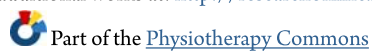


The impact of peer-led falls prevention education on community-dwelling older adults: A mixed methods evaluation

Linda Khong

Follow this and additional works at: <http://researchonline.nd.edu.au/theses>



COMMONWEALTH OF AUSTRALIA  
Copyright Regulations 1969

WARNING

The material in this communication may be subject to copyright under the Act. Any further copying or communication of this material by you may be the subject of copyright protection under the Act.  
Do not remove this notice.

## Chapter 6

### **Providing Community Peer-Led Falls Prevention Presentations: What do Health, Education and Falls Prevention Experts Suggest?**

---

This chapter is based on a manuscript submitted for publication and under 2<sup>nd</sup> peer review. This is presented as a version of the manuscript and modified to suit integration into the thesis.

Khong, L.A.M., Berlach, R. G., Hill, K. D., & Hill, A-M (in press). Community peer-led falls prevention presentations: What do experts suggest? *Journal of Primary Prevention*

---

#### **6.1 Chapter Outline**

This chapter describes Study 3 (Phase 1) which was a mixed methods design study conducted to evaluate peer educators' presentations of the existing falls prevention program against established criteria, by experts from various areas of specialisation.

## **6.2 Abstract**

A mixed methods study was conducted. Convenience and snowball sampling techniques were used to recruit ten experts to evaluate video recordings of the delivery of three peer-led falls prevention presentations. Each expert viewed three videos and rated them using a questionnaire with open-ended and closed items.

A good level of expert agreement was found across the questionnaire domains for the three peer-led presentations. Although some aspects of the presentations were rated highly, overall, the experts considered the presentations mainly didactic in delivery, not consistently personally relevant to the older adult audience and did not encourage older adults to engage in the preventive strategies that were presented. Five key themes and recommendations for effective delivery of peer-led falls prevention presentations were developed based on the experts' findings. These included recommending that peer educators share falls prevention messages in a more interactive and experiential manner and that uptake of strategies should be facilitated by encouraging the older adults to develop a personal action plan.

## **6.3 Background**

Peer education, which usually involves sharing of information by peers of similar age to participants but with training and/or appropriate experience, is one recommended strategy for bridging the research-practice divide (Chapter 2 Section 2.6). However, it ought to be noted that previous falls prevention peer-led interventions were not designed specifically with behaviour change principles (see Section 2.5.1.2) or adult learning principles (Section 2.5.1.3). An adoption of these theoretical principles in any investigation of adult learning vis-a-vis falls prevention may yield a significantly different outcome in terms of bridging the research-practice divide (Section 2.7).

Accordingly, the purpose of Study 3 was to evaluate peer educators' presentations of falls prevention education for community-dwelling older adults against established criteria that were consistent with adult learning principles, the framework of health behaviour change, falls prevention guidelines and recommendations for providing falls prevention information (Dollard et al., 2012; Haines et al., 2014; Hill, Hoffman, McPhail, et al., 2011; Yardley, Beyer, et al., 2007). Expert opinion was harnessed to evaluate peer-led presentations and to advise on the future development of such presentations for community-dwelling older adults.

## **6.4 Study Design and Methods**

### **6.4.1 Study design**

Three experienced peer educators conducted the falls prevention presentations. These presentations were videoed and reviewed independently by a group of content-relevant experts using a self-administered questionnaire developed for this purpose. Specifically, a "within-stage mixed-model design" (Johnson & Onwuegbuzie, 2004, p. 20) based on the use of a questionnaire containing both open-ended and closed items, was utilised for obtaining data.

### **6.4.2 Participants and setting**

The three peer educators to be videoed were sourced through ICCWA (Chapter 3 Section 3.4.1) that currently, with the help of their volunteer peer educators (Section 3.4.4), provides one hour falls prevention presentations to older adult groups

in the community (Section 3.4.3). One of the three peer educators had health-related work experience while the other two had previous work experience that was non-health-related.

A panel of expert reviewers evaluated the peer-led falls prevention presentations. The basis of the evaluation consisted of rating how well the sessions were conducted, when rated against established criteria consistent with adult learning principles and behaviour change. A priori sample-size estimate was calculated for the measurement of inter-rater reliability between the expert reviewers using a questionnaire devised for this purpose (Table 6.1), and was based on an assumption that the minimal accepted level of reliability would not be below 0.6 and that ideally, the estimate of the reliability was likely to be 0.80 or better. Under these conditions, with an alpha level set to 0.05 and power set to 80%, 10 expert participants was required. This procedure yielded 30 ratings (10 experts x 3 video presentations each).

