grief and recovery (Harding et al., 2011). At each of these stages, cancer caregivers must rely heavily on the character skills of resilience and their intrinsic motivation to be engaged with providing such demanding care for their care recipients.

Studies that have examined the underlying motivations of caregivers have found that feelings of love towards the care recipient is a major motivating factor for as many as 75% of the respondents, followed by feeling a sense of duty (50.5% of respondents; Gupta et al., 2024). While it may seem intuitive that caregivers feel a sense of intrinsic motivation to provide care for their recipients, the demanding and exacting nature of providing care to cancer patients inherently entails a lot of burden. Caregiver burden is defined as "the extent to which caregivers perceive that caregiving has had an adverse effect on their emotional, social, financial, physical and spiritual functioning" (Zarit et al., 1986). Several factors are associated with increased caregiver burden including gender, age, employment status, race and ethnicity, and socioeconomic status (Kim et al., 2012; Pinquart et al., 2005; Williams et al., 2003; Covinsky et al., 2003). A factor that is a direct determinant of the level of burden experienced by caregivers is linked to the number of care activities that

caregivers perform for their care recipient. These are encapsulated in two closely linked concepts: Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). ADLs refer to fundamental activities that are required to independently care for oneself (e. g.: eating, dressing), while IADLs refer to activities that require complex cognitive skills that are essential in caring for oneself (e. g.: managing finances, housekeeping). Research shows that caregivers who were engaged in a greater number of ADLs and spent more time on each task reported greater perceived burden (Siminoff et al., 2024).

Interestingly, another factor linked to stress levels experienced by caregivers is whether or not caregivers were able to exercise their choice in becoming involved in the caregiving role. One study found that caregivers who did not have a choice in providing care were more than three times as likely to report stress when compared to caregivers who had a choice (Winter et al., 2010). Furthermore, caregiving is also a vulnerability factor for experiencing loneliness. A study conducted over a six-month period found that approximately one third of the caregivers had high levels of loneliness, and these elevated levels of loneliness did not change over three time points. Furthermore, for any given time point, caregivers with higher levels of perceived stress and caregiver burden reported higher levels of loneliness (Ross et al., 2020).

Another significant challenge that caregivers experience in the process of caregiving is their inability to manage and care for their own health. Caregiver burden and strain have also been related to the caregiver's own poor health status, increased health-risk behaviours such as smoking, and higher use of prescription drugs (Beach et al., 2000). Additionally, due to the excessively demanding nature of the role of caregiving, research suggests that caregivers often experience poor mental health outcomes as a result of the constant stressors and strains involved in providing care to cancer patients (Pottie et al., 2014; Sallim et al., 2015).

The present study

Against this background, the present study aims to identify the critical stressors that pose significant challenges to cancer caregivers' overall well-being. In doing so, the following hypotheses are examined:

H1: ADLs and IADLs predict cancer caregiver burden such that greater number of care activities are associated with higher levels of caregiver burden.

H2: Cancer caregiver burden levels are positively associated with physical strain and this association is moderated by choice such that having a choice to assume the caregiver role is linked to greater levels of burden and physical strain as opposed to not having the choice.

H3: Emotional stress levels of caregivers mediates the relationship between experienced loneliness and the difficulty faced by caregivers in managing their own health.

H4: The caregiving process has a negative impact on caregivers' health status at the time of caregiving.

2. Method

The present study uses secondary data that was originally published by the National Alliance of Caregiving – a non-

profit organisation based in the US that exists to provide better environments and support networks for family caregivers. The National Alliance of Caregiving conducts independent research and publishes open-source datasets for the purpose of enhancing collaboration across disciplines and to influence policies and programs that are aimed at improving the lives of family caregivers. The data for the present study have been obtained from the Caregiving in the US 2020 dataset.

