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Youth sailing participation and market segment profiles for Plymouth (UK)

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Abstract

The study aimed to identify and quantify different sailing participation styles for Plymouth youths and to investigate if determinants of wider sports participation can be used to segment the market based on product usage. This was investigated through the use of questionnaires, interviews and secondary data. Four different sailing participation styles for Plymouth youths were quantified; those that have tried sailing, those that have continued to sail, those that have become members of sailing clubs and those that have not tried sailing but would like to. Secondary data and retrospective interviews were then used to compare and explain results. In addition to this, potential determinants of participation were successfully used as bases for market segmentation for two participation styles; those that have tried sailing and those that would like to try sailing. Finally, results from the interviews conducted with professionals from local organisations (specialising in youth sailing) were used to support a differentiated target marketing strategy to increase youth sailing participation in Plymouth.

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1. Introduction

1.1 Contextual basis of study

Over recent years there has been growing concern over the future of dinghy sailing, largely as a result of a reduction in the number of people participating on a regular basis. The Royal Yachting Association (RYA) (2007) and Water Sports and Leisure Participation Survey (2009) both identified a decline in participation over recent years for any boating activity. Moreover, Anderson and Noble (2001) linked a decrease in the number of opportunities to try sports, such as sailing, to an overall decline in participation. Furthermore, Sport England (2007) identified that 0.3% of all UK adults would like to participate in sailing, or participate in sailing more often; thus there is potential for industry growth.

Moreover, generating interest within children has become a key focus of organizations such as the RYA. Initiatives include OnBoard (OB), a scheme which aims to introduce 500,000 children to sailing and windsurfing (RYA, 2008a) by linking sailing clubs with schools and youth groups to create more opportunities for youths to sail (RYA, 2008b). Furthermore, large amounts funding have become available over recent years to financially assist with taster sessions and other strategies of introducing youths to sailing. Sport England, Sport unlimited and the National Lottery are key players in providing funding for sailing; Sport England's £3 million investment in the Weymouth and Portland Academy will benefit not only those with Olympic potential but also those who want to get involved in sailing for the first time (Sport England, 2008). Moreover, the government has also made £160 million available from the New Opportunities Fund and £80 million from the DfEE Standards Fund to support out of school hours learning; including sport and physical education in England such as sailing (DCMS, 2000).

The current study will analyse a sample of Plymouth youths in order to quantify participation and use marketing theory, specifically target marketing, to suggest strategies to increase participation in youth sailing. Target marketing or market segmentation, as defined by Wright and Crimp (2000) is to 'separate from a population the individual units which are then classified into homogenous groups according to chosen characteristics'. Myers (1996) described how this is one of the most important strategic concepts contributed by the marketing discipline to business firms and organizations. Therefore the study will investigate if market segmentation can also be used to increase participation in sailing by aligning the products and services offered by local organisations with the needs of those most likely to participate in sailing. The specific aims and objectives of the current study are shown in Section 1.2.

1.2 Aims and objectives

1.2.1 Aims

- To identify and quantify four different sailing participation styles for Plymouth youths:
 - Those that have tried sailing
 - Those that continued to sail
 - Those that have become members of sailing clubs
 - Those that have not tried sailing, but would like to

- To identify potential determinants of participation that can act as bases for market segmentation based on product usage

1.2.2 Objectives

- To use questionnaire based survey methods to analyse a sample of youths; this is to provide information on participation styles and potential market segments
- To use retrospective interviews to gather information from local professional organisations; this is to support any questionnaire findings
- To gather secondary data about participation in sailing and wider youth sports participation; this is to evaluate and compare results as well as to support explanations for any identified trends

1.3 Outline of structure

The report will review the literature on the youth sports market, determinants of youth sport participation, participation in sailing, latent demand, segmenting, targeting and positioning, market segmentation and youth sports, and segmentation of youth sailing. The method will then be described, including the design of the current study and details of the participants, materials and procedures used for both the questionnaire and interview aspects of the study. Results will be reported and discussed followed by a chapter detailing conclusions drawn. Appendices and references will follow.

2. Literature Review

2.1 Understanding the Youth Sports Market

Throughout previous research the positive impact of sports participation among youths in relation to their health and fitness has always been clear. Parker *et al* (2003) identified a positive relationship between participation in physical activity and improved mental health, reduced risk of cardiovascular disease, reduced risk of non-insulin dependent diabetes, reduced levels of obesity and reduced blood pressure. Moreover, with their sheer size, spending power and social influences youths have become a target for sports organisations and marketers (Bennett & Lachowetz, 2004). Specifically, Lim and Turco (1999) described how the current market is dominated by post World War II 'baby boomers' or Generation X (16% of population). With the inevitable decline in the number of Generation X in society, the influence and spending power of today's youth, Generation Y (youths born between 1982 and 2003, 25% of population), will soon dominate the market. Bennett and Lachowetz (2004) identified a connection between Generation Y and the increased growth of action sports i.e. sailing, thus Generation Y is a desirable target for sports marketing professionals including those working in youth sailing organisations.

Moreover, with regard to spending power, the charity 'Personal Finance Education Group' (2009) revealed in a press release that children and young people (aged 7-16) in England deploy a collective spending power of more than £132 million per week during summer holidays (peak UK sailing season). This is an increase of £23 million per week in disposable

income during the summer holidays than during the rest of the year due to increased earnings and pocket money. This shows that peak sailing season is a particularly affluent time for marketers to focus on youth consumers.

Finally, with regard to social influences, Lim and Turco (1999) associated youths with trendsetting and strong social influence. Young children and adults were found to observe teens to determine the current fashion; thus it was suggested that if sports marketers can get the business of youths, that of others may follow.

2.2 Determinants of youth sport participation

Throughout the literature it is clear that in order to capitalize on the potential of the youth market, sports marketers and organisations must aim to better understand the unique consumer behaviours and characteristics displayed by youths in relation to sports consumption. McCarthy (1994) suggested that of particular importance to sports marketers is an understanding of the type and extent of involvement that youths have in sports and how factors such as age, education and economic background (employment status) act as determinants of participation. The research discussed below investigated such factors as determinants of youth sport participation.

Schreeder *et al* (2005) investigated the involvement of factors such as age, sex and education in determining youth sport participation styles. A time trend analysis of youth participation in various sports was conducted across three decades (1969-78, 1979-88 and 1989-1998) for Belgian high school boys and girls (N=22,424); the researchers successfully differentiated between participation styles for each period and suggested that the changes resulted from a growing responsiveness to wider social trends. Specifically, “young people’s leisure consumption and participation styles continue to be effected by ‘structuring’ and ‘positioning’ characteristics such as age, sex, education and their level of access to material resources” (Schreeder *et al*, 2005, p.322). Furthermore, Furlong and Cartmel (1997) identified similar trends and linked changes in participation styles to educational participation patterns, delayed labour market transitions and an extended length of parental dependency.

