

STAYING DRY OR TAKING THE PLUNGE? FACTORS THAT INFLUENCE PARTICIPATION IN MASTERS' SWIMMING

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Abstract

Masters swimming offers training and competition opportunities to adults over the age of 25 years through structured programmes. This study aimed to identify what influenced masters swimmers to engage in training and competition. Semi-structured interviews were used to explore the experiences of 12 masters Swimmers (8 male, 4 females; age range = 23-76 years). Data was recorded, transcribed 'verbatim', and thematically analysed. Following analysis, a total of 237 meaning units were identified. They were located into 36 themes before being placed into 8 categories: Achieving Goals, Habituation, Health and Fitness, Organisational Influences, Significant Others, Psychological Benefits, Social, and Swim Specific. The most important findings were themes related to the impact of the coach in their participation, participants' health and fitness, the positive atmosphere inside the squad /club, competitions (for most), and socialisation. This work has helped to identify a landscape that will assist clubs and organisations to develop and maintain masters swimming programmes. Future research is suggested to broaden the range and numbers of responses geographically and culturally, to consider masters swimming alongside other sporting and non-sporting physical activities in which older people participate and extend the work through theoretical discourse.

Key words: masters swimming, motives, health and fitness, habit, competition, coach.

Introduction

Swimming as a physical activity is an important form of exercise, a valuable training modality, and a critical part of therapeutic interventions (Karau, 2019). As such, it is a worthwhile exercise mode for people of all ages (Stubbs, 2017).

Stimulatory effects of increased concentration, psychomotor development, physical development, increased immunity, improved cardiovascular function, and increased resistance are known to result from regular swimming (Garber et al, 2011; Andrieieva, 2019; Montero-Fernandez & Serra-Rexach, 2013; Olson *et al.* 2017). Even when participation begins after the age of 70, consistent exercise decreases mortality rates and increases life expectancy (Hupin, Roche and Gremeaux, 2015). Increasingly, masters swimming (training and competition for those aged over 25 years) offers opportunities to maintain fitness, to beginners and experienced swimmers alike, as well as an attractive competitive incentive for those who seek it (Medic et al. 2019). One key question for teachers, coaches, health professionals and others working in the field of physical activity with older populations is: how can older people be encouraged to continue with physical activities? Ancillary to that, what can be done to persuade others to participate?

There is plenty of evidence of what drives general swimming participation (e.g., Santi et al., 2014). Studies from UK (Pike, 2012, Romania (Petracovschi, 2011), USA (Medic et al., 2019), Australia (Ferrari et al, 2014) and Canada (Stevenson, 2002) have identified participation motives among older swimmers. There are some contrasting views in the literature around the relative importance of psychological, social, health and fitness, and competitive motives. This might be due to the specific focus of some of the investigations e.g. Ferrari et al (2014) and Young et al. (2015) focussed specifically on the role of the coach. Given the disparate range of motives that have been cited previously, this study was designed to bring some cohesion to the subject area.

The purpose of this study was to identify what underpinned people's practice of masters swimming in the north-east of England. As such, three Research Questions (RQ) were developed. One question was generic in substance (RQ 1), whereas the other two referred to specific issues that have arisen sporadically in the literature: the relevance of psycho-social motives compared with those of health and fitness; and the importance of competition as a motive to train.

Research Questions (RQ)

- RQ 1. What motivates people to practice masters swimming in a swimming club in the north-east of England?
- RQ 2. Are psycho-social motives more important than physical health motives for participation in masters swimming?
- RQ 3. What is the importance of competition in the lives of masters swimmers?

Method

Following ethical approval (Host university Ethics Committee, agreement number, 004057), a purposeful sampling method was used to recruit 12 masters swimmers for interview. The swimmers were between 25 - 76 years of age and from a swimming club in the north-east of England.

Semi-structured interviews were employed using an 'aide-memoire' or interview guide. These allowed for pre-set areas to be covered while providing flexibility to probe further where required (Sparkes and Smith, 2013). Interviews were recorded.

Data Analysis

Recorded conversations were transcribed ‘verbatim’ and names of participants were transposed with an identifier to provide anonymity. Next, transcripts were read to familiarise the researchers with the data, following which descriptive data was extracted for quantitative analysis (e.g., age, sex, number of years in masters swimming).

