In-Home Occupational Performance Evaluation for Providing Assistance (I-HOPE Assist): An Assessment for Informal Caregivers

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MeSH TERMS

- activities of daily living
- caregivers
- environment design
- housing
- outcome assessment (health care)

Home modification interventions have the potential to provide support to informal caregivers; however, the impact of these interventions on caregivers is understudied, and adequate assessments are lacking. This study describes the development and preliminary psychometric properties of a performance-based assessment that identifies environmental barriers to performance of daily caregiving activities. An existing assessment of person–environment fit was modified using key informant interviews and was administered to 31 informal caregivers. The In-Home Occupational Performance Evaluation for Providing Assistance demonstrated reliability across raters, good internal consistency for all subscales, and convergent validity with existing measures. This assessment has the potential to guide home modification interventions and measure the impact on informal caregiving in the home.

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An estimated 48 million adults serve as unpaid caregivers for an adult relative or friend (National Alliance for Caregiving, 2009). The majority of care recipients have a long-term physical condition, and family caregivers provide assistance for an average of 4.6 yr (National Alliance for Caregiving, 2009). For many people, family assistance is essential to remain at home; more than 85% of in-home assistance is unpaid (LaPlante, Harrington, & Kang, 2002). Caregivers may experience burdens, such as providing physical assistance without training or help, that put them at risk for physical injury (Brown & Mulley, 1997). Caregivers also experience positive effects of caregiving that enable them to continue providing assistance (Bertrand et al., 2012; Fredman et al., 2008; Fredman, Doros, Ensrud, Hochberg, & Cauley, 2009).

Self-efficacy is one component that plays an important role in caregiver outcomes. For example, low self-efficacy has been linked to depression, whereas high self-efficacy has been linked to reduced risk for negative caregiving effects (Gilliam & Steffen, 2006; Merluzzi, Philip, Vachon, & Heitzmann, 2011; van den Heuvel, de Witte, Schure, Sanderman, & Meyboom-de Jong, 2001). With the growing number of older adults and people living with chronic conditions (World Health Organization, 2011), developing effective caregiver interventions has become a health priority.

One potential intervention is home modifications, which aim to improve people's ability to perform daily activities by reducing environmental barriers. Home modification interventions, such as architectural changes, assistive devices, and activity modification, typically target adults with functional limitations but also have the potential to reduce the need for physical care provided by caregivers (Agree & Freedman, 2000; Mortenson et al., 2012). Home modifications can

increase functional performance for people with disabilities (Wahl, Fänge, Oswald, Gitlin, & Iwarsson, 2009), improve caregiver self-efficacy, and improve functioning for care recipients with dementia (Gitlin, Corcoran, Winter, Boyce, & Hauck, 2001; Graff et al., 2006). Furthermore, caregivers are receptive to environmental modification strategies; adherence rates for adaptation recommendations have been found to range from 65% (Dooley & Hinojosa, 2004) to 75% (Gitlin et al., 2001).

Although initial findings that home modifications improve caregiver outcomes are promising, research has been hindered by a lack of validated instruments for measuring caregiver self-efficacy and assistance related to daily activities in the home (Gitlin et al., 2001; Glasdam, Timm, & Vittrup, 2010; Graff et al., 2006). The majority of caregiver assessments target perceived caregiver burden, such as the Caregiver Burden Inventory (developmental, physical, social, and emotional burden; Novak & Guest, 1989), the Modified Caregiver Strain Index (strain over time; Thornton & Travis, 2003), and the Caregiver Reaction Assessment (schedule disruptions, lack of family support, health and financial problems, and self-esteem; Given et al., 1992). Although these measures evaluate burden related to the overall caregiving experience, they do not assess activity-specific self-efficacy related to providing assistance with daily activities.

Assessments such as the Comprehensive Assessment and Solution Process for Aging Residents (Sanford, Pynoos, Tejral, & Browne, 2002), The Housing Enabler (Iwarsson & Slaug, 2001), and the Safety Assessment of Function and the Environment for Rehabilitation (Chiu et al., 2006) examine performance in the home of people with a disability but do not take into consideration the challenges the environment poses for caregivers. Additionally, other assessments, such as the FIM™ (Keith, Granger, Hamilton, & Sherwin, 1987), objectively measure level of assistance needed but provide no measurement of the influence of the environment and are limited to self-care. These assessments provide valuable information about the performance and environmental barriers of adults with disabilities, but they do not address the impact of the environment on caregivers. Additionally, because of the lack of assessments evaluating person–environment fit, there is a gap in the literature investigating barriers that influence caregiving.