To obtain the required sample size of expert reviewers, 19 experts from Australia and London (UK) with expertise in one or more of the areas of adult education, health promotion, falls prevention and psychology were identified using convenience and snowballing techniques. Prospective experts were subsequently invited to participate as a reviewer in the study. Of the 10 experts who agreed to participate, nine were from Australia and one from the UK. Two criteria for expertise were established. First, the possession of a relevant postgraduate academic qualification; and second, currently practising in one or more of the areas of adult education, health promotion, falls prevention, and psychology. The expert reviewers had an average 15 years' experience ( $SD = 11$ ) in their area of expertise. Upon agreement, each expert participant's written consent, demographic and professional work information was collected. The research team assured them of confidentiality of all information provided.

### **6.4.3 Methodology and instrumentation**

A “within-stage mixed model” design (Johnson & Onwuegbuzie, 2004, p. 20) which incorporated both quantitative and qualitative data was used to enrich the interpretation and as a methodological triangulation (Johnson et al., 2007; Liamputtong, 2013; Lincoln & Guba, 1985).

### **6.4.3.1 Quantitative**

First, based on relevant literature (Haines et al., 2014; Merriam & Bierema, 2014; Queensland Occupational Therapy Fieldwork Collaborative, 2005; Trompf & Sale, 2001), six key adult learning principles were identified. Subsequently, a 30-item statement questionnaire (Appendix L) was structured into six corresponding adult learning domains. A team of four falls prevention experts was consulted prior to the final questionnaire being generated (Table 6.1). This team was also involved in conducting a pilot trial of the questionnaire to establish face validity and to determine its content validity index (CVI) (Lynn, 1986; Polit & Beck, 2006; Polit, Beck, & Owen, 2007). The results from the researchers who reviewed the scale in terms of content validity were an overall Scale-CVI of 0.96, meeting the acceptable level of  $\geq 0.9$  (Lynn, 1986). Each of the 30 items met the criterion of Item-CVI of 0.75-0.78 (Lynn, 1986). Consequently, none of the 30 item statements within the six domains needed to be removed.

Second, the final panel of 10 experts (which did not include any of the four experts involved in the instrument validation process) was directed to a secure web-based video link recording of three falls prevention presentations and asked to view and evaluate these as per the finalised questionnaire (Table 6.1). Each expert was first sent an information pack containing documentation associated with the study and detailed notes about the review procedure. Experts then received reviewer training (Appendix M) via a one hour teleconference session with the primary researcher. The purpose of the session was to review the procedure in detail, as well as to clarify any issues regarding the study. Experts were advised to conduct their reviews independently of each other to enhance trustworthiness of findings (Lincoln & Guba, 1985). They were asked to rate their responses to questionnaire items on a five-point Likert-type scale (Strongly Agree; Agree; Undecided; Disagree; Strongly Disagree). The extent of agreement between the experts was evaluated for consistency using ICC.

### **6.4.3.2 Qualitative**

For the six-domain questionnaire, an open-ended item catered for any comments or suggestions at the end of each domain. Each expert reviewer was asked to provide an overall evaluation summary about the presentations, based on their area of expertise. The experts were invited to present feedback that included practical advice for enhancing the delivery of peer-led falls prevention presentations. The

feedback was then discussed and collated by the researchers to provide a coherent compilation of practical recommendations.

#### **6.4.4 Data analysis**

Statistical analyses of quantitative data were conducted using Stata IC 13 (StataCorp, 2013) with descriptive analysis of expert reviewers' responses being performed for each item. Items within each domain were summarised and the results presented as means (SD). The mean results from the ratings of all 10 experts for each domain were evaluated for inter-rater reliability using the ICC (two-way random effect model) and reported using 95% confidence intervals. ICC values of more than 0.75 were considered indicative of good agreement and those below 0.75 of poor to moderate agreement (Portney & Watkins, 2009).