Participants

The dataset obtained from the National Alliance for Caregiving repository was longitudinal with two data collection points – 2014 and 2019. In order to make the dataset relevant to the purpose of the current study, the original dataset was cleaned and structured such that only caregivers for cancer patients were included in the sample and only data collected in 2019 were included for analysis. Post the data cleaning, the dataset contained a sample of 113 participants ($M_{age} = 52.92$, $SD = 15.81$; female = 65.49%). All participants were primary caregivers of cancer patients and were located in multiple states in the United States of America.

Study variables

The dataset contains various demographic, physical health, and mental health related data points obtained from caregiver respondents. To address the hypotheses to be examined in the present study, the following variables of interest were selected from the dataset.

Activities of daily living (ADLs): Measured as a count of the number of ADLs that caregivers engaged in for their care recipients. This ranged from 0 to 6.

Instrumental activities of daily living (IADLs): Measured as a count of the number of IADLs that caregivers performed for their care recipients. This ranged from 0 to 7.

Burden: Measured using a 5-point Likert scale where respondents indicated the level of burden ranging from 1 = lowest burden and 5 = highest burden.

Choice: Measured using a categorical scale where respondents indicated whether or not they had a choice in providing care to their care recipient. The three options presented were: “Had a choice” and “Did not have a choice” and “Did not answer”.

Physical strain: Respondents indicated the degree of physical strain they felt as a result of caregiving on a 5-point Likert scale ranging from 1 = not a strain at all to 5 = very much a strain.

Emotional stress: Respondents indicated the extent of emotional stress experienced as a result of caregiving on a 5-point Likert scale ranging from 1 = not at all stressful to 5 = very stressful.

Loneliness: Respondents indicated the degree to which they feel alone in their role as a caregiver on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Difficulty in managing health: Respondents indicated the degree to which they found it difficult to care for their own health on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Caregiver health status: Respondents provided an assessment of their own health status at the time of caregiving on a 5-point Likert scale ranging from 1 = poor and 5 = excellent.

Impact of caregiving on caregiver health status: Respondents indicated the impact of the caregiving process on their health status on a 3-point Likert scale ranging from 1 = Made it better to 3 = Made it worse.

3. Data Analysis

In preparation for analysis, the dataset was first cleaned to identify and remove incomplete data points and check for any errors in the data. There were no outliers found in the dataset. To test the four hypotheses as previously specified, regression analyses were applied. For H1, a multiple linear regression was employed to test the effect of two predictors—the number of ADLs and IADLs on the burden experienced by caregivers. For H2, a moderated regression analysis was run to test whether caregiver burden can predict physical strain experienced and this association was moderated by choice. For H3, a mediated regression model was tested to examine the indirect effect of loneliness on difficulty in caring for caregivers’ own health as mediated by emotional stress. Lastly, for H4, a simple linear regression was run to test for the effect of caregiving impact on caregiver health status at the time of caregiving. All analyses were conducted using the R software with the *lavaan* and *lm.beta* packages.

4. Results

The descriptive statistics and the correlation matrix of the study variables are presented in Table 1. The correlation values indicate initial support for all of the hypotheses.

In case of *H1*, both ADLs and IADLs were found to be significant predictors of caregiver burden with the regression model indicating that the predictors explained 68% of the variance in caregiver burden ($R^2 = 0.68$, $F(2) = 199.26$, $p < .01$). Both ADLs ($\beta = 0.58$, $t = 9.29$, $p < .01$) and IADLs ($\beta = 0.37$, $t = 5.91$, $p < .01$) were shown to positively predict caregiver burden. Results for this model are presented in Tables 2 and 3.

For *H2*, the hypothesis was supported by the results from the moderated regression model whereby burden positively predicted physical strain and this relationship was moderated by choice. The model was statistically significant ($R^2 = 0.25$, $F(3) = 13.38$, $p < .01$). There was a significant main effect of burden ($\beta = 0.69$, $t = 5.32$, $p < .01$) and a significant main effect of choice ($\beta = 0.65$, $t = 2.99$, $p < .01$). Finally, the interaction term was also significant ($\beta = -0.50$, $t = -2.18$, $p < .01$). Simple slope analysis revealed that for caregivers who have a choice, burden was a strong positive predictor of physical strain ($b = 0.63$, $p < .01$) and for caregivers who did not have a choice, burden was a weaker, yet significant predictor of physical strain ($b = 0.29$, $p < .01$) as is depicted in

Figure 1. Results for this model are presented in Tables 4, 5, and 6.

