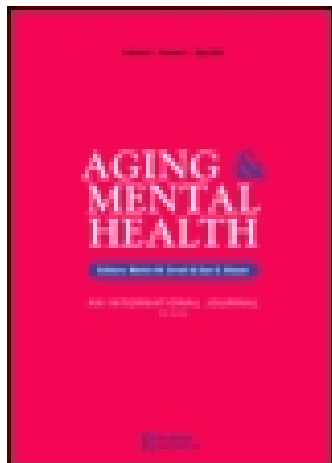


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Liat Ayalon^a & Ilan Roziner^a

^a Louis and Gabi and Weisfield School of Social Work, Bar Ilan University, Ramat Gan, Israel

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Satisfaction with the relationship from the perspectives of family caregivers, older adults and their home care workers

Liat Ayalon* and Ilan Roziner

Louis and Gabi and Weisfield School of Social Work, Bar Ilan University, Ramat Gan, Israel

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Objectives: Given the increasing reliance on both formal (paid) and informal (unpaid) assistance for the care of older adults and the close relationships which are often formed with home care workers, the present study evaluated satisfaction with the relationship from the perspectives of the three members that make up the home caregiving triad: older adults, their family members and their home care workers.

Methods: We relied on a representative sample of 223 complete caregiving triads composed of an older adult, a family member and a home care worker. Each of the members rated his or her level of satisfaction with all other members in the unit, using a seven-item self-report satisfaction with the relationship scale (e.g., satisfaction with communication, intimacy). The Social Relations Model (SRM) was used to partial out the specific variance associated with each of the members as either an actor (i.e., the average satisfaction as a rater, unrelated to whom the person rates) or a partner (i.e., the unique satisfaction level elicited by a person, which is consistent across all ratings of this person).

Results: The structural equations model yielded acceptable results: $\chi^2(3) = 6.94, p = .07$. Our analysis revealed that the variability associated with the worker as partner was significantly greater than the variability associated with the older adult as partner ($\Delta\chi^2[1] = 9.21, p = .002$) or with the family member as partner ($\Delta\chi^2[1] = 8.46, p = .004$).

Conclusions: The study highlights the importance of studying satisfaction with the relationship in the home care setting and calls for further examination of the entire caregiving triad. The home care worker plays a key role in ensuring the overall satisfaction in the caregiving triad.

Keywords: Home care; formal care; caregiving; social relations model; triad; dyadic analysis

Introduction

The present study is focused on family caregivers', home care workers' and older care recipients' appraisals of their satisfaction with their relationships with all other members that constitute the home caregiving triad. The study uses the social relations model (SRM) (Kenny, Kashy, & Cook, 2006; Kenny & La Voie, 1984) to assess interdependence among members. The SRM differentiates an actor effect (i.e., the average satisfaction as a rater, unrelated to whom the person rates; e.g., an older adult might report high levels of satisfaction, unrelated to the type of care provided) from a partner effect (i.e., the unique satisfaction level elicited by a person, which is consistent across all ratings of this person; for instance, the common levels of satisfaction elicited by the home care worker, unrelated to who the raters are). The study highlights the importance of studying satisfaction with the relationship in the home care setting and calls for further examination of the entire caregiving triad.

The theoretical grounds of the present study

To examine interpersonal relationship and satisfaction with the relationship, the entire context of two or more individuals has to be taken into consideration. Family system theories have long argued that the sum is greater than its parts. Hence, in order to understand the experiences of

a particular family member, it is important to evaluate the entire family constellation (Bowen, 1966). These theories suggest that the family is composed of various subsystems and is able to adapt to changes and challenges over time (Cox & Paley, 2003). We follow a family system perspective, given the close ties that are formed between older adults, their family members and their home care workers (Ayalon, 2009b; Iecovich, 2014; Martin-Matthews, 2007; Parreñas, 2014) and recent calls for a more comprehensive evaluation of caregiving as representing complex interactions (Ayalon, 2014; Kemp, Ball, & Perkins, 2013).

