

Research Article

Practitioner's Perspective on Activities and Outcomes of the Weight Management Program: A Qualitative Study

Tatiana Suhaimi¹, Hanif Farhan Mohd Rasdi², Ruzita Abd Talib^{1*}

¹Nutritional Science Programme, Centre of Community Health Studies (ReaCH), Faculty of Health Sciences, Universiti Kebangsaan Malaysia, 50300 Kuala Lumpur, Malaysia

²Centre for Rehabilitation and Special Needs Studies (ICaRehab), Faculty of Health Sciences, Universiti Kebangsaan Malaysia, 50300 Kuala Lumpur, Malaysia

Article History:

Received 18-07-2024
Revised 24-09-2024
Accepted 15-10-2024
Published 29-11-2024

Keywords:

obesity, overweight, perspective, practitioner, qualitative study, weight management program

*Corresponding Author:

tel: +60392897388
email: rzt@ukm.edu.my

ABSTRACT

This study aims to explore the activities and outcomes of weight management programs from the practitioner's perspective. A qualitative approach was employed in this study, which included in-depth interview and document analysis. Ten practitioners with experience and diverse backgrounds were interviewed using a semi-structured questionnaire. Concurrently, document analysis was utilised by examining the printed and online documents provided by the practitioners. The verbatim transcripts and documents were analysed thematically by using Nvivo 12 software. Thematic analysis revealed four themes that represent the key activities generally executed in weight management programs: 1) nutrition and physical activities; 2) screening and monitoring; 3) motivation and spirituality, and 4) task and challenge. This study found two uncommon activities rarely mentioned in previous programs: spirituality and challenge. Practitioners also highlighted activities in the program had positive effects on participants, including: 1) demonstrating positive self-change; 2) influencing their surroundings, and 3) cost savings. Notably, combining these activities could lead to improved outcomes, particularly when participants are fully committed to the program. In conclusion, this study identified four primary activities and three positive outcomes from the weight management programs. From the practitioner's perspective, integrating these activities was seen as a good strategy to achieve an optimal result. Hence, it is recommended that future practitioners to incorporate and diversify the activities to enhance their effectiveness.

INTRODUCTION

The worldwide rate of overweight and obesity among adults remains a cause for concern. A significant increase has been observed in the prevalence of adults categorised as overweight and obese from 1990 to 2022, with approximately 43.0% and 16.0%, respectively (WHO 2024). In Malaysia, the rate of adult obesity appears to be growing, with the latest statistics from the National Health and Morbidity Survey (NHMS) indicating that 54.4% belong to this category (IPH 2024). Being overweight and obese has been associated with a higher risk of several non-communicable diseases, such as various types of cancer (Meshram *et al.* 2022), hypertension (Diana *et al.* 2018; Meshram *et al.* 2022), metabolic syndrome

and fertility abnormalities (De Lorenzo *et al.* 2020), psychological disorders and mental health conditions such as anxiety and depression (Rajan & Menon 2017). Moreover, a notable increase in the expenses associated with managing and treating obesity (Wulansari *et al.* 2016). Due to medical cost treatment, this situation will impact individuals and the economy.

Diverse strategies, including weight management programs, have significantly shown effectiveness in reducing the prevalence of obesity, which improves health and quality of life for committed participants (Ongan *et al.* 2019). Previous studies found that interventions that combine activities, emphasising healthy eating and physical activity, will increase the intervention success rate (O'Connor *et al.* 2020)

and decrease the possibility of developing cardiovascular disease (Nitschke *et al.* 2022).

Nutrition and physical activity are vital components in weight management programs, but integrating components such as behaviour modification, motivation and education has significantly improved participant's weight reduction (Buhari *et al.* 2022). A qualitative study demonstrated that weight management programs improve behaviour change and indirectly benefit participant's partners, showing a wider impact beside physical appearance (Albright *et al.* 2020). However, limited studies explore non-anthropometric measurement especially based on practitioner's perspectives and observations.

Practitioners from various disciplines, such as nutritionists, dietitians, fitness instructors and physical therapists, provide holistic care in the program, especially for adults with overweight or obese who seek consultations (Claridge *et al.* 2014; Nitschke *et al.* 2020). Previous practitioners revealed that support and motivation lead to positive lifestyle changes and achieving weight loss targets (Claridge *et al.* 2014). These practitioners showed the ability to change the participant's behaviour through strategic interventions and tailored it according to participant's needs. It is crucial to recognise their perspective regarding this issue. Participants struggled to maintain weight after the program due to social influence and relapse which required them to manage their health independently. Nevertheless, practitioner's expertise and support do initiate participant's weight loss target (Jessen-Winge *et al.* 2020). Exploring practitioner's perspectives on important activities could aid in developing a more structured program that meets participant's target. Hence, the main objective of this research is to elucidate the activities and their outcomes in the context of weight management intervention from the practitioner's perspective.

