

Original Article

Understanding the delivery of the Falls Management Exercise Programme (FaME) across the U.K.

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Abstract

Objectives: 1) Map FaME delivery across the UK, 2) explore and understand delivery of the FaME programme in practice. **Methods:** Sequential exploratory mixed methods. 1) survey of n=247 Postural Stability Instructor (PSIs) across the UK, 2) purposively sampled n=23 PSIs to take part in interviews. Quantitative data was described descriptively due to low sample size, and qualitative data coded using thematic analysis. **Results:** Instructors pre-dominantly delivered classes in a community-setting, were mostly White British females with a range of experience. Most respondents were exercise instructors, physiotherapists, or therapist assistants. Only 136 (55.1%) respondents currently delivered the programme. The essential components of the FaME programme that instructors did not implement routinely were backward chaining, floorwork and Tai Chi. Five main themes emerged from qualitative data: individual, delivery and set-up, evidence-based delivery, motivational strategies, and instructor-based factors. Most instructors reported fidelity to most components of FaME and shared barriers and facilitators to delivering classes. **Conclusion:** This study gives a UK overview of the implementation of FaME. PSIs present a complex picture of the ways set-up and delivery of evidence-based programmes in practice can influence older adults' attendance, adherence and experience of the programme, and barriers and facilitators to delivery of the programme with fidelity.

Keywords: Exercise, Falls, Implementation, Intervention, Older adults

Introduction

Falls are an important public health issue, with 35% of over-65s experiencing one or more falls each year. This has implications for older adults' independence and quality of life, alongside cost to the health and social care system^{1,2}.

Evidence suggests that exercise programmes that include specific strength and balance exercises, can significantly reduce risk and rate of falls³. The evidence-based FaME multimodal exercise programme^{4,5} is one of two specific programmes proven to reduce falls in frailer older people³ and adopted within the National Health Service (NHS)^{1,6,7}. The World Falls Guidelines recommends that anyone delivering exercise for the purposes of falls prevention and management should receive specific training and that programmes based on research proven exercise prescription should be delivered with fidelity⁸. In the UK, many health authorities and charitable organisations claim to provide FaME, but modification of the programme, in terms of dose (duration, frequency) and progression, is common^{7,9}, many patients do

not receive interventions which follow the evidence-based protocol^{7,9}. The likelihood of achieving positive outcomes is reduced by non-fidelity by staff delivering FaME, non-adherence by older adults, or lack of maintenance by older adults or staff (e.g. time limited programmes and lack of follow-up). Both health and fitness professionals delivering or referring to FaME classes have an important role to play in

Prof Dawn Skelton is a Director of Later Life Training and the lead of the original FaME trial. Dr Helen Hawley-Hague is a qualified PSI instructor but undertook the training to allow her to fully conduct this research. The remaining authors have nothing to declare.

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promoting uptake, supporting adherence, home exercise (to support exercise dose) and in the continuation of exercise after rehabilitation^{12,14}. It is known that if FaME is delivered as designed it can achieve excellent results in practice¹⁰. Work evaluating the implementation of FaME^{10,11}, has shown that there are areas of good practice, but we do not have a full picture of implementation across the UK or across community and health services.

As FaME is an evidence-based recommended programme, there is a need to identify how FaME is delivered across the UK, who is delivering it and to explore the context of the delivery and how these factors may relate to adherence to the programme in terms of sustained activity and maintenance/improvements in physical falls risk factors. Therefore, this study maps FaME delivery across the UK, and then explores delivery and experiences of those delivering the programme.

Methods

The study adopted a sequential explanatory mixed methods approach¹⁵, using a questionnaire followed by telephone interviews. This enabled the establishment of a broader and fuller picture, as well as providing triangulation¹⁶. Ethics approval was gained from the University of Manchester Committee of the Ethics of Research on Human Beings UREC 5 (Ref: 12360).

Participants

Online and postal questionnaire

All FaME instructors, known as Postural Stability Instructors (PSIs), across the UK (n=1484) were identified through Later Life Training (LLT). LLT is the only training company delivering endorsed training in FaME delivery. LLT sent information (via email) to all PSIs registered as having undertaken training with them with a link to the survey. Not all of those trained had access to email/internet and, therefore, where no email was available, we sent postal questionnaires and participant information. All instructors were invited to complete the questionnaire to establish how many were currently delivering programmes. Those currently delivering programmes were then asked further questions on delivery and if they were willing to be contacted about further research.

Interviews

Follow-up semi-structured telephone interviews were carried-out and audio-recorded by the lead author (HHH) with a sample of instructors (n=23) selected from the initial survey. Purposive sampling was based on type and location of delivery, and instructor background.

Data collection tools

Questionnaire

The first part of the questionnaire collected demographic data, instructor background and experience to establish

Demographics	n=247
Gender	
Female	215 (87%)
Male	32 (13%)
Ethnicity	
White British	217 (87.9%)
Black Caribbean	4 (1.6%)
Pakistani	1 (0.4%)
Indian	1 (0.4%)
Other	24 (9.7%)
Age (years)	
Mean (SD)	46.9 (9.94)
Range	23 to 75
Working background¹	
Exercise instructor	114 (46.2%)
Physiotherapist	57 (23.1%)
Therapy assistant	32 (13.0%)
Nurse	7 (2.8%)
Occupational Therapist	11 (4.5%)
Other ²	22 (8.9%)
Experience (in months)³	
Mean (SD)	53.4 (43.6)
Range	1 to 186
Additional motivational training?	
Yes	84 (34%)
Classes per week delivered	
Mean (SD)	2.7 (1.91)
Range	0 ⁴ to 9

Key: ¹ 243 participants responded; ² includes public health, voluntary sector, social workers; ³ 198 participants responded; ⁴ Deliver one to one rather than classes.

Table 1. Demographics of Postural Stability Instructors.

instructors' characteristics. If instructors were currently delivering programmes, they were asked questions about their programmes and delivery, including whether they delivered to the evidence-based protocol. The key components of FaME includes flexibility/mobility, dynamic endurance, leg/ankle resistance, arm/back resistance (progressing with weights/bands), dynamic balance, backward chaining, floor work, adapted Tai Chi cool down. Further delivery information was obtained, we asked instructors to describe their most successful class (defined as good attendance and adherence of participants) and

their most unsuccessful class. This included whether they provided one-to-one/group delivery, compliance in delivery to the evidence-base (type/frequency/intensity/duration, use of music), place of delivery (home/community/clinic/care home), transfer into community exercise groups and the outcomes their participants achieved. The questionnaire was pilot tested by several PSIs and revised prior to use (Supplementary material).

Interview schedule

The interview schedule was informed by previous research, the initial survey, the Theory of Planned Behaviour (TPB), and the related Attitudes to Falls Risk Intervention Scale (AFRIS)¹⁷ (Supplementary material). The TPB has previously been used to assess older adults' and instructors' attitudes towards older adults' uptake and adherence^{13,14}. TPB is based on three main concepts: (a) perceived behavioral control (PBC) which is often interchangeable with self-efficacy, (b) attitudes (outcome expectations), and (c) social influences¹⁸. We asked PSIs about their approach to their FaME classes, fidelity to the evidence-base, reasons for adherence/non-adherence of participants, the impact of their classes, social influence, barriers, and long-term provision.

Statistical Analysis

Questionnaires were examined for missing data and entered onto SPSS, data were explored using descriptive statistics. Interview data were analysed using thematic analysis¹⁹ in NVivo 11 (QSR international). The research was inductive and sought to further understand the quantitative findings, categories and explanations generated directly from the data, reducing risk of bias¹⁹. The validity of the analysis was ensured by using a second researcher (CQ) who separately coded the data¹⁹, and through discussion within the broader team (HHH, JV, CQ). Key findings were checked with a sub-sample of interviewees.

Reflexivity

The authors involved in data collection and analysis were; an academic healthcare researcher with a background of setting-up/commissioning exercise pathways; an undergraduate neuroscience and psychology student; a postdoctoral researcher with specialist interest in FaME implementation. Team discussions encouraged reflection on how background and knowledge influenced the coding and how the researcher (HHH) may have influenced the interviews²⁰ as she was known to several PSIs. This allowed consensus around emerging themes considering all viewpoints.

Results

Survey

The response rate to the survey was 17%, with 247 individuals qualified as PSIs responding, 215 (87%) were

female and 217 (87.9%) White British (Table 1). Many of the contact details held by LLT were out of date, reducing the response rate.

Most respondents were exercise instructors (114, 46.5%), with 57 (23.3%) physiotherapists and 32 (13.1%) therapist assistants. Only 136 respondents (55.1%) were currently delivering the FaME programme. We focus on responses on the successful programmes described, as only 46 (35.9%) instructors reported the characteristic of unsuccessful programmes, responses on characteristics of unsuccessful classes did not greatly differ from successful ones. Despite instructions, instructors often described characteristics of multiple successful classes, rather than their most successful class making it difficult to fully explore characteristics. We are only able to report descriptive statistics due to small sample size. We have not reported all questions from the survey due to low response and missing data.