According to the socio-emotional selectivity theory (Carstensen, 1992; Carstensen, Fung, & Charles, 2003), as people age, they tend to invest in emotionally meaningful goals and activities and demonstrate a preference for positive information. Hence, we expected satisfaction with the relationship with the primary caregivers (either paid or unpaid) to be particularly important for older adults, who as they age tend to invest in close, intimate relations, rather than more superficial ones (Carstensen, Isaacowitz, & Charles, 1999).

The importance of satisfaction with the relationship in the caregiving-care-receiving context

There is a growing body of research on the importance of the relationship in the caregiving context (Ablitt, Jones, &

*Corresponding author. Email: liat.ayalon@biu.ac.il

Muers, 2009; Ayalon, 2009b; Bourgeault, Atanackovic, Rashid, & Parpia, 2010; Eustis & Fischer, 1991; Kemp et al., 2013). This is because caregiving provided to older adults is not solely instrumental in nature, but also involves emotional and personal aspects (Ayalon, 2009b; Ayalon, Halevy-Levin, Ben-Yizhak, & Friedman, 2013b; Ward-Griffin & Marshall, 2003).

Assessing satisfaction with the relationship between caregivers and care recipients is particularly important in the home care setting. This is because home care blurs the boundaries between the public and the private, as public services are provided within the private domain of one's home (Martin-Matthews, 2007; Ward-Griffin & Marshall, 2003). As such, caregiving consists of emotional, mental and physical tasks that blur public and private boundaries (Purkis, Ceci, & Bjornsdottir, 2008; Ward-Griffin & McKeever, 2000). In contrast to the burgeoning literature on the intersection between formal and informal care, which has tended to dichotomize the tasks performed by formal (paid) vs. informal (unpaid family members or friends) caregivers (Cantor, 1979; Litwak, 1985; Tennstedt, Crawford, & McKinlay, 1993), within the home care setting, care is often shared and constantly negotiated by formal and informal caregivers (Ayalon, 2009b; Ayalon et al., 2013b; Ward-Griffin & Marshall, 2003).

Satisfaction with the relationship with the other members who make up the caregiving triad means different things to the different members of the triad. For older adults, research has shown that maintaining reciprocity (Lewinter, 2003) and autonomy (Sherwin & Winsby, 2011) in the relationships is important. In light of the socioemotional selectivity theory, which argues that as older adults sense that their time is limited, they tend to narrow down their social network and focus on more intimate ties, rather than superficial relations (Carstensen, 1992), satisfaction with the relationship might carry a central role. Consistently, research has shown that the relationships that are formed between older adults and their home care workers are often portrayed as friendly (Bourgeault et al., 2010) or even as fictive-kin (Karner, 1998).

When evaluating the relationship between older care recipients and their caregivers, power differential should be taken into consideration. Those older care recipients, who are highly dependent on their home care workers might deny the presence of dissatisfying relationships in order to maintain the relationship (Piercy, 2000; Zisberg et al., 2014).

Given the continued involvement of many family members in the care of older adults, even when home care services are provided (Ayalon, 2009b), family caregivers' satisfaction with the relationship that are formed within this caregiving triad is also important (Ayalon, 2011). Research has shown that those reporting higher levels of satisfaction, also report lower levels of burden (Iecovich, 2011; Steadman, Tremont, & Davis, 2007), higher satisfaction with caregiving (Iecovich, 2011; Snyder, 2000) and better wellbeing (Quinn, Clare, & Woods, 2009). Moreover, satisfaction with the relationship is even more detrimental to the wellbeing of family caregivers than the amount of instrumental support provided (Merz,

Schuengel, & Schulze, 2009). On the other hand, dissatisfaction with the relationship with the care recipient is a predictor of elder neglect (Ayalon, 2010) and caregivers' distress (Hui, Elliott, Martin, & Uswatte, 2011).