METHODS

Design, location, and time

This study utilised a qualitative research methodology to gather information and insights from the perspective of practitioners such as activities and outcomes of the weight management program. A one-to-one-in-depth interviews guided by semi-structured questions were conducted among practitioners in Klang Valley, Malaysia from November 2020 until December 2021.

Several printed and online documents, such as program modules and guidance books, were used as supplementary material for document analysis to provide a greater understanding of the activities in the programs. However, the study duration was extended due to the initial anticipation of achieving data saturation after interviewing six to seven participants, as suggested by a previous study (Guest *et al.* 2020). The research committee decided to include more participants after thoroughly analysing the data. Hence, data saturation was reached after interviewing ten participants from various organisations such government agencies, private companies and non-government organisations. It is imperative to prioritize data comprehensiveness rather than just focusing on the number of participants (Knott *et al.* 2022).

The research received ethical approval from the Secretariat of Research and Innovation at Universiti Kebangsaan Malaysia, with reference number UKM PPI/111/8/JEP-2020-516. Additionally, ethical approval was also obtained from the National Medical Research Register (NMRR), Ministry of Health Malaysia, with the approval number NMRR-20-2450-57008 (IIR). Before beginning the data collection, practitioners were provided with information sheets and signed a formal consent form.

Sampling

The initial selections of six practitioners involved purposive sampling and snowball sampling from the practitioner's professional networks. Nevertheless, qualitative studies do not necessitate statistical sample calculation or achieving a large sample size (DeJonckheere & Vaughn 2019). This research used a maximum variation strategy to involve diverse participant's background, including year of experience, type of employment and organisation. The data collection continued until data saturation was reached, signifying that no new themes or codes emerged from the interviews (Creswell & Creswell 2018; Braun & Clarke 2021).

The inclusion criteria for practitioners consisted of two main requirements: previous experience in managing weight management interventions and a minimum of one year experience in respective disciplines. Thus, ten professionals, including nutritionists, dietitians, and fitness instructors, were involved.

Data collection

The selected practitioners were contacted by phone or email. Some interviews were held at the practitioners' office or studio, while others were performed through Google Meet due to COVID-19 restrictions. The practice of online interviews began before the pandemic (Brown *et al.* 2021), and this adaptable approach has proven advantageous for researchers exploring diverse environments (Keen *et al.* 2022). Additionally, several practitioners provided the program's related documents.

The interview session comprises semi-structured questions that enable practitioners to share their experience in conducting the interventions. The semi-structured questions were developed based on the components found in the Theory of Change, such as Input, Activity, Output, Outcome, and Impact. Theory of Change was selected due to its suitability to use as a strategy and program planning to identify the current and desired situation as a component needed to ensure the program has promising progress (Rogers 2014). However, this study reported to main components which are activities and the outcome of the activity. The language spoken throughout the interview was Malay, and partially mixed with English. Thus, translation into English were done for the purpose of presenting this research. The questions were grouped into two main topics as follow: 1) What are the key activities that you have been conducting that influence a weight management intervention?; 2) What are the outcomes that you observe in a weight management intervention that you have been conducting?

Each session ranged from 40 to 60 minutes, audio recorded and transcribed verbatim. A probing technique was also used to gather additional information. Thematic analysis was then applied to analyse the verbatim transcripts and documents for deeper understanding.

Data analysis

Reflexive approaches were employed to conduct thematic analysis, which conceptualises shared meaning patterns with a central organising concept (Braun & Clarke 2021). This process involved six phases: becoming familiar with the data, coding the data, generating initial themes, reviewing and developing the themes, refining, describing, and naming the themes, and finally, documenting the findings (Braun & Clarke 2021).

Next, NVivo 12 software was used to organise the identified codes, initial themes, and themes.

Data validity was ensured through an audit trail, member checking and peer review. An audit trail was established to record research activities and ensure reliability of both data collection and analysis (Nowell *et al.* 2017). The audit trails track research activities, including instrument development information and data reconstruction, enabling researchers to refine the initial coding and sub-themes before continuing to member checking.

Member checking is a method for verifying interpretations and obtaining feedback from the informants (Creswell & Creswell 2018). Therefore, practitioners were contacted by phone or WhatsApp messenger to set up another discussion. In this session, practitioners reviewed a verbatim transcript labelled with initial coding and sub-themes to verify the interpretation. Prior to peer examination, research teams revised the coding, sub-themes and themes to ensure their relevance to research questions. Lastly, findings were validated through a peer examination by expert as recommended (Creswell & Creswell 2018).