The largest number of FaME classes were delivered in community venues, with community rehabilitation services the biggest referrer, where there was a pathway in place (Table 2). Most instructors reported carrying out pre-assessment (either to tailor delivery or as an outcome measure) with a broad range of measures undertaken, with Timed up and Go (TUG) and the PSI Functional Grid (six functional tests provided in training; seated hamstring flexibility, seated shoulder internal and external flexibility, timed up and go, functional reach and 180 degree turn) were most commonly utilised. PSIs were most likely to deliver the strength, balance, aerobic and flexibility components of the FaME programme and least likely to deliver backward chaining (method of regaining the ability to get up off the floor), floor work, or the adapted Tai Chi cool-down (Table 2). Most PSIs reported tailoring and progressing exercises and encouraging home exercise, with classes running from six weeks to participants able to attend for as long as they wanted. Over two thirds of instructors offered a follow-on class or allowed participants to stay with them long-term. There were a wide variety of approaches to classes with 46.7% of respondents charging for classes and a third providing free transport. Successful classes had a higher proportion of class members with improvements in function, balance, falls, fear of falling and health and well-being (Supplementary material).

Interviews

A total of 23 PSIs were interviewed prior to reaching data saturation where no further themes emerged. Nineteen (82.6%) PSIs were female, 21 (91.3%) were White British. We interviewed PSIs across all four countries in the UK. PSIs who took part in the interviews delivered a variety of FaME programmes at different parts of the falls care pathway (preventative classes, rehabilitation services, maintenance classes post-rehabilitation). PSI instructors either delivered clinically as part of a falls service or rehabilitation service (and are identified as such) or delivered community-

Table 2. (Cont. from previous page).

Class components	Successful classes N=128 Postural Stability Instructors		Unsuccessful classes N=46 Postural Stability Instructors	
Use music	Yes	16 (12.5%)	Yes	1 (2.2%)
	Yes, but not where it effects concentration e.g. balance	39 (30.5%)	Yes, but not where it effects concentration e.g. balance	9 (19.6%)
	No	65 (50.8%)	No	26 (56.5%)
Encourage home exercise		119 (93%)		40 (87.0%)
Progress exercises		120 (94%)		36 (78.3%)
Set short/long term goals		89 (69.5%)		23 (50%)
Charge for class		58 (46.7%)		10 (21.7%)
Transport provided		43 (33.9%)		19 (41.3%)
Free of charge		40 (31.2%)		16 (34.8%)
How many weeks can participants attend?		6 weeks to forever		6 weeks to forever
How many classes a week can participants attend?	3 times or more	7 (5.5%)		1 (2.2%)
	Twice a week	18 (14.1%)		3 (6.5%)
	Once a week	97 (75.8%)		34 (73.9%)
Do you provide home visits?		22 (17.2%)		10 (21.7%)
Do you provide a follow-on class?	They stay in current class	34 (26.6%)		9 (19.6%)
	Yes	43 (33.6%)		12 (26.1%)
	No	40 (31.2%)		19 (41.3%)
Someone else provides follow-on class		43 (33.6%)		15 (32.6%)
Same venue as their class		35 (27.3%)		9 (19.6%)

Key: ¹Including in the home, care homes, day centres. ²Those delivering to one person offered one to one provision. ³People with chronic conditions.

based FaME provision (identified as PSI instructors only). Clinical staff did occasionally set-up additional independent community classes and occasionally community instructors would provide in-reach to health service provision (Table 3).

Five main themes emerged from the data: individual factors, delivery and set-up, evidence-based delivery, motivational strategies, and instructor-based factors. Within these themes a further 18 subthemes were identified and explored (Figure 1).

Theme one: Individual Factors

Health

PSIs discussed how health of older adults was both a motivator (taking control of their health) and barrier to attending FaME classes:

"It's about them wanting to get control of their lives back again, because most of them are saying things like, I'm at the mercy of my falls" (PSI/Occupational Therapist, Female 15).

PSIs had to be very aware of health issues and focused

tailoring was required to ensure that they met individual needs. PSIs perceived that individuals' health had an important relationship with their adherence to the class, including management of a long-term condition:

"...the reason why people don't stick with it again I think it's due to long-term condition...fibromyalgia is one of the things that springs to mind..." (PSI, Female 13).

PSIs reported that some participants had difficulty with travel to classes due to health issues. A further barrier to access was increased caring responsibilities:

"I've had one or two leave because they've moved in with their son and daughter who lives many miles away...one lady very recently stopped coming because her husband became very ill and she didn't want to leave him at home even for the hour" (PSI, Female 14).

Attitudes and Fears

Participants' attitudes towards exercise, attending a class and their own abilities were important factors in

	n=23 ¹
Gender	
Female	19 (82.6%)
Male	17.4 (%)
Ethnicity	
White British/Irish	21 (91.3%)
Prefer not to say	2 (8.7%)
Age (years)	
Mean (SD)	26 to 59
Range	47.6 (8.29)
Working background²	
Exercise instructor	13 (56.5%)
Physiotherapist	6 (26.0%)
Therapy assistant	1 (4.3%)
Nurse	1 (4.3%)
Occupational Therapist	2 (8.7%)
Experience (in months)	
Mean (SD)	65.7 (40.0)
Range	8 to 132
Additional motivational training?	
Yes	11 (47.8%)
Classes per week delivered	
Mean (SD)	2.6 (2.0)
Range	0 to 8
Deliver as falls service/ rehabilitation (NHS)	10 (43.5%)

Key: ¹ n=2 did not provide demographics.

Table 3. Interviewed instructors characteristics.

their motivation. PSIs discussed participants’ confidence in their own ability (self-efficacy) as a barrier: *“Perhaps a self-imposed barrier. They think they’re too frail”* (PSI, Female 6). They also had negative outcome expectations and concerns around injury: *“they think exercise class, it’s going to hurt”* (PSI, Female 13). The lack of acceptance that attending the class may be beneficial and incorrect pre-conceived ideas of what the class would include, posed a further barrier:

“...Sometimes a lot of the time cognitively they aren’t able to grasp the fact that they’re the ones that need to do these activities” (PSI, Physiotherapist, falls service, Female 11).

“I think some people think that they’re going to be jumping around the room with ribbons, lots of people have said it’s better than they expected” (PSI, Female 3).

Cost and Travel

Ability to travel, access to transport, proximity to and cost of classes were among the main barriers cited by PSIs and are an important part of set-up:

“Then they’re going to have to pay for it, albeit not very much money, but when they’re used to having it for nothing, it’s quite a difference for people.” (PSI, Female 5).

PSIs also sensed a fear of safety when using public transport was a barrier to access:

“A lot of them don’t have the confidence to go on public transport, because the buses are driving away before they’ve had the chance to sit down, and, maybe, they can’t even get on the bus in the first place, or the driver’s supposed to put the step down, but he’s in a rush so he doesn’t bother” (PSI, Female 19).

Issues with transport could be overcome by utilising a venue with good transport links: *“it’s literally about 20 steps from the bus stop into the park and then the community centre”* (PSI, Female 5). Some services found that offering transport initially helped to overcome the barriers and increase confidence until commitment was established. Others found that when this provision stopped, individuals drop-out indicating the need for a sustainable transport model.

Theme Two: Delivery and set-up

Funding

Several funding models were discussed by PSIs. Physiotherapists and other health professionals delivered components of FaME as part of rehabilitation. Whereas other services used freelance PSI trained instructors to deliver their programme. This model required top-up payments in instances where participants did not contribute enough:

“it’s two pounds per person who comes to the class and whatever they get, the xxx top it up to £30” (PSI, Female 17).

Other PSIs were self-employed and relied completely on the class income, this was a challenge, especially if numbers needed to be capped to ensure safe delivery:

“If you’re self-employed like myself, I don’t know how you can do it for £2.80 or £3, especially if you’re going to cap the number in your class – which you need to because of vulnerability and the nature of the people coming to your class” (PSI, Female 14).

There were varying approaches discussed about payment for private classes, with PSIs moving to monthly or termly payments in advance to ensure classes were viable. Instructors reported instances of not earning a viable amount to even cover hall hire costs:

“...having 15 on the books I mean literally there were days when I had four people in a class just purely because of circumstance...then there’d be two weeks where I had a full house. But because I was no longer being funded by