Of note is that satisfaction with the relationship between caregivers and care recipients is not static, but rather reflects their past relations in light of current caregiving demands. Research has shown that following the care recipient's illness, there is both continuity and discontinuity in caregivers' satisfaction with the relationship with the care recipient (Walker, Shin, & Bird, 1990). Whereas some caregivers report a decline in their relationship satisfaction following the older adult's illness, others maintain a stable degree of satisfaction over time, yet others even report an improvement in their satisfaction (Archbold, 1983). A contemporary qualitative study identified three groups of caregivers: a negative group, a positive group and an ambivalent group. Both negative and positive groups demonstrated continuity in their relationships with the care recipient (e.g., the relationship with the care recipient was either negatively or positively portrayed throughout their lives). The ambivalent group, on the other hand, reported mixed emotions about the care recipient, in light of past positive relationships and the losses imposed by the disease (Shim, Barroso, & Davis, 2012).

Adequate communication between formal caregivers and informal caregivers is an important indicator of satisfaction with formal services (Liu, Guarino, & Lopez, 2012). Similar to older care recipients, research has shown that family caregivers view their relationship with home care workers as friendship (Piercy & Dunkley, 2004) or even as family-like (Ayalon, 2009b).

Perceived relationship satisfaction is important not only to older care recipients and their family caregivers, but also to formal caregivers. Satisfaction with the relationship has shown to be a predictor of work turnover (Flinkman, Leino-Kilpi, & Salanterä, 2010) and the quality of the care provided, with those more satisfied with the relationship with the care recipient being more likely to provide personalized care (Suhonen, Charalambous, Stolt, Katajisto, & Puro, 2013). Home care workers' satisfaction with the relationship with the care recipient is also an important predictor of their overall satisfaction with their work (Iecovich, 2011). Dissatisfaction with the relationship with the care recipient, in contrast, is a predictor of elder neglect (Ayalon, 2010).

Caregiving in Israel

In Israel, as in other developed countries (Browne & Braun, 2008; Carr, Chen, & Tate, 2000), much of the care provided to older adults is conducted in-home. Only a little over 3% of the population of older adults are being cared for in long term care institutions (JDC-Israel Eshel, 2011). As a country in transition, between modernization and traditionalism (Lavee & Katz, 2003), Israeli older adults tend to enjoy the support of their family members, who usually live in close proximity and provide a substantial amount of their care (Ayalon & Green, 2013). The

welfare system in the country provides financial support aimed to maintain the older adult in the community for as long as possible (Iecovich, 2012). Eligibility for financial support is determined based on age, functional limitations and financial status. As of 2011, 17.4% of the older adults received governmental assistance, with most of the older adults electing to receive this assistance in the form of home care services (National Insurance Institute of Israel, 2011).

For those individuals who require a high level of care and wish to remain in the community, two main home care options are available: a) an Israeli home care worker who provides care for several hours per week or b) a migrant home care worker who provides round the clock (Asiskovitch, 2013). Both types of home care workers consist mainly of migrant women. The main difference is that Israeli home care workers are primarily immigrants from the former Soviet Union, who are Israeli citizens, given their Jewish background and the Jewish identity of the country. They usually provide care for only several hours per week. Migrant home care workers, on the other hand, are regarded as a temporary workforce. They cannot settle in the country for good and are obligated to work on a round-the-clock basis as home care workers. Although they are entitled to basic human rights, given the nature of their round-the-clock work, they earn below the minimum wage. In addition, their flexibility in terms of changing employers is limited. This population of migrant home care workers comes primarily from the Far East (e.g., the Philippines, Nepal, or India) or from East Europe (e.g., Moldavia, Romania) (Ayalon, Green, Eliav, Asiskovitch, & Shmelzer, 2013a; Heller, 2003). Past research has shown that this population is often subjected to poor working conditions (Ayalon, 2009a) and suffers from worse conditions compared with Israeli home care workers (Ayalon et al., 2013a). There are over 70,000 Israeli home care workers (National Insurance Institute of Israel, 2011), more than 40,000 legal live-in migrant home care workers and about 10,000 illegal home care workers (Nathan, 2012).