Responses from the open-ended items in the questionnaire together with the experts' overall evaluation summary were transcribed. Thematic analysis of the qualitative responses (Miles et al., 2014) was then undertaken to analyse and identify patterns or themes from the data. Investigator triangulation was used to increase trustworthiness of the findings by having two researchers conducting coding, data reduction and data analysis independently of each other (Lincoln & Guba, 1985; Miles et al., 2014). The analysis was an iterative process of reflecting on the coding and identifying patterns. Differences in interpretations were thoroughly explored, discussed and refined with the whole research team until consensus was reached and the final key themes identified. Method triangulation was an additional approach used to enhance trustworthiness of the findings (Lincoln & Guba, 1985). That is, the results of the qualitative data were subsequently triangulated with the quantitative data to draw insights into understanding the factors influencing effective delivery of peer-led falls prevention presentations.

### **6.5 Results and Discussion**

#### **6.5.1 Expert rating of the peer-led presentations**

As well as presenting the six questionnaire domains, Table 6.1 lists the median (interquartile range) ratings for each questionnaire item statement across the three videos viewed by the panel of experts.

**Table 6.1 Experts (n=10) Rating of the 3 Presentations Against Each Criterion (n=30)**

<b>Item Statement</b>	<b>Median<sup>a</sup></b>	<b>(IQR)</b>
<b>Domain 1: Learners' active participation in the learning process</b>		
1 The participants were positioned such that everyone could join in discussion activities	3.0	(3-4)
2 There was an introduction to falls and an overview of the falls prevention presentation	4.0	(4-5)
3 The peer educator stated what learning goals were to be achieved during the presentation	4.0	(2-4)
4 The peer educator encouraged the participants to ask for clarification during the talk if they required it	2.0	(2-3)
5 The peer educator encouraged the participants to join in structured activities (such as ice-breakers, games)	2.0	(1-3)
6 Individuals were encouraged to discuss topics raised by the other participants	2.0	(2-3)
7 The peer educator asked an appropriate mix of open-ended and closed questions	4.0	(2-4)
8 Participants' activities allowed for differences in learning style to surface by presenting visual, auditory and kinesthetic information	4.0	(2-4)
<b>Domain 2: Consideration of learners' relevant prior knowledge (includes falls prevention)</b>		
9 Possible consequences of falls were discussed with participants	4.0	(4-5)
10 The peer educator encouraged participants to identify their own risk of falls, such as difficulties with everyday activities	4.0	(2-4)
11 The peer educator asked participants to reflect on and discuss their own history of falling	4.0	(2-5)
12 Participants were asked to weigh up the pros and cons of undertaking falls prevention activities	2.0	(1-2)
13 Positive outcomes of undertaking falls prevention activities were presented	4.0	(4-5)
14 Participants were encouraged to discuss and plan towards an implementation of falls prevention activities	2.0	(2-4)
15 Participants were asked to rate their motivation to plan and undertake a falls prevention strategy	1.5	(1-2)
<b>Domain 3: Environment that is conducive to adult learning</b>		
16 Participants appeared to be able to convey their thoughts, opinions or emotions without fear or hesitation	4.0	(4-4)
17 Participants were validated by the peer educator when they made a contribution	4.5	(4-5)
18 Participants appeared to be relaxed in the environment	4.0	(3-4)
19 The physical environment was conducive for learning and interaction (e.g. peer educator's voice level was audible, background noise was minimal).	4.0	(4-5)



Item Statement	Median <sup>a</sup>	(IQR)
<b>Domain 4: Group interaction that facilitates peer learning</b>		
20 Participants were encouraged to engage in peer dialogue	2.0	(1-2)
21 The peer educator asked participants to relate their experience with falls	4.0	(2-5)
22 The peer educator asked participants to relate examples of falls strategies that they have used	2.0	(1-2)
23 Participants shared strategies with the group that they found to have been useful or not useful	2.0	(2-4)
<b>Domain 5: Delivery protocols that are appropriate for adult learning</b>		
24 The peer educator asked participants to identify which points were particularly relevant for them	2.0	(1-3)
25 Participants had sufficient time to complete verbalising their responses	4.0	(3-4)
26 The peer educator repeated key information in a manner that was appropriate to the audience	4.0	(3-5)
27 There was an adequate mix of information provision, participant engagement and opportunity for questions/discussion	2.5	(2-4)
<b>Domain 6: Opportunity provided for reinforcement via practice</b>		
28 The peer educator discussed, distributed resources and encouraged the participants to review them after the session. (For example, handouts, web-links, information where to seek follow-up information)	5.0	(4-5)
29 The peer educator asked the participants to plan their personal response after the presentation. (For example, activities that they may intend to undertake at home afterwards e.g. conduct a check of your house, list of medications, make an exercise diary)	4.0	(2-4)
30 The peer educator thanked participants for attending the session	5.0	(3-5)

Abbreviations: IQR- Interquartile Range (25<sup>th</sup>-75<sup>th</sup>).

