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Developing an Evidence-Based Falls Prevention Workbook for Clinic and Community: A Content Validity Study

Brenda S Howard*, Kathryn Boomershine, Rachel Gramman, Clare Schirmer and Jerica Schomber

OTD, OTR, University of Indianapolis Alumna, USA

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ABSTRACT

Background: Current falls prevention interventions vary in methodology and effectiveness. There is need for consistent intervention in the clinical setting. The purpose of this study was to determine the content validity of the My "Safe and Sound" Plan workbook a self-assessment for communicating evidence-based fall risk factors to clients.

Methods: Three occupational therapists and two physical therapists in the outpatient setting completed surveys regarding the representativeness and clarity of workbook items.

Results: Results demonstrated interrater agreement for all representativeness items, and the interrater agreement for clarity items was 0.862. Two clarity items, Exercises for Fall Prevention: Endurance and Exercises for Fall Prevention: Stretching, did not demonstrate interrater agreement. The content validity index for the workbook was 1.00, indicating that items were representative of what is known about fall risks.

Conclusion: Results indicated this tool clearly addressed decreasing fall risk factors and is appropriate for use in the outpatient setting. Member checking and qualitative responses informed revisions to the workbook. Implications for practice include respecting the agency and individuality of clients while addressing fall risk factors. Utilizing a client-centered self-assessment may result in clients being more likely to follow through with recommendations.

Keywords: Accidental falls, Fall risk, Content validity

INTRODUCTION

There has been a need for knowledge translation of evidence into tools that can be used in practice [1]. Falls prevention programs exist for use in community-based, group settings, but few programs and tools have been developed for use in the traditional model of providing therapeutic falls prevention education, i.e., individual sessions with clients in inpatient, outpatient, and home care settings. Current falls prevention interventions seek to lower the incidence of falls in older adults, including multimedia interventions [2-5] personal and group exercise interventions [6-13] and multidisciplinary [14-18]. The urgency to find the optimal method to prevent falls has become a top priority for healthcare professionals caring for the older adult population because of the adverse health outcomes that result from a fall [19-21].

The problem of fall risks, and the need to address falls prevention, has been an area addressed by the interprofessional team, including occupational and physical therapists, using a variety of [22-26]. In order to accurately assess fall risks, one must first identify relevant fall risk factors. These factors include extrinsic factors such as dim lighting [27,28] cluttered or uneven flooring [28-30] limited social environment participation [31,32] and poorly fitting footwear [33] Intrinsic factors that contribute to increased risk of falls include chronic medical conditions [34-37] muscle weakness and reduced functional mobility [38,39] low vision [40,41] use of benzodiazepines with polypharmacy [42,43] inactivity [44,45] and fear of falling [28,32,46]. Older adults identified curbs [31,47] weather-related conditions, and heavy traffic as additional fall risks [31].

Regardless of intervention methods, the key to getting clients to recognize the need for change has been the therapeutic relationship [8] Older adults have resisted change, believing that falls were a matter of chance while avoiding labeling themselves "fallers" [12,48-50] In order for interventions to be effective, practitioners have needed to build the therapeutic relationship by being sensitive to personal beliefs and attitudes and cultural [10,12]. Better tools are needed to provide time-efficient means of assessing clients' fall risks

Corresponding author: Brenda S. Howard, DHSc, OTR, 1400 E. Hanna Ave., Indianapolis, IN 46227, USA, Tel: (317) 788-6173; (812) 350-2510; E-mail: howardbs@uindy.edu

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and engaging clients in falls prevention activities in the clinical setting. To answer this need, the primary investigator created a fall risk self- assessment and intervention workbook, entitled, My "Safe and Sound" Plan for Staying Falls Free [54] An earlier study vetted the workbook with a group of older adults in an international context [51] and the second edition of the workbook was reviewed by older adults in the community [52]. Through an iterative process of use and reflection, the workbook was revised and updated. However, there was a need to establish the validity of this evidence-based multifactorial self-assessment and fall risk education tool in a clinical setting.