The present study

We evaluate satisfaction with the relationship among older adults, home care workers, and family members using the social relations model (SRM) (Cook & Dreyer, 1984; Kenny et al., 2006; Kenny & La Voie, 1984). This model takes into consideration the unique characteristics of the entire caregiving triad, the individual members who make up the triad and the dyads that are constructed within the caregiving triad (e.g., the relationship between a family caregiver and a home care worker). For instance, according to this model, the degree of satisfaction from the home care worker reported by the older adult is a function of the overall satisfaction level of the particular caregiving triad, the unique characteristics of the older adult that make this person either more or less satisfied, the unique characteristic of the home care worker and the dyadic relationship that are formed between the older adult and the home care worker. Such a design can answer

several important questions concerning satisfaction with the relationship within the caregiving setting by partitioning the variance associated with each of the components that compose satisfaction with the relationship. We examined the following research questions:

- (1) *Which member of the caregiving triad exerts the most influence on the variation in reported satisfaction?* Although there is no prior research to inform our hypotheses, there is some reason to suggest that family members capture an important managerial role in this caregiving setting (Ayalon, 2009b, 2011; Sims-Gould & Martin-Matthews, 2010). Therefore, we hypothesize that the variance associated with family caregivers as either actors or partners would be larger than the variance associated with older adults or home care workers.
- (2) *What is the degree of reciprocity in satisfaction rating at the individual-level?* At the individual-level (i.e., generalized reciprocity), this analysis depicts the relationship between a particular individual as an actor (i.e., rater) vs. a partner (i.e., person being rated). For instance, such an analysis reveals whether the fact that the home care worker was rated highly by the other two members of the caregiving triad was associated with this worker rating these members highly as well.
- (3) *What is the degree of reciprocity in satisfaction rating at the dyadic-level?* At the dyadic level, the analysis reveals the degree of covariance between two members of the caregiving triad. For instance, a positive dyadic reciprocity between an older adult and a family member indicates that high satisfaction reported by the older adult is associated with high satisfaction reported by the family member.

Methods

The study was funded by the National Insurance Institute of Israel (NIII) and approved by the ethics committee of Bar Ilan University. A random stratified (based on age, gender and geographical area) sample of older adults over the age of 70 who live in Tel Aviv area was drawn from the list of older adults who receive financial assistance from the NIII in order to support their stay in the community. Eligibility criteria for care recipients were: over the age of 70, live in Tel Aviv area, speak Hebrew or Russian, cognitively able to participate in the study based on family members' reports and meet the eligibility criteria for employing a live-in home care worker (e.g., highly dependent in activities of daily living). This is because only the most impaired older adults are eligible to employ a live-in home care worker and one of the goals of the larger study was to compare live-in home care to live-out home care, provided to older adults of comparable needs). This comparison between live-in and live-out home care workers is detailed elsewhere (Ayalon & Green, 2013). All family members who were identified as primary caregivers based

on the records of the Israeli Social Security Institute or based on the reports of the older adults were invited to participate provided they spoke Hebrew or Russian. Home care workers were interviewed if they spoke, English, Russian or Hebrew.

The home addresses of older adults and their family members were obtained from the NIII. A letter explaining the purpose of the study was sent to older adults and their family members. Subsequently, a trained research assistant called those potential participants, who did not explicitly express their refusal. The contact details of home care workers were obtained from older adults and their family members. All participants signed an informed consent after receiving a detailed explanation concerning the study. All interviews were conducted by a trained research assistant, using a face-to-face interview format between 2011 and 2012. There was an explicit attempt to interview each member of the caregiving triad separately, at his or her own preferred location and time.

Our goal was to interview caregiving triads, composed of an older adult, a family member and a home care worker (either live-out Israeli or live-in migrant). However, given the challenges associated with interviewing all members in the triad and our interest in understanding various aspects of this caregiving arrangement (Ayalon et al., 2013a), we conducted an interview even if only one or two persons per caregiving triad were available for an interview. Our final sample consisted of 223 triads. Given the complexity of the SRM analysis and the large number of missing members at the caregiving triad-level, the present study was limited to the 223 complete caregiving triads. See Figure 1 for details on sampling procedure. Table 1 outlines the demographic characteristics of the sample.

Instruments

All measures were back translated and most were used in previous pilot research with this population (Ayalon, 2011).