<sup>a</sup> Score 5- Strongly Agree; 4- Agree; 3-Undecided; 2- Disagree; 1- Strongly Disagree.

Overall, the ICC for the panel of experts for Domains 1 to 5 ranged from 0.76 to 0.88 (Table 6.2) indicating very good levels of agreement. Adult learning Domain 3 (Environment that is conducive to adult learning) and Domain 6 (Opportunity provided for reinforcement via practice) were rated highly by the experts compared to Domain 4 (Group interaction that facilitates peer learning), which was lowest in the rating scale (Table 6.2). For Domain 6 (Opportunity provided for reinforcement via practice), it was impossible to estimate the ICC for all 10 expert reviewers due to incongruence between ratings producing a negative ICC value. On closer inspection of the data, the result was due to three reviewers' ratings [ $M = 3.74$  (SD 1.01)] for the three items in this domain being different from the other reviewers' ratings. The mean value of the seven remaining reviewers for Domain 6 was 3.98 (SD 0.79). The ICC for Domain 6 when estimated for these seven reviewers only was 0.72 (95% CI -0.44-0.99).

**Table 6.2 Expert Reviewers' Levels of Agreement for Each Domain of the Questionnaire**

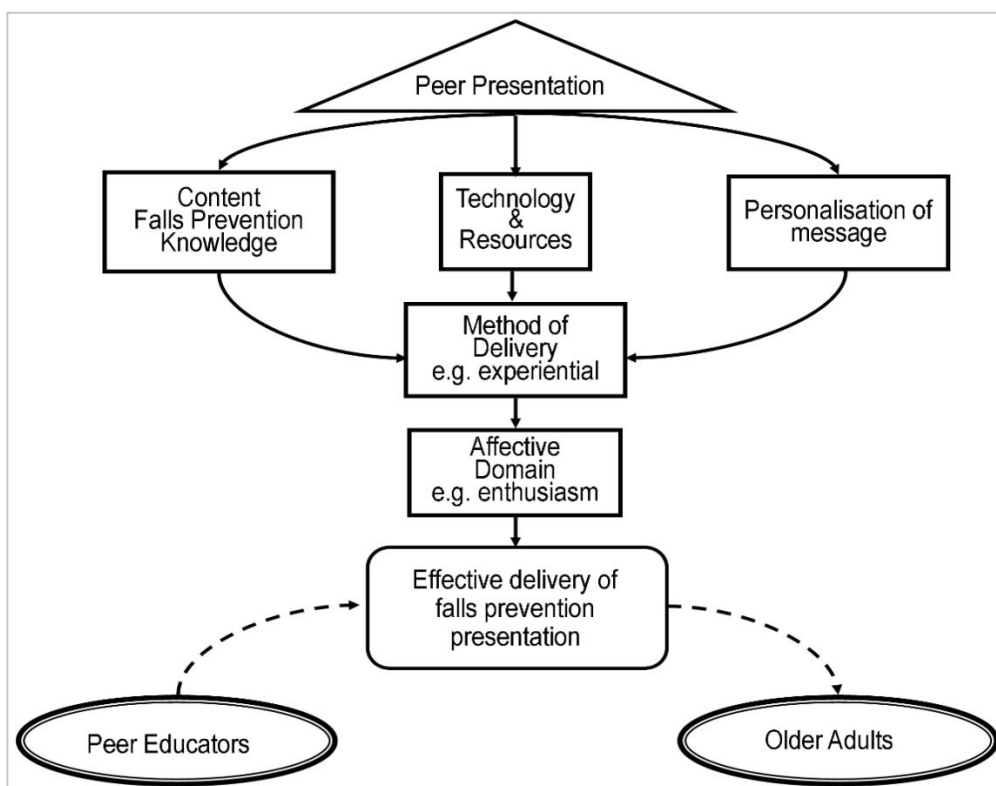
Domain Description	Items	Mean (SD)	ICC	95%CI
1. Learners' active participation in the learning process	8	3.02 (0.65)	0.88	0.44-1.00
2. Consideration of learners' relevant prior knowledge (includes falls prevention)	7	3.08 (0.78)	0.76	-0.97-0.99
3. Environment that is conducive to adult learning	4	4.07 (0.70)	0.81	0.15-1.00
4. Group interaction that facilitates peer learning	4	2.63 (0.91)	0.79	0.04-0.99
5. Delivery protocols that are appropriate for adult learning	4	3.15 (0.76)	0.82	0.17-1.00
6. Opportunity provided for reinforcement via practice	3	3.91 (0.85)	0.72 <sup>a</sup>	-0.44-0.99