RESULTS AND DISCUSSION

Ten practitioners were involved in this study, with an equal gender distribution and a mean age of 35.7 (SD=7.7). Forty percent of the practitioners had more than ten years of experience in handling weight management. Practitioners were recruited from various organisations such as government (n=4, 40.0%), freelance (n=1, 10%), non-government organisations (n=1, 10%) and health-related organisations (n=4, 40%).

This study discovered four significant themes for activities and three themes for outcomes (Figure 1). Four significant themes for weight management intervention activities were identified: (i) nutrition and physical activities, (ii) screening and monitoring, (iii) motivation and spirituality, and (iv) task and challenge. Meanwhile, based on the practitioner's observation and experience, three significant themes emerged as common outcomes identified by the participants. The themes of these activities, which are (i) demonstrating positive self-change, (ii) being able to influence their surroundings, and (iii) being able to save costs, particularly on food and healthcare.

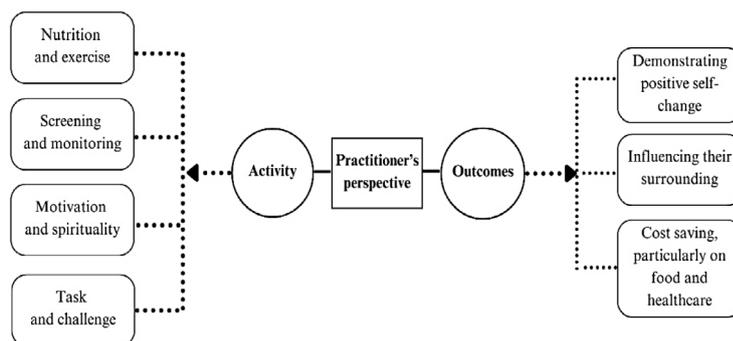


Figure 1. Overview of the theme for activity and outcomes of the weight management program

Themes for activities of weight management intervention

Activity is a fundamental component in weight management programs, notably nutrition and physical activity. According to the practitioner’s experience and perspective, this study discovered several activities that provide beneficial outcomes for the participant. The themes and sub-themes for activities are outlined in Table 1.

Theme 1: Nutrition and physical activities. Most practitioners generally agree that a weight management intervention should include both nutrition and physical activities, as these components are fundamental requirements for this type of program.

"There is an element of nutrition and exercise. These are two basic things. If one is missing, it's not a weight management program, right?" (Practitioner 2, Male, 40)

"Same with our program. It's not just talk about nutrition. It's also focusing more on exercise." (Practitioner 8, Male, 44).

Several studies indicated that combining nutrition or dietary activity with physical activity proved effective in weight loss (Buhari *et al.* 2022). Typically, practitioners will begin by disseminating knowledge and information about food, teaching techniques to control portion sizes, and strategies for establishing healthy habits. It is essential to provide an effective dietary intervention to promote long-term positive sustainability and help participants have a nourishing dietary intake that leads to decreased body fat while increasing lean mass (Buhari *et al.* 2022). Previous research indicated participants are more likely to engage if allowed to choose their preferred physical activity intensity (Williams *et al.* 2015), which is similarly observed in this study.

Theme 2: Screening and monitoring.

Practitioners emphasised the importance of screening participants before the program. A screening process was used to determine the participant’s situation, which was crucial for assessing their preparedness. There are a variety of tools used by the practitioners to screen the participant’s readiness such as survey form, a rapport and interview session with the potential clients. Thus, certain practitioners used strict screening processes to ensure participants were fully prepared.

"So before becoming a client, we will assess your readiness to change. Ok, so readiness to change, if he/she is not ready, we tell them. This is not the best time for you. Ok. Come back when you are ready. That's why we have a high success rate here. Because all the clients have come here and are ready." (Practitioner 6, Female, 27).

A scoping review revealed that the Transtheoretical Model was the most common theory or model used in program or interventions to assess participants for behaviour change

Table 1. Themes and sub-themes of activities in the weight management program

No	Activity (themes)	Sub-themes
1	Nutrition and exercise	Controlling diet intake Physical activity
2	Screening and monitoring	Observe and follow-up Evaluate the readiness to change
3	Motivation and spirituality	Encouragement talk Spiritual talk
4	Task and challenge	Positive competition Daily assignment

(Suhaimi *et al.* 2022). Including a screening process helps practitioners to choose a suitable strategy that aligns with each participant's requirements. The program module shared by practitioners illustrates how to assess a client's readiness for change using the Transtheoretical Model, which assist the practitioners in taking a proper approach for the participants. Meanwhile, practitioners monitor participant's progress during the intervention. Monitoring is a process that is performed during the intervention, such as weighing the participants before and after the intervention and evaluating their progress. Consistent monitoring increases the possibility of success, particularly in an exercise program (Petridou *et al.* 2019). Some practitioners monitored participant's food intake with apps or food diary, while others conducted weekly anthropometry measurement to track the progress. Both methods are common monitoring mechanisms used in weight management programs.