Other research has developed categories of determining factors, for example, Mullin *et al* (2000) differentiated between individual (psychological; motivation, perceptions, attitudes) and environmental (external; socio-cultural, situational, gender) influences. Similarly, Shank (2005) provided a model in which internal, external and situational factors are described. Internal factors relate to the psychological influences such as personality, motivation, perception, learning or attitudes, and external influences include culture, social class, reference groups or family. Finally, situational factors involve the individual’s physical surroundings, social surroundings, presence of free time, task definition and antecedent states. Overlaps exist between the models of determining factors for youth sport participation and it is apparent that the determining factors work as part of complex processes. This is supported by Taks and Schreeder (2006) who suggested that these processes are too complex to study as a whole and that researchers should set limits/boundaries as to which determinates they will include in their work. Furthermore, using at least one variable that is internal, external or situational according to Shank (2005)’s model of influencing factors on participation, increases the validity of a study and offers a wider breadth of understanding behind the interaction of different determinants of participation. Sports marketers must therefore select from a wide range of determinants including internal, external or situational, ensuring to pick those that stand to offer the most relevant data to their chosen market.

2.3 Participation in Sailing

This section will discuss the determinants of participation relevant to the UK sailing market. In previous research into sports participation, sailing has been included in broader categories with other similar sports, for example, in Taks and Schreeder (2006) it was grouped with skateboarding and mountain biking under the category named 'popular action'. No research has been carried out to date that has investigated UK youth (under 16) participation in sailing, although wider trends in participation are reasonably well documented for those aged over 16. Having said this, such research has primarily been published by governing bodies and charitable organisations as opposed to peer reviewed journals. Nevertheless, data published by organisations such as the Royal Yachting Association (RYA) and Sport England (representative of the UK adult (over 16) population) can be used to provide an invaluable insight into the wider participation styles and determining factors associated with sailing in the UK.

2.3.1 Watersports and Leisure Participation Survey

The Watersports and Leisure Participation Survey 2008 (WLPS) (2009) aimed to provide robust estimates of participation levels in a range of watersports and water based leisure activities, including sailing, for the UK adult population. Thus there were several divisions of sports within WLPS (2009). Of particular relevance to sailing are data sets relating to any activity, any boating activity, yacht cruising, yacht racing, small sail boat activities and small sail boat racing. Key variables (or determinants of participation) investigated in WLPS included gender, age, socio-economic group, ethnicity, working status, life stage, ITV Regions and postal areas. These variables all fall within the premises laid out by Shank (2005) and Mullin *et al* (2000) for models of determining sport participation, and more importantly, the sets of variables included selected variables from each category (internal, external and situational). The youngest age group studied was 16-34 year olds, falling outside of the specific focus of the current study. However, a summary of the key findings from the study follows, so to provide an overview of the UK adult sailing market, from which conclusions may be drawn regarding the youth sailing market. For the purposes of the current study this data will also form the basis of secondary data, against which the results can be compared.

Summary of key findings relating to sailing from WLPS (2009)

- 16-34 yr old age group was most likely to participate in 'any boating activity'.
- 16-34 yr old age group demonstrated an overall decline in participation over recent years for 'any boating activity'. Specifically, 'small sail boat activities' saw a decrease of 0.28% and 'small sail boat racing' a decrease of 0.23%.
- In both 'yacht racing' and 'small sail boat racing' participants were twice as likely to be male than female.
- For 'yacht racing', 'small sail boat activities' and 'small sail boat racing' participants with the highest participation rate were predominantly from socio-economic group AB. However, due to the hierarchical nature of the socio-economic scale, group C1 were still the largest single group in 'yacht racing', 'yacht cruising' and 'small sail boat racing'.
- Club members participated more often than non-members. Despite this 'small sail boat racing' participants had a reduction in club membership from over 50% of racers being members in 2007 to 33% in 2008.

- The average frequency of participation in ‘any activity’ increased from 2007, thus although many disciplines were experiencing a reduction in participants, those that continued participating did so on a more regular basis.
- 54.8% of people in ‘any boating activity’ participated in a coastal region as opposed to inland. This is an increase from 47.5% in 2007; however, the change in balance is attributed to the reduction of inland participation rather than to a rise in coastal participation.

2.3.2 Active People Survey

Similar research was conducted by Sport England in the Active People Survey 2007/2008 (APS) (2009). The primary focus of the study was frequency of participation among the UK adult population in relation to variables such as age, sex and socio-economic class. Unlike the WLPS (2009), who divided sailing into specific sub-categories, the APS (2009)’s definition is much broader as it included activities such as jet skiing and windsurfing thus it provided a less accurate description of the sailing market than the WLPS (2009). This shows that little attention has been paid to the types of sailing that participants take part in and that variations exist in the definitions used by different authors. For example, WLPS (2009) classified sailing under four categories: cruising, yacht racing, small sail boat activities and small sail boat racing; whereas, APS (2009) included much more diverse activities under the category of sailing and identified between club membership, tuition and organised competition. The current study aims to combine the categories described in WLPS (2009) and APS (2009) to create classifications for the types of youth sailing undertaken in Plymouth, UK.

Despite this, the general trends identified in the APS (2009) are consistent with that of the WLPS (2009). Table 1 (below) provides a summary of the results of APS (2009); of particular significance is that regular participants are more likely to be male than female and that there exists an unbalanced distribution of participants by socio-economic class.

Table 1: From sport England APS, Sailing participation

Active People Survey (APS)	APS 1 (2005/06)		APS 2 (2007/08)		Change (Numbers)	Significant Difference
	Number	%	Number	%		
Overall	64,100	0.16%	90,000	0.22%	25,900	TRUE
Male	46,700	0.24%	65,000	0.32%	18,300	TRUE
Female	17,400	0.08%	25,000	0.12%	7,600	TRUE
Age 16-34	22,400	0.18%	27,400	0.21%		FALSE
Age 35-54	25,200	0.18%	30,600	0.21%		FALSE
Age 55+	16,700	0.12%	32,200	0.23%	15,500	TRUE
White	62,000	0.17%	88,200	0.24%	26,200	TRUE
Non White		*		*		
Limiting Disability or Illness	4,300	0.07%	6,800	0.10%		FALSE
No Limiting Disability or Illness	59,800	0.17%	83,200	0.24%	23,400	TRUE
NS SEC 1-4	46,400	0.22%	66,100	0.30%	19,700	TRUE
NS SEC 5-8	10,100	0.07%	13,300	0.09%		FALSE
NS SEC 9	7,700	0.18%	10,900	0.25%		FALSE

A parallel study by Leeworthy and Wiley (2001) was conducted in the U.S. that investigated sailing participation levels in relation to variables such as age, sex, educational level, household income and coastal versus inland locations. The research successfully concluded that with the exception of sex, each of these variables was statistically significant in explaining participation in sailing. This evidence further supports the existence of a relationship between determinants of participation (e.g. frequency) and the influences identified within WLPS (2009) and APS (2009).

Although this research provides an overview of the general sailing market, no research to date has focused on or even included youths between the ages of 8 and 16. Having said this, it seems reasonable to suggest that overlaps between determinants of youth sport participation and determinants of adult sailing participation exist, thus leading to the assumption that youth sailing participation may also be heavily influenced by these same factors, e.g. age, gender and socio-economic background.

2.4 Latent Demand

BusinessDictionary.com (2010) define latent demand as a desire or preference which consumers are unable to satisfy. There are many reasons that this state may occur, primarily that: no existing products/services exist to satisfy need, a lack of awareness, lack of general information, financial constraints or geographic restrictions. The marketing task is to measure the size of the potential market and develop goods and services to satisfy this latent demand; thus increasing actual demand for the products/services sold by that organisation.

