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Objective: There is a growing body of literature on the rewards associated with caregiving and the utility of these rewards on buffering the negative consequences of caring for a family member with Alzheimer's disease. Many psychoeducational interventions aim to empower caregivers to seek and obtain help from their social support network, with the expectation that help will enable them to cope more effectively.

Methods: This study investigated the impact of changes in help and changes in satisfaction with help on positive aspects of caregiving for both spouse (N=254) and adult-child (N=208) caregivers who attended a psychoeducational intervention.

Results: Analyses using structural equation modeling revealed that increases in amount of help and satisfaction with help were significantly linked with increases in caregiver rewards for adult-children. However, only increases in satisfaction with help were significantly related to increases in caregiver rewards for spouses.

Conclusions: These group differences suggest that the quality of support is critical for spouses, whereas both quality and receiving extra help are useful for adult-child caregivers. These findings are discussed in terms of the importance of understanding the differential needs of spouse and adult-child caregivers in practice. Copyright © 2013 John Wiley & Sons, Ltd.

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Introduction

There is a growing body of literature on the positive aspects of the caregiving experience. Positive aspects have been conceptualized as caregiver gain (Kramer, 1997, Yap et al., 2010), rewards (Raschick and Ingersoll-Dayton, 2004), uplifts (Pinquart and Sorensen, 2003), and satisfaction with the caregiver role (Tarlow et al., 2004). These positive aspects or views on caregiving typically include feelings of competence in the caregiving role, being glad to give back to the care receiver, and personal growth (Peacock et al., 2010, Schulz et al., 1997, Tarlow et al., 2004, Yap et al., 2010, Carbonneau et al., 2010). There is also evidence of the utility of these positive views on buffering the negative consequences of caring for a

family member with Alzheimer's disease. Caregivers who held positive views toward their role were less likely to report depression, burden, and poor health (Cohen *et al.*, 2002) and were less likely to institutionalize their family members (Mausbach *et al.*, 2004).

One question that arises is the impact that receiving support or help has on positive views toward the caregiver role. Receiving support from others is linked with caregiver well-being (Chappell and Reid, 2002) and improved caregiver health over time for adult-child and spouse caregivers (Goode *et al.*, 1998). Social support can buffer caregiver stress by increasing a caregiver's perception of the availability of resources and his or her ability to handle stressors (Cohen, 2004). Social support is particularly important when caring for a family member with Alzheimer's disease

because disease-related impairments, such as communication difficulties, can diminish the reciprocity in a relationship (Savundranayagam *et al.*, 2005). Caregiver life satisfaction has been linked with having others to talk with who provide positive feedback to the caregiver (Kaufman *et al.*, 2010). Because of dementia-related impairments, care receivers are less likely to be the source of such affirmations.

However, the role of receiving help has not always yielded consistent findings. Receiving paid care services has been linked with reduced feelings of overload and declines in anger and depression (Pot et al., 2005; Jarrott et al., 2005). Conversely, paid services have also been linked with reductions in positive affect and increased feelings of worry and strain (Pot et al., 2005). It is possible that satisfaction with help may be the more important factor in predicting caregiver outcomes. Satisfaction with support is a more consistent predictor of reductions in stress and depression for caregiving spouses compared with the mere presence of support (Roth et al., 2005, Clay et al., 2008). Although there are findings on the roles of receiving help and satisfaction with help on negative outcomes, either the findings

are limited to spouse caregivers or there is little research on the differential roles of receiving help and satisfaction with support on positive views toward caregiving.

Many psychoeducational interventions aim to empower caregivers to seek and obtain help from their social support network, with the expectation that help will enable them to cope more effectively (Gallagher-Thompson and Coon, 2007). Participation in such interventions or caregiver training programs has been linked with caregiver gain (Liew et al., 2010). Yet, little is known about the mechanisms by which caregiver interventions result in such gains, and whether some of the gains are more protective than others has vet to be determined (Cohen, et al., 2002). Moreover, little is known on whether spouse and adult-child caregivers experience an intervention in the same manner. Accordingly, the purpose of the current study was to investigate the impact of changes in help and satisfaction with help on positive aspects toward caregiving for both adult-child and spouse caregivers who attended a psychoeducational intervention. This study was guided by the model depicted in Figure 1.