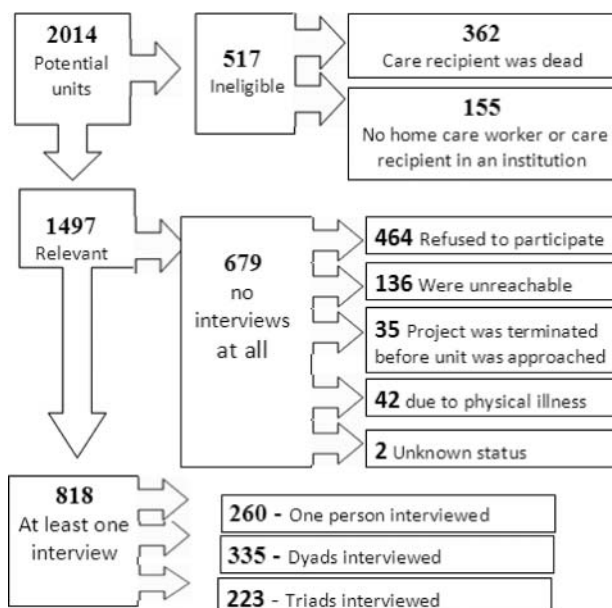


Figure 1. Sample flow.¹

Table 1. Sample characteristics (223 complete caregiving triads).

Demographic characteristics	
Reports by older adults (223)	
Age	84.0 (6.3)
Woman	150 (67.3%)
Education	9.7 (5.1)
Married/partnered	83 (37.9%)
ADL/IADL (0–12)	7.5 (2.6)
Reports by family members (223)	
Age	72.6 (12.9)
Woman	
Education	13.5 (3.5)
Married/partnered	176 (79.3%)
Lives with the older adult	81 (36.7%)
Spouse of the care recipient	56 (25.2%)
Child/child in law of the care recipient	148 (66.7%)
Number of hours per day providing care (0–24)	1.5 (.5)
Number of days per week providing care (0–7)	3.7 (2.6)
Reports by home care workers (223)	
Age	44.0 (11.8)
Woman	195 (87.8%)
Education	11.7 (3.4)
Married/partnered	127 (57.0%)
Live-in migrant home care	134 (60.1%)
Number of years with the care recipient	2.4 (2.3)

Means and standard deviations are reported for continuous variables and frequencies and percentages are reported for categorical variables.

Satisfaction with the relationship

This is a seven-item self-report scale that assesses satisfaction in various areas of the relationship (0 = Very dissatisfied and 5 = Very satisfied) (Burns & Sayers, 1988). Respondents are asked to rate their level of satisfaction with communication and openness, resolving conflicts and arguments, degree of affection and caring, intimacy and closeness, satisfaction with their role in the relationship, satisfaction with the other person's role in the relationship, and overall satisfaction with the relationship. It has been used in past caregiving research (Ayalon, 2011; Steadman et al., 2007) and is indicated for the assessment of relationship satisfaction with a variety of individuals, including friends, family members and colleagues (Burns, 1993). A sum of all items was calculated to reflect an overall satisfaction score. In the present study, each respondent was asked to complete this questionnaire in relation to all other members of the caregiving triad (e.g., an older adult rated his or her satisfaction with the family member and the home care worker and was also rated by the family member and the home care worker). This resulted in a total of six satisfaction ratings per caregiving triads. Cronbach's alpha in the present study ranged between .93 and .98.

Functional status of the care recipient

Functional status, as reported by the older adult, was evaluated in terms of the care recipient's ability to perform six

Table 2. Distribution and correlations among measures of relationship-specific satisfaction for members of 223 triads.

Satisfaction measure (0–35)	Mean	SD	1	2	3	4	5
1. Worker with family member	31.4	5.4	–				
2. Worker with older adult	31.6	4.3	.44**	–			
3. Family member with worker	29.7	5.9	.18**	.23**	–		
4. Family member with older adult	29.4	6.5	.21**	.21**	.32**	–	
5. Older adult with worker	29.9	6.1	.14*	.38**	.43**	.25**	–
6. Older adult with family member	30.5	6.0	.11	.08	.15*	.45**	.18**

* $p < .05$, ** $p < .01$

ADLs (Activities of Daily Living; e.g., eating, dressing; Katz, Downs, Cash, & Grotz, 1970) and six IADLs (Instrumental Activities of Daily Living; e.g., preparing a meal, managing finances; Lawton & Brody, 1969). The sum of impaired activities was calculated to reflect impairment in ADLs or IADLs. Range was 0 to 12, with a higher score indicating a greater impairment. Cronbach's alpha was .82.