2.5 Segmentation, targeting and positioning

Segmentation, targeting and positioning forms the primary strategy of modern marketers striving for success in the modern business environment (Weinstein, 1994). Kotler (1994, p. 265) defined market segmentation as “the act of identifying and profiling distinct groups of buyers who might require separate products and/or marketing mixes”. This definition has changed very little from Smith (1956)’s original definition of market segmentation, which stated that “market segmentation involves viewing a heterogeneous market as a number of smaller homogenous markets, in response to differing preferences, attributable to the desires of consumers for more precise satisfaction of their varying wants” (as cited in Wedel & Kamakura, 1998, p.3). Weinstein (1994) described how the successful application of market segmentation can assist sports marketers to design products that are responsive to the needs of the marketplace, determine effective promotional strategies, evaluate market competition and gain insight into present marketing strategies by better understanding the customers’ needs.

2.5.1 Segmentation

The variables used to group consumers sharing common needs, or bases for segmentation, have been the focus of much research. Shank (2005) identified six bases for segmentation, these were geographic (i.e. location), demographic (e.g. age and gender), socio-economic (e.g. income and education), psychographic (e.g. lifestyle or opinions), usage benefits (i.e. consumer needs and desired product) and behavioural (Frequency/size of purchase). These bases for segmentation are commonly accepted (e.g. by Weinstein, 1994 and Mullin *et al*, 2000) and can be used individually to identify market segments if required. However, Schreeder *et al* (2005) stated that common marketing practice is to use a pre-determined combination of variables to segment the market. Moreover, Schreeder *et al* (2005) outlined a

set of six criteria based on previous literature that each market segment must meet in order to be credible; these are identifiability, substantiality, accessibility, stability, responsiveness and actionability.

2.5.2 Targeting

Once the market has been segmented, the effectiveness and profitability of each market segment must be established. Assessing the potential of each segment individually allows an organization to selectively target the segment(s) that offer the best chance of attaining the firms' aims and objectives in view of its marketing strategy and resources (Shank, 2005). According to Weinstein (1994) the evaluation process to identify the most desirable market segment must take into account customer needs, internal business environment (i.e. finance and resources), the external market environment, opportunities versus problems and corporate objectives.

2.5.3 Positioning

Shank (2005) described how positioning exists within the mind of the individual; it is influenced by their perceptions of the product/service relative to competitive offerings. Weinstein (1994) described how organisations are able to position their product/service in ways that create the best possible competitive advantage, i.e. through the formulation of a unique marketing strategy, including manipulation of the 4 p's (produce, price, place and promotion). For example, most entry level sports equipment would be positioned using low price and high durability with a possible reduction in performance. Conversely, professional equipment would primarily focus on superior quality and high performance, but potentially with an increase in price. Additionally Shank (2005) stated that due to the heterogeneous nature of the market as a whole, a well structured marketing strategy may lead to the positioning of a single product/service being varied between different market segments in line with associated variations in attitude. Regardless of the type of product or service offered, it is clear that the process of segmentation, targeting and positioning plays a critical role in the formulation of any strategic marketing strategy. Therefore, youth sailing organisations can employ this process to increase their sustainable competitive advantage over rival organisations and to increase the overall levels of youth participation.

2.6 Market Segmentation and Youth Sports

Market segmentation enables sports marketers and organisations to plan marketing strategies that accurately position their product/service in line with a specific segment(s) so to better meet the needs and wants of that segment(s), thus creating more demand for their product/service. Specifically, Taks and Schreeder (2006) stated that market segmentation can be used to retain members of a sport, identify potential segments for growth, find opportunities for cross selling and select suitable communication channels to reach the target market.

Very little peer reviewed work has been carried out to date that has specifically aimed to segment the youth sports market; the focus of sports segmentation has tended to be on spectators of sporting events rather than in participation consumption (e.g. Armstrong & Paretto Stratta, 2004; Trail *et al*, 2003a; Trail *et al*, 2003b). Furthermore, studies that investigated participation tended to focus towards psychographic variables such as attitudes or motivation (e.g. Brooks, 1998; Park, 2001); i.e. *why* people participate rather than *who* participates. Funk *et al* (2003) suggested that future studies should go beyond motives for

participation and should examine environmental and developmental factors affecting participation. This recommendation for further work is also supported by the work of the UK Health Education Authority (1997) and Dagkas and Stathi (2007).

Taks and Shreeder (2006) successfully used situational and contextual variables as the basis to segment the youth sports market; specifically, they used demographic, socio-economic and psychographic characteristics of different components of sports participation behaviour (e.g. intensity). These were analysed using logistic regression modelling and ad-hoc methods. The experimenters identified five youth sports participation styles; these were traditionally organised, family orientated, aesthetic, exclusive glide and popular action. Furthermore, non-linear canonical correlation was used to create a perceptual map of market segments based on a multitude of sports behavioural, demographic, socio-economic and psychographic characteristics. This revealed that age, sex, gender, socio-economic status, education, parental participation in sports and organisational context can be used as bases to segment the youth sports market based on usage (i.e. level of participation, number of sports practiced and sport preference).

2.7 Recommendations for future research

Previous investigations of sports participation styles provide limited information on specific sports, e.g. sailing, as a result of similar sports often being categorised as one. Therefore, Taks and Schreeder (2006) recommended that future work should use individual sports, such as sailing, as the dependant variable.

Additionally, the Health Education Authority (1997) suggested that there has been very little youth sports research specific to the UK. Having said this, since its publication in 1997 there has been a small increase in UK research, e.g. Dagkas and Stathi (2007), WLPS (2009) and APS (2009); however, such research investigated the determining factors of sports individually rather than using regression modelling to identify potential market segments. Therefore future work in the area should focus on the use of regression modelling to allow for more detailed results regarding market segmentation.

Dagkas and Stathi (2007) conducted a study exploring the social influences on participation of 16 year old youths from the Midlands UK (N=52) in physical activities. Through use of qualitative methodology (i.e. group interviews), the study linked involvement in physical activity to students' social class, home environment and economic status. However the qualitative responses to questions asked were difficult to summarise or analyse using conventional statistical methods, thus the paper failed to provide any useful data that would allow for valid comparisons to be made. Thus future work must aim to use conventional statistical methods to allow for meaningful results to be obtained.

2.8 Segmentation of Youth Sailing

Due to the absence of previous research specifically segmenting the UK youth sailing market, the current study will test if overlapping variables/determinates found in youth sport participation and adult sailing participation will successfully identify market segments for youth sailing in Plymouth, UK. Specifically, previous research shows that age, gender, education, socio-economic background, organisational context and parental participation influence youth sport participation (e.g. McCarthy, 1994; Mullin *et al*, 2000; Shank, 2005) and UK adult sailing participation (e.g. WLPS, 2009; APS, 2009) and are also commonly accepted bases for market segmentation (e.g. Weinstein, 1994; Mullin *et al*, 2000). It therefore seems appropriate

to use these variables as the basis to segment and analyse the youth sailing market of Plymouth, UK.

The current study will use a combination of questionnaires, interviews and secondary data to triangulate results and provide a more balanced view of youth sailing in the Plymouth area. This will form a cross-sectional, differential research design (Gravetter and Wallnau, 2004); combining descriptive and analytical elements, utilising both qualitative and quantitative data.