The purpose of this study was to determine the content validity of the My "Safe and Sound" Plan [54] workbook through review by a panel of experts who were occupational and physical therapy practitioners. Through survey responses, occupational and physical therapy practitioners reported on the representativeness and clarity of the workbook as a fall risk assessment and its usability as a self-assessment for individuals who are at risk for falling. [55] have defined representativeness as an item's ability to represent the content domain. WHO [55] have defined clarity as how clearly an item is worded.

METHOD

In this study, investigators utilized a panel of experts to determine the content validity of the My "Safe and Sound" Plan [54] workbook through the method outlined by [55]. This method included review of the workbook by occupational and physical therapy practitioners who have worked with the population at risk for falls.

ETHICS

The Director of the Human Research Protections Program (HRPP) approved this study as exempt on May 2, 2017 (UIndy Study #0823).

RECRUITMENT

Participants of this study were recruited via email, phone, and personal contact with managers and directors at two rehabilitation facilities in the State of Indiana, United States. Materials provided to the facilities included the "My Safe and Sound" Plan [54] workbook, sample survey questionnaire, and a sample Letter of Cooperation. Both participating facilities were large health networks. The participants of this study included occupational therapy (OT) and physical therapy (PT) practitioners working with individuals at risk for falls as defined by the practitioners in the outpatient clinical setting. To be included in the study, the practitioners had to be employed by a facility in which a Letter of Cooperation was provided and had to work with individuals at risk for falling on a regular basis. Following the outline set forth by [55] OT and PT practitioners were recruited from amongst practitioners who had experience with the population of interest. Students were excluded from the study.

DEFINITIONS

For purposes of this study, a fall was defined as "Event(s) which (result) in a person coming to rest inadvertently on the ground or floor or other lower level" [56] Fall risk was defined as any intrinsic or extrinsic factor that placed an individual at an increased potential for falling. Practitioners were defined as individuals who were licensed to practice occupational or physical therapy in the state in which they practiced. At-Risk Individual was defined as an individual who the practitioner deemed to be at an increased risk for falls through their clinical reasoning and an assessment of fall risks specific to that individual.

INSTRUMENTS

Investigators distributed a survey and the My "Safe and Sound" Plan workbook via paper copies, per request of participating facilities. Qualtrics® (Provo, UT), an online survey tool, was used for data storage and preliminary analysis. The survey included questions regarding the participants' perception of the My "Safe and Sound" Plan [54] workbook as a tool for assessing and communicating fall risk factors to clients.

The workbook was developed based on current falls prevention evidence, including the American Geriatrics Society/British Geriatrics Society Clinical Guidelines for Falls Prevention [57]. It was written on a third-grade reading level, with white spaces, lines, and fill-in-the-blanks for customizing of the content to individual needs. The author, an occupational therapist, intended the workbook to be used primarily as a clinical tool, but with the flexibility to be used by a variety of health care practitioners in a variety of settings, including as a stand-alone book that could be utilized by persons concerned about falling or their caregivers. The author has made the workbook available as a free download. Content addressed why people fall, health impact of falls, a fall risk screening (self-assessment), behavior management, medication management, heart conditions, vision, selecting foot wear and appropriate foot care, vitamin D and calcium, exercises for falls prevention, and a home safety checklist. The workbook was examined as an evaluation measure because it included both a self-assessment and self-home assessment.

In order to establish content validity, the questionnaire addressed representativeness and clarity of items in the workbook. WHO [55] used four criteria were used to evaluate a new measure: Representativeness of the content domain, clarity of the item, factor structure and comprehensiveness of the measure? Each criterion was rated on a scale from one to four, with anchors provided: a score of one meant that the item was not representative or clear, while a score of four meant that the item was representative or clear. Once results were collected [55] calculated the interrater agreement for representativeness scores and for clarity scores. This determined the degree to which the experts were reliable in

their ratings of one to four. In order to calculate interrater agreement, items rated on the four-point scale were dichotomized, combining one with two, and three with four. If both representativeness and clarity were to have satisfactory interrater agreement, the content validity index could be calculated using the same dichotomized information. The number of items rated three or four would be totaled and divided by the total number of items. Ideally, the content validity index would be at least 0.8. The interrater agreement, content validity, and expert feedback would then be used to revise the measure.