Sociodemographic characteristics

Age (in years), gender, education (in years), marital status (married/not), whether the family member lives with the older adult (yes/no), relationship to the older adult (spouse/other), and type of home care services provided (live-in migrant /live-out Israeli) were gathered based on self-report.

Analysis

Analysis relied on Mplus 7.11 (Muthén & Muthén, 1998–2012). Confirmatory factor analysis was conducted in order to construct six latent variables (three partner effects and three actor effects, one for each member of the caregiving triad). All loadings were set to 1 to ensure model convergence.

There are four types of effects in the SRM: an actor effect (e.g., how much the home care worker is satisfied on average), a partner effect (e.g., how much the other two members are satisfied with the older adult on average), relationship effect (i.e., the unique relationship of an actor and a partner after both effects have been removed), and the family effect (i.e., the unique satisfaction level of the particular family). Because the caregiving triad is composed of only three members, the error variance cannot be separated from the relationship effect and an overall family effect cannot be calculated (Kenny et al., 2006).

The SRM estimates the variance associated with these effects. Actor variance indicates whether people are satisfied with others in a similar way, whereas partner variance indicates whether people elicit similar levels of satisfaction from others. The size of the variance associated with each of the effects indicates the underlying dynamics of satisfaction in the caregiving triad. For instance, a large variance for the older adult as an actor indicates that caregiving triads tend to differ in this regard. The SRM also evaluates correlations between the different effects. Generalized reciprocity is modelled as the relationship

between the actor effect and the partner effect for a particular member of the caregiving triad (e.g., do older adults who report high levels of satisfaction also elicit high levels of satisfaction). Dyadic reciprocity is modelled as the relationship between the two satisfaction measures involving the same dyad (e.g., the relationship between the rating of the older adult made by the family member and the rating of the family member made by the older adult) (Kenny et al., 2006). The minimal covariance coverage in the variance-covariance matrix used in the analyses was .95. To take advantage of all available data, the model was fit using full-information maximum likelihood (FIML) estimation with robust standard errors (Little & Rubin, 2002). Model fit was assessed using the chi-squared statistic. A statistically non-significant chi-squared indicates good fit of the model to the empirical data.

Results

Table 2 details the characteristics of the six satisfaction variables. The correlation matrix between the satisfaction variables suggests that with the exception of two correlations, all other correlations were significantly related to each other.

The structural equations model yielded acceptable results: $\chi^2(3) = 6.94, p = .07$. Table 3 provides information about the three members who make up the caregiving

Table 3. Social relations analysis of relationship-specific satisfaction.

SRM component	Variance
Actor	
Worker	0.20**
Family member	0.21**
Older adult	0.11*
Partner	
Worker	0.28**
Family member	0.09*
Older adult	0.11**
Residual (relationship + error)	
Worker with family member	0.24**
Worker with older adult	0.07
Family member with worker	0.17**
Family member with older adult	0.52**
Older adult with worker	0.34**
Older adult with family member	0.53**

* $p < .05$, ** $p < .01$

Table 4. Percentage of variance in relationship-specific satisfaction that is explained by the components of the social relations model.

Relationship	Social relations model components		
	Actor	Partner	Relationship/ error
Worker with family member	38	17	45
Worker with older adult	53	29	18
Family member with worker	32	42	26
Family member with older adult	25	13	62
Older adult with worker	15	38	47
Older adult with family member	15	12	73

triad as actors and partners as well as the relationship plus error variance. To examine whether significant differences in the size of the variability of the three members of the caregiving triad as actors or partners exist, we conducted a series of comparisons, in which, each time, two variances were set as equal. If the overall goodness of fit of the model, as indicated by the difference in χ^2 scores between the unconstrained and constrained models is significantly poorer, significant differences in the size of the variance exist. Otherwise, we can assume statistical equality between the different variances. Our analysis revealed that the variability associated with the worker as partner was significantly greater than the variability associated with the older adult as partner ($\Delta\chi^2[1] = 9.21, p = .002$) or with the family member as partner ($\Delta\chi^2[1] = 8.46, p = .004$). All other variances were non-significantly different.