"There is a record. We called it food diary. We record in food diary. We monitor their food diary. Aaa yes, food diary. We have two ways. One, we used the Apps. Another one, we write in the book. We also have a diary." (Practitioner 1, Female, 37).

"Okay, on certain days we measure their body weight. Once a week we will take their body fat measurement and other details." (Practitioner 9, Male, 36).

Meanwhile, some practitioners use different approaches to assess participants, like conducting a quiz.

"We will have close monitoring. So, during close monitoring, we will make a zoom call. So, during zoom call we will make a quiz. We will ask, we will teach them interactively, because by the end of the day, after they finish with our program, we will assess, whether they are ready for us to let them go. If they are not ready, meaning that they don't understand anything, we will ask them to renew again until you are ready." (Practitioner 6, Female, 27).

Theme 3: Motivation and spirituality.

Practitioners typically motivate current participants through sharing session with past successful participants to boost self-efficacy and attain their objectives. Self-efficacy facilitates behavioural changes that result in positive outcomes (Bandura 1998). Furthermore, to increase participant motivation, practitioners

commonly invited knowledgeable or professional individuals.

"For the motivation perspective, we invited ustad, psychologist, icon or even celebrity, or anyone with connection." (Practitioner 2, Male, 40).

"For motivation, certain nutritionist they called a motivational specialist who is specialises in losing weight to motivate. Aa to motivate. Because if we only do nutrition and physical activity only with no motivations, meaning it will not work, right? So, there are certain time we call for motivation talk." (Practitioner 1, Female, 37).

Beside motivation, a new theme emerged: spirituality. It was found that practitioners also integrated spiritual activities such as religious elements that involve inviting speakers or ustad to discuss nutrition from an Islamic perspective.

"Nutrition, then disease prevention, is the doctor's job. Then, for the spiritual soul, it's the counsellor's job. Now, we also include a religious part. Meaning that we are not only focused on a single talk. We have many things." (Practitioner 4, Female, 46).

One practitioner uses a spiritual approach to encourage participants to manage their time and routine by waking early and performing a voluntary Sunnah Prayer, which strengthens their discipline to lose weight.

"Actually, what I want to convey is to wake up and ask Him. 'Oh Almighty, I want to be healthy'. That is the reason. If you asked God, God will take care of your life, your time. All of sudden, they can exercise. Suddenly trying to fasting. What I want to teach is, what I want to show them, you have to ask the God first. I'm just a medium." (Practitioner 10, Female, 36).

Spirituality is commonly perceived as having deeper meaning and experience in life beyond scientific explanation, yet vital in a religious context (Steinhauser *et al.* 2017). Although it is not common in the intervention, including a religious component can enhance participant's health awareness that complies with spiritual teachings. A study found that the majority of Malay Muslim respondents did not follow Prophet (SAW) healthcare practices, which raising concerns about the uncontrolled eating habits that are linked to obesity risk (Burhanuddin *et al.* 2017). Another study reported that Muslims usually experience weight changes during the month of fasting (Sadeghirad *et al.* 2014), which lasts 29 or 39 days and refrains them

from consuming food and drinking from sunrise to sunset (Moghadam *et al.* 2021). This fasting generally contributes to weight loss depending on individual dietary intake. As the majority of Malaysians are Muslim, some practitioners emphasise the importance of incorporating spiritual activities such as fasting to increase the chance of losing weight.

“We focus more on calorie deficits and fasting. Ha, we got three styles of fasting. One, once a week. Second, of course on Tuesday and Thursday. Thirdly, Nabi Daud’s fasting. Or if can’t at all, we will try to push it. Try at least three days in a month.” (Practitioner 10, Female, 36).

Theme 4: Task and challenge. Various tasks and challenges were employed due to the intervention’s lengthy duration and increasing participant’s engagement. Task refers to the activity participants are required to fulfil, such as sharing their daily food intake and steps. Practitioner 10 mentioned using WhatsApp messenger or email to assign daily or weekly tasks to the participants:

“But for example, I gave them through email. Email. Then we WhatsApp daily. Then they have homework again every week. Their homework is like focusing more on getting the steps every day.” (Practitioner 10, Female, 36).

“I said, there are days when you are busy, for example, Monday. Based on research, at least try to reach 4,700 steps less or more. So on Monday, try to complete 5,000 steps, is enough. Aa so we focus get the 10,000 steps on Saturday and Sunday. Because we know everybody is busy, it is not possible to get 10,000 steps on Monday.” (Practitioner 10, Female, 36).

