

Invited Article

# Translating Basic Research on the Aging Family to Caregiving Intervention: The Case of Within-Family Differences

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## Abstract

Since its inception, the field of gerontology has sought to establish optimal connections between the scientific activities of researchers and the real-world concerns of practitioners and clinicians. The concept of translational research has emerged in recent years as a model for bridging the gap between science and service. This article provides an example of how basic research findings can be translated to provide guidance for intervention in the area of family caregiving. We review findings from an innovative program of research on within-family differences, which extends theory and research from the developmental psychological study of children to the family in later life. The within-family difference perspective focuses on how the individual parent–child dyads in a particular family differ from and are affected by other dyads. Basic research on this topic has revealed the extent of parental favoritism in later life, factors related to parental differential treatment of offspring, and the consequences of such favoritism and treatment on sibling relationship quality and psychological well-being. Four examples are provided of ways in which attention to within-family differences research could enhance caregiving interventions.

**Translational Significance:** This article provides an example of the translational research process, demonstrating how a body of basic research can be mined for insights that can guide intervention. A focus on within-family differences in older parent–adult–child relationships suggests how existing caregiving interventions could be adapted or fine-tuned to take advantage of empirical insights regarding family complexity.

**Keywords:** Caregiver intervention, Translational models, Parental favoritism, Parental differential treatment, family, Parent–adult child relations

Since its origins as an organized discipline, gerontology has been deeply engaged with the question: What is the optimal relationship between research on aging and the real-life problems of older people and their families? The field has always included both scientists and helping professionals, which has led to ongoing concerns about the way in which basic research

and practice should ideally intersect in gerontology. As evidence of this fact, we point to a very contemporary-sounding statement of the problem, penned over a half century ago.

In 1961, [Geneva Mathiasen \(1961\)](#) offered an analysis in the first volume of a brand new journal, *The Gerontologist*. She noted:

There is a growing conviction of many persons working in social aspects of aging of the need for a closer relationship between individuals engaged in research and those engaged in practice. There has been ... a sometimes subtle, sometimes blunt, assumption of hierarchy, with the practitioners at the lower end of the order... The practical result has been to separate those with an academic orientation and primary research interest from those primarily engaged in the field of practice.

Mathiasen went on to identify the key problem: “the researchers believe that much of the work with older people is based on unproved assumptions,” whereas “practitioners refer to research studies as instruments to prove statistically what every good practitioner already knows.” She concludes that the need for: “a device for better communication and even collaboration seems apparent.”

Given this call to arms from over 50 years ago, how successful have we been in bridging the gap between science and service in our field? Unquestionably, the search for “a device for better communication and even collaboration” has continued. Despite advances, however, the need clearly exists for better translation among the activities of fundamental scientific discovery in gerontology and geriatrics, the development of effective treatments and interventions, and their eventual adoption by practitioners in the community, long-term care facilities, health care settings, and in the policy arena.

There have been limited efforts to translate basic behavioral science findings into behavioral interventions across fields (Czajkowski et al., 2016) and specifically in gerontology (Pillemer, Suiitor, & Wethington, 2003; Wethington & Burgio, 2015). In a recent analysis, Callahan and colleagues incisively sum up the progress in applying basic research to problems of aging as follows: “Viewed from a scientist’s perspective, our progress over the past century has been astonishing. Viewed from the perspective of public health, our progress has been meandering, poorly integrated, imbalanced, with low impact, and high cost.” (Callahan et al., 2014). There is considerable agreement that new models are needed to bridge this gap.

### Translational Research: Moving Basic Science into Practice

Over the past decade, vigorous academic discussion of translational research has taken place (Westfall, Mold, & Fagnan, 2007; Woolf, 2008). The term has taken on particular importance through the embrace of the concept by the National Institutes of Health (Collins, 2011), from which hundreds of millions of dollars have now been invested in the Clinical and Translational Awards Program (Pincus, Abedin, Blank, & Mazmanian, 2013) as well as dozens of specific calls for translational research on various topics. Within the field of aging, the Edward R. Roybal Centers were established by the National Institute on Aging in 1993 to facilitate the translation of theory and basic research from the social and behavioral sciences into

applied research, interventions, and programs to improve quality of life, productivity, and health of older people (Pillemer et al., 2003).