Table 4 provides a detailed account of the percentage of variance in the overall caregiving triad satisfaction that is explained by the different components of the SRM (e.g., the relative importance of the various effects). Worker as actor and worker as partner accounted for the largest portion of the overall variance. Because the relationship factor cannot be separated from the error, variance explained by this factor is uninterpretable.

For all three members of the caregiving triad, there was a significant positive correlation between the particular member as an actor and the same member as a partner (generalized reciprocity). This indicated that as satisfaction level of the member as a rater increased the satisfaction with this particular member as reported by the other two members also increased. There were no significant differences between generalized reciprocities across the three members of the caregiving triad. Two significant dyadic correlations emerged. The first indicated that as the worker's satisfaction increased, the family member's satisfaction decreased, and vice versa. The second correlation indicated that as the family member's satisfaction increased, so did the older adult's satisfaction and vice versa. These two dyadic reciprocities were significantly different from each other ($\Delta\chi^2[1] = 18.67, p < .001$). See Table 5 for details.

Discussion

This study provides a unique outlook on the intersection between formal and informal care within the home caregiving triad, which is composed of an older adult, his or

her family member and a home care worker. In contrast to other long term care alternatives, the home care represents a unique setting, between private and public domains (Ward-Griffin & Marshall, 2003; Ward-Griffin & McKeever, 2000). Consistently, the care provided by home care workers includes instrumental assistance in addition to emotional and social care (England & Dyck, 2012). These characteristics of the home care setting make satisfaction with the relationship particularly important.

Following family system theories that argue that the sum is greater than its parts (Bowen, 1966), the present study draws attention to the caregiving triad as the unit of analysis. By simultaneously addressing satisfaction with the relationship of all three members of the caregiving triad, this study goes beyond current caregiving knowledge. Theoretically, the study contributes to the emerging body of research on the intersection between formal and informal care by depicting the caregiving triad as a system, in which all members are interdependent. The study provides a clear response to recent calls for a move towards a dyadic (Braun et al., 2009) and possibly a triadic perspective (Ayalon, 2014) on caregiving. The study has important practical implications as it identifies the unique contribution of each of the members to the overall satisfaction within the caregiving triad and points out to those members who take the most central role.

Our findings point to the home care worker as the major source of variability within the caregiving triad. This is because the highest levels of variability were due to the satisfaction with home care workers and to satisfaction reported by home care workers. Even though family members take major roles as care managers and cultural

Table 5. Generalized and dyadic reciprocity correlations for relationship-specific satisfaction.

Reciprocity	Reciprocity correlation
Generalized	
Worker	0.42**
Family member	0.83**
Older adult	0.71**
Dyadic	
Worker – family member	-0.60*
Worker – older adult ²	NA
Family member – older adult	0.30**

* $p < .05$, ** $p < .01$

mediators (Ayalon, 2009b), the worker carries a more substantial weight in determining the overall satisfaction level within the triad.

Home care workers are external to the caregiving triad. Unlike older adults and their family members who have lived together for many years, for home care workers, the caregiving triad is relatively new. Possibly, these characteristics make the satisfaction elicited or reported by the home care worker more variable. The home care worker enters an “unfamiliar territory” and as such, might elicit more extreme responses of satisfaction or dissatisfaction and might respond more extremely.

In the present study, we evaluated two types of home care workers: live-in migrant home care workers and live-out Israeli home care workers. These workers come from different cultural origins, are entitled to different social rights, and provide different types of services (round the clock vs. a few hours per week). Past research has shown that both family members and older adults report higher levels of satisfaction with migrant live-in home care workers compared with Israeli live-out home care workers (Ayalon & Green, 2013; Ayalon et al., 2013a; Iecovich, 2007). Hence, it is possible that the high variability association with satisfaction is due to these characteristics. We attempted to examine group differences between live-in vs. live-out caregiving triads, but this analysis did not yield a proper solution, presumably due to a problem of empirical under-identification (Muthén & Muthén, 1998–2012).