An inductive thematic analysis (Strauss & Corbin (1998) was then conducted using NVivo12 software. This process followed Braun & Clarke’s (2013) 6-stage model. This allowed for the researchers to interpret the responses, define the data, tag meaning units (meaningful text), list and compare the meaning units, before allocating them into themes and subsequent categories (Glaser & Strauss, 1967).

Inter-Rater Reliability Check

Inter-rater reliability was tested by an experienced qualitative researcher. Through an interactive process, categories, themes, and the relevant placings of meaning units were agreed (Smith & McGannon, 2018). Two complete transcribed interviews were analysed separately, and results compared. Congruence was reached with 85% of meaning units being ascribed to the appropriate themes.

Results

Eight males and four females were involved in the study (mean age of 56.25 years with a range of 25 to 76 years) (Table 1). Males were older than females (Male Mean = 63.9 years; Female Mean = 41 years). Participants were involved in masters swimming for between 2 to 35 years with males having more years training than females (Male Mean = 20.75 years; Female Mean = 11 years).

Table 1: Details of participants including Sex, Age, Age when Started Swimming, Years as Master Swimmer, Competitive Yes/No, Number of training sessions per week.

ID	Sex	Age in Years	Years as a Masters Swimmer	Competitive	Training Sessions per Week
1	M	64	25	Yes	4-5
2	F	65	15	Yes	4
3	M	65	13	No	3-4
4	M	72	20	No	3
5	M	70	23	Yes	2-3
6	F	25	7	Yes	5
7	M	61	31	No	3-4
8	M	68	16	Yes	4
9	M	35	3	No	3-4
10	F	25	2	No	2-3
11	M	76	35	No	4
12	F	49	20	Yes	3-4

Thematic Analysis

Following thematic analysis using NVivo12, 237 meaning units were identified. They were located into 36 Themes and then placed into 8 categories (Figure 1).