In clarifying the focus of translational research, it is useful to ask “What is the principal problem that translational research trying to solve?” As suggested in the introduction to this article, we believe that the most pressing problem is the too-distant relationship between fundamental scientific discoveries in the field of aging and the life course on the one hand, and attempts to address the challenges of later life on the other. Over the past several decades, there has been tremendous growth in basic research in geriatrics and gerontology. At the same time, on the practice level, programs have proliferated to assist older persons in various domains of life. However, the expansion in both fields has made increasingly obvious the lack of connection between them. In particular, insights from basic research are rarely used systematically to guide the development of new programs. An argument for translational research is the length of time it takes for a fundamental research discovery to move into a treatment or therapy. This lag has been estimated as approximately 17 years for research evidence to reach clinical practice (Westfall et al., 2007), and much basic research is never transferred into practical use (Institute of Medicine, 2001).

Despite an ongoing debate over its precise definition, our review of the varied definitions and uses of the term “translational research” suggests one common element to all formulations: the need for a more rapid and seamless movement from basic science to practice in some form, and always including both. Translational research necessarily includes a critical step: theory and basic research findings are directly employed to develop interventions and treatments. For the purposes of our discussion here, we therefore employ this definition of translational research on aging:

Systematic translation of research findings from gerontology into the development of innovative interventions that ultimately improve real-world practices and from interventions and practices back to basic research.

This definition reflects the core component of most definitions we have reviewed: a movement from basic science to practice in some form, but always including both. Also promoted in most discussions of translational research is speeding up the process of translation and making it intentional and systematic. Finally, translational research emphasizes a flow of knowledge in the reverse direction: insights from practice can be used to generate research questions and inform science, creating “practice-based evidence” (Green, 2008).

### Families in Later Life: Fertile Ground for Translation

Although there are many priorities for translational research within social gerontology, in this article we focus

on a particularly prominent area: family caregiving. Over the past several decades, interest has increased in supporting individuals caring for frail older family members (Qualls, 2016). This concern is an outgrowth of extensive research indicating that family caregivers are at elevated risk of a number of negative outcomes, including psychological distress, physical illness, and economic strain (Adelman, Tmanova, Delgado, Dion, & Lachs, 2014). Such problems are particularly acute among caregivers to persons suffering from Alzheimer's disease and related forms of dementia (Parker, Mills, & Abbey, 2008). Given the growth in the older population, as well as the association of advanced age with physical and mental disability, translational research is critically important to bring to bear scientific knowledge on the development of interventions.

Despite these pressing concerns, widespread use of the translational research paradigm as outlined above are lacking in the area of aging and family. In this article, we endorse translational approaches in gerontology and apply this perspective to our particular area of research expertise: the study of within-family differences in later-life families. We employ this area as a "test case" for using programs of basic research as inspiration for intervention. We begin by summarizing major insights from our basic research program on within-family differences in later life, noting in particular findings that potentially relate to family caregiving. We then adopt a "translational lens," offering selected insights regarding how this new perspective could influence programs and practices involving the care of older people by their adult offspring.

We focus on one crucial component of the translational research process—moving basic research findings into ideas for intervention—because it has received the least attention in gerontology. In the field of caregiving specifically, basic research on aging families rarely has been applied to caregiver interventions. Instead, caregiver interventions typically provide education, counseling, and concrete services (such as respite care) based on clinical observation or applied research about client needs. To the extent that caregiving interventions are empirically based, the research is typically derived from studies of caregiver stress and burden, rather than basic research on the family. Considerable analysis has taken place of the opportunities and challenges related to translating caregiver interventions from randomized trials to implementation in the community (Gitlin, Marx, Stanley, & Hodgson, 2015; Wethington & Burgio, 2015). However, virtually no attention has been paid to the core component of translational research: using findings from basic research to inspire and design empirically based interventions.