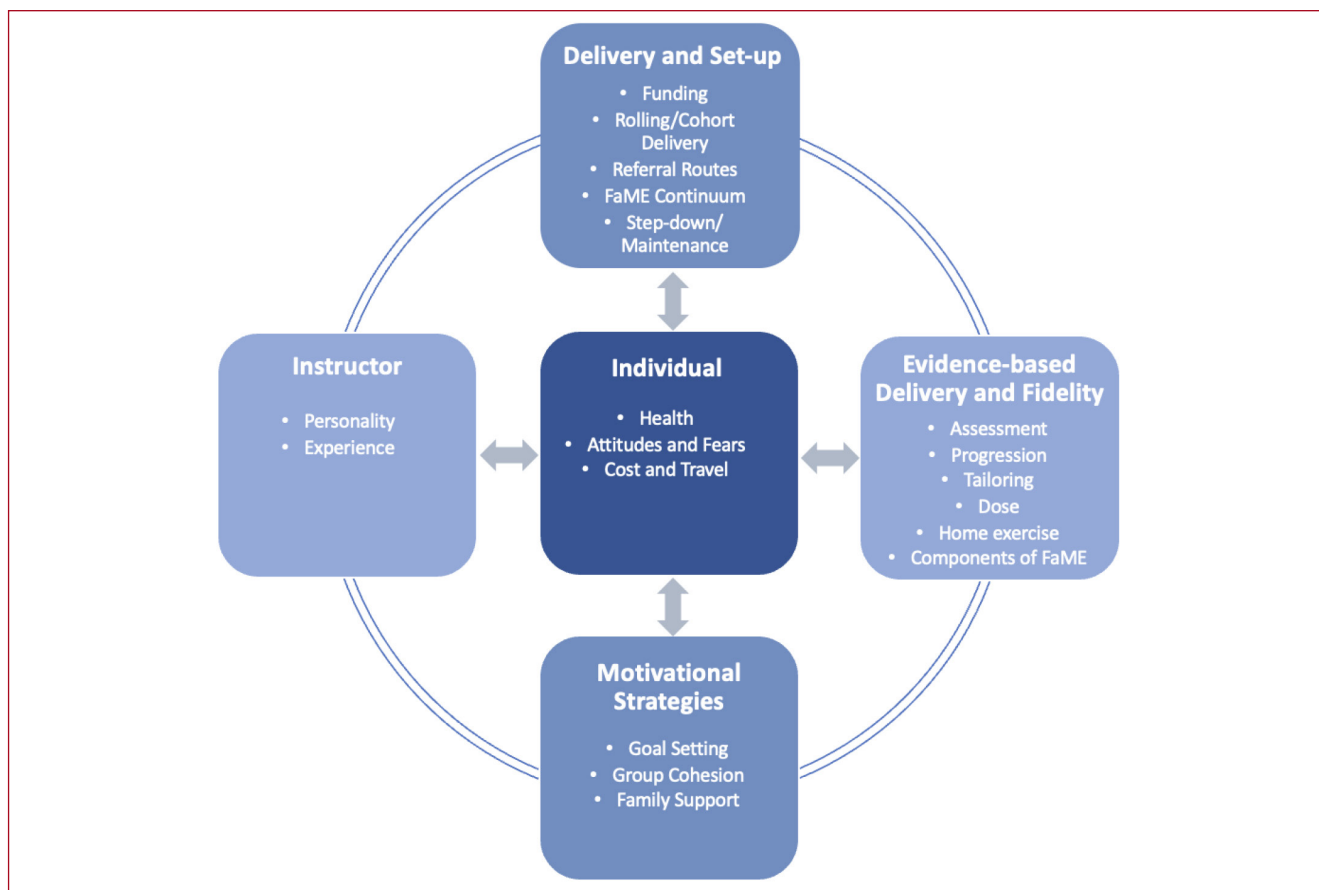


Figure 1. Themes identified in successful FaME delivery

xxx, and I needed to make these classes work long-term... I thought what I'll do is I'll ask them to pay for a month" (PSI, Female 14)

Rolling/Cohort Delivery

PSIs described two different approaches to delivering FaME. Most PSIs delivered a rolling programme, meaning that participants could join the group at any time:

"...it's all rolling, so we don't often have patients that will discharge at the same time" (PSI, Physiotherapist, falls service, Female 11).

PSIs discussed the benefits of group cohesion and the support that could be provided to new class attendees by existing participants, they particularly helped to build-up new participants' self-efficacy. However they also discussed issues with the capacity of the classes and challenge of supporting participants to be less reliant on the instructor to enable them to move on:

"Have a rolling programme which is much harder so to speak, but it means that you've got patients in there have

sort of tried and tested it so they're quite enthusiastic with the new ones." (PSI, hospital-based falls service, Female 12).

"...These are all the issues with rolling programmes, the same classes get full. So, fundamentally there was a lot more that we put in place to nurture this movement around sessions, so that actually we weren't nurturing them to stay in the same place." (PSI, Female 2).

PSIs talked about the classes requiring very careful management so waiting lists did not build-up. Risk assessment and full assessment of participants were key to their experience:

"We have to manage rolling programmes, we have no choice, otherwise people would be waiting months and months to get into the service...what are the formats that we can use, some people need unison group approaches, aren't appropriate for circuits so that's how two instructors work together to see who they have on any particular day...that really depends on the risk assessment on the day and risk of the people in the group" (PSI, Female 2).

Some services did deliver a cohort approach and provided set weeks with participants starting together. They suggested

it was easier to bond with participants, to get to know their names and created a more cohesive group environment:

“They seemed to gel quite well as a group and the fact that they’re all supporting each other and they know that they’re all struggling with the same things and there’s not new people coming and going” (PSI, falls service, Female 9).

Referral Routes and the FaME “Continuum”

Physiotherapists who were trained to deliver the FaME programme discussed the challenges of short timescales within rehabilitation:

“We just try and get them to the best place for the falls rehab, but the community service, community physio team, aren’t really going for very long” (PSI, hospital-based falls service, Female 12).

However, despite this being seen as an issue, referral routes were not always well-developed into longer-term community-based FaME provision. This was exacerbated by restructuring within the NHS. Referrals did not always come through from rehabilitation services despite connections made and some PSIs were reliant on private physiotherapists:

“...we’ve been waiting for these people to come through, but it’s very rare that it happens...all the physio’s who have referred to me have been private” (PSI, Female 17).

For other PSIs there was friction with the clinical teams, and PSIs reported that some clinicians felt that they were the only appropriately trained people to deliver to older adults:

“...some of the physios are terrible like that, their training is that, and they are the sole people in a hospital giving exercise, if you like, and then somebody like me coming in, well you know, luckily I’ve got a thick enough skin to deal with it” (PSI, Male 4).

There were also barriers to developing relationships and referral pathways. For self-employed PSIs it was a challenge to find the time and for it to generate enough referrals to make it worth the effort:

“I’m self-employed and I do class delivery and personal training delivery and in order to make that work for the one or two classes I have, it wouldn’t be worth the time” (PSI, Female 17).

Where pathways were successfully developed, falls coordinators or pro-active relationships with local clinicians in acute, primary and community care were important. This could be facilitated by a local falls network or by multiple disciplines being trained together, breaking down barriers:

“The good thing with having this network in xxxxx with the GPs and the hospital and the physios, it’s nice that they are recommending exercise as the first option” (PSI, Female 5).

“who’s an OT, myself, a couple of others, we all trained together, a couple of the physios and I’d go along to the classes sometimes and say, well, we do a similar sort of thing that you’re doing here but it’s just a little more advanced” (PSI, Female 5).

This relationship could also be forged by instructors going to rehabilitation classes and clinicians attending community classes to see what was delivered:

“They’ve both been up to review the day hospital falls group...I speak to them quite frequently on the phone about their classes and what’s available” (PSI, physiotherapist, falls service, Female 11).

Referral routes varied, with some areas having formalised referral routes and a pathway between acute services, falls services and community-based FaME and others utilised non-clinical pathways and worked with a wide range of community organisations:

“We’ve got a transfer from the hospitals that they fill in ... we’ve also got very modified documents about people to community classes” (PSI, Female 14).

“U3A I found myself, Age Concern I found myself. I am trying to think of my other ones, Sheltered Housing I did myself... the fitness centre” (PSI, Female 6).

‘Step-Down’/Maintenance

Some PSIs discussed ‘step-down’ models with participants to ensure maintenance of exercise. They noted how it was beneficial for individuals to be able to transition between classes that were held in the same venue to maintain familiarity:

“We use the same venue for the physio-led group, so I will have a group...it’s in between two of mine actually, they come in and do a 12-week programme with the physios and then they refer them on...and some of them you can hear them, they don’t want to come on to me, they want to stay with the physios, but they’re able to say, this is xxx she’ll be taking the class and that’s done really well” (Private PSI, Female 3).

The maintenance of class delivery with the same PSI also provided another level of familiarity for participants and led to long-term adherence: *“...so some people have done their 36 week and then been in that one for four years”* (Private PSI, Female 7). The continuation of delivery was felt by PSIs to be another important aspect for participants, who were grateful of the longer delivery durations. Longer-term delivery enabled participants to continue to develop their skills and once a relationship had been built with the PSI it was also easier for them to move to charging participants:

“Those of you who can do this longer, will keep going and will do better to build on the skills you’ve already learned, so we’re going to be offering you another eight weeks. It’s entirely optional, it’ll be the same instructor. If there’s enough of you, it’ll be the same place...the only thing we ask is going to change is three pounds towards the cost...you normally find at least 75 per cent of them say yes...” (PSI, Female 8).

One of the issues with delivery and the offer of maintenance classes or ongoing provision was capacity to deliver and enough PSIs:

“there’s another PSI instructor in the area, she is now joining us...what we’re trying to do is expand because then

we can cover each other if we're ill" (PSI, Female 7).

Several health professionals within falls services discussed how they had set-up independent community classes available outside of their current working hours to ensure there was ongoing provision for participants:

"The community class that I set up in xx was because there was nowhere suitable that a lot of people could go. Some of them were fine going to the gym class, which was run locally wasn't what people were after, it didn't help them with their balance. So, I set up the Saturday class. That class is a rolling class, people come for a limited time or as long as they want" (PSI, nurse and falls co-ordinator, Female 18).

Theme Three: Evidence-based delivery and Fidelity

Assessment

An important part of the PSI training is the role of assessment, to ensure the participants are at the right class and set goals:

"We've got telephone screening that we do initially if somebody rings and enquires about the class...then we invite them along to come and see a class, and obviously by the third time we will have met them; we then have a chat with them about suitability of the class. I tend to still use the Later Life health questionnaire because even though it's long I feel that it's very informative" (PSI, Female 14).

Some PSIs used it regularly to give feedback. This method helped to ensure that participants were progressing as intended and to help motivate. Further assessments were completed on exit to ensure they planned appropriately for the participants' future:

"we do an assessment when they first start to make sure that they are suitable and that they're in the right place and we'll do some outcome measures... We redo those at the end, but also at the end we ask a few questions about, okay, so what benefits have you got, what are your plans now" (PSI, Male 1).