3. Method

3.1 Design

The demographic, socio-economic and psychographic characteristics of different components of participation (e.g. intensity, diversity and organizational context) were investigated using a differential research design (Gravetter and Wallnau, 2004). Thus the research involved no manipulation, but attempted to compare and establish differences between pre-existing groups defined by participant variables such as whether participants have tried sailing before, whether they continued to sail, whether they are club members and whether they would like to try if they have not previously. Dependent variables such as age, gender, school, where participants first tried sailing, what type of sailing, frequency of participation, participation in other sports, family unit size, socio-economic class and parental participation were then measured for each participant to obtain a set of scores within each group. Statistical analysis was then performed. Retrospective semi-structured interviews were then carried out to provide supplementary marketing information and validate conclusions drawn from questionnaires. The aim of this was to gain an understanding of the experiences of local organisation engaged in delivering youth sailing in Plymouth and to identify any strategies currently in place for increasing and maintaining participation.

Details of the pilot study, participants, materials, procedure, operationalisation of the variables and statistical analysis procedures will be described for the questionnaire in section 3.2 and details of the semi-structured interviews in Section 3.3.

3.2 Questionnaires

3.2.1 Pilot study

A pilot study was completed on 10 youths to check understanding, functionality and effectiveness of the questionnaire. Largely there were no problems, however, the order of questions was revised and a minor grammatical error changed.

3.2.2 Participants

64 primary schools and 16 secondary schools were contacted using the Plymouth Schools Register. 5 primary schools consented to take part in the research thus 836 questionnaire packs were distributed to the participating primary schools. Each of the schools represented a geographically different location in and around the City of Plymouth. Once distributed 120 questionnaires were returned. Participants were males and females aged between 8 and 11 years of varying socio-economic class from the different schools. All participants gave consent for participation in the study and all parents gave consent for their child to participate in the study.

3.2.3 Materials

The questionnaire (see Appendix A) was distributed in a pack along with a cover letter (see Appendix B), information sheet (see Appendix C), information regarding a prize draw incentive (see Appendix D), consent form for youth (see Appendix E), consent form for parent (see Appendix F) and a debrief sheet (see Appendix G).

The questionnaire consisted of a brief introduction, questions about the youth, questions about the parent/guardian assisting with completion, questions about a partner if applicable and questions about the family background. The appearance was designed to be welcoming and not overbearing; balance was needed between the amount of writing on each page and keeping the total number of pages (questionnaire thickness) low.

The cover letter provided information about the researcher including his contact details, the nature of the project and questionnaire, free prize draw and instructions of the procedure to follow. The information sheet was designed to brief the participants about the procedure and to provide details of how to withdraw should a participant want to. An incentive was used to encourage the completion and return of the questionnaires. This involved a free prize draw for all respondents with the prize being two places on a Mount Batten Centre Adventure Day. The prize was designed to appeal to children and parents and increase awareness of opportunities to sail in Plymouth and provide two participants with the opportunity to try sailing for free (normal value £70). Consent forms for both youths and parents allowed the researcher to gain written consent from participants. The debrief sheet was included to inform participants of the importance of their contribution, remind them of procedures to withdraw and to provide them with contact information should they have any questions or problems.

The questionnaire packs were distributed within unsealed envelopes; this was to allow parents and children to return the completed pack in the same envelope, increase the professional appearance of the questionnaire, protect the documents and protect any confidential information within the questionnaire pack.

3.2.4 Procedure

Primary and Secondary schools in and around Plymouth were contacted using the Plymouth Schools Register. Questionnaire packs were then delivered to consenting schools to be distributed in class. Students took them home to be completed with their parent/guardian allowing for information on socio-economic class and parental participation to be collected. Each participant was required to read the information sheet, sign the consent forms, complete the questionnaire, retain the debrief sheet and complete the prize draw entry form should they wish to enter. Once completed the questionnaires were returned to school where they were collected approximately 3 weeks later (allowing time for late returns) by the researcher.

3.2.5 Operationalisation of the variables

Table 2 shows the operationalisation of sports or sailing participation behaviour. These variables were designed to allow for market segmentation based on product usage, aligning with the 'observable-product-specific group' of Wedel and Kamakura (1998) i.e. frequency, usage type and variety. Moreover, the questions allowed for the organisational context of participation to be established for active participants. Furthermore, identification of latent demand in sailing was achieved through determining whether those surveyed that had not tried sailing would indeed like to.

Table 2: Overview of operationalisation of participation components (product usage)

Variable	Profile Categories
Non-participation	Does not sail
Level of participation	Low active - (once or twice per year / every couple of months) Moderately active – (Once per month) Active – (Once per week) Highly active – (3 + per week)
Tried sailing	Has tried Has not tried
Organisational context (if continues)	Club member Non-club member
Like to try (If has not already)	Like to try Not like to try

The bases for segmentation followed that carried out forward by Weinstein (1994), as shown in Table 3. Age, sex, family size and socio-economic class of family align with the ‘general-observable quadrant’ of Wedel and Kamakura (1998), and variables such as parental participation form psychographic influences or ‘general-unobservable quadrant’. In combination these two sets of variables were designed to allow for the creation of identifiable market segments.

In order to determine the socio-economic variable the National Statistics Socio-economic Classification (NS-SEC) was used. It was constructed specifically to measure employment relations and conditions, whereas previous used methods such as Social Class and Socio Economic Grouping required sensitive personal information such as financial income and level of education. It was felt that the NS-SEC was not only the most recent and up to date test, but that it used questions that were less intrusive to those completing the questionnaire. This was considered appropriate so as to minimise the risk of people choosing to opt out. Therefore, the prescribed questions from the NS-SEC were included in the questionnaire, once the data was collected these questions were converted into simplified NS-SEC scores (1-8).

Table 3: Overview and operationalisation of demographic, socio-economic and psychographic variables

Variable	Profile Categories
Age	In years
Sex	Male Female
Where first sailed	School activity RYA Course Youth Group With Parents With friends
Type of sailing (if continues)	School activity RYA courses Youth Group Family Friends Racing Race training
Diversity of sports participation	Does regularly participate in other sport Does not regularly participate in other sports
Family Size	Total number of children + adults
Parental participation in sailing	Does sail Does not sail
Parental participation in other sports	Does participate in other sports regularly Does not participate regularly
Socio economic NS-SEC (1-8)	1– Higher managerial and professional occupations 2– Lower managerial and professional occupations 3 – Intermediate occupations

	4 – Small employers and own account workers
	5 – Lower supervisory and technical occupations
	6 – Semi-routine occupations
	7- Routine occupations
	8 – Never worked / long-term unemployed

3.2.6 Statistical analysis procedures

In order to collate and analyse the data SPSS 17 was used. Firstly descriptive statistics of the sample were taken; secondly chi-square tests of independence were used where suitable to identify any variables that exhibited differences between groups i.e. those who have tried sailing vs those who have not, active participants vs those no longer participating, club members and non-members and finally those who would like to try sailing for the first time and those who do not. P was set at 0.05 as in line with other previous research in this area. Furthermore, graphical tools were used to display distributions and assist in comparisons between groups.

3.3 Interviews

3.3.1 Participants

Retrospective, semi-structured interviews were carried out with representatives from Plymouth based organisations specifically engaged with increasing youth sailing participation. Details of participants interviewed are given in Table 4. Participants were selected due to their focus on increasing youth sailing participation in Plymouth. All participants gave consent for participation in the study.