The goal of this article, therefore, is to shed light on the potential of translational research on caregiving by focusing on our own program of basic research on families in later life. Over the past decade, we have employed an innovative approach to the study of older parent—adult child relations that emphasizes *within-family differences*. Despite the accumulation of extensive empirical findings

(by our research group and others) on how different parent—child dyads differ within families, no attempt has been made to take a translational approach, asking: How can these powerful findings regarding within-family differences be applied to intervention to improve the lives of older people and their families? More broadly, we hope to shed light on the question: Can research that has up to this point been largely of interest to academic specialists in a subfield of gerontology—parent—child relations in later life—be extended such that they can guide intervention strategies?

### **Within-Family Differences: A New Paradigm for Understanding Parent-Child Relations in Later Life**

A goal of our basic research program on parent—child relations is the integration of perspectives from developmental psychology and sociology to better understand family relationships. A number of issues of burning interest to developmental psychologists have been largely ignored by gerontologists. This gap may in part be due to the "alpha-omega" split in studies of the family, in which there has been relatively little permeation of insights derived from research on families with young children into work on families in later life (Fingerman & Bedford, 2000). One area in which this gap is particularly evident is research on within-family differences.

The study of within-family differences is grounded in classic theories of social interaction in both sociology (Simmel, 1964) and psychology (Heider, 1958), which can be used to argue that the relationship between a parent and any one of his or her children is likely to be affected by the parent's relationships with other adult children in the family. The within-family approach also draws from two other closely related theoretical perspectives—family systems theories (Bowen, 1978; Cox & Paley, 1997), which focus on the interconnectedness of family ties and life course theories (Elder, 1985, 1994; Conger & Elder, 1994) that emphasize linked lives between family members both within and across generations.

Within-family approaches have been used by developmental psychologists extensively to demonstrate that there are differences in parent—child relations within families in the early years. For example, studies have shown that parents of young and adolescent children differentiate between their offspring on a variety of relational dimensions, including affection, pride, disapproval, punishment, and time investment. Furthermore, this line of research has shown that such within-family differences in parental responses often have important consequences for children's well-being and achievement (Kowal, Kramer, Krull, & Crick, 2002; Pillemer & Sutor, 2008; Shanahan, McHale, Crouter, & Osgood, 2008).

Despite the obvious significance of such research in explaining both the causes and consequences of relationship

quality and well-being, these designs have received limited attention in the literature on families later in life. This situation has improved in recent years through the work of several research groups (Suito et al., 2017). A major focus of this research has been on the topic of parental differential treatment, which includes patterns of favoritism and disfavoritism toward individual offspring in the family.

This growing body of research now has established that parental differential treatment is prevalent in the second half of the parents' life course, when offspring are adults. Studies have found compelling evidence of parents' favoritism (or disfavoritism) toward particular children in terms of relationship quality (e.g., closeness and conflict); parents' evaluations of their adult children (e.g., pride and disappointment) and provision and receipt of emotional support dimensions (Fingerman, Miller, Birditt, & Zarit, 2009; Suito, Sechrist, Plikuhn, Pardo, & Pillemer, 2008). Further, research shows that patterns of differential treatment are relatively stable across time (Suito, Gilligan, & Pillemer, 2015). Taken together, the growing body of research on parental differential treatment indicates that this phenomenon is common and enduring.

Of particular importance to the development of interventions, patterns of parental differential treatment have well-documented detrimental effects on individuals and relationships. Parental favoritism has been shown to influence negatively the quality of sibling relationships over the life course. In particular, the literature has demonstrated that in adulthood (as well as childhood and adolescence) siblings feel and express less warmth and more hostility toward one another when a parent favors one child over others (Boll, Ferring, & Filipp, 2003, 2005; Brody, Stoneman, & McCoy, 1994; Gilligan, Suito & Pillemer, 2013; Suito et al., 2009). Researchers using recollections of parental differential treatment have found that childhood memories of differential treatment were more strongly associated with sibling relationship quality than were current perceptions (Suito et al., 2009, 2014). Taken together, the literature demonstrates that siblings have worse relationships when they perceive that they are being treated unequally by their parents.