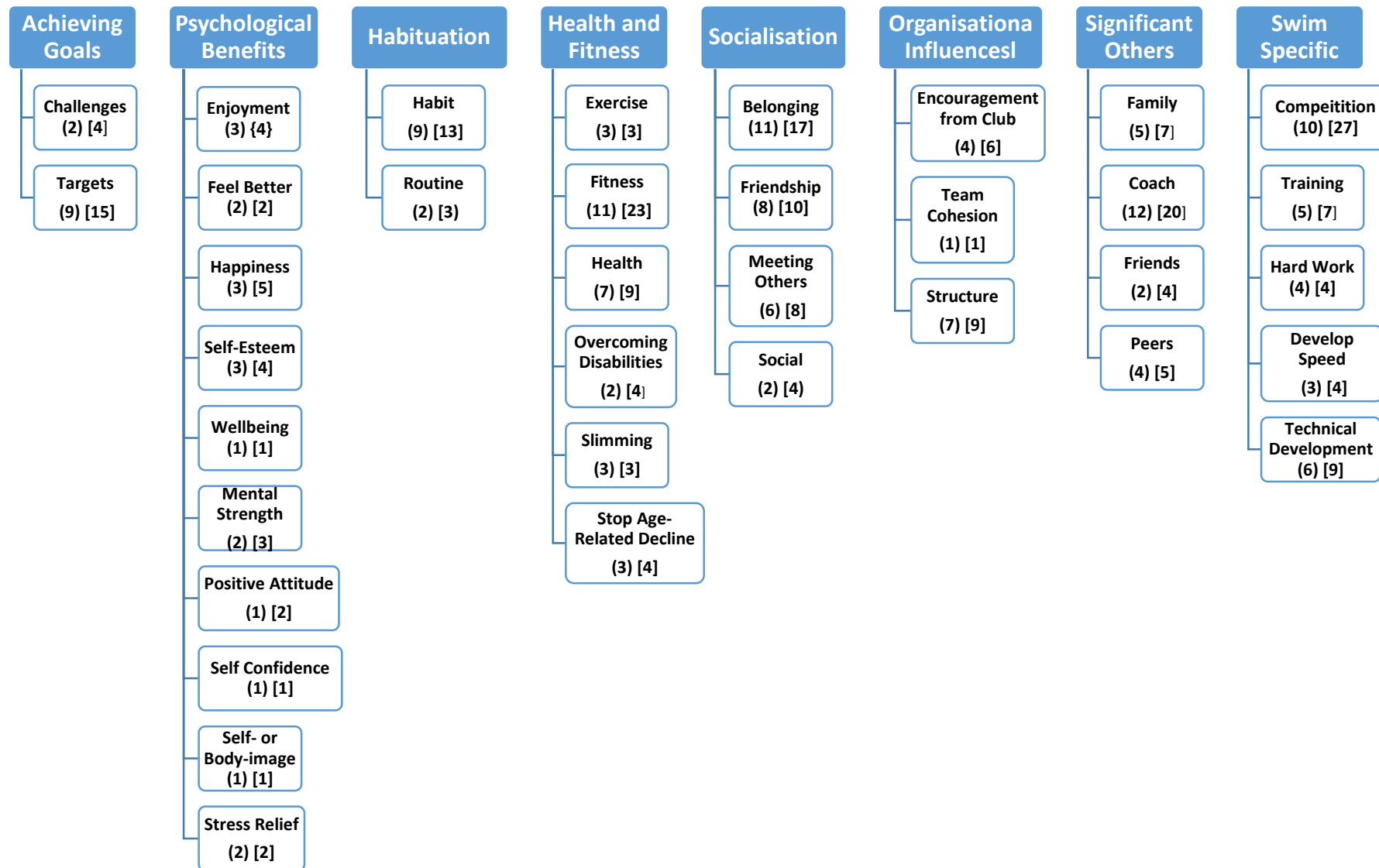


Figure 1: Categories and Themes from Thematic Analysis of Masters' Swimmers Interviews Identifying the (Numbers of) Participants Who Responded and the [Numbers of] Meaning Units Ascribed to Each Theme.

In presenting the results, the relative merits of categories and themes have been based on how many swimmers highlighted the importance of key themes to their decision-making process. This is not a positivistic infiltration of qualitative methods, but a way of legitimately using enumeration to highlight trends (Stake, 2010).

Three research questions were stated at the outset and they will now be addressed in turn:

RQ 1. What motivates people to practice masters swimming in a swimming club in the north-east of England?

Multiple motives determined participation in masters swimming. Four key factors were predominant with positive comments from 11 of the 12 respondents in each category (Figures 1 and 2).



Figure 2: Categories derived from thematic analysis with example (THEMES) and exemplar statements.

Significant Others was one of those categories with ‘coach’ and ‘family’ being the most identified themes. This was exemplified by comments from swimmers, such as:

The **coach** at this club watches how you are swimming, and you always get a technical point such as ‘stretch out more’, ‘make sure that you breathe on the correct side’, so yeah, you get plenty encouragement from him. (Part. 11)

I mean I have a daughter at age 14 and a husband. So, they were totally supportive. I wasn't here [at home] for the last 18 months due to swimming, away at weekends, swimming, training, and racing. So, my **family** are hugely supportive (Part. 12)

Health and Fitness was a strong category with comments covering both ‘health’ and ‘fitness’ as individual constructs, but this category also had other comments that cited them in combination:

Since I started about two years ago, I feel much **fitter**, and a lot **healthier** than when I did ... when I first started, I couldn't complete a full training session, and I was out of breath very easily. These are now a big part of why I keep coming along [to train] (Part. 9)

Similarly, **Social** was a strong category with, specifically, the ‘feeling of belonging’ and ‘friendship’ being two prevalent themes. Interviewees indicated that the positive atmosphere from being part of the team/squad being was one of the most significant motives in their participation with comments such as “I like training with others, it’s more social and I get more out of myself” (Part. 1), being expressed alongside comments of ‘friendship’:

There was the **friendship** thing, because there are four of us of a similar age in the masters and we meet up regularly. You have a bit of a chat on the poolside, and it makes it more pleasant (Part. 4)

In a category entitled **Swim Specific** the opportunity for ‘competitions’ was highest rated, even among those who had come from a recreational swimming background or were relatively new to masters swimming. One recent member to masters swimming said in support of competition:

I started wanting to get fitter and work along with others but then was able to enter my first swimming gala [meet] and after that I was hooked. So, now my training has a meaning, a purpose. I look to the next competition, maybe a few months away and use it as a target (Part. 10)

One of the older members referred back to his earlier years when providing a rationale for the importance of ‘competition’ in his life:

I’m not sure I was hooked on swimming, I was hooked on competition, but certainly because of role models as a child, swimming became much more important for me than other sports. The competitive goal gives me a target, because other than that I would probably stop. So, I need a target and because it’s quite competitive that’s my target, to compete better (Part. 1)

Many physical activities can be habit forming and masters swimming is no different with 75% of our interviewees noting that swimming was a **HABITUATED** behaviour:

You get it into a **habit** of doing something ... I do keep swimming because it's what I want to do. If I sit in the house and don't go swimming, I feel bad (Part. 4)

While there were many agreements about the relevance of some motives, there were others that were more individualised. For example, **Psychological Benefits** were deemed important by many of the respondents, however, there was no overwhelming evidence of one theme (psychological factor) dominating.