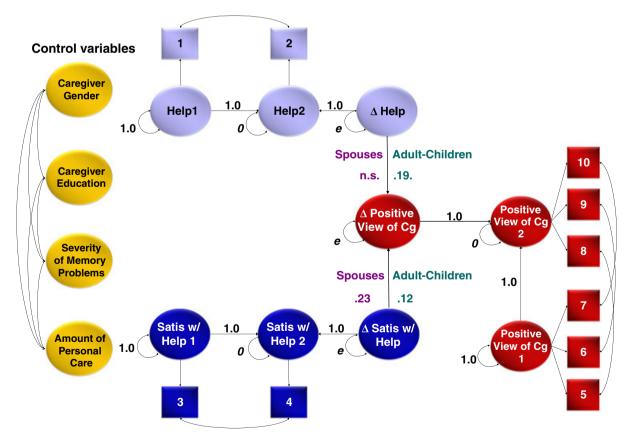


Figure 1 Differential roles of receiving help and satisfaction with help on positive views toward caregiving. All parameter estimates are standardized and significant, unless otherwise stated. Controlling for variables in structural equation modeling requires direct paths (not shown) from control measures to each latent construct in the model.

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Method

Psychoeducational intervention

"Powerful Tools for Caregiving" (PTC) is a psychoeducational intervention that aims to enhance selfcare skills of family caregivers. The intervention consists of six sessions, each lasting 2.5 hours. A major focus throughout the 6 weeks is the importance of obtaining support from others to reduce caregiving stress and enhance self-care. Asking for help is identified as one significant action to reduce stress. Two of the six sessions focus on tools for communicating more effectively when asking for help; a third session provides caregivers with approaches for obtaining help from family members, for example, through a family meeting and following a decision-making model. In addition, PTC teaches caregivers ways to better manage their emotions and to reframe their perspective when a situation cannot be changed (Boise et al., 2005, Schmall et al., 2000). Moreover, PTC teaches caregivers to manage emotions and to reinterpret their feelings and attitudes about caregiving (Boise et al., 2005,

Schmall *et al.*, 2000). Although studies have shown that PTC enhances self-care skills and reduces stress and objective burden (Savundranayagam and Brintnall-Peterson, 2010, Savundranayagam *et al.*, 2010), little is known about the role of PTC in influencing the relationship between receiving help and enhancing positive views about the caregiver role.

Participants and procedure

Participants included 254 spouse and 208 adult-child caregivers of persons with Alzheimer's disease who completed evaluations for PTC classes held in Wisconsin from 2001 to 2008. Data were collected from participants prior to session 1 and a week after the last session. The average age of spouse and adult-child caregivers was 74 and 56 years, respectively. Most participants in both groups were female (Table 1). Almost all caregivers were White (96%). The study was reviewed and approved by the Institutional Review Board at the University of Wisconsin-Extension.

Table 1 Description of the sample

	Spouses (N = 254)	Adult-children (N=208)
Average age (years)	74	56
Gender (female, %)	74	84
Caregiver education (%)		
Up to Grade 11	12	2
High school graduate	44	26
Some college	22	31
College graduate	12	26
Graduate course work	10	15
Severity of memory problems of care receiver (%)		
Mild	17	22
Moderate	54	58
Severe	29	20
Amount of personal care (%)		
Not at all	38	50
Some days but not everyday	26	28
Daily or almost daily	36	22
Amount of help ^a (mean, standard deviation)		
Time 1	3.14 (1.24)	3.19 (1.08)
Time 2	3.09 (1.17)	3.35 (1.06)
Satisfaction with help ^b (mean, standard deviation)		
Time 1	3.66 (1.06)	3.34 (1.02)
Time 2	3.77 (0.99)	3.60 (1.03)
Positive views toward caregiving ^c (mean, standard deviation)		
Time 1: I regularly remind myself about how important my caregiving is	2.81 (0.85)	2.60 (0.86)
Time 1: I feel good about what I am doing as a caregiver	2.77 (0.85)	2.76 (0.77)
Time 1: I tell myself I am doing good things in my caregiving	2.67 (0.84)	2.66 (0.82)
Time 2: I regularly remind myself about how important my caregiving is	2.89 (0.77)	2.78 (0.78)
Time 2: I feel good about what I am doing as a caregiver	2.94 (0.69)	3.05 (0.71)
Time 2: I tell myself I am doing good things in my caregiving	2.88 (0.70)	2.98 (0.75)

^aScale range was from 1 (I get no help) to 5 (I get a lot of help).