A large body of work has also demonstrated the negative consequences of parental differential treatment on psychological well-being in childhood, adolescence, and early adulthood (Feinberg & Hetherington, 2001; Jensen et al., 2013; McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000; Richmond, Stocker, & Rienks, 2005; Shanahan et al., 2008; Young & Ehrenberg, 2007). Recently, this line of research has been extended to the exploration of parental differential treatment and well-being when children are well into midlife (Davey, Tucker, Fingerman, & Savla, 2009; Pillemer, Suito, Pardo, & Henderson, 2010; Suito et al., 2015, 2016). Pillemer and Suito (2010) examined actual and perceived maternal favoritism in the domains of closeness, expectations for care, and conflict. The findings indicated that, across all three

domains, maternal differentiation was related to higher depression scores among offspring. Suito and colleagues (2015) focused on perceived favoritism, finding that among middle-aged adult children depressive symptoms were also higher if they perceived themselves as being the child in whom the mother was most disappointed. Peng, Suito, and Gilligan (2016) found that both recollections of parental differential treatment from childhood and perceptions of current parental differential treatment predicted depressive symptoms.

In sum, adoption of a within-family differences perspective provides a new lens for understanding families in later life, with significant implications for issues of care provision and planning. Almost all investigations of helping by adult children have used between-family designs, focusing typically on a single child in the family. Comparisons among all offspring have not been possible in these studies. Fundamental to the within-family approach is the view that the characteristics of individual children and of mother-child dyads will, relative to those of other children and dyads in the family, explain patterns of mothers' selection of a particular adult child. Taken together, this body of research findings represents a promising, but as a yet untapped, source of innovative ideas for practice.

### Translating Research on Within-Family Differences to Family Caregiving Interventions

Given the growing body of literature demonstrating the prevalence and consequences of within-family differences in later-life families, we believe that this phenomenon provides an ideal "test case" to illustrate how a program of basic research can be translated into testable ideas for prevention and intervention efforts. To demonstrate this potential, in the remainder of this article we provide examples of ways in which fundamental research on within-family differences can inform programs designed to improve the lives of older people and their family caregivers. Our goal is to make both a methodological and a substantive contribution, by highlighting new avenues for intervention while demonstrating how fundamental research can be applied to practical problems of caregiving. Because our goal is to translate research on within-family differences in parent-child relations to intervention, we restrict our discussion to adult-child caregivers.

Hundreds of caregiver intervention programs have been developed over the past 30 years, which can generally be grouped into the following categories: psycho-educational, support, and multi-component. Interventions are also categorized as either group or individual, with the latter now being delivered increasingly through electronic means. Despite the diversity in the interventions employed, our review uncovered no programs that take into account within-family differences in parent-child relations. That is, programs are directed toward caregivers generically, rather



than seeing them as embedded in a complex family network. Indeed, the designs of most studies of caregiving do not permit an examination of within-family differences, as they almost invariably focus on a single older parent–child caregiver dyad (Koehly, Ashida, Schafer, & Ludden, 2014; Lingler, Sherwood, Crighton, Song, & Happ, 2008).

In contrast, the within-family perspective calls for viewing each parent–child relationship as embedded in a network of other intrafamilial relationships. Specifically, we suggest that the relationship between a parent and any particular adult child is likely to be affected by the parent's relationships with other adult children in the family, as well as by long-standing patterns of parental preference and differential treatment. By translating these insights from basic research on the family, it may be possible to develop innovative caregiver interventions and fine-tune existing ones. Furthermore, in addition to the individual outcomes typically assessed in most caregiving evaluations (e.g., burden, mastery, and preparedness) a within-family approach would allow for the assessment of additional family-level outcomes (e.g., conflict, distance, or disagreement in family relations). Below we offer four specific examples to highlight the ways in which the insights of basic research on within-family differences can be applied to interventions to improve the intergenerational caregiving experience.

### Who Cares? Within-Family Differences in Caregiver Selection

Becoming a family caregiver represents a highly significant adjustment for adult offspring that affects physical health, psychological well-being, and social relationships. Although an extensive research base exists on the consequences of caregiving, until recently, remarkably little was known about a very important issue: the way in which one offspring becomes the primary caregiver while his or her siblings do not. An example of the utility of the within-family differences perspective is its ability to shed light on the issue of parental preference for a specific child as the caregiver and how expectations for care from offspring vary within the same family.