Another assessment, the In-Home Occupational Performance Evaluation (I–HOPE), was designed to evaluate person–environment fit of older adults (Stark, Somerville, & Morris, 2010). The I–HOPE is a multistep assessment that includes a card sort deck of 44 activities adults and older adults perform in their home (the basis for calculating the Activity Participation subscale score), client

ratings of their ability to perform problematic activities (Performance subscale), client ratings of their satisfaction with their performance of the activities (Satisfaction subscale), and a performance-based assessment with ratings by the therapist of the influence of the environment on activity performance (Severity of Environmental Barriers subscale). Clients sort the 44 cards into piles to identify problematic activities, and a subset of 10 problematic activities is selected to rate the Performance and Satisfaction subscales. The therapist then observes the client as he or she performs the problematic activities and calculates a Severity of Environmental Barriers score using ratings of the influence of environmental barriers for each of the prioritized activities.

The subscales have demonstrated good internal consistency and excellent interrater reliability, content validity, and sensitivity to change in the environment (Stark et al., 2010). The ability of the I–HOPE to address person–environment fit of older adults performing daily activities in the home makes it a promising tool to measure caregiver outcomes. The main purpose of this study was to adapt the I–HOPE to address caregiver outcomes and establish preliminary psychometric properties of the modified assessment. The secondary aim was to describe problematic caregiving activities and barriers to providing assistance in the home environment, information that is important to guide future intervention planning. The research questions guiding this study were, Is the modified I–HOPE a valid and reliable measurement of person–environment fit for caregivers? and What are the most common problematic daily activities and barriers to caregiving?

Method

This study was completed in two phases: (1) modification of the I–HOPE and (2) validation of the modified assessment. In Phase 1, 8 caregivers completed key informant interviews to identify activities relevant to caregiving that were absent from the I–HOPE card sort. In Phase 2, a cross-sectional study of 31 caregivers and care recipients received an in-home evaluation to allow us to evaluate the modified I–HOPE. We used an iterative process to modify the assessment throughout the study. The institutional review board at Washington University in St. Louis approved all procedures.

Participants

Caregivers in the St. Louis, Missouri, area who provided assistance to an adult family member over age 18 with at least two activities of daily living (as measured by the phone FIM) were eligible to participate. Caregivers with cognitive impairment (score of >10 on the Short Blessed

Test, indicating moderate impairment; Katzman et al., 1983) were ineligible. For Phase 1, occupational therapists at Washington University in St. Louis identified a convenience sample of family caregivers. For Phase 2, we used a variety of recruitment methods, including advertisements distributed through a center for independent living, community organizations, clinical service organizations, and a research participant registry. The sample size for Phase 2 was calculated on the basis of the interrater reliability of .94 to 1.0 of the original I-HOPE (Stark et al., 2010). Assuming a 20% relative error margin with an anticipated agreement between raters of .90, a total of 31 dyads was deemed necessary for the validity of the κ coefficient.

Phase 1: I-HOPE Revision

Procedure. Key informant interviews were used to validate and identify new items for a caregiver version of the I-HOPE. We used a semistructured interview format to review the current activities in the I-HOPE, identify additional activities that were not represented, identify activities that were frustrating or difficult for caregivers to perform, determine the importance of activities, identify the types of caregiving support provided, and explore the effects of caregiving on the caregiver's health. A semistructured method was used to allow the caregivers to guide the interview to explore personal experiences with caregiving (Marshall & Rossman, 1999). The interviews were audio recorded and transcribed verbatim.

Data Analysis. Constant comparative analysis was used to identify emerging themes (Hewitt-Taylor, 2001; Strauss & Corbin, 1994). Author Marian Keglovits, who is trained and experienced in qualitative research, completed the analysis. She manually identified themes in caregiving activities. The process was iterative, with final themes developed by continuous contrasts and comparisons among concepts and categories. Analysis was conducted throughout the interviews until a saturation point was reached after the eighth interview.

I-HOPE Adaptation Process. On the basis of the qualitative findings, we modified the I-HOPE card sort deck, sorting categories, and rating scales to reflect caregiving activities. For both retained and new activities, we created new cards with photographic images depicting caregiving activities. Three laypeople who were unfamiliar with the I-HOPE reviewed the new cards to determine whether the photos accurately represented the activities defined by the key informants. Photos that did not elicit the appropriate response were changed, and the process was repeated. The Performance and Satisfaction subscales and rating scale anchor points were also revised, and a new subscale, Self-Efficacy

(i.e., confidence in providing assistance during the activity), was developed to reflect caregiver self-efficacy. The new instrument was pilot tested with three caregivers.