^bScale range was from 1 (not satisfied at all) to 5 (very satisfied).

^cScale range was from 1 (never) to 4 (always).

Measures

Amount of help. Participants were asked to describe the amount of help they received from all sources, including family members, friends, and paid providers, in caring for their family member with Alzheimer's disease. The response options for this single-item question ranged from 1 (*I get no help*) to 5 (*I get a lot of help*).

Satisfaction with help. Participants were asked to describe how satisfied they were with the help they received from others. The response options for this single-item question ranged from 1 (not satisfied at all) to 5 (very satisfied).

Positive views toward caregiving. Three items were used to measure positive views of caregiving (Boise *et al.*, 2005): "I regularly remind myself about how important my caregiving is," "I feel good about what I am doing as a caregiver," and "I tell myself I am doing good things in my caregiving". Response options for these items ranged from 1 (*never*) to 4 (*always*). The Cronbach's alpha was 0.82 for both spouse and adult-child caregivers at time 1. At Time 2, the Cronbach's alpha was 0.81 for spouse caregivers and 0.85 adult-child caregivers.

Control variables. Four variables reflecting characteristics of caregivers and care receivers were included as control variables because previous studies have identified them as factors related to positive views toward caregiving (Talkington-Boyer and Snyder, 1994, Tarlow et al., 2004). The caregiver-related variables included gender, education level, and amount of personal care provided by the caregiver (Table 1). The severity of the care receiver's memory problems was also included as a covariate.

Data analyses procedures

Two-group structural equation modeling (SEM) using LISREL 8.8 was used because SEM tests complex models and corrects for measurement error (Rigdon, 2001).

Measurement model. The measurement properties of the latent variables were examined for each group separately prior to testing whether the hypothesized structural models fit the data. The latent constructs for the control variables and pre-measures and post-measures of amount of help and satisfaction with help were composed of single indicators. The latent constructs for pre-measures and post-measures of positive

views toward caregiving were composed of the three items listed in the Measures section.

Latent difference scores. The latent difference score approach was used to assess the extent to which change in help and change in satisfaction with help influenced change in positive views toward caregiving (McArdle, 2001). This approach allows for the direct estimation of change in a variable between two points of data collection. The following example, using amount of help, describes how latent difference scores were created. The observed score for amount of help (HELP[t]n) from a participant (n) at time (t) is made up of a true or latent score (help[t]n) and an error score (e[t]n): HELP[t]n = help[t]n + e[t]n. The latent difference score $(\Delta \text{help}[t]n)$ is equal to the difference between the current latent score for amount of help (help[t]n) and the previous latent score, $\text{help}[t - \Delta[t]]n$: $\Delta \text{help}[t]n = \text{help}[t]n - \text{help}[t - \Delta[t]]n$. Given that the time between each pre-PTC (t=1) and post-PTC (t=2) score is constant, $\Delta[t]=1$, the equation for the latent difference score can be simplified to $\Delta \text{help}[2] = \text{help}[2] - \text{help}[1]$. When the equation was rearranged, $help[2] = help[1] + \Delta help[2]$ (Figure 1). The latent score for amount of help at Time 2 was regressed on its previous level (help $[\bar{1}]$) and the regression coefficient was fixed to 1.0. This meant that any difference would be the mathematical subtraction of the two scores for amount of help. By fixing latent variance for amount of help at Time 2 to zero, the leftover variance was pulled into the latent difference score. Therefore, the change in amount of help has a mean and variance. The mean of the latent difference score is the mean difference between Times 1 and 2. The latent difference score estimates individual differences in intra-individual changes from Times 1 and 2.