The issue of mothers' preferences for care from a specific child are not simply of academic interest. Suito, Gilligan, and Pillemer (2011) used quantitative and qualitative data from a sample of older mothers at two-time points (7 years apart). Mothers' preference for a specific child as a caregiver was recorded at Time 1. At the Time 2 assessment, mothers who required and received care during the time period identified the offspring who had helped them, making it possible to compare mothers who did or did not receive care from the child they preferred. Mothers who received care from children whom they had not identified as their preferred caregivers reported increased depression at Time 2. Qualitative data revealed that the greater distress was related to greater socioemotional incompatibility with the

non-preferred caregiver. Thus, understanding the issue of preference for a caregiving offspring can have translational implications for intervention.

In an analysis of the same data set, we focused on one component of the caregiver selection process—identifying the factors that lead to a mother's selection of a particular child whom she expects will become her caregiver when the need arises. This issue is of considerable importance, as a mother's expectations for the likely caregiver are likely to shape the actual course of caregiver selection as it unfolds over time (Pillemer & Suito, 2014). We asked each mother to select which of her children would be most likely to care for her on a day-to-day basis if she became ill or disabled. It should be noted that less than one-quarter of the mothers (23%) refused to differentiate among their children. When mothers did choose an expected caregiver, they did so most strongly based on gender similarity. The odds of mothers naming daughters were more than three and a half times greater than the odds of naming sons (the strongest predictor in the analysis).

Two other variables were strongly associated with being the child selected as the future caregiver: perceived similarity in values and degree of emotional closeness. Both of these factors represent socioemotional characteristics of parent-child relationships. In particular, emotional closeness is a relational dimension of parent-child relationships that reflects mothers' perceptions of relationship quality with their adult children (Suito et al., 2016). Previous research has shown that geographic proximity affects adult children's availability to provide care to older parents (Spitze, Ward, Deane, & Zhuo, 2012; Stuifbergen, van Delden, & Dykstra, 2008). Consistent with this previous work, we found that adult children who lived at a greater distance were less likely to be named by their mothers as caregivers. Furthermore, children who were employed were somewhat less likely to be named. Children who historically had provided more support to their mothers were more likely to be named as expected caregivers; however, children who had received support from their mothers were no more or less likely to be selected.

From these results, a profile appeared that is relevant to intervention. Older mothers are most strongly influenced by factors representing similarity, comfort, and attachment, such as gender and value similarity, emotional closeness, geographical proximity, and the past provision of care from the child. Further, in contrast to prior literature (Silverstein, Conroy, Wang, Giarrusso, & Bengtson, 2002), mothers' caregiving expectations were not influenced by the view that they are owed care by children whom they have helped. Past exchange of help made a difference, but only in the sense that the child's past provision of help made him or her appear qualified to continue.

Particularly notable were characteristics of children that were not related to being chosen as the expected caregiver. Measures of availability, such as the child's marital or parental roles, did not affect mothers' expectations. In

addition, mothers' choices were not affected by the degree to which a child experienced major life problems (such as mental or physical illness, alcoholism, or trouble with the law). Thus, the mothers did not emphasize characteristics of children that might negatively affect their ability to provide care. For example, the presence of mental health and substance abuse problems are likely to diminish the capacity of the child to be an effective caregiver. Indeed, these two factors have been identified as important predictors of abusive caregiving situations (Lachs & Pillemer, 2015). Similarly, it is likely that children's family roles, such as parental status, would make them less able to take on parent care. Neither of these considerations emerged in either quantitative or qualitative data analyses.

We now turn to the implications of these findings for translational research on caregiving. First, the vast majority of mothers stated a clear choice for the child they expect to care for them. Education of professionals who work with older people and their families would be useful to encourage and guide discussion of this topic, with the goal of avoiding potential violated expectations and resulting family conflict. As an example, mothers may expect care to continue from children who have helped them in the past, assuming this familiar situation will continue. However, those offspring may instead be operating under the norm of reciprocity, expecting siblings to step in and "take their turn." In addition to assessing mothers' preferences and expectations, future caregiving interventions should also include assessments of adult children's expectations regarding care provision. Discussions with service professionals with whom older adults and their families are likely to have contact (e.g., counselors, medical professionals, social workers) could help prevent a potentially damaging discrepancy among the mothers' expectations, those of her expected (but perhaps unwilling) caregiver, and those of siblings.