In summary, no single factor was deemed important by our masters swimmers, with motivations to participate being multi-faceted. Whereas no individual motive can be cited as 'the' single reason that our swimmers took part in a masters programme, the accumulation of overlapping factors seemed to provide a landscape of motivation for our older people.

RQ 2. Are psycho-social motives more important than physical health motives for participation in masters swimming?

On interrogating of our transcripts, it became apparent that there was a balance between the two factors of psycho-social motives and physical-health motives. All the respondents positively commented in themes within the category of **Psychological Issues**, albeit that none of the themes rated highly as individual factors. In terms of **Social** motivations, 'belonging' was rated highly alongside the roles of 'significant others'. From these findings, it can be theorised that psycho-social issues were deemed of significance in our swimmers' participation.

Likewise, all twelve of our interviewees made comments that were ascribed to at least one of the themes that formed the category **Health and Fitness**. In those specific themes, eleven swimmers indicated that they swam for 'fitness' purposes, with seven stating that 'health' reasons were important in their decision-making. When considered from a different perspective, undertaking physical activities motivated our participants to maintain health and fitness while health and fitness goals motivated them to maintain their swimming.

One interesting phenomenon was the overlapping by some swimmers of themes from all four categories noted above. One commented:

Swimming helps me to maintain a 'positive attitude' and this positive attitude keeps me swimming. I think mentally it keeps you into a position of continuing 'positively' in your life, having the drive to 'stay fit' and 'healthy'. I also think it gives you an attitude which is better for [social] 'relationships' with other people (Part. 4)

This statement makes plain the summary that psycho-social aspects of masters swimming are important motives, in addition and NOT in contrast, to health and fitness.

RQ 3. What is the importance of competition in the lives of masters swimmers?

Despite only six of our cohort defining themselves as competitive swimmers (Table 1), a substantial majority of our masters swimmers found competition important (10 out of 12). Responses denoted the impact that competitions had on their behaviour, manifested by reports of the importance of setting personal goals/targets during training sessions or competitions and working to achieve them. This motivation helped them to challenge themselves, pushing mental/physical barriers, and to be more competitive both internally as well as with others.

Discussion

Masters swimmers in this study were motivated primarily by a number of factors: a healthy lifestyle, to maintain their level of fitness at the highest level possible irrespective of age, attachment to water (habituated behaviour), competing against others, interaction with people, and coach involvement

within a structured training set-up. These findings were similar to those of other studies irrespective of age group. For example, Klint & Weiss' (1987) study with younger swimmers (aged 13 – 19 years) discovered that sports activities in a group undertaking structured training encouraged them to practice regularly in that specific sport. Another similarity with younger swimmers is that our masters swimmers also found the coach to be an incredibly important factor in their participation, based on positive comments from all of our respondents. Younger swimmers haven't commented on organisational structures, so it is useful to know that masters swimmers are influenced by the quality of structured training allied with coach involvement. This might help with the design of masters programmes for the future.

Studies of adults in sport have indicated that they like to meet new people, to have fun together, and compete; with older adults (over 30s) preferring these motives compared with younger adults (20-30 years) (Brodkin & Weiss, 1990). Similarly, the importance of health and fitness is relatively low in younger swimmers (Klint and Weiss, 1987) compared with older swimmers (Brodkin and Weiss, 1990). This contrasts to our findings in which health and fitness garnered substantive support as a motive for participation in this contemporary English group and finds accord with Hastings et al's (1995) investigation of masters swimmers from U.S. and Canada. They found that health and fitness were cited as the most common reasons which influenced their swimmers to take part. In common with their results, we observed a great association between these factors as all our masters swimmers felt that one or other of the components affected their engagement positively. Those responses aligned with contextual comments tend to indicate an awareness of the benefits of swimming among older people given that swimming, as a physical activity, provides such strong health benefits (Stubbs, 2017).