DATA COLLECTION PROCEDURES

Investigators followed procedures outlined by [55] for establishing content validity through use of a panel of experts. A sufficient number of participants recommended by [55] was 6 to 20 experts, with at least three being professional and three being lay experts. Since a previous study focused on obtaining data from lay experts [53] this study focused on obtaining data from professional experts. In order to obtain the recommended number of participants to represent the target population, the survey opened in the summer of 2017 and closed after 90 days. Paper copies were manually entered into Qualtrics® for protection of participants and then scanned, electronically stored, and paper copies were shredded. The final question on the survey was voluntary and requested that participants provide names and phone numbers that were used for member-checking in the data analysis process. These names and phone numbers were physically removed from the paper surveys and were not linked with the data that were entered into Qualtrics.

DATA ANALYSIS

Data were entered into SPSS for analysis. Investigators performed checks for data integrity, which consisted of frequencies and counts to check for missing data. Investigators limited this present study to examining representativeness and clarity of items, representativeness of the measure overall, and informal feedback regarding comprehensiveness of the measure. A factor validity index calculation was not relevant to the purpose of this study [55]. Investigators established reliability by calculating inter-rater agreement (IRA) of clarity items and of representativeness items. Following the procedure outlined by WHO [55], the items rated on a four-point numeric scale were dichotomized to combine one with two, and three with four. IRA was calculated for representativeness of items, for clarity of items, and for the representativeness of the measure as a whole. An acceptable level of IRA was considered to be 0.80 for each item [55]. once reliability was established, investigators calculated the content validity index (CVI). Content validity was calculated based on the representativeness items only, as described by [54] to determine the CVI of the representativeness of each item, investigators transformed variables to combine 1 and 2 as not representative and 3 and 4 as representative. For each item, the number of experts who rated it 3 or 4 were totaled, then divided by the total number of experts. To calculate the CVI for the tool as a whole, investigators calculated the average CVI across all representativeness items by adding up all items with a CVI of at least 0.80 and dividing by the total number of items in the representativeness category. An acceptable level of CVI was considered to be 0.80 [55] Qualitative comments were considered for workbook revisions, and investigators conducted member checking by conducting follow-up phone calls or emails to those participants who opted to provide their name and phone number.

RESULTS

Participants

Investigators distributed surveys to the two participating facilities, with a possibility of approximately 25 respondents. Seven surveys were returned, all on paper, but two surveys were discarded that were duplicates of the same respondent (as indicated by the respondent). The total sample consisted of five participants who completed the My "Safe and Sound" Plan [54] workbook survey. According to WHO [55], a minimum of three professional participants are needed for a study of this type; therefore, five professional participants met this criterion. Participants included three occupational therapists (OTs) and two physical therapists (PTs) with 11-30 (mean=20) years of experience working with individuals at risk for falls in an outpatient setting. Participants reported neurologic, vestibular, proprioceptive, and frequent falls as the most commonly treated primary diagnoses. All participants reported utilizing in-clinic practice as a fall risk education method, two participants reported using a handout, and one participant reported referring patients to a class for fall risk education. See **Table 1** for participant characteristics.

Inter-Rater Agreement and Validity

The IRA for clarity items was .862. Twenty-five of 29 items had an IRA of 0.80 or above, indicating interrater agreement. The individual items for clarity that did not achieve IRA were Exercises for Fall Prevention: Endurance, and Exercises for Fall Prevention: Stretching **(Table 2)**. The IRA for representativeness items was 1.00. All individual items for representativeness met the IRA of 1.00 **(Table 2)**. See **Table 3** for IRA of the entire measure. Representativeness items were shown to be reliable due to having 1.00 IRA, allowing investigators to proceed to calculate validity. All representativeness items had a CVI of .80 or 1.00 individually **(Table 4)**. The CVI for the entire tool was 1.00, or 100%.

Qualitative Findings

Table 5 provides qualitative responses obtained from the participants via the survey. Comments were too few to analyze with qualitative means. Rather, participants' comments informed the follow-up questions used for member checking.