Testing for invariance. The samples for spouses and adult-children were combined to test for configural and metric invariance (Meredith, 1993) after testing the fit of the measurement models for spouses and adult-children separately. Configural invariance indicates that the pattern of free and fixed parameter estimates was the same across the two groups. Metric invariance indicates that the factor loadings and intercepts of the indicators on the latent variables were the same across the two groups and across the two time points. Invariance of indicator intercepts indicates that the factor structure of all latent constructs is equivalent for spouses and adult-children and across the two time points. Therefore, any group differences should be found at the latent level.

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Nested models. Nested models were created by placing constraints on previous models using a model trimming approach, which begins with a justidentified model with equal numbers of known variances/covariances relative to unknown parameters (Kline, 1998). On the basis of modification indices, paths were removed from the hypothesized model until there was a significant chi-square difference signifying that the more parsimonious model provided the best fit to the data.

Fit. Maximum likelihood estimation was used because it yields optimal parameter estimates with continuous multivariate normally distributed variables (Jöreskog and Sörbom, 1993). Model fit was evaluated by chi-square goodness-of-fit index, Bentler–Bonett Non-Normative Fit Index, root mean square error of approximation, and comparative fit index.

Results

Measurement model

To test the hypothesis regarding the effect of changes in help and satisfaction with help on changes in positive views toward caregiving, one needs to assess whether the latent constructs in the hypothesized model are the same across spouses and adult-children. Models (2 and 3) reported in Table 2 were used to test for strong metric invariance (i.e., the loadings and intercepts were constrained to be invariant across groups and across time) and showed no significant changes in fit based on both the root mean square error of approximation model test (Little, 1997) and differences in comparative fit index (Cheung and Rensvold, 2002). This indicated that all constructs in the model have the same factor structure for spouses and adult-children and across time. Table 3

Table 2 Fit indices for the nested sequence in the two-group structural equation modeling analyses

Model	χ^2	р	df	RMSEA (90% CI)	NNFI	CFI	$\Delta \chi^2$	Δdf
1. Configural	123.02	< 0.001	74	0.0517 (0.034; 0.068)	0.97	0.99		
2. Lambda invariance ^a	136.72	< 0.001	86	0.0499 (0.033; 0.066)	0.98	0.99		
3. Intercepts invariance ^a	154.08	< 0.001	89	0.0553 (0.040; 0.070)	0.97	0.99		
4. Hypothesized ^b	174.07	< 0.001	97	0.0562 (0.042; 0.070)	0.97	0.98	19.99	8, <i>p</i> > 0.01

RMSEA, root mean square error of approximation; NNFI, Bentler-Bonett Non-Normative Fit Index; CFI, comparative fit index.

Table 3 Loading and intercept values, residuals, and R² values for indicators in strong metric invariance model

	Equated estimates				Spouses		Adult-children	
Indicator	Loading (SE)	Intercept (SE)	Standardized loading ^a	Theta	R^2	Theta	R^2	
Positive views toward caregiving								
Time 1: I regularly remind myself about how important my caregiving is	0.57 (0.03)	2.67 (0.04)	0.67	0.58	0.43	0.52	0.46	
Time 1: I feel good about what I am doing as a caregiver	0.64 (0.03)	2.77 (0.06)	0.80	0.37	0.63	0.35	0.65	
Time 1: I tell myself I am doing good things in my caregiving	0.72 (0.04)	2.66 (0.04)	0.89	0.17	0.83	0.24	0.77	
Time 2: I regularly remind myself about how important my caregiving is	0.57 (0.03)	2.67 (0.04)	0.69	0.54	0.44	0.54	0.48	
Time 2: I feel good about what I am doing as a caregiver	0.64 (0.03)	2.77 (0.06)	0.79	0.39	0.60	0.35	0.66	
Time 2: I tell myself I am doing good things in my caregiving	0.72 (0.04)	2.66 (0.04)	0.86	0.25	0.74	0.26	0.76	

SE, standard error.

^aEvaluated with the RMSEA model test.

^bEvaluated with the γ2 difference test.

^aCommon metric completely standardized solution

presents the loading, intercept, residual, and squared multiple correlation values for each indicator of positive views toward caregiving in the strong metric invariant model.