Second, the complex interplay of mothers' preferences and children's desires and capabilities points to another route for intervention design. Specifically, there is a pressing need to begin discussions of allocation of responsibilities among adult children *prior* to the onset of care needs. Both aging parents and adult children can benefit from discussing issues regarding future care with a variety of professionals. Although such discussions often focus on formal care and end of life planning, the within-family differences perspective argues for an exploration of expectations for care and help *from adult children*, and the degree to which parental expectations align with the realities of family life (Bromley & Blieszner, 1997). Given the finding that mothers often consider future care from children and have clear preferences, such dialogue before the onset of caregiving needs may ameliorate the eventual stress of caregiving and improve the quality of family relationships. Family mediation interventions are a promising approach (Pinquart, Sörensen, & Peak, 2005) that could be enhanced through explicit discussion of within-family differences in parental

preferences, adult children's capacity and expectations and pre-existing patterns of assistance.

Third, the caregiving intervention literature emphasizes the need to maximize conditions in which caregiving is the most beneficial to the recipient and least stressful for the caregiver (Suitor, Gilligan, & Pillemer, 2013). Developing ways in which families can follow an older parent's preferences for care should be a high priority for translational research. If such a "matching" of preferred and actual caregiver is not possible, then interventions could ameliorate the possible negative effects. Counseling interventions should be tested that include open and honest discussion of parental expectations for care, as well as methods to assist parents and offspring in modifying long-standing family roles and preferences. Although parental favoritism is sometimes perceived as a taboo subject, the fact that mothers openly expressed preference for certain children over others regarding caregiving suggests that this issue can be approached openly in care planning interventions.

### Family-Based Caregiving Intervention: Considering the Family as a Unit

Most previous caregiving studies and interventions have focused exclusively either on the primary caregiver in the family or on the caregiving dyad (i.e., the care recipient and one caregiver). However, as we have noted, caregiving is usually a "family affair," negotiated among siblings. As such, professionals who work with older adults should consider the larger family unit beyond the primary caregiver, because parents' relationships with other children have implications for the overall caregiving experience. In particular, although by the time they reach their eighties most parents have made the transition from caregiver to care recipient (Fingerman, Sechrist, & Birditt, 2013; Suitor, Sechrist, Gilligan, & Pillemer, 2011), recent research using a within-family approach has demonstrated that parents continue to provide some adult children with support late into the life course. In many cases, parents are providing support to adult children who are experiencing medical, financial and other life stressors (Fingerman, Cheng, Cichy, Birditt, & Zarit, 2013; Gilligan, Suitor, Rurka, Con, & Pillemer, 2017).

A large body of research indicates that such situations may cause substantial distress for parents, due to their emotional stake in the normative development of their offspring and their anxiety regarding the well-being of the child (Fingerman et al., 2013; Pillemer, Suitor, Riffin, & Gilligan, 2017). Because of the emphasis on the stresses incurred by adult children caring for parents, this reverse pathway to parental distress may be ignored in practice settings. Clinicians who work with older adults should be aware of the possibility of ongoing dependency of adult offspring with serious problems, and that older parents may be providing support to these children while simultaneously receiving support from other children in the family. Thus, assessing whether parents are receiving care from a

specific child may not adequately capture the complex support exchanges that are occurring in later-life families.

Instead of focusing only on the care recipient, clinicians should also consider the differing needs and demands of older adults' offspring. This issue is very relevant for professionals who work with older individuals in financial planning and management, as substantial support to adult child may compromise the parent's own economic future (Grundy & Henretta, 2006; Remle, 2011). Understanding differential support patterns among adult children can be useful in determining the best use of the older parent's resources.

### Incorporating Within-Family Differences in Family Therapy

Family therapy approaches are growing for caregivers, and the within-family differences approach can help to inform such interventions (Qualls, 2016; Walsh, 2016). Given that within-family differences appear to intensify the negative consequences of caregiving, ideally these family dynamics should be addressed in family therapy prior to the caregiving context (Suitor et al., 2014). However, family therapists working with current caregivers must also be aware of within-family differences and address these concerns in addition to the family's other needs. By addressing within-family differences, family therapists may assist families in achieving a more optimal caregiving experience.