Results. The analysis identified five themes not represented by activities in the original I-HOPE card sort deck: (1) providing daily medical care (e.g., wound care, coughing assistance, insulin management), (2) providing assistance with rehabilitation to address physical and cognitive needs, (3) managing equipment (e.g., ventilators, wheelchairs), (4) scheduling appointments and paid or unpaid assistance, and (5) ensuring safety in the home (e.g., preventing falls, making safe decisions). We reviewed the original card sort deck and developed eight new activities from the five themes: (1) assisting with bowel and bladder care, (2) managing medications, (3) assisting with rehabilitation, (4) managing equipment, (5) ensuring safety in the home, (6) scheduling appointments, (7) positioning the care recipient, and (8) providing daily medical care. On the basis of the key informant interviews and feedback during pilot testing, we combined eight activities from the original card sort deck (e.g., ironing was combined with washing and drying clothing) and removed four activities (e.g., child care) because of lack of relevance to caregiving. The final card sort deck included 43 caregiving activities.

We modified the card sorting categories from the original I-HOPE to reflect caregivers' perspectives, as follows: A = *I do not do and do not want to*, B = *I do now with no problem*, C = *I do now, but it can be challenging*, D = *I do now, but I am worried about my ability in the future*, and E = *I do not do but wish to do*. The pilot test caregivers expressed a need to include a category for activities that the caregiver currently assisted with but preferred not to. During the pilot testing, no caregivers placed activities in Category E; therefore, Category E was modified to *I do now but do not wish to do*.

The revised assessment, the In-Home Occupational Performance Evaluation for Providing Assistance (I-HOPE Assist), has three steps. First, the caregiver sorts the cards into the five sorting categories to identify problematic activities. The *Activity Participation score* is the proportion of difficult activities (difficulty with activities score) divided by the total number of caregiving activities. To calculate the difficulty with activities score, each card sort category is assigned a value (0 to *I do now but do not wish to do*, .5 to *I do now, but it can be challenging*, .75 to *I do now, but I am worried about my ability in the future*, and 1 to *I do now with no problem*) and summed. Activities that caregivers *do not do and do not want to do* are not included in the participation score. Next, from the cards in Categories C, D, and E, the caregiver identifies the top 10 most problematic activities, which are used in the subsequent steps.

Using the 10 most problematic activities, the caregiver provides ratings of Performance, Satisfaction, and Self-Efficacy on a 5-point Likert-type scale as follows: For Performance, 1 = *unable to perform at all* and 5 = *able to perform without difficulty*; for Satisfaction, 1 = *not at all satisfied with performance* and 5 = *very satisfied with performance*; and for Self-Efficacy, 1 = *not confident at all* and 5 = *very confident*.

In the third step, the occupational therapist observes while the caregiving dyad performs each problematic activity. The therapist identifies *environmental barriers*, or characteristics of the environment that make performance difficult, unsafe, or impossible or that necessitate assistance (e.g., low height of chair), and rates each barrier for each activity on a 5-point scale from 5 (*no activity, unable to assist*) to 0 (*no assistance needed*) on the basis of performance. The I-HOPE Assist subscale scores are described in Table 1.

Phase 2: Validation of the I-HOPE Assist

Following the revision, we recruited 31 participants to determine the feasibility, receptivity, validity, and utility of the I-HOPE Assist in identifying environmental barriers that affect caregiving and caregiver self-efficacy and to establish the psychometric properties of the instrument.

Measures. Caregivers reported their sociodemographic characteristics and the functional performance of the care recipients in motor and cognitive domains using the phone FIM (Keith et al., 1987). Self-reported ability to provide care was measured using the Caregiving Competence Scale (Pearlin, Mullan, Semple, & Skaff, 1990), a four-item assessment in which caregivers rate their feelings of competence in providing care (higher values indicate higher levels of perceived competence). Self-efficacy was assessed using the Caregiver Inventory (CGI), a non-disease-specific questionnaire addressing self-efficacy in managing medical information, caring for the care recipient and oneself, and managing difficult interactions and emotions; the latter is highly related to burden and stress (Merluzzi et al., 2011). The CGI uses a rating scale of 1 (*not at all confident*) to 9 (*totally confident*).