Table 4: Description of interviewees

Participant	Organisation description	Role
1	Charitable sailing organisation, links to RYA OnBoard Scheme. Provide an opportunity for young people to maintain their interest and continue to develop their skills and confidence through youth work and adventurous water activities	Secretary/ Development Officer
2	Yacht Racing, adult and youth dinghy sailing	Commodore
3	Learning, Educational and Developmental opportunities that would otherwise be beyond the means of inner city communities of Plymouth	Business Manager

3.3.2 Materials

Participants were approached via e-mail or telephone. A time and location for interview was then confirmed and the interviews were conducted in person where possible. For the organisations where it was not possible to meet in person interviews were conducted over the telephone or via e-mail. In all formats the responses of the interviewees were recorded on the answer sheet (see Appendix H). A debrief sheet (see Appendix I) was provided informing the interviewees of the nature of the interview.

3.3.3 Operationalisation of variables

The interviews were semi structured and used open and closed questions, fixed response and Likert scale measures of attitudes. The questions and variables anticipated for results are shown in Table 5.

Table 5: Interview questions, response types and anticipated variables

Question	Response Type	Variables
Which organisation are you from?	Open	Name of organisation
What is your role in the organisation?	Open	Roles within organisation
What types of sailing activities does your organisation provide?	Open	Different sailing activities engaged in
How important is youth participation to the future of sailing?	Fixed	<i>Very Important, Important, Neutral, Unimportant, Very Unimportant</i>
What trends have you experienced in the number of children participating in sailing over the last 1-3 years?	Fixed	<i>Increasing Rapidly, Increasing, Neutral, Decreasing, Decreasing Rapidly</i>
What situational factors do you think influence children who haven't sailed before wanting to try?	Open	Situational and contextual determinants of latent demand
What situational factors do you think influence children who have tried sailing and are continuing to participate?	Open	Situational and contextual determinants of maintaining participation
What is the best age to try sailing for the first time?	Fixed (Years)	<i>0-3, 4-7, 8-11, 12-15, 16+</i>
What measures/actions do you take to encourage youths to try sailing?	Open	Strategies to increase participation
What measures/actions do you take to maintain participation once they have tried sailing?	Open	Strategies to retain participants
Do you specifically target a particular market segment, if so what is it?	Open	Identification of existing segmentation strategies
Approximately what percentage of children aged 8-11 do you think: Want to try sailing? Have tried sailing? Continue to sail? Do not sail again? Become club members? Do not join clubs?	Open	Percentage estimates describing participation rates and latent demand

4. Results

4.1 Questionnaires

4.1.1 Descriptive statistics of sample

Descriptive statistics for age, gender, school, family unit size, participation in other sports, socio-economic class and parental participation in sailing are illustrated in Figures 1 – 7. Raw data are available in Appendix K.

Age

The mean age of participants ($n = 120$) was 9.38 years (S.D = 1.187). The age distribution of the sample is illustrated in Figure 1.

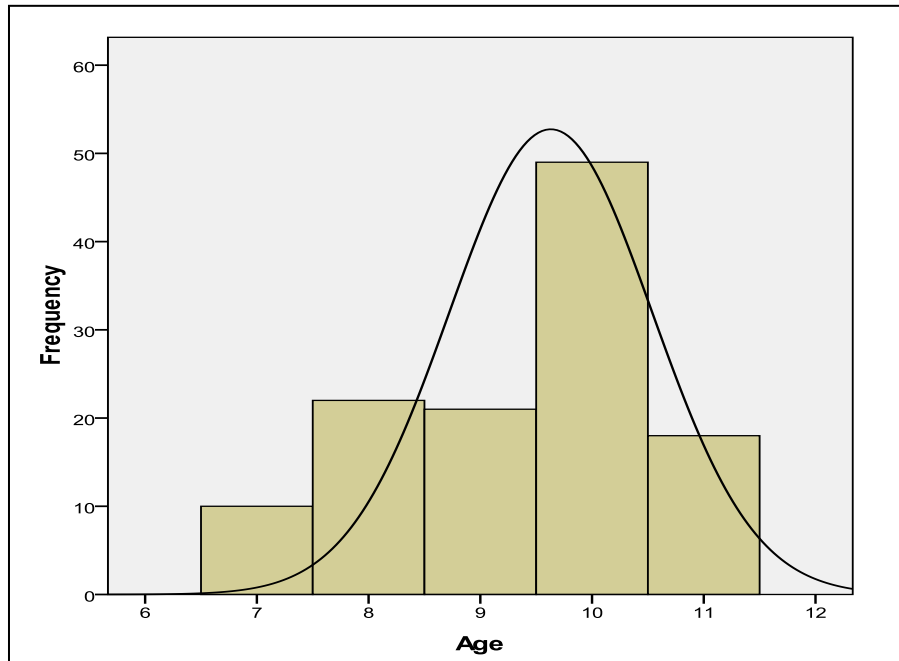


Figure 1: Histogram to show the age distribution of sample ($n = 120$)

The data in Figure 1 shows that the mean age was 9.36 years (S.D = 1.187)

Gender

Secondly, the gender distribution of the sample is illustrated in Figure 2.

The data in Figure 2 show that of the participants ($n = 120$) 39.2% were male and 60.8% female.

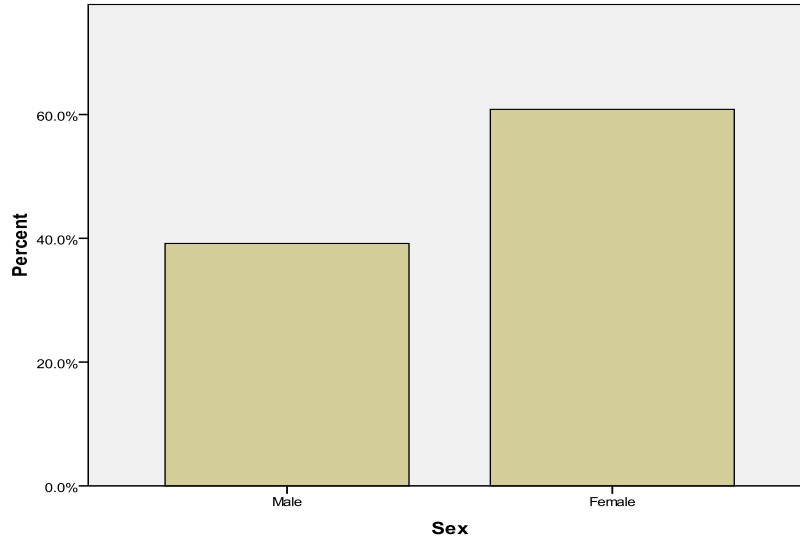


Figure 2: Bar chart to show the gender distribution of sample (n = 120)

School

The distribution of the sample by school attended is illustrated in Figure 3.