However, relatively few PSIs used it in this way. Collecting outcome data only, rather than using assessment to improve provision was criticised by one PSI:

"It drives me insane at the amount of data collection that our referral schemes and all our pathways have to collate, because actually the evidence told you what it does, it improves X, Y and Z, if the instructor does A, B and C. So, why don't we quality ensure the A, B, C, stuff?" (PSI, Female 2).

Some instructors just did not do any assessment, whereas others discussed incorporating some assessments as part of the class giving feedback:

"I don't do any paperwork stuff. It's just really like I'll observe say one week and we're doing a certain exercise and I'll say, oh you're getting your legs up a lot higher today" (PSI, Female 5).

One of the main reasons for this was the time-consuming nature of assessments, especially when delivering community groups rather than being NHS funded. A further barrier was participants not seeing the importance of assessments when paying for a class:

"You can't charge somebody to come in just to get retested because they, if they don't care, then what difference does it make?" (PSI, Female 17).

Progression

Progression was seen as an important part of FaME and PSIs discussed the different ways that they introduced this into the classes. One method was adding variety to delivery that continually challenged individuals by using different equipment, asking participants to close their eyes, and increasing cognitive demand:

"...the next pressure from this when you can do that is to do it with your eyes closed." (PSI, hospital-based falls service, Female 12).

PSIs also outlined their fidelity to the programme and how that changed over time. PSIs discussed whether they perceived fidelity as delivering as outlined in their training manual or if they could include progressions which were in the 'spirit' of FaME, but not in the manual.

"I stick religiously to the book, 33-weeks, I don't go off it at all, I have a set 33-week programme, I do the same thing every week, I mean I have it written down, so the 33-week programme everybody at week eight has got the same lesson plan, it doesn't vary" (PSI, Female 3).

Changes in delivery were perceived by PSIs as required to meet individual need and based on resistance to certain activities from participants:

"I think we all start off with the standard models and because I think of previous experience with different areas, different groups, different problems...Be firm when you have to, ease off when you don't have to, because I think sometimes people have a line they've drawn, they're not prepared to cross it... Whereas you've got to be a little bit more flexible than that, and you really only get that with the confidence of having done" (PSI, Female 14).

"I wouldn't say that there was any contradiction there really. I would say that they were within the spirit and the principals of FaME" (PSI, hospital-based falls service, Female 12).

The training gave PSIs the confidence and skills to be able to flex and adapt the programme dependent on participants, room and other variables.

Tailoring

PSIs discussed tailoring their delivery to individual participants. This was even more important when they had a mix of new and experienced participants:

"I have people in my class for over a year, two years, I then have people joining and it's there very first time; within

a class I normally have three levels of ability so every time I give an exercise out I'm actually giving it out on three levels" (PSI, Female 14).

Some PSIs delivered this alone, but others developed delivery where there was more than one instructor allowing for more tailoring.

"We very quickly developed dual classes basically with two instructors whereby we would address and basically run two focussed sessions within the same venue" (PSI, Female 2).

Dose

Instructors discussed the importance of exercise dose and understood that they needed to offer longer delivery:

"I never actually thought that 24 weeks was long enough, the results of that were found that really it wasn't long enough. Twice a week wasn't long enough... We have classes run every day." (PSI, Female 10).

Some PSIs discussed how assessment was important to making decisions about dose and whether to keep them in the class for longer. They reflected on how this option may be taken away from them and they would be forced to deliver for a set time-period, impacting participants who were moved on too soon:

"That's probably going to go in the next few months as well, we'll probably just have a 12-week cut off and that's it then they have to find their way in the world" (PSI, Physiotherapist, falls service, Female 11)

Other PSIs who delivered self-funded classes were able to keep their participants for longer periods of time. In some circumstances this transition to participants paying for classes was an important part of sustainability and long-term provision and enabled the delivery of 48 weeks of FaME:

"They're on the scheme for 16 weeks and for the first 16 weeks they pay £1.50 per session. However, the falls pathway extends that to 48 weeks". (PSI, Female 2).

Many PSIs felt that participants were not always getting adequate dose, including home exercise, despite their best efforts:

"It's that continuation that we are really trying to encourage...I did an audit...60% having undergone the postural stability were not complying with the optimal levels of exercises" (PSI, Physiotherapist, Male, 20).

Home exercise

An important part of ensuring participants get adequate dose of exercise includes PSIs providing and encouraging adherence to a home exercise programme. PSIs discussed their participants' commitment to home exercise, although there were some people that they knew would not do them. PSIs felt that adherence to home exercise led to better outcomes and that they could clearly see who had been doing their exercises at home:

"those who have picked-up the homework and done, and

they, by sheer determination, seem to do better than the ones that are perhaps less able but less motivated" (PSI, Female 8).

PSIs used home exercise as an opportunity to support individuals with their physical weaknesses and help them to improve or to support the participant so that they could prepare to attend the class, so as home-based 'skilling-up', developing the ability to engage more in the class:

"I just put in a short-term skilling up in order to bring them up to the standard whereby they can come into a group session" (PSI, Female 2).

PSIs facilitated home exercise by ensuring they gave participants support and assisted them to adapt. They often worried about participants exercising alone due to poor technique. To combat this, PSIs would call or follow-up in class with participants, *"What I usually do is ring them after two weeks and see how they're getting on."* (PSI/Occupational Therapist, Female 15).

Components of FaME (movement and exercises)

PSIs discussed the different components of FaME and whether or how they delivered them:

"There must be a flexibility component to it, a balance component to it, a strength component to it" (PSI, physiotherapist, falls service, Female 11).

There were key components of FaME that were less likely to be delivered for a variety of reasons. Participants gave examples of how these components were delivered successfully, but also reasons and barriers as to why other PSIs did not deliver them in their sessions. PSIs who carried-out backward chaining or floorwork often had colleagues there to support, offering more than one instructor to increase safety. They approached backward chaining by breaking it down into core components and steps:

"The lead instructor will do a demonstration of backward chaining and do it in stages, so that what we would say as we're demonstrating it is, if this is the stage that you get to which is just lunging towards the chair and holding the chair then that's fine, practice that. So, everybody can have a go and then people are working at different levels because we only work on a 1:8 ratio there are usually enough instructors around to keep an eye on everybody" (PSI, Male 1).

Backward chaining occurred a few weeks into the programme to allow participants to develop the skills to achieve the movements successfully:

"By about week 20 most people are on the floor. Most do it, a few refuse. Most people give it a go and some have been surprised that they can." (PSI, Female 8).

Not all PSIs interviewed delivered backward chaining and floor work. The length of the session and adequate space were presented as barriers:

"I do it maybe once every six weeks and those who want to do it, just to make sure they can still do it. Time is an element,

within one hour, I think most of my sessions run over to an hour and a quarter" (PSI, Female 10).

PSIs would make a judgement about when it was right for an individual to learn backward chaining as for some it was too early to get the benefits. However, some participants refused to do it at any time due to a fear of not being able to get up: *"You'll always get patients who don't want to do it..."* (PSI, hospital-based falls service, Female 12).

PSI confidence was an important factor related to whether backward chaining or floor work was done and whether participants engaged:

"I don't do backward training, it was one thing that really worried me about PSI when I did the course. Actually, when I did the training I was, okay got this, and then I went to my first PSI class for me to teach and I was absolutely really scared about how I was going to get these people on the floor and back off the floor. I kept thinking, well as the week's progress I will get there, but I've never met anybody or a group of people that I would be able to do that with...and people I've spoken to don't do it, because I was worried that I wasn't delivering the full PSI programme" (PSI, Female 3).

Some PSIs talked about the standard of delivery within rehabilitation and the fact that backward chaining was not carried-out or even discussed. This made it harder to introduce it.

"if they're coming from a falls prevention service than the standard should be set quite high at that point because if they're not doing things like backward training, et cetera, then they're setting the standard lower than I would expect" (PSI, Male 16).

PSIs discussed the adapted Tai Chi component and how they always did it at the end (as per training) but found they were limited by time constraints, tiredness of participants and religious views:

"We struggle with the Tai Chi sometimes. By the time we get to the Tai Chi the patients are a bit tired" (PSI, hospital based falls service, Female 12).

"We don't because my manager doesn't like to do it as it's in a church and she has religious reasons why she feels it's wrong." (PSI, Female 7).

Theme 4: Motivational strategies

Goal-setting

Goal-setting was an important part of delivering classes, supporting participant satisfaction:

"...let's see if you can hold a tray and walk from one end of the room holding a tray and a cup of tea...so I'm setting simple goals like that rather than big goals." (PSI, Female 10).

A key strategy used was determining with the participant what was individually important to them. This method helped to make the goals specific to help individuals achieve their potential:

"I do it one-to-one and I sit down with them and I talk through what's important to them, because that can drive how hard I push them on the programme, you know, I get to somebody and they say, I want to be able to go out and walk the dog again, then I'm going to be much more active with them in terms of the programme and the progression and push them harder." (PSI/Occupational Therapist, Female 15).

Rapport with the PSI was deemed important to goal-setting, with some instructors building a rapport before setting SMART goals:

"short-term, long-term goals, and everything needs to be focused, but we can't even talk about goals until we really spend time. I don't believe we can do goal-setting on a first consultation... they just might not be ready to talk about those things, I just need to get them hooked in, that's what I need first and foremost" (PSI, Female 2).