Table 1. Participant characteristics.

Characteristic	**N (%)**
Content Experts (Outpatient Setting, 11-30 Years of Experience [mean=20])	
Occupational Therapists (OTs)	3(60%)
Physical Therapists (PTs)	2(40%)
Primary Diagnoses Seen:	
Orthopedic	1(20%)
Neurologic	4(80%)
Vestibular	4(80%)
Proprioceptive	3(60%)
Visual	2(40%)
Multifactorial	2(40%)
Frequent Falls	3(60%)
Current Fall Risk Education Method:	
Handout	2(40%)
In-Class	1(20%)
In-Clinic Practice	5(100%)

Table 2. Interrater Agreement and Content Validity Index (CVI).

	Clarity		Representativeness		
Workbook Item	Expert Ranking on Scale*	Agreement Frequency (%)	Expert Ranking on Scale*	Agreement Frequency (%)	CVI**
Introduction: How to Use This Book	4	5 (100)	4	5 (100)	1.00
Introduction: Why do People Fall? Internal Reasons	4	5 (100)	4	5 (100)	1.00
Introduction: Why do People Fall? External Reasons	4	5 (100)	4	5 (100)	1.00
Introduction: What are the Risks?	4	5 (100)	4	5 (100)	1.00
Fall Risk Screening: Strength	1 4	1 (20) 4 (80)	4	5 (100)	1.00
Fall Risk Screening: Endurance	1 4	1 (20) 4 (80)	4	5 (100)	1.00
Fall Risk Screening: Balance	1 4	1 (20) 4 (80)	4	5 (100)	1.00
Fall Risk Screening: Flexibility	1 4	1 (20) 4 (80)	3 4	1 (20) 4 (80)	1.00
Fall Risk Screening: Balance Confidence	4	5 (100)	4	5 (100)	1.00
My Safe and Sound Plan: Change your Mind	4	5 (100)	4	5 (100)	1.00

My Safe and Sound Plan: Manage your Medicines	4	5 (100)	4	5 (100)	1.00
My Safe and Sound Plan: Manage your Heart	4	5 (100)	4	5 (100)	1.00
My Safe and Sound Plan: Vision	4	5 (100)	4	5 (100)	1.00
My Safe and Sound Plan: Footwear and Foot Care	4	5 (100)	4	5 (100)	1.00
My Safe and Sound Plan: Vitamin D and Calcium	4	5 (100)	4	5 (100)	1.00
Exercises for Fall Prevention: Strength	3 4	1 (20) 4 (80)	4	5 (100)	1.00
Exercises for Fall Prevention: Endurance	3 4	2 (40) 3 (60)	4	5 (100)	1.00
Exercises for Fall Prevention: Balance	3 4	1 (20) 4 (80)	4	5 (100)	1.00
Exercises for Fall Prevention: Stretching	3 4	2 (40) 3 (60)	3 4	1 (20) 4 (80)	1.00
Home Safety Check: In The Home	4	5 (100)	4	5 (100)	1.00
Home Safety Check: Entrance, Halls, and Steps	4	5 (100)	4	5 (100)	1.00
Home Safety Check: Kitchen	4	5 (100)	4	5 (100)	1.00
Home Safety Check: Bathrooms	4	5 (100)	4	5 (100)	1.00
Home Safety Check: Bedroom	4	5 (100)	4	5 (100)	1.00
Home Safety Check: Living Room	4	5 (100)	4	5 (100)	1.00
Home Safety Check: My Activities and Behaviors	4	5 (100)	4	5 (100)	1.00
Home Safety Check: My Mobility	4	5 (100)	4	5 (100)	1.00
Summary: Calendar- Fill in the Blank Goals	4	5 (100)	4	5 (100)	1.00
Summary: Calendar Tool	4	5 (100)	4	5 (100)	1.00

Expert Ranking on Scale
1 = Item is not representative or clear
2 = Item needs major revisions to be representative/clear
3 = Item needs minor revisions to be representative/clear
4 = Item is representative/clear

***Representativeness Scale items 3 & 4 are combined for CVI (Rubio et al., 2003)*

Table 3. Interrater Agreement (IRA) for Entire Measure.