Important to note that even though the home care worker plays the most central role in determining the satisfaction of the caregiving triad, significant differences were found only in relation to the worker as a partner vs. the family member or older adult as partners. Hence, the worker's role is primarily a passive one. We found that what matters the most is how much the other two members of the triad are satisfied or dissatisfied with the home care worker, rather than the other way around. This is consistent with past research, which has described the inferior and disempowered role of home care workers (Ayalon, 2009a; Neysmith & Aronson, 1997).

As expected, the more satisfied a member felt, the more satisfying responses this person elicited. This is consistent with the social exchange theory, which views satisfaction as a non-tangible commodity of potential exchange between individuals (Cook, Cheshire, Rice, & Nakagawa, 2013). Using satisfaction as a non-tangible exchange commodity, we demonstrate the interactional aspects of relationship satisfaction. Consistently, the overall level of satisfaction of older adults and their family members was positively correlated, suggesting that in families in which the older adult is satisfied with the relations, so is his or her family member and vice versa.

An unexpected finding concerns the inverse dyadic reciprocity between the family member and the home care worker. As the family member's satisfaction with the relations increases, the worker's satisfaction decreases and vice versa. This finding could be explained by a recent study that depicted the delicate balance between family

members and home care workers within the caregiving triad. The study found that as the amount of care provided by the home care worker increased, the care provided by the family member decreased. Consistently, the levels of burden reported by the home care worker and the older adult were inversely related, so that higher levels of burden reported by the home care worker were directly related to lower levels of burden reported by the family member (Ayalon, 2015). This is also consistent with other studies that have shown that caregiving tasks are carried collaboratively by the home care worker and the family member and that the role division is often permeable (Funk & Stajduhar, 2013).

Practical and research implications

Despite its innovative approach, the study has several limitations that should be taken into consideration. We relied on a cross-sectional design, which does not allow for the evaluation of causality or change over time. Using the SRM to assess satisfaction over time is desirable as this will provide important information about the evolution of family relations. The present study was also limited by obtaining satisfaction ratings of only three members in this caregiving triad. Future research will benefit from including the perspective of additional members. Such a model might allow examining the family effect and the relationship effect as well as additional predictors of variability such as the type of home care or family relationship to the older care recipient. Given the complexity of the SRM model, we were only able to examine basic questions that directly stem from this model and were unable to evaluate the role of potential predictors such as type of home care services provided or relationship to the care recipient. This type of basic analysis has been the norm in the majority of past SRM research (Kenny et al., 2006; Kenny & La Voie, 1984). Finally, because the study was limited to older adults of high levels of impairments (thus, eligible to employ a live-in home care worker), our sample had a higher proportion of live-in home care workers than is the case in the general population.

Despite its limitations, the study highlights the importance of studying satisfaction with the relationship in the home care setting and calls for further examination of the entire caregiving triad. Given the fact that caregiving involves not only instrumental tasks, but also emotional tasks (England & Dyck, 2012), more attention should be given to the role of relationship satisfaction. Our findings point to the important role played by the home care worker in ensuring the overall satisfaction within the caregiving triad. Theoretically, our findings suggest that even though the family does not abandon the older adult when formal care is provided, formal care captures a very substantial role in the overall satisfaction level of the caregiving triad.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes

1. Of the 818 caregiving triads, we were able to interview 223 complete caregiving triads and 335 dyads (e.g., only two members of the same caregiving triad were interviewed; 66 units consisted of a family member and an older care recipient, 190 units consisted of a family member and a home care worker and 79 units consisted of an older care recipient and a home care worker). A total of 260 caregiving triads had only one person interviewed (in 21 units only an older care recipient was interviewed, in 209 units only a family member was interviewed and in 29 units only a home care worker was interviewed). A total of 64 older adults, 43 family members and 56 home care workers completed the questionnaire in Russian and 282 home care workers completed the questionnaire in English. The remaining participants completed it in Hebrew.
2. NA-Dyadic reciprocity was not calculated because the variance of relationship + error was not significantly different from 1 (i.e., unreliable)

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