PSIs further discussed using leaflets and aids to set goals and revisiting them after they had attended the class for some time. They discussed how participants reflected on meeting their goals and physical improvements within class:

"A goal-setting leaflet which we then revisit after about ten weeks at the class with them, or even before we do the goal-setting, they do say to me things like, oh, yeah, I think I have got fitter, I went round such and such gardens at the weekend" (PSI, Female 14)

Group cohesion

PSIs suggested the social aspects of attending the class acted as a motivational strategy. These social elements helped the groups to bond and build rapport. They led to participants feeling able to organise additional social opportunities outside of the class, spending significantly more time being social with other class members:

"Like last week for example one lady, the place where I go is a community centre with a little café and of course a lot of them they stay on for tea afterwards...So they've actually spent the whole afternoon, although the class is only an hour." (PSI, Female 5).

Family Support

Support from spouses and family members provided a vital resource for individuals when being motivated to start a new class:

"I do find when there's a husband-and-wife situation the men are coming along because their wives are bringing them...So if there's a family member behind them then they'll definitely stick with it. If they can bring a friend along, they'll stick with it" (PSI, Female 13).

They provided support and encouragement by giving feedback on improvements, whilst encouraging and supporting the home exercise programme. Other participants were encouraged to attend to ensure they could stay fit and healthy so that they could care for others:

“Some of them have got a husband that they’ll look after at home, so they know they’ve got to be fit to look after them”. (PSI, Female 5).

Theme 5: The Instructor

Personality

PSIs felt that their personality was important particularly in relation to long-term attendance. PSIs identified how they built rapport with participants. PSIs who shared aspects of their life with their participants appeared to create a strong bond and could also act as role models:

“Whenever I’ve done a run I bring in the pictures and they have a little look while they’re having a coffee afterwards... they all want to hear how that’s going on and there’s just more of a friendliness about it.” (PSI, Female 5).

PSIs outlined how demonstrating qualities and skills such as empathy, planning and organisation helped them to bond with participants as well as delivering appropriate content:

“We’ve got quite a good empathy with the clients in the class, and we’ve got to know them quite well.” (PSI, Female 19).

“it takes planning, it takes consideration, it takes practice and forethought – you can’t just go in and make it up as you go along, you’ve got to have your plans in hand” (PSI, Female 17).

However, some PSIs had found that the relationship with participants was not without risk, as a strong bond with an instructor could mask poor or dangerous delivery:

“I guess the worst thing is, very simply, you can go out to a group, take any kind of class, you can look at it technically and go, oh my God, that’s awful, what are they doing? Speak to the group and they absolutely love it, and herein lies the danger, and my absolute belief is, if they like you, they will do whatever you tell them to do” (PSI, Female 2).

Experience

PSIs felt that their experience was important to their delivery and participant confidence, they were able to answer questions and became a trusted source of knowledge:

“...confidence in me, I believe what I say with absolute conviction, and I really believe that’s important to people” (PSI, Female 2).

PSIs identified that their ability to become a trusted source of knowledge stemmed from the evidenced-based nature of the qualifications undertaken. Instructors also identified that regular continued professional development (CPD) was important, CPD enabled PSIs to keep class content engaging (and delivered with fidelity) for participants:

“The training gave me the confidence to know that I’m teaching a class that works, that is evidence-based and that definitely makes a big difference to me, the fact that I know that it’s been tried, there’s a set programme to follow and if you do this, you will get good results.” (PSI, falls service, Female 9).

“Every two years we do updates to Later Life Training and they are really useful for us in terms of changing what we do and keeping it fresh” (PSI, Male 1).

The specialist training gave PSIs the additional skills and knowledge to bring together the exercises and explain the impact they will have and support motivation.

“I bring motivation, I give them reasons why they’re doing components of the exercises...we’re motivating because we know that it works, we’ve seen the results” (PSI, Female 10).

Discussion

This is the first study to describe the delivery of an evidence-based recommended falls exercise programme, FaME, across the UK, and explores instructors’ perspectives on its implementation into practice both within falls rehabilitation and community-based strength and balance classes. The mixed methods approach has allowed us to establish whether PSIs are delivering all the evidence-based FaME components as evidenced in the original trials^{4,5}. Interviews demonstrate how programme factors such as setting, set-up, delivery, motivational components and the instructor are interlinked and influence participants attitudes and experiences.

The themes emerging from the qualitative interviews allowed further exploration of the barriers PSIs face in delivering the evidence-based programme, with backward chaining, floor work and adapted Tai Chi cited in the survey as components not always delivered. Setting of the classes may lead to differences in fidelity to the delivery of the components of FaME. Within a hospital setting participants are less likely to complete the whole FaME programme because they are more likely to be in the ‘skilling-up’ phase of FaME delivery (where backward chaining for example is not carried out) as shorter programmes are delivered^{7,9}. This was reflected in our interview data, but, it was difficult for us to check this in our survey data because instructors described characteristics of all the different classes that they delivered, rather than describing each class individually.

In previous exploration of the implementation of FaME in one area of the UK, home exercise, adapted Tai Chi and floorwork were also found to be the components most likely to be excluded from community-based delivery⁹. Like Orton et al.¹⁰, the PSIs in our study indicated that confidence to deliver backward chaining, particularly related to the functional complexity of people in the class, was a barrier, and that a second instructor would increase likelihood of it being delivered^{12,21}. Time restriction, because classes were often only an hour, was an additional barrier identified within our study to delivering these components, alongside participant refusal and tiredness.

The evidence-base advocates for a dose of 50 hours before falls risk is reduced and that this needs to be maintained³. There is a danger that programmes as short as some of the ones described in this study (with no follow-on options made available) can in fact increase confidence

and a potential exposure to risk, without increasing ability, leading to higher risk of future falls. In the original FaME trial, there was a slight increase in falls (although not injurious) during the early part of the intervention suggesting this was the case⁵. However, a third of instructors did report letting participants stay in their classes or offering them a follow-up class delivered by either themselves or someone else. Developing follow-on pathways or provision alongside encouraging home exercise are important to maintain a reduced falls risk, self-management and reduce re-access to health services^{11,12}. This study provides some examples of how this can be done for example through its description of step-down models of delivery which helped support participants' continued adherence to classes.

PSIs described the set-up required to put classes in place including different cost models, transport provision, types of programmes (rolling or cohort), the importance of referral routes, communication, and relationships. Such a broad perspective on delivery set-up has not previously been explored. Other studies exploring implementation have only explored one type of set-up model^{9,10,12} and this research enables providers of FaME to consider the different advantages and disadvantages to different set-up. Individual factors emerged consistently from previous work on older adults' exercise and falls prevention/strength and balance classes^{10,12,21}, and from a PSIs instructors' perspective were important factors particularly related to uptake and adherence. Interview data suggests that participant attitudes, health management and cost can be influenced by delivery model, set-up and instructor approach^{12,13}.

We investigated PSIs assessment approach, progression and tailoring of exercises and home exercise prescription. Most of the instructors who responded did report providing assessment, tailoring and home exercise. These factors have previously been found to be associated with the effectiveness of the exercise and are seen to be important to participant motivation and dose^{9,10,12}. Self-reported outcome data from instructors illustrates that those classes reported as successful (based on higher adherence) had more participants in the class with improvements in balance, function, fear of falling and health and well-being, but this must be considered with caution. PSIs provided important insight into how home exercise could be supported effectively. They also discussed the challenges to assessment, supporting home exercise and adequate dose, and social time, particularly if they were freelance and self-employed. Where older adults paid for classes, rather than it being delivered for free under a commissioned model (normally paid for by health and social care), fidelity to these important parts of the FaME training were often difficult for PSIs. Previous studies have only explored fidelity to the programme in commissioned programmes^{9,10}, though the role of freelance instructors (and participant paid for classes) are potentially important for long-term maintenance, adequate dose and transition to full self-management¹².

Motivational strategies are a key part of the FaME training and are designed to support uptake, adherence and dose of exercise to enable participants to gain the full benefit of the intervention. PSIs discussed the importance of goal-setting, particularly as it was an important way to bridge a link between the exercises and participant outcome expectations. Previous research underpinned by psychological theory has found that outcome expectations relate to both intention and adherence to exercise¹⁴. Other motivational strategies such as facilitating family support and creating group cohesion again emerged from previous studies related to both general exercise classes and FaME classes^{10,12,14}. Our research suggests that social opportunities are an important part of the classes, partly as it makes participants feel that they are getting a whole morning or afternoon out rather than just the exercise session. Cost has emerged as a barrier in the literature¹², and PSIs felt that this is particularly important when participants are self-funding and organising travel themselves, which could become expensive.

The PSIs experience and personality emerged as important attributes in delivering FaME classes successfully. PSIs felt increased confidence through their evidence-based training and from continued CPD. They felt that this confidence transferred to the participants. Within previous work with older adult exercise instructors' personality attributes related to planning and organisation were positively correlated to increased adherence to the classes¹⁴. This is further supported here as PSIs discussed the importance of the approach they took because of their training and how this led to better delivery.

Overall, PSIs report individual class participant, organisational factors related to delivery set-up, and instructor factors which interact. Although PSIs adopted motivational strategies to support their older adults' participation, motivation is a theme which underpins all five themes identified and the FaME training. Choices made by class participants, how the class is set-up and delivered, how closely the evidence-base is adhered to and instructors' attributes all influence the full implementation of FaME and, as a result, participants uptake and adherence to it.