	Total Number of Items	**Items with 100% IRA with Dichotomous Variables**	**IRA Score**
Clarity	29	25	0.862
Representativeness	29	29	1.00

Table 4. Content Validity Index (CVI) for Representative Items.

Item Name	**Expert Ranking on Scale** **3 = Item needs minor improvements** **4 = Item is representative/clear***	**Frequency**	**Percent**	**CVI per Item**
Introduction: How to use this book	4	5	100	1.00
Introduction: Why do People Fall? Internal Reasons	4	5	100	1.00
Introduction: Why do People Fall? External Reasons	4	5	100	1.00
Introduction: What are the Risks?	4	5	100	1.00
Fall Risk Screening: Strength	4	5	100	1.00
Fall Risk Screening: Endurance	4	5	100	1.00
Fall Risk Screening: Balance	4	5	100	1.00
Fall Risk Screening: Flexibility	3 4	1 4	20 80	1.00
Fall Risk Screening: Balance Confidence	4	5	100	1.00
My Safe and Sound Plan: Change Your Mind	4	5	100	1.00
My Safe and Sound Plan: Manage Your Medicines	4	5	100	1.00

My Safe and Sound Plan: Manage Your Heart	4	5	100	1.00
My Safe and Sound Plan: Vision	4	5	100	1.00
My Safe and Sound Plan: Footwear and Foot Care	4	5	100	1.00
My Safe and Sound Plan: Vitamin D and Calcium	4	5	100	1.00
Exercises for Fall Prevention: Strength	4	5	100	1.00
Exercises for Fall Prevention: Endurance	4	5	100	1.00
Exercises for Fall Prevention: Balance	4	5	100	1.00
Exercises for Fall Prevention: Stretching	3 4	1 4	20 80	1.00
Home Safety Check: In the Home	4	5	100	1.00
Home Safety Check: Entrance, Halls, and Steps	4	5	100	1.00
Home Safety Check: Kitchen	4	5	100	1.00
Home Safety Check: Bathrooms	4	5	100	1.00
Home Safety Check: Bedrooms	4	5	100	1.00
Home Safety Check: Living Room	4	5	100	1.00
Home Safety Check: My Activities and Behaviors	4	5	100	1.00

Home Safety Check: My Mobility	4	5	100	1.00
Summary: Calendar- Fill in the Blank Goals	4	5	100	1.00
Summary: Calendar Tool	4	5	100	1.00
Content Validity for Total Tool				1.00 (100%)

Table 5. Qualitative responses.

Survey Question	Qualitative Responses
Question 12: Comments on the Fall Risk Screen	"It may be nice to explain why each of these contributing factors relate to fall prevention. Why is this important" "The flexibility test/screen is more balance screen clinically for me. I would say this is more functional reach/balance than flexibility." "There should be more explanation as to why these factors are important to balance and preventing falls- makes it more meaningful for the pt"
Question 14: Comments on the "My Safe and Sound Plan" Section	"Client recognized he needs his cane, shared that he uses lots of night lights" "I find those are awesome points but patients need more explanation. -Medicine: maybe explain right way...take medicine at same time if appropriate. Often get patients who fail to do this. -Also, can you add references at end of book where to get things suggested such as pill sorter? or offer support of how to find more information. -With BP? Can you put norms or HTN risk levels or resources of American Heart Association." "Loved these sections :)" "This section was incredibly important for the patient"
Question 16: Comments on the Exercises for Fall Prevention Section	"Again, why are these components important? Make this more meaningful for the patient" "Describe why these exercises might help prevent falls" "How many times do they do these? Example: just starting point. How long do you walk or add how they can get started or how to push yourself? Balance: SLS: I'd have a chair by patient in picture in more visible & eyes closed I usually have patients do in a corner for safety"