A practitioner stated that responses usually based on the participant’s input.

“But I, I usually encourage those who have just joined to show us what they eat. And from there, we can help to guide them. It means, they upload the foods photo, chicken rice. And I said, okay good. Very good. Okay, no problem. How about the food got coconut milk? No problem, coconut milk is good.” (Practitioner 10, Female, 36).

Meanwhile, challenge activities create competitiveness, such as counting the highest weekly steps among participants.

“And we also do a challenge, a physical challenge. We have a virtual run, and we have a medal. And we have a challenge like a squat. In

those six weeks, they must complete squats, plank and burpees.” (Practitioner 9, Male, 36).

A task-based weight management program was discovered as a practical approach. Task-based activities include weekly goals like walking 10,000 steps daily, using a food diary and avoiding unhealthy food (McRobbie *et al.* 2019). These activities are not only effective but also cost effective particularly for low socioeconomic communities. In contrast, middle-class and upper-class communities tend to engage in voluntary online platform activities like viewing multimedia information submitting dietary activities through platform (Leahey *et al.* 2018). Participation in these activities is typically voluntary and optional.

Nevertheless, these task and challenge activity indirectly help initiate participants’ self-efficacy in engaging in healthy behaviour. Self-efficacy, derived from the Social Cognitive Theory constructs, describes individual’s belief in achieving goals based on task-specific challenges (Bandura 1998; Johari 2019). Hence, increasing self-efficacy may contribute to participants’ capability to sustain a healthy lifestyle.

Themes for outcomes of weight management intervention

The practitioners pointed out three primary outcomes that commonly occur following the completion of the intervention, as listed in Table 2. According to practitioners, these outcomes usually become apparent after a minimum duration of eight weeks of the program.

Table 2. Themes and sub-themes of outcomes in the weight management program

No	Outcome (themes)	Sub-themes
1	Demonstrating positive self-change	Confident and motivated Changing lifestyle Body weight loss Healthier dietary intake
2	Influencing their surrounding	Inspiration to other people
3	Cost saving, particularly on food and healthcare	Less money being spent

Theme 1: Demonstrating positive self-change. Participants demonstrated a positive self-change in two categories: physical and mental improvement. Depending on their personal goals, participants will either lose or maintain their physical weight. Practitioner 1 noticed that participants display positive behavioural changes towards healthy eating and lifestyle, which aligns with previous research on the health benefits of weight management programs (Nitschke *et al.* 2022).

“Actually, weight management can be a cure. It means that it can be a treatment for fertility. And the positive impact that we can see the changes in their lifestyle, which has been able to change towards a healthy lifestyle.” (Practitioner 1, Female, 37).

From a mental perspective, practitioners observed that participants developed greater self-confidence along with weight loss. This finding is consistent with a review of the program focusing on behavioural change (Jones *et al.* 2021), which will improve the participant’s mental well-being and quality of life.

“They seem to gain more confidence. People who are losing weight seem happy, more healthy and have higher levels of self-confidence.” (Practitioner 4, Female, 46)

“Definitely those who managed to lose weight look more confident. Yes definitely, and aaa how do you say? They are braver too.” (Practitioner 2, Male, 40)

Theme 2: Influencing their surrounding. Practitioners posited that participants positively impact themselves and the people surrounding them.

“But I think the positive impact is also that he/she actually influences his/her friends who did not join the program.” (Practitioner 1, Female, 37).

“So, we’ve got participant who was very shy at first. Later, become successful. We bring that participant to be an icon for the next program, which can give presentation and give motivation to others.” (Practitioner 2, Male, 40).

The weight management interventions enable participants to positively influence their families and communities (Solmon 2015), which influences the social environment. Engaging as a team encourages the likelihood of success due to positive support (Johari 2019). Based on this finding, participants can influence fellow program participants, as well as their peers who are not enrolled in the weight management program.

Theme 3: Cost saving, particularly on food and healthcare. Practitioners noticed economic savings among participants, especially in food and health-related treatment.

“We want to promote that when they become healthy, their cost for medical treatment will decrease.” (Practitioners 1, Female, 37).

According to some practitioners, participants often choose pricier food while starting a weight loss journey.

“I noticed one more thing. When people are aware of changing their diet and lifestyle, they think they need to eat expensive food. Usually, they choose Western food. They don’t realise that our food is actually healthy.” (Practitioner 5, Male, 26).

Thus, practitioners guided participants towards healthier choice but affordable.