Limitations

There were some limitations to the study, the response rate to the initial survey was very low with only a 17% response rate, and only 9.2% of those trained to deliver FaME provided data on their delivery. However, only just over half of those who did respond reported delivering classes at the time of the survey. This means the results may not be generalisable to the broader PSI population. LLT report that large numbers of instructors stop delivering (change jobs) or only train so that they can oversee a service rather than deliver classes. This could explain why the average length of experience of instructor is four years. It likely that many instructors did not respond because they no longer deliver FaME classes or work in the field. There was also a

considerable number of emails returned as not delivered, showing they had changed these over the years and LLT could not remain in touch. There was some further missing data within the survey responses which could have caused response bias, this loss of data although small also reduces the sample size further.

Our instructor population was mostly white British and we were unable to interview any instructors from an ethnic minority background. They may have differing experiences and views particularly about engaging ethnic minority groups which continues to be a challenge for implementation of the FaME programme²².

When asking PSIs to discuss their FaME delivery within the survey we asked them to describe the characteristics of one of their most successful classes. Although we also asked them to describe their most unsuccessful class, we found that this was often not completed and thus we do not have a full understanding of the unsuccessful classes from the survey. This may have led to a more positive response than if we had asked them to generalise across their classes.

Key recommendations

- Consider rolling programmes, step-down models and development of referral pathways from rehabilitation to community provision and ongoing private classes to ensure maximum efficiency and long-term maintenance.
- Two instructors delivering classes and assessments are recommended to support better fidelity to the components of FaME and allow for tailoring.
- Location and set-up of classes needs to be carefully considered to support older adults' access.
- Key motivational strategies should be utilised including assessment, goal-setting and social opportunities and are linked to set-up as well as facilitated by the instructor.

Conclusions

Future research is needed to further explore different models of delivering FaME in different contexts and their cost effectiveness, exploring how we can support increased fidelity to the evidence-base. Instructors provide useful insights into effective delivery models and what helps maintain fidelity which can assist in future programme delivery.

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References

1. Public Health England. Muscle and bone strengthening and balance activities for general health benefits in adults and older adults. Summary of a rapid evidence review for the UK Chief Medical Officers' update of the physical activity guidelines; 2018. Available from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/721874/MBSBA_evidence_review.pdf. Access date: 01/09/2023
2. WHO. Step safely: strategies for preventing and managing falls across the life-course. Geneva: World Health Organization; 2021. <https://www.who.int/publications/i/item/978924002191-4>. Access date: 01/09/2023.
3. Sherrington C, Fairhall NJ, Wallbank GK, Tiedemann A, Michaleff ZA, Howard K, et al. Exercise for preventing falls in older people living in the community. *Cochrane Database Syst Rev* 2019; 1:CD012424.
4. Iliffe S, Kendrick D, Morris R, et al. Multicentre cluster randomised trial comparing a community group exercise programme and home-based exercise with usual care for people aged 65 years and over in primary care. *Health Technol Assess*. 2014;18(49):vii-105.
5. Skelton D, Dinan S, Campbell M, Rutherford O. Tailored group exercise (Falls Management Exercise -- FaME) reduces falls in community-dwelling older frequent fallers (an RCT). *Age Ageing* 2005; 34(6):636-9.
6. Public Health England. A return on investment tool for the assessment of falls prevention programmes for older people living in the community 2018a. A Return on Investment Tool ([publishing.service.gov.uk](https://assets.publishing.service.gov.uk/media/5a7aedafe5274a319e77bb5d/A_return_on_investment_tool_for_falls_prevention_programmes.pdf)) https://assets.publishing.service.gov.uk/media/5a7aedafe5274a319e77bb5d/A_return_on_investment_tool_for_falls_prevention_programmes.pdf. Access date: 01/09/2023.
7. Royal College of Physicians. Older people's experiences of therapeutic exercise as part of a falls prevention service-patient and public involvement. London: RCP 2012.
8. Montero-Odasso M, van der Velde N, Martin FC, Petrovic M, Tan MP, Ryg J, et al. Task Force on Global Guidelines for Falls in Older Adults. World guidelines for falls prevention and management for older adults: a global initiative. *Age Ageing* 2022;51(9) 1-36.
9. Orton E, Lafond N, Skelton DA, Coupland C, Gladman JRF, Iliffe S, et al. Implementation fidelity of the Falls Management Exercise Programme: a mixed methods analysis using a conceptual framework for implementation fidelity. *Public Health* 2021;197:11-18.
10. Orton E, Audsley S, Coupland C, Gladman JRF, Iliffe S, Lafond N, et al. 'Real world' effectiveness of the Falls Management Exercise (FaME) programme: an implementation study. *Age Ageing* 2021; 28:50(4):1290-1297.
11. Centre for Ageing Better. Raising the Bar on Strength and Balance on Strength and Balance: The importance of Community Based Provision 2019. Healthy Active Ageing Group. Raising the bar on strength and balance: The importance of community-based provision | Centre for Ageing Better (ageing-better.org.uk) <https://ageing-better.org.uk/resources/raising-bar-strength-balance>. Access date: 01/09/2023.
12. Hawley-Hague H, Roden A, Abbott J. The evaluation of a strength and

- balance exercise program for falls prevention in community primary care. *Physiotherapy Theory and Practice*, 2017. 33:8, 611-621.
13. Yardley L, Donovan-Hall M, Francis C, Todd C. Attitudes and beliefs that predict older peoples' intention to undertake strength and balance training. *Journal of Gerontology: Psychological Sciences* 2007;2:199-225
 14. Hawley-Hague H, Home M, Campbell M, Demack S, Skelton DA, Todd C. Multiple levels of influence on older adults' attendance and adherence to community exercise classes. *Gerontologist* 2014;54(4):599-610.
 15. Creswell, J. W. *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage. 2003.
 16. Bryman, A. *Social research methods*. 3rd Edition, Oxford University Press., New York. 2008.
 17. Yardley L., Todd C. Attitudes to Falls-Related Interventions Scale (AFRIS) www.profan.eu.org, Access date: November 12, 2008.
 18. Ajzen I. *Attitudes, personality and behaviour*. Maidenhead, UK: Open University Press. 1988.
 19. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006;3:77-101.
 20. Finlay L. 'Reflexivity: an essential component for all research?' *British Journal of Occupational Therapy* 1998;61:453-456.
 21. Gumber L, Timmons S, Coupland C, Gladman JRF, Iliffe S, Kendrick D, et al. 'It is designed for everybody to find their own level and to improve themselves': views of older people and instructors of the Falls Management Exercise (FaME) programme. *Age and Ageing* 2022;51(2): afac023.
 22. Chiang K, Seman L, Belza B, Tsai JH. "It is our exercise family": experiences of ethnic older adults in a group-based exercise program. *Prev Chronic Dis* 2008;5(1):1-12.

Supplementary material

PSI Instructor questionnaire

SECTION 1: ABOUT YOU

DEMOGRAPHICS

	Male	<input type="checkbox"/>		Female	<input type="checkbox"/>
1. Are you					
2. What is your Date of Birth (Day/Month/Year)?					
...../...../.....					
3. Please tick the appropriate box which best describes your ethnic origin					
a) Black or Black British		b) White			
Caribbean	<input type="checkbox"/>	British		<input type="checkbox"/>	
African	<input type="checkbox"/>	Irish		<input type="checkbox"/>	
Any other Black background within a)	<input type="checkbox"/>	Any other White background within b)		<input type="checkbox"/>	
c) Asian or Asian British		d) Mixed			
Indian	<input type="checkbox"/>	White & Black Caribbean		<input type="checkbox"/>	
Pakistani	<input type="checkbox"/>	White & Black African		<input type="checkbox"/>	
Bangladeshi	<input type="checkbox"/>	White and Asian		<input type="checkbox"/>	
Chinese	<input type="checkbox"/>	Any other mixed background within c)		<input type="checkbox"/>	
Any other Asian background within d)	<input type="checkbox"/>				
e) Any other ethnic groups					
Prefer not to say	<input type="checkbox"/>				
Any other ethnic group, please specify	<input type="checkbox"/>				
.....					
4. Please tick the category which best describes your background					
Care Worker	<input type="checkbox"/>	Nurse		<input type="checkbox"/>	
Physiotherapist	<input type="checkbox"/>	Sports Coach		<input type="checkbox"/>	
Fitness Instructor	<input type="checkbox"/>	Social Worker		<input type="checkbox"/>	
Sheltered Housing Scheme Manager	<input type="checkbox"/>	Gym Instructor		<input type="checkbox"/>	
Voluntary sector worker	<input type="checkbox"/>	Occupational Therapist		<input type="checkbox"/>	
Community Development worker	<input type="checkbox"/>	Peer supporter		<input type="checkbox"/>	
Healthcare Assistant (e.g physiotherapist assistant)	<input type="checkbox"/>	Other, please specify			
.....					
5. What qualifications do you have (apart from PSI) which enable you to deliver exercise (does not just have to be to older adults)?*					
.....					
6. When did you qualify as a PSI instructor?					
Month/Year/...../.....					
7. Have you undertaken any motivational training? (To encourage uptake and adherence to exercise amongst older adults) ie. Motivate Me by LLT or other course.					
Yes	<input type="checkbox"/>	No		<input type="checkbox"/>	
If yes, please give details of the training course and provide the year that you attended the course.					
.....					
8. Please indicate how long you have been delivering PSI classes (if you have taken a break from delivering classes and then started delivery again, please state the time from when you first started).					
Years	Months				

YOUR PERSONALITY*

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age. Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

1	2	3	4	5	6	7	8	9
Extremely Inaccurate	Very Inaccurate	Moderately Inaccurate	Slightly Inaccurate	Neither Inaccurate nor Accurate	Slightly Accurate	Moderately Accurate	Very Accurate	Extremely Accurate

- | | | | |
|------------------|------------------|-------------------|--------------------|
| ___ Bashful | ___ Energetic | ___ Moody | ___ Systematic |
| ___ Bold | ___ Envious | ___ Organized | ___ Talkative |
| ___ Careless | ___ Extraverted | ___ Philosophical | ___ Temperamental |
| ___ Cold | ___ Fretful | ___ Practical | ___ Touchy |
| ___ Complex | ___ Harsh | ___ Quiet | ___ Uncreative |
| ___ Cooperative | ___ Imaginative | ___ Relaxed | ___ Unenvious |
| ___ Creative | ___ Inefficient | ___ Rude | ___ Unintellectual |
| ___ Deep | ___ Intellectual | ___ Shy | ___ Unsympathetic |
| ___ Disorganized | ___ Jealous | ___ Sloppy | ___ Warm |
| ___ Efficient | ___ Kind | ___ Sympathetic | ___ Withdrawn |

If there are any other comments that you would like to make, please write them here.