Abbreviations: SD-Standard Deviation, ICC-Intraclass Correlation Coefficient, CI-Confidence Interval

<sup>a</sup> Rating by seven expert reviewers only

### 6.5.2 Key themes

Expert reviewers' feedback was examined and five key themes were identified to facilitate effective delivery of peer-led falls prevention presentations. These are presented in the form of a conceptual framework (Figure 6.1).



**Figure 6.1 Five Key Themes for the Effective Delivery of a Falls Prevention Presentation: A Framework Based on Expert Recommendations**

### 6.5.2.1 Theme 1: Method of Delivery.

The expert reviewers strongly concurred that there was little opportunity during the session for exchange of views, discussion or reflection of the older adults' experiences about falls and falls prevention with their peers during the presentations. The experts also agreed that group interaction (Domain 4:  $M = 2.63$ , ICC 0.79) was limited, including that the participants did not engage much in peer dialogue (Domain 4's Item 20,  $Mdn = 2$ ). The experts agreed that the didactic nature of the presentations meant that the audience most likely failed to engage with the key messages, given that effective falls prevention messages should be 'largely experiential and personal' (Expert 9). Expert 5 indicated that 'the presentation was weighted towards information provision rather than discussion'. Expert 1 concurred: "Lecturing is a bona fide way of presenting information; however, research has shown that it is one of the least effective in terms of aiding retention." The expert panel suggested that greater audience participation and interaction was needed. This was reflected in the lowest rating for 'group interaction that facilitates peer learning' in Table 6.3. Experts 2, 3, 4, and 5 suggested that presenters should use a mix of open-ended or closed questions, or small-group discussions to encourage active learning which has been associated with improved retention of information (Prince, 2004). Such strategies are congruent with facilitating adult learning (Merriam & Bierema, 2014). Expert 3 concluded that interaction is highly recommended to establish interest and importantly, 'to influence engagement and presentation effectiveness'.

Besides interaction, a structured format with a clear framework for the presentations was suggested (Expert 4). It was recommended that each presentation should include a standardised introduction at the start and a lesson closure segment at the end (Expert 9). Experts 1, 3, 6 and 7 stated that lesson closure, including reinforcement of the key take home messages and most importantly, to spur the older adults to make an action checklist is consistent with how adult learners achieve learning outcomes. Such suggestions are also borne out in the literature (Merriam & Bierema, 2014). Moreover, scaffolding what would be covered during the presentation, such as identifying the objectives and the significance of falls prevention to the audience, was recommended. Expert 6 indicated that such a strategy provides opportunity for the audience to ask clarifying questions and obtain further information prior to the content being presented, and this is supported by previous research (Jaramillo, 1996; Pea, 2004).

### 6.5.2.2 Theme 2: Content of the presentations

A common curriculum with associated resource material was proposed to ensure that presentations were unvarying and covering topics could help ‘to make the audience more cognizant of the personal relevance of the information presented’ (Expert 6). As one expert indicated,

So it is not only about preventing falls but improving your overall health, wellbeing and independence. Highlighting the broader benefits is important because some people may think falls aren’t important to me (Expert 4).

The experts recommended that the content of the presentations should include key falls prevention evidence, thus facilitating knowledge (capability) as well as developing motivation to implement the recommendations. Concomitantly, consistent with adult learning principles (Merriam & Bierema, 2014), it has been suggested that educators consider drawing on an audiences’ prior knowledge about falls prevention as a form of motivation. Experts were undecided as to whether this had been achieved (Domain 2:  $M = 3.08$ , ICC 0.76). Several experts also advised that peer experience and personal anecdotes could be used judiciously to stimulate motivation, encourage social support (opportunity), foster self-efficacy (capability), and enhance topic focus (Expert 1 and 4), which is consistent with findings of other research (Michie et al., 2013). Expert 6 proposed that using positive messages and highlighting personal benefits would tend to appeal to older adults’ preferred identities as ‘being physically competent and responsible’.