Structural model

Figure 1 depicts both the hypotheses tested in the structural model and reports the results of the final model for spouses and adult-children. The chi-square difference between the model with strong metric invariance and the hypothesized model indicated no significant loss in fit. Analysis of the latent difference scores showed that the PTC intervention had an effect on amount of help for adult-children only. In other words, there was no change in amount of help (latent difference = -0.02, p > 0.05) for spouses, but adultchild caregivers experienced an increase in the amount of help over the course of the intervention (latent difference = 0.17, p < 0.05). There was an increase in satisfaction with help for spouses (latent difference = 0.16, p < 0.05) and adult-children (latent difference = 0.26, p < 0.05). Similarly, both groups experienced an increase in positive views toward caregiving (latent difference for spouses = 0.28, p < 0.05; latent difference for adult-children = 0.41, p < 0.05).

Change in satisfaction with help was associated with change in positive views toward caregiving. In other words, an increase in satisfaction with help was linked with more positive views toward caregiving for spouse caregivers. For adult-children, however, both changes in amount of help and satisfaction with help were associated with changes in positive views toward caregiving. Specifically, increases in both the amount of help and satisfaction with help were linked with more positive views toward caregiving for adult-children.

Discussion

The aim of the current study was to assess the mechanisms by which the PTC intervention affected positive views toward caregiving. The specific mechanisms investigated were the roles of changes in support and satisfaction with support on changes in positive views toward caregiving. In addition to acting as a buffer against negative outcomes such as caregiver depression (Roth *et al.*, 2005), the findings suggest that social support can also enhance positive views toward caregiving. The findings revealed that the intervention did not affect the amount of help that spouses received but the intervention did increase the amount of help received by adult-child caregivers. The increase in

amount of help was associated with more positive views toward caregiving among adult-children. Both spouse and adult-child caregivers experienced increases in satisfaction with support and positive views of caregiving. Further, increases in satisfaction with support were linked with increases in positive views toward the caregiving role for both groups.

Existing research findings suggest that the needs of spouse caregivers differ from those of adult-child caregivers. Spouses generally require more emotional support, whereas adult-child caregivers need additional assistance in coordinating professional services and dementia-related care (Peeters, Van Beek, Meerveld, Spreeuwenberg, & Fracke, 2010). Caring for a spouse with Alzheimer's disease is stressful when there is a perceived change in the spousal relationship (Savundranayagam and Montgomery, 2010). Spouses who were once confidants and sources of social support to one another may find that their partner with Alzheimer's disease no longer fulfills those roles adequately. Therefore, the quality of support spouse caregivers receive from others becomes more relevant to them (Roth et al., 2005). This difference may explain why the PTC intervention did not result in any change in the perceived amount of help received among spouses and why satisfaction with support may be more critical for them. In the current sample, spouse caregivers may not have needed additional instrumental support. Instead, they learned how to reframe the help being given in a positive way. For example, caregivers may have come to the realization that someone else may not provide care in the same way but that the care is as good as they would have provided. Spouses may feel that they have adequate support but are more satisfied with it because of their participation in the PTC intervention. This finding is corroborated by previous studies, which reported that satisfaction with support is consistently related with reductions in negative outcomes such as stress and depression (Clay et al., 2005; Roth et al., 2005). Adult-children, on the other hand, experienced improvements in both amount of help and satisfaction with help, but the former had a stronger association with positive views toward caregiving than the latter, lending support to the previous finding regarding differing needs for spouses and adult-children.

The findings regarding satisfaction with support suggest that the quality of support is critical in terms of improving caregiver outcomes. The PTC intervention may have increased satisfaction with support by improving relationships with other family members, friends, and paid professionals. Having more help does not always translate into positive outcomes for