.....

.....

ATTITUDES*

The next part of the questionnaire is exploring what YOU think about older adults' participation in PSI exercise classes. Think about older adults similar to the ones who attend your PSI classes. Please tick the answer which is closest to your opinion. There are no right or wrong answers, we really want to know what you think about older adults' participation in PSI classes.

1. Attending a PSI class would be good for an older adult.

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Disagree strongly | Disagree | Disagree slightly | Agree slightly | Agree strongly | Agree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Taking part in a PSI class would make an older adult feel more confident

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Disagree strongly | Disagree | Disagree slightly | Agree slightly | Agree strongly | Agree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. The support that is given to participants by an instructor during a PSI class can make a difference

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Disagree strongly | Disagree | Disagree slightly | Agree slightly | Agree strongly | Agree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. The support that is given to participants by an instructor **in between** PSI classes can make a difference e.g supportive phonecalls.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. An older adult would find it easy to participate in a PSI class.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. I think that encouragement from other people (friends, family and health professionals) whose opinions matter makes a difference to older adults' participation in a PSI class.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. I think that an older adult would feel that they are the kind of person who should attend a PSI class.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. If an older adult attended a PSI class it would mean they would be able to get out and about more easily.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. If an older adult attended a PSI class then they would be less likely to fall and be injured.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Attending a PSI class would enable an older adult to maintain their independence.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. A PSI class would give an older adult an opportunity for social interaction

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. A PSI class would give an older adult an opportunity for social interaction **outside** of the class.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Doing a PSI class could be tiring or painful for an older adult

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Doing a PSI class could cause an older adult to harm themselves.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Older adults are capable of participating in a PSI class.

Disagree strongly	Disagree	Disagree slightly	Agree slightly	Agree strongly	Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If there are any other comments that you would like to make related to the attitudes questions, please write them here. If there are any questions which you find difficult to answer please state the question number and your reasons why.

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SECTION 2: YOUR PSI CLASSES

1. Do you currently deliver PSI classes?

Yes No

IF NO, YOU HAVE FINISHED THE QUESTIONNAIRE. PLEASE GO TO THE END IF YOU HAVE ANY ADDITIONAL COMMENTS TO MAKE. THANK YOU!

2. How many PSI classes do you deliver per week?

SECTION 3: YOUR PSI CLASSES

Please describe two classes that you have delivered in the last 12 months, which have run for at least 6 weeks.

This should be:

1. Your most **successful** class in terms of regular weekly attendance/low drop out.
2. Your most **unsuccessful** class in terms of poor weekly attendance/high drop out.

	Successful	Unsuccessful
1. Is the class that you deliver (please use PSI definitions from your training manual)*:	Rehabilitation <input type="checkbox"/> Chair based options of PSI <input type="checkbox"/> 'Pre-hab' <input type="checkbox"/> Other <input type="checkbox"/> please state,	Rehabilitation <input type="checkbox"/> Chair based options of PSI <input type="checkbox"/> 'Pre-hab' <input type="checkbox"/> Other <input type="checkbox"/> please state,
2. Do you deliver the class as:	A falls service <input type="checkbox"/> Independent instructor <input type="checkbox"/> Community based provision (voluntary/ local council provision) <input type="checkbox"/> Other <input type="checkbox"/> please state,	A falls service <input type="checkbox"/> Independent instructor <input type="checkbox"/> Community based provision (voluntary/ local council provision) <input type="checkbox"/> Other <input type="checkbox"/> please state,
3. Please state the age range of the older adults who attend your class. (put none if there is not any)	..... ..... .....	..... ..... .....
4. What are the entry criteria for your class?*	..... ..... .....	..... ..... .....
5. Are there restrictions to entry to your class? (put none if there is not any) e.g.do not accept people with dementia.*	..... ..... .....	..... ..... .....
6. What is the maximum number of participants allowed in your PSI class?*	..... ..... .....	..... ..... .....
7. Is the class delivered to (you can tick more than one answer)*: If your class has participants with Dementia/Parkinson's etc but is not specifically targeted at this group please tick general older adult population.	General older adult population <input type="checkbox"/> History of falling <input type="checkbox"/> Dementia <input type="checkbox"/> Parkinson's <input type="checkbox"/> Stroke <input type="checkbox"/> COPD <input type="checkbox"/> Other	General older adult population <input type="checkbox"/> History of falling <input type="checkbox"/> Dementia <input type="checkbox"/> Parkinson's <input type="checkbox"/> Stroke <input type="checkbox"/> COPD <input type="checkbox"/> Other
8. Is the area that you deliver in*:	Urban <input type="checkbox"/> Rural <input type="checkbox"/> Mixed <input type="checkbox"/>	Urban <input type="checkbox"/> Rural <input type="checkbox"/> Mixed <input type="checkbox"/>
9. Can you give us the postcode of the venue where your class is held*?	..... ..... .....	..... ..... .....
10. Who refers/signposts to your class?	Self-referral <input type="checkbox"/> GP practice <input type="checkbox"/> Hospital <input type="checkbox"/> Community services e.g. physiotherapy/ Occupational therapists. <input type="checkbox"/> Other <input type="checkbox"/>	Self-referral <input type="checkbox"/> GP practice <input type="checkbox"/> Hospital <input type="checkbox"/> Community services e.g. physiotherapy/ Occupational therapists. <input type="checkbox"/> Other <input type="checkbox"/>

	Successful	Unsuccessful
11. Do you have a formalised referral pathway?	Yes <input type="checkbox"/> No <input type="checkbox"/> Other, please explain	Yes <input type="checkbox"/> No <input type="checkbox"/> Other, please explain
12. Do you charge the participant to attend your PSI class? i.e. Is there a cost to attend?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
12 a.If yes, is it means tested? (dependent on income)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
13. Is transport provided for your participants?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
13a. If yes, is this transport free of charge to the participant?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
14. Is the class delivered in:	Community venues e.g. church halls, community centre. <input type="checkbox"/> Hospital setting <input type="checkbox"/> NHS Community setting/ rehabilitation venue <input type="checkbox"/> GP Practice <input type="checkbox"/> Leisure Centre <input type="checkbox"/> Other <input type="checkbox"/> If other, please state	Community venues e.g. church halls, community centre. <input type="checkbox"/> Hospital setting <input type="checkbox"/> NHS Community setting/ rehabilitation venue <input type="checkbox"/> GP Practice <input type="checkbox"/> Leisure Centre <input type="checkbox"/> Other <input type="checkbox"/> If other, please state
15. Is the class delivered in*:	Participants' local communities (attend their nearest group) <input type="checkbox"/> Centralised location (where people come from all over your area to one central centre e.g. rehabilitation centre) <input type="checkbox"/> Other <input type="checkbox"/> If other, please state	Participants' local communities (attend their nearest group) <input type="checkbox"/> Centralised location (where people come from all over your area to one central centre e.g. rehabilitation centre) <input type="checkbox"/> Other <input type="checkbox"/> If other, please state
16. How many weeks can participants attend your PSI classes for?	..... ..... .....	..... ..... .....
17. How many times a week can each participant attend the class?	Once a week <input type="checkbox"/> Twice a week <input type="checkbox"/> Three times a week <input type="checkbox"/> More than three times a week <input type="checkbox"/>	Once a week <input type="checkbox"/> Twice a week <input type="checkbox"/> Three times a week <input type="checkbox"/> More than three times a week <input type="checkbox"/>
18. What is the total number of hours of FaME (class and home exercise visits) each person gets offered? (Please leave blank if you do not know)	..... ..... ..... .....	..... ..... ..... .....
19. Do you provide a follow on class (this may be included in hours stated above)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (they stay in this class) <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (they stay in this class) <input type="checkbox"/>
20. Does someone else provide a follow on class?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (they stay in my class) <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (they stay in my class) <input type="checkbox"/>
21. Is this delivered in the same venue?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>