Expert 1 also indicated that there was little to no discussion about the frequency or consequences of falls (Domain 2’s Item 15,  $Mdn = 1.5$ ). Other authors have similarly noted the importance of this aspect, and the use of a range of topics for evidence-based falls education (Evron, Schultz-Larsen, & Fristrup, 2009; Haines et al., 2014; Hill, Hoffman, Beer, et al., 2011; Yardley, Beyer, et al., 2007). Suggestions by the panel of experts for redress included: using statistics to show how commonly falls occur; discussing consequences and costs of falls; highlighting falls risk factors, emphasising the strategies that address falls risk factors; discussing the reasons for and against taking measures to prevent falls (Expert 1, 4, 5 and 7). These suggestions for peer-led falls prevention presentations were consistent with other studies which have

investigated older adults' preferences for receiving falls prevention information (Khong, Bulsara, Hill, & Hill, 2016; McInnes & Askie, 2004; Yardley, Beyer, et al., 2007). The behavioural change literature (Michie et al., 2013) explains that addressing topics such as the ones cited encourages older adults to evaluate the perceived benefits of and barriers to engaging in falls prevention activities while at the same time assisting with developing motivation to change behaviour.

#### **6.5.2.3 Theme 3: Transition of key messages with use of technology and resources.**

Use of multimedia resources (such as posters, a checklist, diagrams, demonstrations or kinesthetic stimuli) has been found to create an enriched learning experience (Spector et al., 2014). Experts concurred, as reflected by their lower rating that they were unconvinced that this was achieved (Domain 5:  $M = 3.15$ , ICC 0.82). Expert 1 stated that video 'enhanced presentations' and could 'keep attention levels high'. The experts agreed that technology and resources should be used to facilitate transition from research theory to practice and that tailoring key falls prevention messages by linking video to their personal action checklist would be advantageous (Expert 10). Having resources to support presentations has also been recommended by peer educators who deliver falls prevention group presentations (Khong et al., 2015).

#### **6.5.2.4 Theme 4: Personalising the falls prevention message with an action plan.**

The experts strongly agreed that provision of checklists would likely spur the older adults in developing a personal action plan. However, the experts were limited to observing activities within the video-recording only and not any informal impetus that facilitated engagement that took place beyond recording time. Expert 6 stated that 'It was a good idea to encourage participants to write down their ideas. It would have been good to follow this up with them to make a link between their insights and potential action'. This suggestion may have been made because previous studies have found that older adults may not perceive falls prevention to be personally relevant (Haines et al., 2014; Hill, Hoffman, McPhail, et al., 2011). Therefore, tailoring action plans could personalise the relevant information and so potentially promote a change in health behaviour (Michie et al., 2013; Noar, Benac, & Harris, 2007).

Expert 7 reinforced that:

Information alone does not lead to behaviour change. Encouraging the development of a personalised 'action list' to facilitate behaviour change by asking them which strategies are you going to go away and action?

Expert 9 elaborated:

Talking through recently presented information helps to 'ground' these new data into participants' lived experiences, which in turn can facilitate adult learning through linking theory with experience.

#### **6.5.2.5 Theme 5: Influence of the affective domain during presentations.**

The peer educators' warm and enthusiastic approach was considered by the experts to provide a positive learning environment. Experts agreed that attention to the affective domain was a characteristic that subsumed the other four domains. It is 'a very powerful way to create a connection between the presenter, the audience and the material being presented' (Expert 10). Despite conducting the review through a video-recording, the experts were still able to observe the peer educators' use of positive non-verbal language such as the engagement of their hands, smile, participants' names, and eye contact, which were highlighted as positive effects on learning (Expert 3 and 10). Expert 9 stated that:

The presenter conveyed a pleasant, professional and personable approach to the issue of falls prevention. She was very well-spoken. She used humour and anecdotes to establish rapport and trust with the audience. The audience responded to the presenter's approach and participated when asked to.

The expert reviewers strongly concurred that the environment was conducive for adult learning throughout the presentations by providing the highest rating for the domain 'environment that is conducive to adult learning' (Domain 3:  $M = 4.07$ , ICC 0.81). Expert 8 described the presentations as being held in a 'warm inviting environment'. There was thus broad endorsement of the importance of the affective domain. A comfortable place to share in discussion, to ask questions and to learn, has likewise been identified as important in other research (Kim & Pekrun, 2014) including in a health-related peer-led study (Klein et al., 2014).