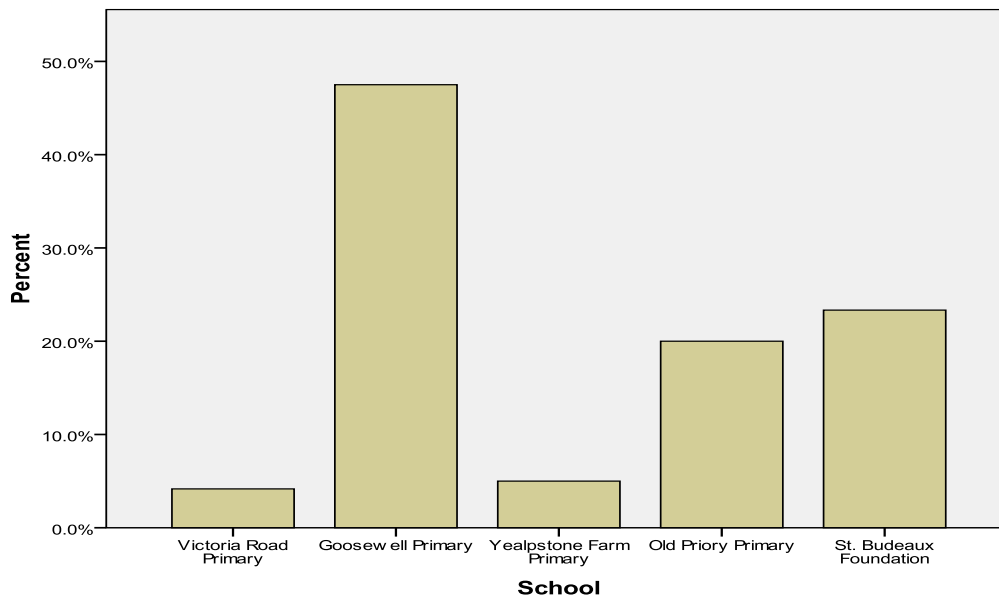


Figure 3: Bar chart to show distribution of school attended (n = 120)

Figure 3 shows how the various schools contributed to make up the overall sample; specifically, Goosewell Primary School represents the largest contribution and Victoria Road Primary School the least.

Family unit size

The distribution of participants' family size is shown in Figure 4.

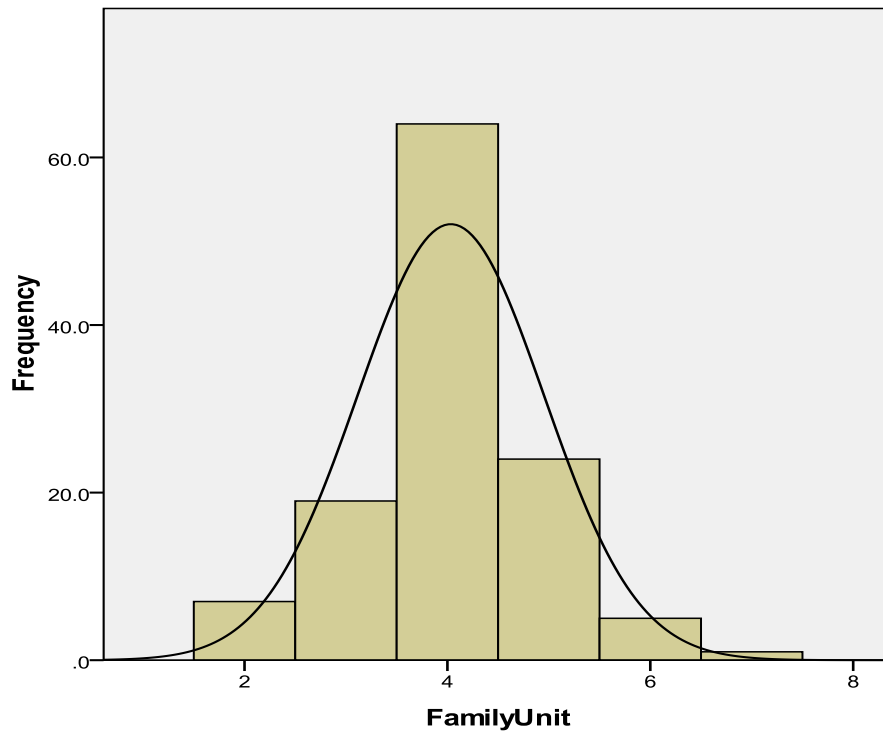


Figure 4: Histogram of family unit size (n=120)

Figure 4 shows how the mean family unit size was 4.03 (S.D. 0.916).

Participation in other sports

The proportion of participants that do and do not participate in other sports is shown in Figure 5.

Figure 5 shows that 64.8% of the sample participate in other sports and 35.2% do not.

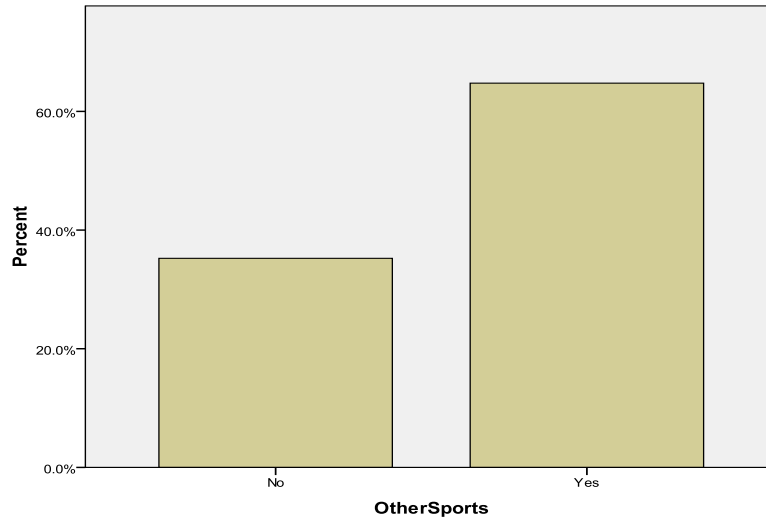


Figure 5: Bar chart to show participation in other sports.

Socio Economic Class

The mean socioeconomic class was 5.02 (S.D. = 1.725). The distribution of socioeconomic class is illustrated in Figure 6.

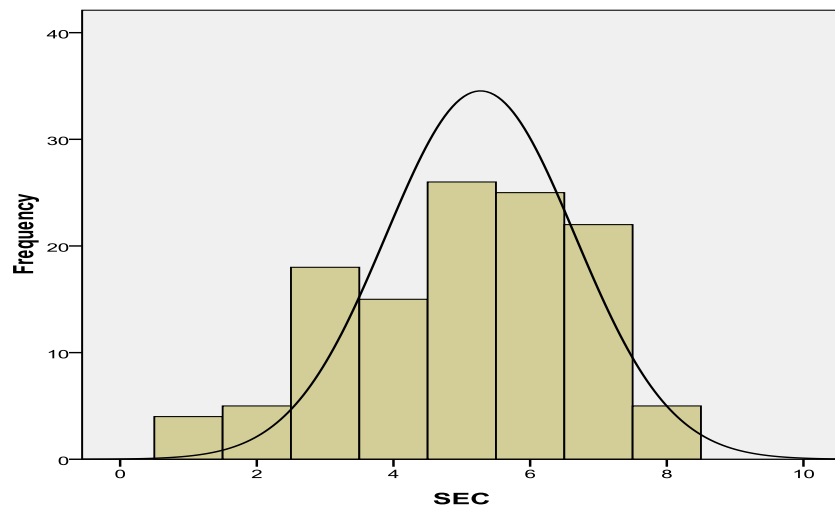


Figure 6: Histogram to show the Socio Economic Class distribution of sample (n = 120)

The data in Figure 6 shows that the distribution of socioeconomic class followed a normal distribution.