“When we do personalisation with him, it’s really helpful from the economic point of view. It’s like, there are people who think they have to eat salmon to be healthy, right? We just give him eggs; he’ll be like, ‘Can we eat eggs to lose weight?’ People are always afraid of cholesterol and all, things like that.” (Practitioner 7, Female, 28).

A weight management intervention was found to assist a family in improving their finance by decreasing health treatment (Albright *et al.* 2020). A possible explanation was that reducing sugar or fat intake allows them to purchase healthier food like fruits and vegetables (Kaur *et al.* 2020). Indirectly, intervention promotes nutritious food purchased and minimises illness risk while reducing spending on health treatment.

In general, four significant themes for activities and three themes for outcomes were identified from this study. Most practitioners agreed that nutrition and exercise; screening and monitoring activity are essential components in the intervention, as emphasised by Practitioner 1 and Practitioner 9. By the program’s end, participants that committed to nutrition and exercise activity can manage their weight, aligning with previous studies showing that these activities assist in weight loss effectively (Buhari *et al.* 2022). Not all programs include spiritual and challenge activities, as highlighted by several practitioners. The implementation of spiritual activities depends on several factors, such as the speaker’s topic and participant’s willingness to engage.

Therefore, not all favourable results may be achieved. Practitioners observed that some low

success rates were caused by participant's lack of commitment, time constraints, limited resources, and mental and physical preparation or readiness. A similar study found that a lack of dedication prevents participants from progressing in weight loss (Johari 2019). Participants acknowledge the importance of commitment, yet deficiencies in action and mental preparedness, dedication to change, and managing time compromise the program's effectiveness.

Practitioner's perspectives are crucial as they are responsible for planning and implementing interventions. This present study also identified novel themes, such as spirituality and challenge activities, that are rarely report in previous research. While most programs include motivational activities, limited studies have considered spiritual activities. Spirituality is diverse and subjective, which depends on human belief (Michopoulou & Jauniškis 2020). Although often overlooked, some studies demonstrated its significance in strengthening health promotion intervention and health outcomes (Steinhauser *et al.* 2017) and improving dietary intake and Body Mass Index (BMI) among overweight and obese individuals (Patel *et al.* 2017). Hence, in this study, practitioners believe adding spiritual activities can be beneficial to the participants.

Conversely, a challenge activity can appear as a physical task, such as achieving physical goals, which significantly improved weight loss among participants (Bojd *et al.* 2022). Thus, some practitioners integrated into the program in the hope of increasing the effectiveness of the outcome. However, limited studies have explored the effectiveness of this activity. Our findings grouped challenges and task activities, while spirituality and motivation were combined into another theme. It is recommended that they be classified as separate and independent themes. Spirituality and challenges activity are valuable sharing from practitioners, although they only emerged briefly during the interview. Incorporating these two activities may improve future interventions, especially in the Malaysian context.

CONCLUSION

In conclusion, practitioners believe that combining various activities will strengthen the program's effectiveness, including nutrition and physical activity, screening and monitoring,

motivation and spirituality, and task and challenge. The present study also discovered two types of potential activities, namely spirituality and challenge activity. Including activities like spiritual talks by certified speakers and creating positive competition among participants is recommended. Hence, future intervention practitioners may incorporate relevant activities to boost the intervention's impact.

ACKNOWLEDGEMENT

We would like to express our appreciation to the practitioners who generously dedicated their time and experience to contribute to this research. Special dedication to Universiti Kebangsaan Malaysia and Universiti Putra Malaysia for providing financial support for this article.

DECLARATION OF CONFLICT OF INTERESTS

The authors have no conflict of interest.

REFERENCES

- Albright CA, Pratt KJ, Martin SB, Hulshult H, Brown CL, Skelton JA. 2020. Family members' experiences with adult participation in weight management programs: Triadic perspectives from patients, partners and children. *Clin Obes* 10(2):e12354. <https://doi.org/10.1111/cob.12354>
- Bandura A. 1996. Health promotion from the perspective of social cognitive theory. *Psychology & Health* 13(4):623–649. <http://dx.doi.org/10.1080/08870449808407422>
- Bojd B, Song X, Tan Y, Yan X. 2022. Gamified challenges in online weight-loss communities. *Inf Syst Res* 33(2):718–736. <https://doi.org/10.1287/isre.2021.1081>
- Braun V, Clarke V. 2021. Can i use TA? Should i use TA? Should i not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Couns Psychother Res* 21(1):37–47. <https://doi.org/10.1002/capr.12360>
- Brown CA, Revette AC, de Ferranti SD, Fontenot HB, Gooding HC. 2021. Conducting web-based focus groups with adolescents