In the case *H3*, the results again supported the hypothesis. The total effect of loneliness on difficulty in managing caregivers' own health was significant ($\beta = 0.60, p < .01$). After including emotional stress in the model, the direct effect of loneliness on difficulty in managing caregivers' own health reduced but remained significant ($\beta = 0.51, p < .01$). There was also a significant positive relationship between loneliness and emotional stress ($\beta = 0.29, t = 3.14, p < .01$) and emotional stress positively predicted difficulty in managing caregivers' own health ($\beta = 0.29, t = 3.80, p < .01$). The indirect effect of loneliness on difficulty in managing caregivers' own health through emotional stress was also significant ($\beta = 0.08, p < .01$) indicating the mediating effect of emotional stress on the relationship between loneliness and the difficulty caregivers experience in managing their own health. Results for this model are presented in Tables 7 and 8.

Finally, for *H4*, results from the simple linear regression supported the hypothesis such that the impact of caregiving on caregivers' health status at the time of caregiving was found to be negative and significant. The model was statistically significant ($R^2 = 0.05, F(1) = 7.05, p < .01$) indicating that caregiving impact explained 5% of the variance in caregiver health status. Caregiving impact negatively predicts caregiver health status ($\beta = -0.25, t = -.66, p < .01$). Results for this model are presented in Tables 9 and 10.

5. Discussion

The aim of the present study was to identify the critical stressors that are part of the caregiving process that have a significant impact on cancer caregivers' overall well-being. To this end, the open-access dataset sourced from the National Alliance for Caregiving repository was analysed for relevant study variables. Results from the analyses support the hypotheses of the study.

For *H1*, it was found that being engaged in a greater number of ADLs and IADLs leads to a significantly higher burden for cancer caregivers. This finding is consistent with previous research that reports that caregivers' levels of burden were positively linked to the number of ADLs they performed and the amount of time they spent on care activities (Siminoff et al., 2024). Since performing basic care activities in the context of ADLs requires the caregiver to be engaged physically as well as emotionally it can be perceived as a taxing care responsibility by caregivers leading to higher burden levels. Additionally, since IADLs are tasks that draw on the cognitive faculties of the caregiver, being engaged in a greater number of ADLs and IADLs can have the impact of overloading the caregiver with care responsibilities, thereby significantly increasing burden.

In case of *H2*, results showed that caregiver burden significantly predicts the physical strain that caregivers feel and this relationship was moderated by choice such that caregivers who had a choice in being engaged in care responsibilities reported a stronger positive burden-physical strain relationship as opposed to caregivers who did not

exercise such choice. This finding was in contrast to findings from a previous study that reported that caregivers who did not have a choice were more than three times as likely to report stress when compared to caregivers who had a choice (Winter et al., 2010). This phenomenon could be attributable to the underlying motivations that energise caregivers to provide care to cancer patients. Studies have shown that commitment, feeling a sense of duty, and love can be major motivating factors for caregivers (Williams, 2007; Gupta et al., 2024). Given these motivations, it could be argued that caregivers who willingly volunteer to be engaged in caregiving feel a greater sense of responsibility and commitment to their care recipient and hence are likely to exert themselves in the process of caregiving by going above and beyond to meet the needs of the patient. This may lead to faster exhaustion. On the other hand, one potential explanation for the weaker association between burden and physical strain for caregivers who did have a choice in taking up caregiving responsibilities could be that they are less motivated and/or emotionally engaged with the care recipient, thereby perhaps not exerting themselves at the rate of their counterparts who made the choice for caregiving. However, these assertions need to be tested.