Question 18: Comments on the Home Safety Check	"Loved these sections :)" "Pt reported using night lights; caution with throw rugs" "This is one of my favorite sections. It's very thorough"
Question 20: Comments on the Summary	"Loved it :)"
Question 21: Please comment on what was most helpful in the workbook	"All of the workbook is clear and representative with good suggestions." "Calendar for use" "Home Assessment Safe & Sound Plan portion" "I loved that all the pieces were brought together in one reference book for the patient's family." "Page 9 and the exercises for fall prevention section" "Pt thought it was helpful especially with throw rugs"
Question 22: Please comment on what was least helpful in the workbook	"All beneficial" "All was information needed for this particular client." "N/A" "P 14 Vitamin D and calcium. It does say to check with your doctor, but it is contra-indicated for some people, plus many people are already taking large doses of vitamins or have imbalances with other vitamins or minerals." "Pt thought it was all helpful"
Question 23: Is there anything else that should be included in the workbook?	"Feel it was comprehensive" "How distraction/multi-tasking can increase fall risk" "I think patients take HEP more seriously if its meaningful to them. I verbally educated on this, but adding reasons why one needs to improve strength, balance, endurance to the book reminds them why its important each time they open the book." "No" "Refer back to comments on exercises & screening section" "Resources or blank to have resources listed for patient for ex: how/where to find info on fall alert buttons or websites for BP recommendations or where to buy pill sorter."

Question 26: Any additional comments	"Dividers for different section for easy quick reference" "Dividers for the different sections" "Over time aware resources and links change so have a blank page that list topics where therapists can complete on how to find or list website for more info like AHA (American Heart Association, etc)." "This client was not very receptive to the information. He said it was all things he had been told before in various settings by various people. He chooses not to follow the recommendations (and also continues to fall nearly daily)."

Member Checking

After surveys were returned and results were analyzed, one physical therapist agreed to participate in member checking. This participant responded via email and agreed that adding a one sentence explanation to each activity within the The First Step: A Fall Risk Screening might enhance clients' understanding. This participant also agreed that adding resources to the end of the workbook informing clients where they may obtain local access to items such as pill sorters and medical alert buttons would also be helpful to clients. To increase the clarity of items within the workbook, the participant suggested adding a description for length of time and intensity to the section about endurance exercises and specifying how long to hold a stretch and how many repetitions were needed to complete the stretching exercises. The participant noted that the investigators could also leave space in the workbook for the practitioner to fill in this information depending on the specific need of each client. Within the Manage Your Medicines section, for the item, take your medicines the right way, the participant suggested replacing the phrase the right way with as recommended or as indicated to increase clarity. Lastly, the participant suggested changing the fall risk screen term flexibility to functional reach to be more representative.

DISCUSSION

The purpose of this study was to determine the content validity of the My "Safe and Sound" Plan [54] workbook. Investigators accomplished this final step in workbook development by utilizing a panel of experts to review the workbook using the methodology described [55]. Experts found workbook items achieved representativeness, meaning the items accurately reflected the self-assessment of fall risk. Experts also found workbook items had clarity, meaning the items were appropriately and clearly written for the population at risk for falls. DiClemente and Prochaska [58] stated that clinicians need a consistent method of address fall risks, and this evidence-based tool meets that need by allowing practitioners to address fall risks with their clients using a clear evidence-based tool that covers recommended content for falls prevention.

Workbook changes

Following member checking, the primary investigator revised the workbook based on feedback. Adjustments included the wording regarding medications and supplements, and added a text box beside each exercise so that practitioners could indicate what was recommended for the client. A blank page was added after exercises so that practitioners could add other content that they feel is appropriate for the client. A list of resources was added after the calendar, including sources for obtaining adaptive equipment for home modification.

Changes made to the workbook during this study allowed for greater individualization of the workbook. DeGroot and Fagerström [9] examined the behavior of older adults in fall prevention programs and found that they were less likely to participate in programs if their agency and individual needs were not addressed through a generic program. The edited My "Safe and Sound" Plan workbook allowed for individualized participation and programming, increasing the likelihood that clients would follow through with suggestions in the workbook.

Clarity of items

The following items did not demonstrate interrater agreement for clarity: Exercises for Fall Prevention: Stretching, and Exercises for Fall Prevention: Endurance. During member checking, the participant stated that there was some confusion about the definition of "clarity" which affected the responses. Providing definitions to practitioners for "clarity" and "representativeness" might improve the accuracy of IRA assessment.