In summary, experts advocated that the peer-led falls prevention presentations should be more interactive and experiential; that the content ought to focus on building capability and should be more consistently presented; the message ought to be made more personally relevant; and technology and resources should be used to greater advantage to facilitate translation of research into practice by supporting older adults to take up falls prevention strategies. As such, key theoretical influences on promoting behaviour change identified earlier (Michie et al., 2011) have relevance for peer-led falls prevention presentations, these being, capability, opportunity and motivation.

Subsequently, the experts also made a number of practical recommendations about how delivery could be enhanced. These were collated as final recommendations (Table 6.3).

**Table 6.3 Delivery of Peer-Led Falls Prevention Presentation to Community-Dwelling Older Adults: Experts' Recommendations**

<b>Questionnaire Domain</b>	<b>Experts' Recommendations</b>	<b>Rationale</b>
Learners' active participation in the learning process (Theme: Method of delivery)	Interactive presentation with active learning techniques such as using a mix of open-ended and closed questions, group tasks and pair or small-group discussion to encourage active learning	Learning is an internal process, self-directed enquiry produces the greatest learning (adult learning theory) (Merriam et al., 2014)
	Provide audience with an overview of talk at the start of the presentation	Clear framework of presentation (pedagogical skills; scaffolding) (Jaramillo, 1996; Merriam et al, 2014; Pea, 2004;)
	Invite audience to seek clarification anytime during presentation	
Consideration of learners' relevant prior knowledge (includes falls prevention) (Theme: Content of presentation)	Keep peer/personal anecdotes relevant to falls prevention topic only	Keep presentation and discussion focused on key points of falls prevention topic. Dramatic deviation from the topic to be avoided
(Theme: Personalisation of message)	Use of a standardised and targeted script to encourage consistency of the content including aims and significance of falls prevention	Consistency of presentation and time management enhanced when numerous presenters are involved

Questionnaire Domain	Experts' Recommendations	Rationale
	Encourage audience to reflect and discuss personal experiences regarding falls. Encourage audience to develop personalised action plan	Foster personal relevance of falls prevention information (falls prevention guidelines, health behaviour change) (Haines et al., 2014; Michie et al., 2013; Yardley, Beyer, et al., 2007)
Delivery protocols that are appropriate for adult learning (Theme: Technology and resources)	Maintain a positive tone and message via the use of appropriate interactive strategies	Older adults prefer the fostering of a positive social identity (falls prevention guidelines) (Dollard et al., 2012; Haines et al., 2014; McInnes et al., 2004; Yardley, Beyer, et al., 2007)
Delivery protocols that are appropriate for adult learning (Theme: Technology and resources)	Incorporate various sensory formats including visual, aural or kinesthetic stimuli e.g. posters, pictures, video, demonstrations or tactile resources Use resources provided to document personal intention or action plan after the presentation. (e.g. falls prevention booklet and checklist)	Use variety of technologies in presentation to engage audience (adult learning theory)  To reflect upon and discuss information presented (health behaviour change) (Michie et al., 2011; Michie et al., 2013)
Environment that is conducive for adult learning (Theme: Affective domain)	Portray positiveness, enthusiasm and a motivational style	Educator's approach can impact on level of engagement with message (adult learning theory) (Merriam et al., 2014)

## 6.6 Limitations

This study has some limitations. The findings are context-specific and may not be generalisable to peer-led falls education programs in other settings within Australia or overseas. The expert review appraisal was limited to watching an edited video-recording of mainly the peer educator and presentation, with audio feedback from the audience. The real-time ongoing dynamics of any of the three presentations



may be too subtle to be evident on a positionally fixed video-recorder. As such, participants' non-verbal communication cues could not be observed. Finally, although the questionnaire used for the expert rating of peer education provided consistent responses for the first five domains, the incongruent rating observed for the sixth domain ('opportunity provided for reinforcement via practice') suggests that this component of the questionnaire may require further clarification and investigation. Additional rigour could be included into the study by conducting interviews with each expert to clarify further their review comments.

## **6.7 Summary of Chapter**

Study 3 provided new information, gathered from experts, about how peer-led presentations might be structured to effectively deliver falls prevention presentations to groups of community-dwelling older adults. Effective peer-led presentations have the potential to motivate peers to move from comprehending falls prevention messages to developing falls prevention plans and taking relevant actions to reduce their risk of falls. Their evaluations and recommendations were used to inform the design and delivery of the contemporary peer-led education program.