	Successful		Unsuccessful	
22. Do you provide home visits as part of your classes?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
22a. If yes, how many times a week/month are these offered?	.....		.....
22b. If yes, what are the total number of home visits offered to an individual?	.....		.....
23. Do you encourage home exercise?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
23a. If Yes, do you ask them whether they have done their exercises?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
23b. Do you give them any of the following to remind them what to do at home?	Printed booklet <input type="checkbox"/>	Video/DVD <input type="checkbox"/>	Printed booklet <input type="checkbox"/>	Video/DVD <input type="checkbox"/>
	Audio <input type="checkbox"/>	Other <input type="checkbox"/>	Audio <input type="checkbox"/>	Other <input type="checkbox"/>
	Please state		Please state	
23c. If you give them a booklet with the exercises in, does this include illustrations of the exercises?*	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
CLASS CONTENT	Your most successful class in terms of regular weekly attendance/low drop out.		Your most unsuccessful class in terms of poor weekly attendance/high drop out.	
1. Do you carry out a pre-exercise assessment?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
1a. Is this assessment	From the PSI course <input type="checkbox"/>	Tailored to your service? <input type="checkbox"/>	From the PSI course <input type="checkbox"/>	Tailored to your service? <input type="checkbox"/>
	Other <input type="checkbox"/>	Please state	Other <input type="checkbox"/>	Please state
	Yes	No	Yes	No
2. Do you include:				
Dynamic endurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dynamic balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Targeted resistance				
Leg and Ankle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm and Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open and closed chain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
weights/theraband	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Backward chaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional Floor work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility				
leg & ankle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
chest & spine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tai Chi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Successful	Unsuccessful
If you have answered No to any of the above please explain your reasons for each one	...............	...............
3. Are your exercises specific to preventing falls and focused on the aims of the FaME programme? (Improve balance and co-ordination, increase functional capacity, increase bone and muscle mass, Increase confidence)	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?
4. Do they progress and become more challenging e.g. increased weights and more challenging balance exercises?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?
5. Do you tailor your exercises to the individual? E.g. individual capabilities and goals?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?
6. Do you set short and long term goals for your participants?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?	Yes <input type="checkbox"/> No <input type="checkbox"/> If No, why not?
7. Are additional exercises which do not meet the FaME principles used?*	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
7a. If Yes, what exercises do you use and what are your reasons for this?	..... ..... .....	..... ..... .....
8. Do you use music?	Yes, all the time <input type="checkbox"/> Yes, but not where it impacts on concentration e.g. balance exercises <input type="checkbox"/> No <input type="checkbox"/>	Yes, all the time <input type="checkbox"/> Yes, but not where it impacts on concentration e.g. balance exercises <input type="checkbox"/> No <input type="checkbox"/>
8.a If Yes, do you have an exercise to music qualification?*	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>

	Successful	Unsuccessful
OUTCOMES	Your most successful class in terms of regular weekly attendance/low drop out.	Your most unsuccessful class in terms of poor weekly attendance/high drop out.
1. How good is the attendance at your classes in the first/full 6 weeks?*	Less than 25% of participants attend the first/full 6 weeks <input type="checkbox"/> 25-49% of participants attend the first/full 6 weeks <input type="checkbox"/> 50%-74% of participants attend the first/full 6 weeks <input type="checkbox"/> 75% and above of participants attend the first/full 6 weeks <input type="checkbox"/>	Less than 25% of participants attend the first/full 6 weeks <input type="checkbox"/> 25-49% of participants attend the first/full 6 weeks <input type="checkbox"/> 50%-74% of participants attend the first/full 6 weeks <input type="checkbox"/> 75% and above of participants attend the first/full 6 weeks <input type="checkbox"/>
2. How good is the attendance at your classes in the first/full 12 weeks?*	Less than 25% of participants attend the first/full 12 weeks <input type="checkbox"/> 25-49% of participants attend the first/full 12 weeks <input type="checkbox"/> 50%-74% of participants attend the first/full 12 weeks <input type="checkbox"/> 75% and above of participants attend the first/full 12 weeks <input type="checkbox"/>	Less than 25% of participants attend the first/full 12 weeks <input type="checkbox"/> 25-49% of participants attend the first/full 12 weeks <input type="checkbox"/> 50%-74% of participants attend the first/full 12 weeks <input type="checkbox"/> 75% and above of participants attend the first/full 12 weeks <input type="checkbox"/>
2a. If your class runs for more than 6 weeks but less than 12 weeks, please state how many weeks it runs for and how good the attendance is for the class using the criteria above.	..... ..... ..... ..... .....	..... ..... ..... ..... .....
3. How many of the original participants are still attending the class at 6 months (if offered)?*	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not offered <input type="checkbox"/>	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not offered <input type="checkbox"/>
4. How many of the original participants have transferred into a community exercise group (if applicable)?*	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not offered <input type="checkbox"/>	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not offered <input type="checkbox"/>
5. Which assessments do you use with your participants?	Functional grid <input type="checkbox"/> Tinetti <input type="checkbox"/> SF12/36 <input type="checkbox"/> TUG <input type="checkbox"/> Black Score <input type="checkbox"/> EQ-5D <input type="checkbox"/> ConfBal <input type="checkbox"/> FRAT <input type="checkbox"/> FES-I <input type="checkbox"/> FRAX <input type="checkbox"/> Berg <input type="checkbox"/> None <input type="checkbox"/> Other	Functional grid <input type="checkbox"/> Tinetti <input type="checkbox"/> SF12/36 <input type="checkbox"/> TUG <input type="checkbox"/> Black Score <input type="checkbox"/> EQ-5D <input type="checkbox"/> ConfBal <input type="checkbox"/> FRAT <input type="checkbox"/> FES-I <input type="checkbox"/> FRAX <input type="checkbox"/> Berg <input type="checkbox"/> None <input type="checkbox"/> Other

	Successful	Unsuccessful
6. How many participants have improved their functional scores at the end of your programme (or generally if you keep them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used
7. How many participants have improved their balance scores at the end of your programme (or generally if you keep them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used
8. How many participants have reduced their falls/fracture risk at the end of your programme (or generally if you keep them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used
9. How many participants have improved their fear of falling/ confidence in mobility at the end of your programme (or generally if you keep them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used
10. How many participants have improved their perceptions of their health and well-being at the end of your programme (or generally if you keep them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used
11. How many participants have improved on any other outcome measures you have used at the end of your programme (or generally if you keep them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/> Please state the assessment/s used
12. How many of them have maintained their improvements on follow-up (if you have not kept them)?	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/>	Less than 25% of participants <input type="checkbox"/> 25-49% of participants <input type="checkbox"/> 50%-74% of participants <input type="checkbox"/> 75% and above of participants <input type="checkbox"/> Not carried out <input type="checkbox"/>
12a. Can you tell us when you followed them up? e.g. 6 months after finishing the class	..... ..... .....	..... ..... .....

	Successful	Unsuccessful
13. If there are any other comments that you would like to make about your exercise classes or this questionnaire, please write them here. If there are any questions that you have found difficult to answer please state the question number and the reasons.

*These questions are not included in the paper as they were either not relevant to the specific focus of the paper or had poor response rate/missing data.

Interview schedule

Your classes

1. Can you tell me about how you approach your PSI classes?
 2. You said that you do not deliver the FaME programme as trained, can you explain a bit more about this and your reasons for it?
 3. Can you explain to me what you think are the key reasons why your PSI class is successful (in terms of adherence)?
 4. Can you explain the key reasons why you think your PSI class is unsuccessful (in terms of adherence)?
 5. Can you give me an example of a really successful class and what it was that made it work? Can you do the same for a class that was less successful?
 6. What do you think motivates participants to attend in the first place?
 7. What do you think keeps them attending?
 8. What do you think is the impact of the class for your participants?
 9. Do you think others (families, friends, and professionals) influence your participant's attendance?
 10. What do you think the barriers are to participants attending your classes?
 11. Do you think your background has made any difference to the way you deliver?
 12. Do you think your training has influenced the way you deliver and how?
 13. Do you think that your approach has changed over time?
 14. What do you feel you bring to the class?
 15. Do you feel the setting you deliver in constrains what you can achieve?
 16. Are there any key differences that you observe between participants who continue to exercise and those who do not?
 17. If they transfer on to another exercise class, how is this facilitated? Can you talk me through the process?
- Anything else that you want to tell me?

Outcomes reported by instructors for successful and unsuccessful classes

Outcomes	Percentage of class	Successful class N=128 ^a (%)	Unsuccessful class N=46 ^a (%)
Improved functional scores	Less than 50%	9 (7.0%)	4 (8.7%)
	50% to 74%	26 (20.3%)	12 (26.1%)
	75% and above	43 (33.6%)	8 (17.4%)
	Not carried out	21 (16.4%)	5 (10.9%)
Improved balance scores	Less than 50%	10 (7.8%)	5 (10.9%)
	50% to 74%	28 (21.9%)	12 (26.1%)
	75% and above	42 (32.8%)	10 (21.7%)
	Not carried out	24 (18.8%)	8 (17.4%)

Outcomes	Percentage of class	Successful class N=128 ^a (%)	Unsuccessful class N=46 ^a (%)
Reduced falls and fracture	Less than 50%	11 (8.6%)	2 (4.3%)
	50% to 74%	13 (10.1%)	3 (6.5%)
	75% and above	21 (16.4%)	5 (10.9%)
	Not carried out	47 (36.7%)	20 (43.5%)
Fear of falling	Less than 50%	14 (10.9%)	7 (15.2%)
	50% to 74%	25 (19.5%)	8 (17.4%)
	75% and above	46 (35.9%)	9 (19.6%)
	Not carried out	18 (14.1%)	7 (15.2%)
Health and well-being	Less than 50%	12 (9.4%)	2 (4.3%)
	50% to 74%	12 (9.4%)	4 (8.7%)
	75% and above	38 (29.7%)	5 (10.9%)
	Not carried out	32 (25.0%)	19 (41.3%)

^a Missing data throughout responses. ^{nb} Measures outlined in Table 2 or reported as self-reported subjective improvements.