For *H3*, it was found that loneliness has a positive relationship with caregivers' ability to manage their own health and this relationship is mediated by emotional stress. The caregiving role can make one susceptible to loneliness because of the inherently demanding nature of the responsibility which could isolate caregivers from their usual social circles, professional pursuits, and the normalcy of ordinary life. Furthermore, the daily challenges of caregiving make caregivers vulnerable to experiencing high levels of emotional stress depending on where the care recipient is in their illness trajectory and how well they may be responding to on-going treatment. Taken together, the loneliness and emotional stress do not bode well for caregivers who then face difficulties in focusing on their own health. The Theory of Caregiving Dynamics highlights these issues within the concept of self-care where the need to create spaces to experience ordinary life outside of caregiving is underscored as an important mechanism to cope well with stress. This finding emphasises the need to have systems in place that caregivers can rely on for support and connection such that loneliness and emotional stress levels can be managed well before they can negatively impact caregivers' ability to care for their own health.

Lastly in case of *H4*, results showed that there is a negative relationship between the impact of caregiving and the caregivers' own health status at the time of caregiving. This finding essentially spotlights the intense nature of the caregiving role by underscoring how being engaged in providing care to a cancer patient can have the effect of eroding the caregivers' health. According to the Theory of Caregiving Dynamics, role support is an important element of maintaining a functional caregiving relationship such that caregivers are able to negotiate their own responsibilities in the caregiving process, manage care expectations well, and draw on external support where required such that caregivers themselves do not get excessively taxed as a result of stepping into the caregiver role. Given this finding, it is vital that healthcare systems in the space of oncology are sensitised to

the needs of cancer caregivers who may be suffering silently. In the interest of seeking better outcomes, the healthcare teams of cancer patients would do well to design treatment strategies and plans that not only prioritise the recovery of cancer patients but also optimise for the overall well-being of their caregivers.

6. Limitations and Directions for Future Research

The present study is not without limitations. Firstly, the data used in this study were collected in the US with a primarily American caregiver population. Thus, these findings are not readily generalisable to the caregiving populations across other demographics and geographies who may be likely to face different or more severe stressors depending on the predominant local healthcare challenges. Thus, future studies must consider these aspects in the process of contextualising the stressors caregivers face and developing interventions to address them. Furthermore, since this was an open-access dataset, some analyses were precluded by the availability of limited data, especially around mental health constructs such as anxiety, depression, cognitive overload, negative affect, adjustment issues among others. Future studies can address these concerns by conducting primary research with robust methodologies. Additionally, qualitative methodologies can help shed light into the lived experiences of caregivers, thus providing a richer dataset for the implementation of strategies for better healthcare outcomes in the space of cancer care.

7. Practical Implications

The findings of this research point to the importance for families, healthcare professionals, social systems, and policy makers to aid cancer caregivers to be able to justice to their role without negative personal outcomes. Stepping into the caregiver's role would necessitate a change in family dynamics such that caregivers' families are better able to offer support to the caregiver. Counselling services may help to navigate these changes smoothly for caregivers as well as their families. Additionally, the healthcare systems can embed support groups and networks into their cancer care programs such that caregivers are initiated into an already available system they can draw on for support. Furthermore, processes such as running a helpline service, psycho-education workshops, grief counselling services, regular health checks that are specifically directed at cancer caregivers can help the caregivers feel seen and empowered, thereby better able to perform in their caregiving role.

8. Conclusion

The present study aimed to identify the relevant stressors for cancer caregivers that can impact their overall well-being. A secondary data analysis was conducted using the data that were part of the open-access dataset collated by the National Alliance for Caregiving (US). Results showed that the process of caregiving involves navigating a number of stressors including number of care activities, caregiver burden, physical strain, loneliness, emotional stress, lowered ability to manage caregivers' own health, and lowered caregiver health status. Taken together, caregiving can be an inherently

demanding and challenging role that necessitates greater support from families, social systems, and the healthcare industry. Healthcare practitioners and policy makers must account for these unique challenges faced by cancer caregivers to facilitate better outcomes in the arena of cancer care.