Parental participation

The proportion of participants that had at least one parent who participated in sailing is shown in Figure 7.

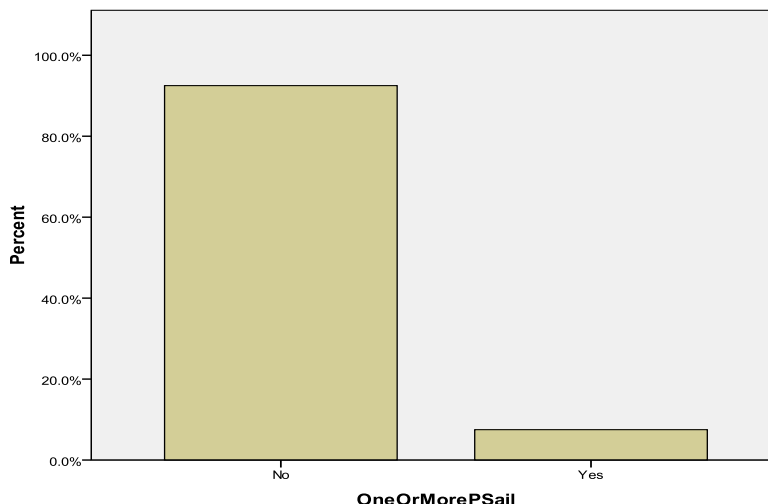


Figure 7: Bar chart showing parental participation in sailing

Figure 7 shows that 7.5% of participants had at least one parent that sailed and 92.5% did not.

4.1.2 Summary of key results

Participants that have tried sailing

Of the sample (n=120), 6.7% stated that they had tried sailing at least once before. Where participants stated that they had first tried sailing is shown in Figure 8.

Figure 8 shows that 25% tried sailing with parents, 37.5% as part of a sailing club/youth organisation and 37.5% as part of a school activity.

Furthermore, family unit size was found to be of importance with regards to participation in sailing. A Chi Square Test for Independence revealed that family unit size was statistically different for those that have tried sailing compared to those that have not tried sailing, $X^2 = (5, N=120) = 19.083$, $P = 0.002$. Figure 9 shows the family unit size of participants that have tried sailing and those that have not tried sailing.

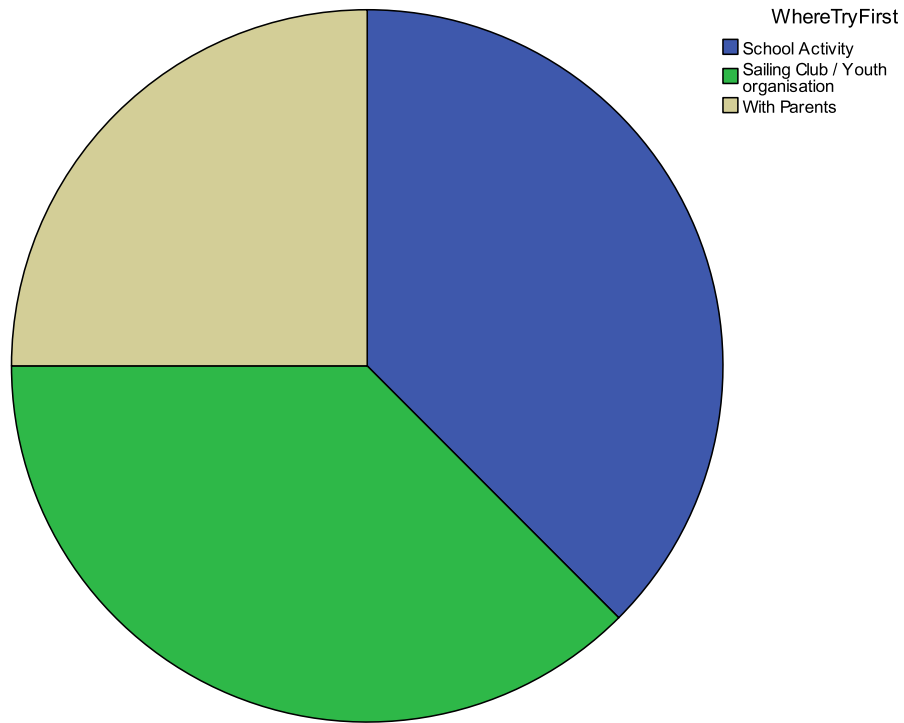


Figure 8: Pie Chart to show the ways in which youths tried sailing for the first time (n = 120)

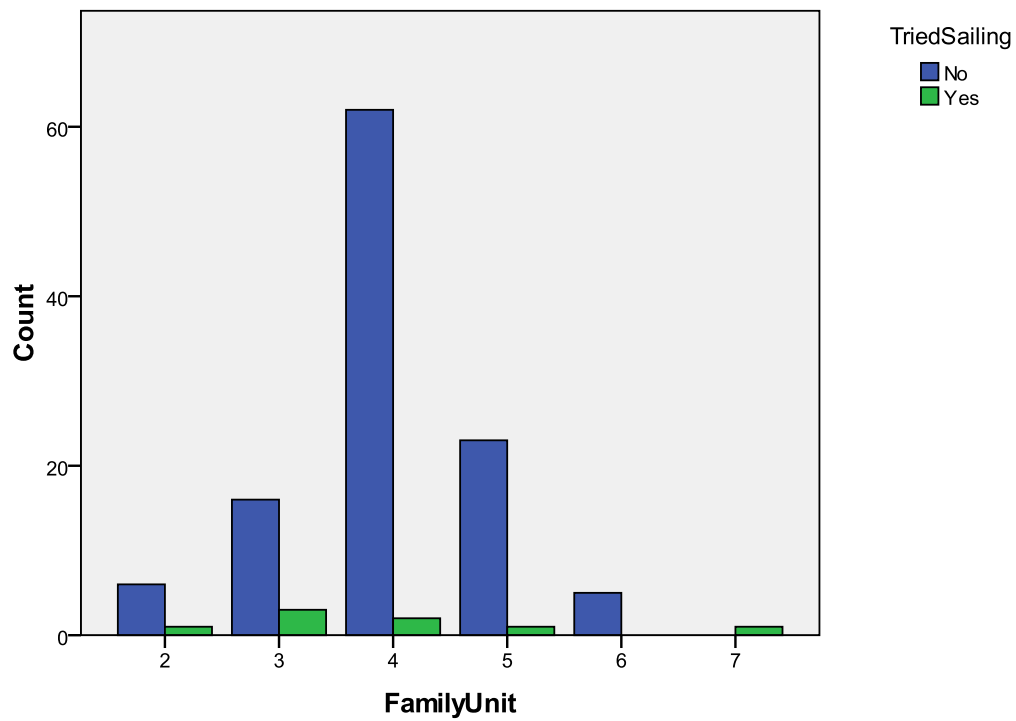


Figure 9: Frequency bar chart to show whether participants have 'tried sailing' and 'family unit size' (n = 120)

The distributions in Figure 9 suggest that participants who have tried sailing come from smaller family units (2 or 3 persons) and those that have not tried come from larger family units (4 or more).