This appreciation of swimming as an outlet to develop positive physical wellbeing, allied with a lifestyle that involved regular physical activity, led to our cohort reporting that a lack of swimming had negative consequences. Reports of feeling emotionally upset if they missed training sessions were made by some of the English swimmers. This expressed an attachment to the physicality of training and also to the atmosphere provided by the squad and club. Our participants answered positively about the habit-forming perspective of their participation, viewing this as a sound influence on their lives, a finding that finds support in Pike's (2012) study.

In addition to the above, the participants in our study were drawn to the idea of challenge. This is not a key motive for young people (Klint and Weiss, 1987), but the idea of challenging oneself is one of the motives which persuades older people to practice a competitive sport in their later years (Hritz & Ramos, 2008). Our study supported the assumption that some older people wanted to prove to themselves that they are still able to tackle and reach challenging objectives (Dionigi, Baker & Horton, 2011). This is backed-up in much of the literature around masters sport e.g. Young & Medic (2011). Those two researchers investigated masters track and field athletes as well as masters swimmers and found that the most common themes were 'training to compete' and 'opportunity to test their skills'. Given their findings and those of this study, it seems that often masters sports men and women have competed throughout their lives, and competition in older years is simply an extension of that.

Notwithstanding the notion of personal challenge as a prime motivator, other people and social structures were also important to our masters swimmers. All of our swimmers spoke about the impact of the squad on their behaviour, especially as they encouraged each other during training sessions and competitions. Most of the swimmers noted that interacting with others was important and how much more positive they were when they are involved in structured training with others, supporting Gill et al's (1996) findings of the benefits of socialisation.

Despite the fact there are general similarities between the sexes in terms of their motives for participating in this sport, Deaner et al. (2016) found that males were generally more motivated by competition and status, while females were more motivated by socialisation aspects. These issues can be observed in this research with a greater proportion of men tending to be competitive than women, and proportionally more women designating a stronger social focus than men. However, it is fair to say, that both have some significance among our cohort, supporting Woodman & Hardy's (2001) findings in elite sport (by definition, competitive) that noted how a friendly, supportive atmosphere influenced the motivations of their participants.

Conclusion

The aim of this study was to identify what underpins people's practice of masters swimming in one region of the UK.

This work has shown that there are many motives for taking part in masters swimming in the north-east of England. The eight categories that were identified covered a wide area of motivations from health and fitness to competitive motives, while also embracing psycho-social motives. Although many common motives were found, others were very individualised, but all our performers gave accounts of multiple reasons for participation.

It is hoped that the results of this study will influence others; both the older people who are thinking of doing sport, as well as clubs and organisations that offer training sessions.

Limitations of the Study and Future Research

The first limitation is that the participants numbers were low, although this suited the methodological approach. Additionally, the swimmers were members of a masters club with a competitive ethos; no truly recreational swimmers were included in the study. However, both of those issues mean that results cannot be generalised to a wider swimming population, irrespective of whether they are masters swimmers or swimmers from all aspects of the adult swimming spectrum.

Future research should be conducted with informal recreational swimmers following the same protocol as this study. This would help identify if there were different motives between the two groups, especially since informal recreational swimmers will be unlikely to be influenced by a coach, structured organisation, and competition. Following this study, and taking cognisance of the literature, it should be possible to develop a questionnaire suitable for a descriptive study and validate it. This would allow more subjects to be recruited and offer greater representativeness.

The third limitation reflects the fact that the findings may not be applicable to all countries and regions due to the location from where the participants were recruited. They were specifically from one area of the north-east of England, thus may not be representative of other English areas, or those from other countries. A greater geographical spread is required to consider local and cultural differences. This could be a worthwhile field for future research, especially if the aforementioned questionnaire was available for use, as it would then extend the location by including the rest of the UK or even wider.

Another limitation is that the study specifically considered only older swimmers. There are many other sports with organised masters groupings, training, and competitions that should be studied. This would allow for comparison, and ultimately greater judgements, to be made about older people's motives for participation in organised sport. The fifth limitation is a methodological one, as this study analysed the data inductively. There was no attempt to view the data through a theoretical lens e.g. testing a specific motivational theory. Again, this met the methodological approach set out at the

beginning of the study. However, it would be useful to consider expanding this present investigation to consider the topic from a theoretical stance.

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