Implications for practice and research

Studies [53] examined the perspective of potential clients or users of the My "Safe and Sound" Plan. In the current research study, the practitioners who would use this workbook in

practice contributed their perspective. Taken together, these two perspectives have established content validity for the My "Safe and Sound" Plan workbook. To enable carryover of this or any other clinical intervention, it is necessary to facilitate the therapeutic relationship with clients. Yardley et al. [13] found that many health practitioners held negative stereotypes of older adults as "fallers", which negatively impacted the therapeutic relationship. It is important that practitioners respect the agency and individuality of clients while opening a dialogue about the fall risk factors of clients. This respectful dialogue ensures that practitioners do not carry any unconscious bias into interactions with clients, and that clients are more likely to follow through with any recommendations and/or programming.

Successful implementation for lifestyle changes requires individuals to have the desire to change. Extrinsic factors can facilitate the desire to change, but it is ultimately up to the individual to incorporate new behaviors into their lifestyle. Change does not occur in an instant, but rather through a gradual process. This process is described in the Transtheoretical Model of Behavior Change (TMBC) as consisting of five stages: precontemplation (not aware of a need for change), contemplation (aware of need for change), preparation (plan to change), action (new behaviors are tried, but inconsistent), and maintenance (long-term establishment of behavior [59] Healthcare practitioners must consider ways to facilitate movement through the stages of change when encouraging a client to adopt fall risk reduction behaviors. Investigators received qualitative and constructive feedback from participants that used the My "Safe and Sound" Plan workbook with their clients. The following participant response reflects behavior that is associated with the precontemplation stage of the TMBC:

This client was not very receptive to the information. He said it was all things he had been told before in various settings by various people. He chooses not to follow the recommendations and also continues to fall nearly daily (see **Table 5**, Qualitative Responses).

The statement demonstrated that the client was not considering implementing the change (precontemplation) and did not recognize how choosing to follow recommendations could affect him on a personal level.

Healthcare practitioners act as educators and supporters of new behaviors that can be implemented into the lifestyle of the at-risk population that they are working with. The My "Safe and Sound" Plan workbook was designed to be used as a tool for education of the client. It is important to note that traditional education techniques and tools are not effective with all clients as each individual move through the stages of change at different rates [60]. Therefore, healthcare practitioners must stay attuned to the needs of each client and modify approaches to intervention accordingly.

Future studies could repeat content validity methodology using the updated version of the workbook. Further, other types of validity could be explored with this tool. However, because this tool is intended as both a self-assessment and a workbook for intervention, its ability to be validated as an assessment tool is limited. Since this tool was intended for use by interprofessional team members or as a stand-alone tool that clients and caregivers might use, further research regarding its usefulness by persons other than occupational therapists would be warranted.

LIMITATIONS

Due to the time needed to allow for IRB approval and the academic schedule of the student investigators, there was a time delay from recruitment to distribution of the survey questions, which may have resulted in loss of interest or decreased participant response. Though the number of participants for the current study met the minimum recommended number of professional experts according to studies [55], the small number of participants was limited geographically, and demographic diversity was not assessed. Furthermore, the participants of this study represented only the practitioner side of fall risks. Regarding the survey questions, the investigators did not define "clear" and "representative" for experts, which may have influenced participants' responses. Following the methodology outlined [55], the current study had similar limitations. There have been limitations with using experts for content validity; the experts were only able to provide their thoughts, which provided a subjective rather than objective [55] Additionally, this study considered only one type of validity; therefore, additional psychometric testing may be indicated to establish validity [55]. Lastly, though the authors conducted member checking, there was no second iteration of expert review following suggested revisions, so the most current version of the workbook has not been formally assessed.

CONCLUSION

Consulting a panel of experts, investigators found the My "Safe and Sound" Plan [54] workbook demonstrated content validity and IRA. Since the present study examined only content validity, further research using the updated version of the workbook could address other types of validity. Using a tool that is valid and effective in clinical and home settings will allow clients to achieve the best outcomes for reducing fall risks.

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