Procedure. Two occupational therapists (authors Keglovits and Somerville) received training as raters and completed the I-HOPE Assist for each participant. One therapist was chosen at random (flip of a coin) to conduct the home visit, and the other observed the visit and recorded ratings in silence. At the conclusion of the visit, the second rater had the opportunity to ask clarifying questions. The raters were instructed not to discuss the assessment results between themselves. Caregivers then completed a process evaluation to identify potential problems with the acceptability of the assessment.

Data Analysis. Data entry was completed using REDCap (Harris et al., 2009), a secure Web-based application. Data analysis was completed using IBM SPSS Statistics (Version 21; IBM Corporation, Armonk, NY). Demographic characteristics of the participants were calculated as descriptive statistics. Internal consistency of the subscales was examined using Cronbach's α , with coefficients greater than .70 considered reliable (Nunnally & Bernstein, 1994). To test the validity of the I-HOPE Assist, correlations between the Self-Efficacy subscale and the CGI and Caregiving Competence Scale and between the Activity Participation subscale and the FIM total score for the care recipient were calculated using Spearman rank order correlation coefficient.

To obtain interrater reliability, intraclass correlation coefficients (ICCs) were calculated to compare scores between the trained raters. Shrout and Fleiss's (1979) Model 2 was used, which assumes that the raters, who are representative of a larger population, assess all participants. Agreement between raters was excellent, with ICCs $\geq .75$ (Shrout & Fleiss, 1979).

Results. Descriptive statistics for the caregivers are provided in Table 2. This sample of 31 caregivers provided assistance to family members with dementia or Alzheimer's disease ($n = 8$, 26%), stroke ($n = 4$, 13%), spinal cord injury ($n = 2$, 7%), Parkinson's disease ($n = 5$, 16%), arthritis ($n = 3$, 10%), and other conditions ($n = 9$, 29%); other conditions included Meniere's disease, traumatic brain injury, and deconditioning. Caregivers reported assisting with an average of 28.1 ($SD = 7.8$) of the 43 card sort activities. Mean (standard deviation [SD]) subscale

Table 1. Subscales of the In-Home Occupational Performance Evaluation for Providing Assistance

Subscale	Construct	Score Calculation
Activity Participation	Proportion of total activities that are problematic	Sum of activity difficulty scores divided by number of caregiving activities
Performance	Subjective rating of performance in providing assistance with activities	Mean rating of prioritized problems
Satisfaction	Subjective satisfaction with ability to provide assistance during activities	Mean rating of prioritized problems
Self-Efficacy	Subjective confidence in providing assistance during activities	Mean rating of prioritized problems
Severity of Environmental Barriers	Therapist rating of person-environment fit	Sum of ratings

Table 2. Caregiver Characteristics

Characteristic	Phase 1, <i>n</i> (%) ^a	Phase 2, <i>n</i> (%) ^b
Gender, female	7 (87.5)	21 (67.7)
Ethnicity		
White	8 (100)	22 (71.0)
African-American	0 (0)	9 (29.0)
Mean age, yr (range)	65.3 (52–85)	61.34 (23–86)
Work status		
Retired	5 (62.5)	16 (51.6)
Full time	1 (12.5)	7 (22.6)
Part time	1 (12.5)	4 (12.9)
Unemployed	1 (12.5)	3 (9.7)
Homemaker	0	1 (3.2)
Relationship to care recipient		
Lives with care recipient	8 (100)	23 (74.2)
Spouse	5 (62.5)	12 (38.7)
Parent or in-law	1 (12.5)	11 (35.5)
Child	2 (25.0)	3 (9.7)
Other	0	5 (16.1)
Time spent providing care, hr/day		
0–6	4 (50.0)	16 (51.6)
7–13	2 (25.0)	9 (29.0)
≥14	2 (25.0)	6 (19.4)
Presence of other care providers		
None	1 (12.5)	7 (22.6)
Family	5 (62.5)	17 (54.8)
Paid	3 (37.5)	13 (41.9)

^a*N* = 8. ^b*N* = 31.

scores were as follows: Activity Participation, 0.87 (1.04); Performance, 3.60 (0.91); Satisfaction, 3.39 (0.99); Self-Efficacy, 3.52 (1.11); and Barrier Severity, 25.51 (15.01).