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Table 1: Means, Standard Deviations and Correlation Matrix of Study Variables

	Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1	ADLs	2.15	2.06									
2	IADLs	4.93	1.73	0.49**								
3	Burden	3.24	1.38	0.77**	0.66**							
4	Physical Strain	2.56	1.25	0.52**	0.23*	0.44**						
5	Emotional Stress	3.53	1.13	0.35**	0.26**	0.41**	0.41**					
6	Choice	1.56	0.5	-0.17	-0.01	-0.15	0.15	0.09				
7	Managing Caregiver Health	2.65	1.18	0.23*	0.22*	0.28*	0.49**	0.43**	0.21*			
8	Loneliness	2.38	1.16	-0.01	0.02	-0.02	0.37**	0.29*	0.34**	0.59**		
9	Caregiver Health Status	3.32	0.97	-0.13	-0.15	-0.27*	-0.21*	-0.03	-0.07	-0.38**	-0.13	
10	Caregiving Impact on Caregiver Health	2.23	0.53	0.11	0.15	0.16	0.16	0.35**	0.17	0.51**	0.22*	-0.25*

Table 2: Multiple Linear Regression: Effect of ADLs and IADLs on Burden

Predictor	B	SE	B	t-value	p
Intercept	0.90	0.23		3.84	<0.01
ADLs	0.39	0.04	0.58	9.29	<0.01
IADLs	0.30	0.05	0.37	5.91	<0.01

Table 3: Model Fit Statistics

	Sum of squares	Df	Mean sum of squares	F	p
Model	143.47	2	71.74	199.26	<0.01
Residual	64.96	108	0.60		
R ²	0.69				
R ² _{adj}	0.68				

Table 4: Moderated Regression Analysis: Burden predict Physical Strain and this association is moderated by Choice

Predictor	B	SE	β	t-value	p
Intercept	0.16	0.44		0.37	0.71
Burden	0.63	0.12	0.69	5.32	<0.01
No choice	1.65	0.55	0.65	2.99	<0.01
Burden*No Choice	-0.34	0.15	-0.50	-2.18	<0.05

Table 5: Model Fit Statistics

	Sum of squares	Df	Mean sum of squares	F	p
Model	47.31	3	15.77	13.38	<0.01
Residual	126.17	107	1.18		
R ²	0.27				
R ² _{adj}	0.25				

Table 6: Simple Slope Analysis for Effect of Burden on Physical Strain

Comparison	Estimate	SE	t-value	p
Choice	0.63	0.12	5.32	<0.01
No choice	0.29	0.1	2.96	<0.01

Table 7: Mediation Regression Model: Effect of Loneliness on Difficulty in Managing Health via the Impact of Emotional Stress

Effect	Estimate	SE	β	t-value	p
Loneliness → Emotional Stress	0.28	0.09	0.29	3.14	<0.01
Emotional Stress → Difficulty in Managing Health	0.30	0.08	0.29	3.8	<0.01
Loneliness → Difficulty in Managing Health	0.51	0.07	0.50	6.61	<0.01

Table 8: Causal Mediation Analysis

Type	Effect	Estimate	95% C. I.		p
			Lower	Upper	
Indirect	Loneliness → Emotional Stress → Difficulty in Managing Health	0.08	0.03	0.16	<0.01
Direct	Loneliness → Difficulty in Managing Health	0.51	0.34	0.66	<0.01
Total	Loneliness → Difficulty in Managing Health	0.60	0.44	0.74	<0.01
Proportion Mediated		0.14	0.05	0.26	<0.01

Table 9: Simple Linear Regression: Effect of Caregiving on Caregiver Health Status

Predictor	B	SE	β	t-value	p
Intercept	4.33	0.39		11.17	<0.01
Caregiving Impact	- 0.45	0.17	- 0.25	- 2.66	<0.01