- and young adults. *Int J Qual Methods* 20:1609406921996872. <https://doi.org/10.1177/1609406921996872>
- Buhari SS, Radzuan NN, Zafirah N, Rahman A, Ahir NM, Ilias K, Yusof SM. 2022. Effectiveness of weight loss program among young adults using diet and physical activity approach. *Healthscope: The Official Research Book of Faculty of Health Sciences, UiTM* 5(1):80–87.
- Claridge R, Gray L, Stubbe M, Macdonald L, Tester R, Dowell AC. 2014. General practitioner opinion of weight management interventions in New Zealand. *J Prim Health Care* 6(3):212–220. <https://doi.org/10.1071/HC14212>
- Creswell WJ, Creswell JD. 2018. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Fifth Edition. Los Angeles (USA): SAGE.
- DeJonckheere M, Vaughn LM. 2019. Semistructured interviewing in primary care research: A balance of relationship and rigour. *Fam Med Community Health* 7(2):e000057. <https://doi.org/10.1136/fmch-2018-000057>
- De Lorenzo A, Romano L, Di Renzo L, Di Lorenzo N, Cennamo, Gualtieri P. 2020. Obesity: A preventable, treatable, but relapsing disease. *Nutrition* 71:110615. <https://doi.org/10.1016/j.nut.2019.110615>
- Diana R, Nurdi NM, Anwar F, Riyadi H, Khomsan, A. 2018. Risk factors of hypertension among adult in rural Indonesia. *J Gizi Pangan* 13(3):111–116. <https://doi.org/10.25182/jgp.2018.13.3.111-116>
- Guest G, Namey E, Chen M. 2020. A simple method to assess and report thematic saturation in qualitative research. *Plos One* 15(5):e0232076. <http://dx.doi.org/10.1371/journal.pone.0232076>
- [IPH] Institute for Public Health. 2024. Fact Sheet National Health and Morbidity Survey (NHMS) 2023. Ministry of Health. <https://iku.nih.gov.my/images/nhms2023/fact-sheet-nhms-2023.pdf> [Accessed 30 June 2024].
- Jessen-Winge C, Ilvig PM, Thilsing T, Lee K, Fritz H, Christensen JR. 2020. Health professionals' perceptions of weight loss programmes and recommendations for future implementation: A qualitative study. *BMJ Open* 10(11):e039667. <https://doi.org/10.1136/bmjopen-2020-039667>
- Johari MZ. 2019. *Strategies and factors influencing weight management in Malaysia*. [Doctor of Philosophy]. United Kingdom: Newcastle University.
- Jones RA, Lawlor ER, Birch JM, Patel MI, Werneck AO, Hoare E, Griffin SJ, van Sluijs EMF, Sharp SJ, Ahern AL. 2021. The impact of adult behavioural weight management interventions on mental health: A systematic review and meta-analysis. *Obes Rev* 22(4):e13150. <https://doi.org/10.1111/obr.13150>
- Kaur J, Kaur M, Chakrapani V, Webster J, Santos JA, Kumar R. 2020. Effectiveness of information technology-enabled “SMART Eating” health promotion intervention: A cluster randomized controlled trial. *Plos One* 15(1):1–22. <https://doi.org/10.1371/journal.pone.0225892>
- Keen S, Lomeli-Rodrigue M, Joffe H. 2022. From challenge to opportunity: Virtual qualitative research during COVID-19 and beyond. *Int J Qual Methods* 21:16094069221105075. <https://doi.org/10.1177/16094069221105075>
- Knott E, Rao AH, Summers K, Teegar C. 2022. Interviews in the social sciences. *Nat Rev Methods Primers* 2(1):73. <https://doi.org/10.1038/s43586-022-00150-6>
- Leahey TM, LaRose JG, Mitchell MS, Gilder CM, Wing RR. 2018. Small incentives improve weight loss in women from disadvantaged backgrounds. *Am J Prev Med* 54(3):e41–e47. <https://doi.org/10.1016/j.amepre.2017.11.007>
- McRobbie H, Hajek P, Peerbux S, Kaha BC, Eldridge S, Trépel D, Parrott S, Griffiths C, Snuggs S, Smith KM. 2019. Randomised controlled trial and economic evaluation of a task-based weight management group programme. *BMC Public Health* 19(1):1–10. <https://doi.org/10.1186/s12889-019-6679-3>
- Meshram I, Boiroju NK, Longvah T. 2022. Prevalence of overweight/obesity, hypertension and its associated factors among women from Northeast India. *Indian Heart J* 74(1):56–62. <https://doi.org/10.1016/j.ihj.2021.12.009>
- Michopoulou E, Jauniškis P. 2020. Exploring the relationship between food and spirituality:

- A literature review. *International Int J Hosp Manag* 87:102494. <https://doi.org/10.1016/j.ijhm.2020.102494>
- Moghadam MT, Taati B, Paydar Ardakani SM, Suzuki K. 2021. Ramadan fasting during the COVID-19 pandemic; Observance of health, nutrition and exercise criteria for improving the immune system. *Front Nutr* 7(570235):1–10. <https://doi.org/10.3389/fnut.2020.570235>
- Nitschke E, Gottesman K, Hamlett P, Mattar L, Robinson J, Tovar A, Rozga M. 2022. Impact of nutrition and physical activity interventions provided by nutrition and exercise practitioners for the adult general population: A systematic review and meta-analysis. *Nutrients* 14(9):1729. <https://doi.org/10.3390/nu14091729>
- Nowell LS, Norris JM, White DE, Moules NJ. 2017. Thematic analysis: striving to meet the trustworthiness criteria. *Int J Qual Methods* 16(1):1609406917733847. <https://doi.org/10.1177/1609406917733847>
- O'Connor EA, Evans CV, Rushkin MC, Redmond N, Lin JS. 2020. Behavioral counseling to promote a healthy diet and physical activity for cardiovascular disease prevention in adults with cardiovascular risk factors: Updated evidence report and systematic review for the US preventive services task force. *Jama* 324(20):2076–2094. <https://doi.org/10.1001/jama.2020.17108>
- Ongan D, Kuş AD, Ongan E, Kiliç D. 2019. Results of an adult weight-management program and reflections as the influence of weight on quality of life in patients with obesity. *Prog Nutr* 21(4):943–951. <https://doi.org/10.23751/pn.v21i4.7764>
- Patel R, Lycett D, Coufopoulos, Turner, A. 2017. A feasibility study of taste & see: A church based programme to develop a healthy relationship with food. *Religions* 8(2):29. <https://doi.org/10.3390/rel8020029>
- Petridou A, Siopi A, Mougios V. 2019. Exercise in the management of obesity. *Metab.: Clin Exp* 92:163–169. <https://doi.org/10.1016/j.metabol.2018.10.009>
- Rajan TM, Menon V. 2017. Psychiatric disorders and obesity: A review of association studies. *J Postgrad Med* 63(3):182–190. https://doi.org/10.4103/jpgm.JPGM_712_16
- Rogers P. 2014. *Theory of Change, Methodological Briefs: Impact Evaluation 2*. Florence (IT): UNICEF Office of Research.
- Sadeghirad B, Motaghipisheh S, Kolahdooz F, Zahedi MJ, Haghdoost AA. 2014. Islamic fasting and weight loss: A systematic review and meta-analysis. *Public Health Nutr* 17(2):396–406. <https://doi.org/10.1017/S1368980012005046>
- Solmon MA. 2015. Optimizing the role of physical education in promoting physical activity: A social-ecological approach. *Res Q Exercise Sport* 86(4):329–337. <http://dx.doi.org/10.1080/02701367.2015.1091712>
- Steinhauser KE, Fitchett G, Handzo GF, Johnson KS, Koenig HG, Pargament, KI, Puchalski CM, Sinclair S, Taylor EJ, Balboni TA. 2017. State of the science of spirituality and palliative care research part I: Definitions, measurement, and outcomes. *J Pain Symptom Manag* 54(3):428–440. <http://dx.doi.org/10.1016/j.jpainsymman.2017.07.028>
- Suhaimi T, Tarek SWWSS, Rasdi HFM, Abd Talib R. 2022. Models and theories to support health promotion programmes for overweight and obese adults: A scoping review. *Malays J Nutr* 28(3):335–355. <https://doi.org/10.31246/mjn-2021-0126>
- Yusof FB, Bin WS, Hassan W, Tahar ASB, Amiruddin SB. 2017. The understanding of Terengganu muslim community concerning health care practice of prophet Muhammad SAW. *Int J Acad Res Bus Soc Sci* 7(10):2222–6990. <http://dx.doi.org/10.6007/IJARBSS/v7-i10/3378>
- [WHO] World Health Organization. 2024. Obesity and overweight. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight> [Accessed 3rd July 2024].
- Williams DM, Dunsiger S, Miranda R, Gwaltney CJ, Emerson JA, Monti, PM, Parisi AF. 2015. Recommending self-paced exercise among overweight and obese adults: A randomized pilot study. *Ann Behav Med* 49(2):280–285. <https://doi.org/10.1007/s12160-014-9642-7>
- Wulansari A, Martianto D, Farida Baliwati Y. 2016. Estimasi kerugian ekonomi akibat obesitas pada orang dewasa di Indonesia. *J Gizi Pangan* 11(2):159–168. <https://doi.org/10.25182/jgp.2016.11.2.%25p>