Family therapists are often trained to see the family as an "emotional unit" (Bowen, 1978). As a result, these professionals are inclined to address similarities and differences in the experiences of individual family members and the interconnectedness of family relationships. Thus, considering a within-family perspective that explicitly assesses for and addresses parental preferences and differential treatment would be a natural extension to current family therapy practice. We suggest that a first step for integrating a within-family difference perspective into current practice would be to assess systematically long-standing patterns of parental preferences and differential treatment.

When making initial contact with families, therapists could incorporate questions that provide parents and adult children with an opportunity to describe their perceptions of parental differential treatment. The high prevalence of this phenomenon in the research findings suggests that this is a common experience among families. For families struggling with issues related to sibling perceptions of unfairness or inequality, it may be reassuring to realize that such differentiation is normative rather than unusual. Therapists should be aware, however, that adult children perceptions of favoritism are not always consistent with parents' reports (Suitor, Sechrist, Steinhour, & Pillemer, 2006). As a result, it is important to consider multiple family members' perceptions of within-family differences. Further, therapists may facilitate discussions among family members' regarding their multiple perceptions.

Therapists may also assist families in managing the consequences of within-family differences. As mentioned, parental differential treatment negatively affects sibling relationships and psychological well-being across the life course (Suitor et al., 2009; Gilligan, Suitor, Kim, & Pillemer, 2013). Despite the fact that individuals tend to avoid conflict and increase harmony in their relationships as they age (Charles & Carstensen, 2008; Coats & Blanchard-Fields, 2008; Lefkowitz & Fingerma, 2003), offspring have difficulty ignoring their parents' favoring particular siblings in the family. Further, mothers' favoritism reduces closeness regardless of which child was favored. Therapists should be aware of the negative consequences of parental differential treatment on sibling relations in adulthood, which may in turn affect care provision.

Therapists should also be aware of the detrimental consequences of parental differential treatment on children's psychological well-being across a variety of dimensions (e.g., relational, evaluative and supportive) (Pillemer et al., 2010; Suitor, Gilligan, Peng, Jung, & Pillemer, 2015). Further, recent work suggests that when children perceive that they are preferred across multiple areas (e.g., closeness, confiding, helping), parental favoritism has a greater impact on well-being than does being favored for a single dimension. These consequences are greater for daughters than sons (Suitor, Gilligan, Peng, & Ruka, *in press*). These findings suggest that children's perceptions of parental differential treatment carry with them an emotional burden that takes a toll on adult children's psychological well-being. These consequences might be alleviated if parents and children had the opportunity to discuss parents' preferences and adult children's reactions to these preferences in a family therapy setting.

### Within-Family Differences Perspective as a "Sensitizing Concept"

Beyond the concrete opportunities for intervention design we have proposed, there is another way in which the within-family perspective can help designers of caregiving interventions and practitioners who work with caregivers and care recipients. The concept of within-family differences can be profitably used as a "sensitizing concept." According to Blumer (1954) a sensitizing concept provides a general frame of reference and points toward possibly enlightening lines of inquiry, providing guidance in approaching a particular phenomenon (Oddli, Nissen-Lie, & Halvorsen, 2016). In this case, professionals who work with caregivers can be influenced by the general awareness of the impact of legacies of parental favoritism, varying expectations for children, and long-standing patterns of differential treatment of offspring.

To give an example, both researchers and clinicians frequently encounter typical responses when asking older parents about the quality of relationships with their children in the aggregate: "I get along with all my children,"

or “They’re all good kids.” Influenced by within-family differences as a sensitizing concept, a practitioner would continue the dialogue by asking detailed questions about the quality of relationship with each individual child. Similarly, rather than focusing only on the child identified as the primary caregiver, a professional leading a care planning discussion would sensitively probe about differential expectations and histories with the other siblings in the family. Exploring the parent’s expectations and preferences for care not only from formal sources, but also among his or her offspring, using this lens becomes an essential component of the discussion.