All subscales demonstrated reliable internal consistency. The coefficients for each subscale were as follows: Activity Participation, $\alpha = .87$ (43 items); Performance, $\alpha = .85$ (10 items); Satisfaction, $\alpha = .89$ (10 items); Self-Efficacy, $\alpha = .90$ (10 items); and Severity of Environmental Barriers, $\alpha = .82$ (20 items). ICCs for each subscale were as follows: Activity Participation, 1.00; Performance, 1.00; Satisfaction, 1.00; Self-Efficacy, .99; and Severity of Environmental Barriers, .94. The results thus demonstrate excellent agreement.

We hypothesized that Self-Efficacy scores would be positively correlated with measures of self-efficacy and mastery and that FIM scores would be negatively correlated with the base Activity Participation score (i.e., number of activities) and Severity of Environmental Barriers score. The Self-Efficacy subscale was positively correlated with the CGI, $r_s = .50$, $p = .01$, and the Caregiving Competence Scale, $r_s = .39$, $p = .04$. The FIM was negatively correlated with the base Activity Participation score, $r_s = -.40$, $p = .03$, and the Severity of Environmental Barriers score, $r_s = -.34$, $p = .06$, indicating that the number of activities the caregiver

assisted with and the number of barriers were correlated with higher levels of assistance.

To examine acceptability of the I–HOPE Assist, the caregivers completed a process evaluation, answering questions using a 5-point Likert-type scale. The mean score for “How well did the assessment address your concerns about caregiving?” was 4.16 ($SD = 1.12$) and for “How well did the assessment address your confidence in providing assistance?” was 4.25 ($SD = 1.07$) on a scale of 1 (*did not address my concerns or confidence*) to 5 (*completely addressed my concerns or confidence*). The length of the assessment was evaluated on a scale of 1 (*too burdensome*) to 5 (*not burdensome at all*), with a mean score of 4.68 ($SD = 0.78$). The ability to answer questions honestly in the presence of the care recipient was brought up during the pilot testing and was further evaluated in Phase 2. The mean score for “Does the presence of the care recipient impact your ability to answer questions truthfully?” was 2.23 ($SD = 1.69$) on a scale of 1 (*does not affect my answers*) to 5 (*affects my answers a great deal*).

Descriptive statistics were analyzed to determine common problematic caregiving activities and environmental barriers to caregiving (Table 3). Frequency for problematic activities was calculated as the number of caregivers who identified the activity in their 10 most problematic activities. The most frequent problematic activities included providing assistance up and down steps, 52% ($n = 16$); in and out of the car, 48% ($n = 15$); in and out of the home, 39% ($n = 12$); and in and out of the bath or shower 39% ($n = 12$), as well as responding in an emergency, 36% ($n = 11$).

After gathering feedback from the participants and occupational therapists, we made additional modifications to the instrument. The Satisfaction subscale description, originally “satisfaction with ability to provide assistance during the activity,” was modified to “satisfaction with the way the activity is completed” to better include the experience of caregivers who reported no difficulty in completing an activity but dissatisfaction with the process of completing the activity. For example, a caregiver may be able to assist with toileting tasks without difficulty but may not feel comfortable assuming this role.

Discussion

The I–HOPE Assist is a new measure with promising reliability and validity designed to evaluate person–environment fit for caregivers providing assistance in the home. This assessment provides a theory-driven, structured process to identify problematic caregiving activities through subjective and objective performance-based ratings. This study demonstrated interrater reliability and good internal consistency

Table 3. Most Frequent Environmental Barriers to Caregiving

Barrier ^a	Example
Lack of hand support	No grab bar in shower
Characteristics of transfer surface	Low height of chair
Malfunctioning or lack of adaptive equipment	Lack of alert system
Weight of items	Heaviness of wheelchair
Steps	High number of steps
Lack of signals or cues in the environment	No reminder alarm to complete activity

^aListed in order of frequency.

for all subscales of the tool. Convergent validity was demonstrated through correlations between the Self-Efficacy, Activity Participation, and Severity of Environmental Barriers subscales with existing measures of self-efficacy and care recipient function. The activities most frequently identified as the most problematic for caregivers indicate that caregivers find assisting with mobility and transfers to be most problematic. Common barriers in the environment, such as the type of transfer surface, are modifiable, and addressing these barriers has the potential to reduce the amount of support required of caregivers.

The client-centered approach of the I-HOPE enables evaluation of caregivers' self-perception of and satisfaction with their performance in caregiving activities and self-efficacy in providing assistance, as well as the impact of environmental barriers on providing assistance. Using the I-HOPE Assist, the caregiver self-identifies problematic activities, which facilitates development of a tailored intervention plan. This strategy helps target caregiving interventions to those activities that the caregiver perceives to be the most problematic. Caregivers supported the clinical utility of the assessment: They felt that their caregiving concerns were addressed and did not view the length of the assessment as burdensome.