Table 10: Model Fit Statistics

	Sum of squares	Df	Mean sum of squares	F	p
Model	6.35	1	6.35	7.05	<0.01
Residual	97.98	109	0.90		
R ²	0.06				
R ² _{adj}	0.05				

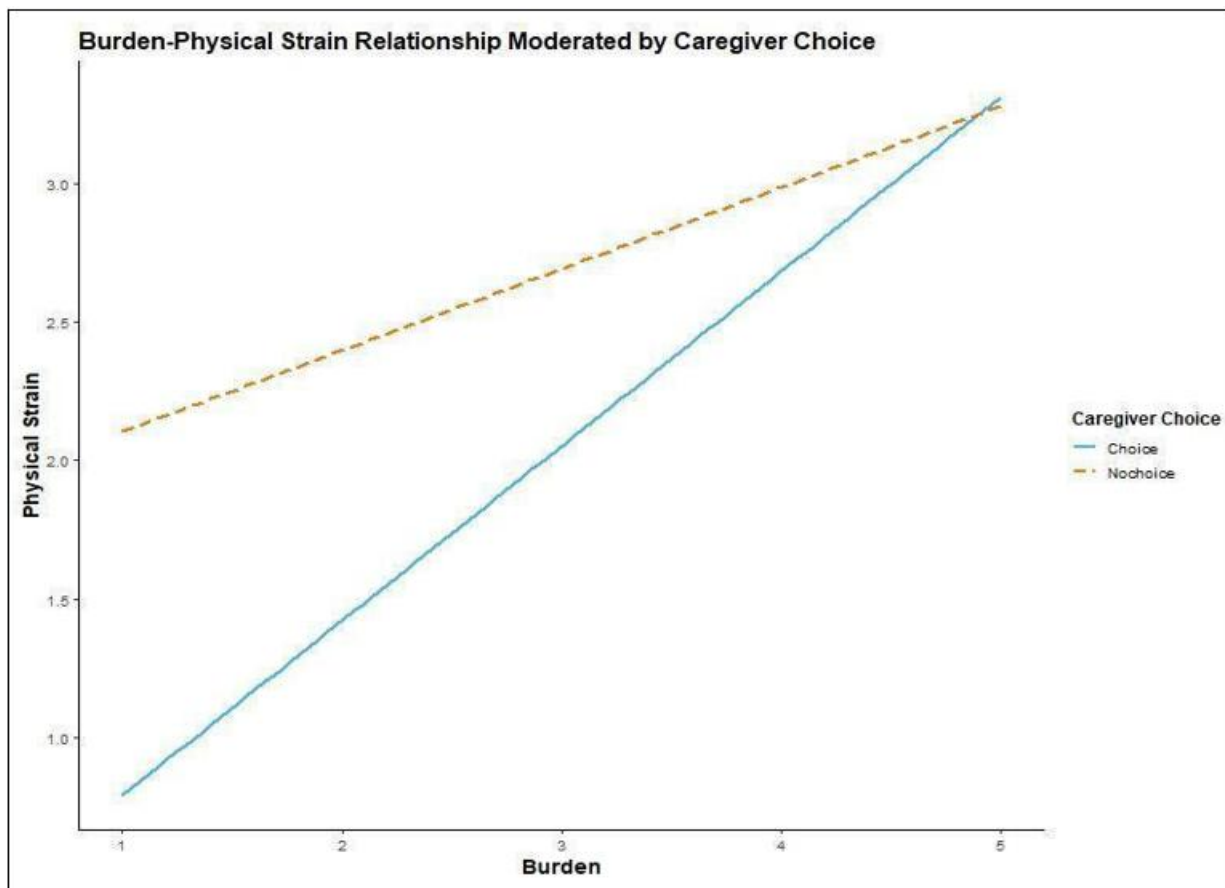


Figure 1: Plot of the caregiver burden and physical strain relationship moderated by caregiver choice