## Discussion

The within-family differences approach calls for considering each individual parent-child dyad as embedded in a complex network of other dyadic parent-child relationships. Therefore, a parent’s relationship with a particular adult child will be affected by the parent’s relationships with offspring in the same family. This perspective more accurately reflects the complex reality of families in the second half of life, moving gerontological research closer to the lived experience older parents and their children (Pillemer et al., 2007). To highlight the ways in which the insights of basic research can be applied to interventions to improve the intergenerational caregiving experience we provided four specific examples how a within-family differences approach can be applied to caregiver selection, family-based caregiving, family therapy and as a sensitizing concept.

Beyond our substantive suggestions, using within-family perspectives also has implications for the evaluation of caregiving interventions. The evidence for current interventions overall is mixed, with few studies employing rigorous research designs sufficient to evaluate them as evidence-based. A number of systematic reviews have been conducted over the past decade, relying on the relatively small number of studies that have employed adequate research designs (such as employing randomized, controlled design methodology and involving adequately powered samples). The results are at best equivocal, with limited support for effectiveness of many interventions, and uncertain clinical significance of outcomes that were found to be statistically significant (Thompson et al., 2007).

The evidence we have provided in this article on within-family differences suggests that intervention research could be strengthened by collecting and analyzing data from multiple family members. Evaluators should take advantage of multilevel modeling techniques to assess the outcomes of multiple family members. In particular, newly developed group actor-partner interdependence models (Kenny & Garcia, 2012) would allow researchers to consider both individual characteristics (e.g., gender, preparedness, and burden) and group level characteristics of the family network (e.g., harmony and discord). Further, collecting

qualitative data from parents and adult children would allow for evaluation of multiple family members’ perspectives and experiences (Reczek, 2014). Conducting rigorous evaluation is necessary to establish whether interventions based on within-family perspectives are effective in improving the caregiving experience for both care recipients and care providers.

Finally, caregiving research can be further enhanced by incorporating a translational research paradigm into intervention work. Specifically, a number of analysts have noted that a key translational problem exists in the micro-level: how can dialogue be increased and improved between researchers and practitioners (Bartunek and Rynes, 2014)? Following a translational model, we hold that practitioners, who are the eventual end-users of research, should be engaged as partners in establishing research priorities. Gerontological researchers should intentionally and systematically include the knowledge and expertise of clinicians who work with families when designing research. A number of methods are now available to facilitate researcher-practitioner collaboration, including community-based participatory research methods (Minkler & Wallerstein, 2008) and consensus-building methods that promote knowledge translation having participants to reflect on research-based knowledge and how it might improve practice (Sabir et al., 2006; Pillemer, et al., 2015). Applying such approaches to the issue of within-family differences could facilitate the uptake of translational research programs and findings.

Finally, at its core, translational research means exploiting existing basic research findings to create better interventions to solve human problems. Many interventions in the field of gerontology—including caregiver support programs—are based on practical experience and clinical observation. In no way do we call into question the utility of such interventions, and arguments can be made for placing major emphasis on the real-world insights of practitioners in developing solutions to human problems (Pillemer, Suito, & Wethington, 2003).

We would argue, however, that social theories about human behavior and the basic research that emerges from these theories create unique opportunities for intervention design. Fundamental, curiosity-based research brings a perspective that transcends individual cases and points toward innovations. Translation from basic research helps avoid one potential danger: that relying only on practical experience in program design will lead simply to fine-tuning current practices. Interventions based on clinical impression or practice wisdom may miss important avenues for personal or organizational change. In this article, we have argued that attention to basic science on within-family differences can move the field away from individual-level interventions for caregivers to whole-family approaches.

Based on the examples we have provided above, we believe that the optimal environment for intervention is the interplay between the grounded experience of human



needs offered by clinicians and social scientists' attention to theory and basic research. We propose that collaboration between researchers and clinicians who specialize in identifying and intervening in problems of caregivers can ultimately bring about a balance between these perspectives. This interaction can accomplish the foundational goal of translational research: to create a better marriage of science and service that leads to more creative and effective intervention designs.

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## Conflict of Interest

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

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