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caregivers (Pot et al., 2005). It is more important to improve perceptions of the quality of support. The PTC intervention teaches caregivers to reframe how they perceive the help they receive. As previously mentioned, lack of satisfaction with support for a spouse caregiver might be related to "they don't do it as I do it" even though the family member is still doing it well. PTC teaches caregivers to identify the basis for the dissatisfaction with support. For example, caregivers are asked to consider if the help being given is not appropriate or not being addressed or if the concern is with who is or who is not giving the help. Alternatively, the dissatisfaction might be related to the caregiver's perception of the help even though the help is being provided. Once caregivers are able to identify the issues and concerns underlying the dissatisfaction with support, PTC empowers caregivers to communicate these concerns in an assertive manner. Caregivers are likely to state more clearly and in a positive way their needs and expectations and to be more effective in the manner in which they ask for help. Too often caregivers will use "you" or "hidden you" messages when asking for help, which tend to be aggressive and less effective, for example, "you are not helping me take care of your father." PTC teaches caregivers to use "I statements". With "I" statements, caregivers learn to be clear, direct, and fair. They begin with how they feel and explicitly describe how the actions of the other person resulted in a specific emotion. An alternative to the aforementioned example of the "you statement" is "I feel frustrated when you do not help me out with your father. I would value your help with a few tasks involving your father's medical appointments." There is no blame or accusation directed to others, nor do caregivers expect others to read their minds.

Limitations and implications for practice

Although this study provides insight into the roles of receiving help while caregiving, there are notable limitations. Assessing the role of support on positive views toward caregiving was not a primary goal when PTC was originally created. As such, this study used the existing measures of support and satisfaction with support in the original data collection in Wisconsin. These measures provide a global sense of both the amount of and satisfaction with help received by caregivers. Having more specific components of support (e.g., instrumental vs. emotional support) (Drentea et al., 2006) and the source of each type of support (e.g., family member and professional caregiver)

would shed light on which type of support is most helpful to adult-child and spouse caregivers. This study was limited by the measures used to assess the impact of PTC. Specifically, the three items that measured positive views of caregiving did not incorporate the notion of "giving back," which has been linked to caregiving rewards. Finally, this study did not include a control or comparison group, making it difficult to draw definitive conclusions about the role of the PTC intervention in yielding positive outcomes. However, the key research question extends beyond the role of the PTC intervention as a sole contributor to changes in help, changes in satisfaction with help, and changes in positive views toward caregiving. The larger research question focuses on the role of receiving help in contributing to caregiver rewards, regardless of whether caregivers are participating in an intervention.

The findings indicate that it is critical that caregivers of persons with Alzheimer's disease are satisfied with the quality of the help they receive. This has important implications for providers of caregiver support services. Ongoing assessments of caregivers' satisfaction with help will be a useful way to monitor if changes are required in the types of support and services a caregiver needs. Moreover, referring caregivers to psychoeducational interventions, such as PTC, would be a resourceful way of addressing low levels of satisfaction with support because such programs teach caregivers how to communicate their needs and emotions with others in the caregiving context and consequently reappraise their existing sources of support.

The findings also have implications for care managers, especially in the area of caregiver assessment. Many care manager organizations have assessments for negative caregiver outcomes, such as burden and depression. The findings from the current study highlight the importance of assessing caregiver rewards and directing caregivers to psychoeducational programs, such as PTC, if individuals are not experiencing any caregiver gains. Specifically, caregivers need services and interventions that empower them to better communicate their need for help and get the help that they desire while also reframing their appraisal of help. Equally important, care managers should identify specific reasons for satisfaction gained from caregiving in order to target appropriate services. For example, if the concept of "giving back" is important to an adult-child caregiver, he or she may refuse to allow others to assist with care. Offering respite or home care may not be appropriate for this caregiver. Therefore, understanding the satisfaction gained from caregiving may help to identify the services that a caregiver is more likely to accept or reject.

Receiving help can be instrumental in maintaining one's role as a family caregiver. Help can be offered in many forms, including emotional support as well as help with caregiver tasks. The current findings indicate that satisfaction with help appears to be a common predictor of gains in the caregiver role for both spouses and adult-children. This satisfaction can be enhanced by participating in a psychoeducational self-management program, such as PTC. Improving satisfaction with help appears to be a key element in increasing positive views toward the caregiving role, which in turn may result in fewer premature nursing home placements.

Key points

- Increases in amount of help and satisfaction with help were significantly linked with increases in caregiver rewards for adult-children.
- However, only increases in satisfaction with help were significantly related to increases in caregiver rewards for spouses.
- These group differences suggest that the quality of support is critical for spouses, whereas both quality and receiving extra help are useful for adult-child caregivers.

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Conflict of interest

None declared.

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