Most caregivers reported that the presence of the care recipient would not affect their answers; however, some caregivers did indicate that the presence of the care recipient would influence their ability to provide an honest self-report, and practitioners should therefore consider the potential for this type of influence on assessment results. To ensure honest responses, we gave the caregivers in this study the choice of whether to have the care recipient present during the identification and ratings of problematic activities and completion of study measures. Future research should explore the impact of the care recipient's participation during the evaluation process.

Reviews of the caregiving literature indicate a need for interventions directly targeting caregivers and the use of valid and reliable assessments to determine needs and measure outcomes (Brown & Brown, 2014; Pinquart &

Sörensen, 2003; Sörensen, Pinquart, & Duberstein, 2002). Previous studies on home modification interventions for caregivers used caregiver report or assessments designed to evaluate functional performance of people with disabilities to assess caregiver support. The I-HOPE Assist provides objective ratings based on the performance of the caregiving dyad in completing daily activities.

Additionally, the I-HOPE Assist measures self-efficacy in performing problematic caregiving activities. Self-efficacy helps determine the degree of effort, perseverance, and coping efforts caregivers can expend when facing caregiving obstacles (Bandura, 1977) and is considered to have a protective effect on health outcomes for caregivers (Harmell, Chattillion, Roepke, & Mausbach, 2011). Self-efficacy scales should be tailored to measure specific domains of functioning (Bandura, 2006). The I-HOPE Assist is unique because it allows caregivers to identify and rate self-efficacy for the most problematic caregiving activities in the home. This assessment builds on previous research by providing a tool designed to guide and assess home modification interventions tailored to the needs of informal caregivers.

Although pilot data on the psychometric properties of this instrument are encouraging, this study has several limitations. Further examination is required of the clinical utility of this assessment in guiding home modification intervention. Although this preliminary investigation demonstrated acceptability to caregivers, additional information on the ability of the instrument to guide interventions, acceptability to clinicians, and time and training requirements would further clarify the clinical utility of the I-HOPE Assist (Smart, 2006). Additionally, the sensitivity of the instrument in measuring change should be evaluated. This study also provides preliminary data on caregiving activities and barriers in the home environment that affect caregivers. Although this information provides a better understanding of the roles and needs of caregivers, the small sample size should be taken into consideration. A small, diverse sample size was used, which may influence generalizability of the results. Future investigation should examine the use of the instrument with specific caregiver and care recipient populations.

Despite the limitations of this pilot study, the I-HOPE Assist is a promising new assessment for measuring caregiver outcomes. Future research should be conducted using the I-HOPE Assist to guide home modification interventions and to measure clinically meaningful changes in caregiver self-efficacy and support. This research will provide additional information on the efficacy and clinical utility of the assessment. Additionally, further analysis of caregivers for specific populations,

such as care recipients with dementia or spinal cord injury, is warranted. Currently, information is lacking on the types and level of support for activities of daily living and instrumental activities of daily living that caregivers provide (Pinquart & Sörensen, 2003). Studies using the assessment with larger numbers of caregivers can provide additional information on the activities that caregivers assist with and the barriers in the environment affecting these activities. This information is essential to build an understanding of the complex roles and needs of family caregivers who provide assistance in the home.

Implications for Occupational Therapy Practice

The results of this study have the following implications for occupational therapy practice:

- The I-HOPE Assist provides occupational therapy clinicians and researchers with a measure of person–environment fit and caregiver self-efficacy in providing assistance.
- The most problematic activities for caregivers include mobility and transfer components. Barriers in the environment that influence performance of these activities are often modifiable, and occupational therapy practitioners should address any concerns in these areas.
- The presence of the care recipient may influence caregiver report; this possibility should be taken into consideration in clinical and research settings.

Conclusion

Because many people provide and receive unpaid help, it is imperative to address the burdens associated with providing care. Home modifications are one potential intervention to reduce caregiver strain. However, previous research has been limited by the lack of assessments designed to measure caregiver support. The I-HOPE Assist has the potential to help fill this gap by providing a client-centered assessment that includes both self-ratings and objective ratings of caregiver support. The I-HOPE Assist demonstrates adequate preliminary psychometric properties, indicating that this instrument has excellent potential to guide home modification interventions for caregivers and measure outcomes related to caregiver performance and confidence. Further investigation of the ability of the measure to detect changes in performance before and after interventions is necessary. ▲

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