Furthermore, a Chi Square Test for Independence revealed that parental participation (one or more parent that sail) was statistically different between those that have tried sailing compared to those that have not, $X^2 = (1, n=120) = 11.120, P = 0.001$. This suggests that youths are more likely to have tried sailing if at least one parent also participates in the sport.

Furthermore, 78.8% of participants that had at least one parent that were members of a sailing club stated that they have tried sailing.

Finally, age, gender, school, participation in other sports and socio-economic class failed to reject the null hypothesis in Chi Square Tests for Independence; therefore, there are no statistically significant differences for these variables between those that have tried sailing compared to those that have not tried sailing.

Participants that have continued to sail

Of participants that had tried sailing, 37.5% have continued to sail whereas 62.5% have since stopped. Therefore, 2.5% of the total sample were participating in sailing at the time of completion of the questionnaire.

Moreover, Figure 10 shows the ages of participants who have continued to sail and participants who have stopped.

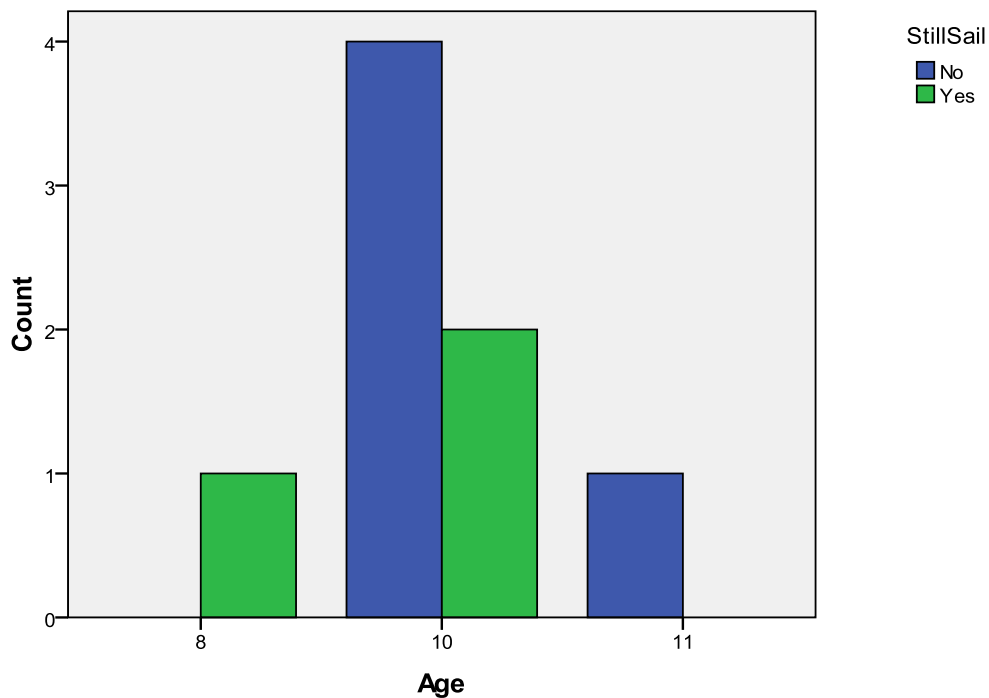


Figure 10: Bar chart to show whether participants 'still sail' and age ($n = 120$)

Figure 10 shows that participants who have continued to sail have a mean age of 9.33 years (S.D. 0.447), which is lower than that of participants who have stopped sailing (M = 10.2 years; S.D. = 1.155). This difference was not statistically significant.

Finally, age, gender, school, where participants first tried sailing, participation in other sports, family unit size, socio-economic class and parental participation failed to reject the null hypothesis in Chi Square Tests for Independence; therefore, there are no statistically significant differences for these variables between participants that continue to participate and those that do not.

Participants that are club members

Of participants that have continued to sail, 66.6% stated that they were club members; moreover, all stated that they participate 'once per week'. 33.3% of participants that have continued to sail stated that they were not club members and that they participate less often i.e. 'every couple of months'.

Age, gender, school, where participants first tried sailing, what type of sailing, frequency of participation, participation in other sports, family unit size and socio-economic class failed to reject the null hypothesis in Chi Square Tests for Independence; therefore, there are no statistically significant differences for these variables between those that stated they were club members and those that stated that they were not.

Participants that would like to try sailing

The proportion of participants that wanted to try sailing is shown in Figure 11.

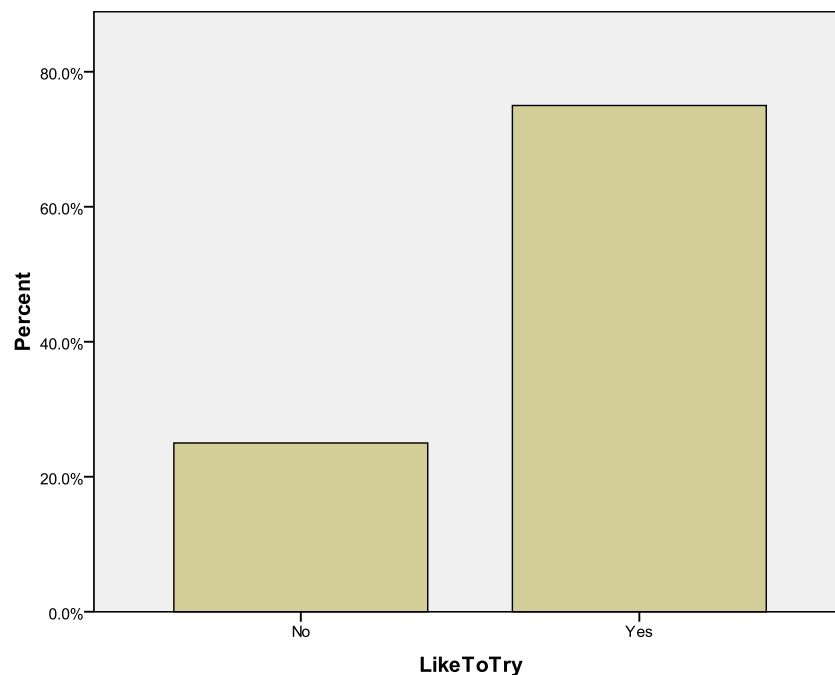


Figure 11: Bar chart showing desired participation rates (n = 120)

Figure 11 shows that of the sample who had not tried sailing (n=112), 75% stated that they wanted to try in the future and 25% stated that they did not.

Furthermore, participation in other sports was found to be of importance with regards to whether participants would like to try sailing or not. A Chi Square Test for Independence revealed that participation in other sports was statistically different for participants that would like to try sailing compared to those who would not, $X^2 = (1, n=120) = 17.960, P < 0.001$. This suggests that participants that would like to try sailing also participate in other sports; and that those who would not like to try sailing do not participate in other sports.

Moreover, family unit size was found to be of importance with regards to whether participants would like to try sailing or not. A Chi Square Test for Independence revealed that family unit size was statistically different for participants that would like to try sailing compared to those who would not, $X^2 = (4, N=120) = 18.119, P < 0.005$. This suggests that participants that would like to try sailing come from larger sized family units; and that those who would not like to try sailing come from smaller sized family units. Figure 12 shows the family unit size of participants that would like to try sailing and those that would not.

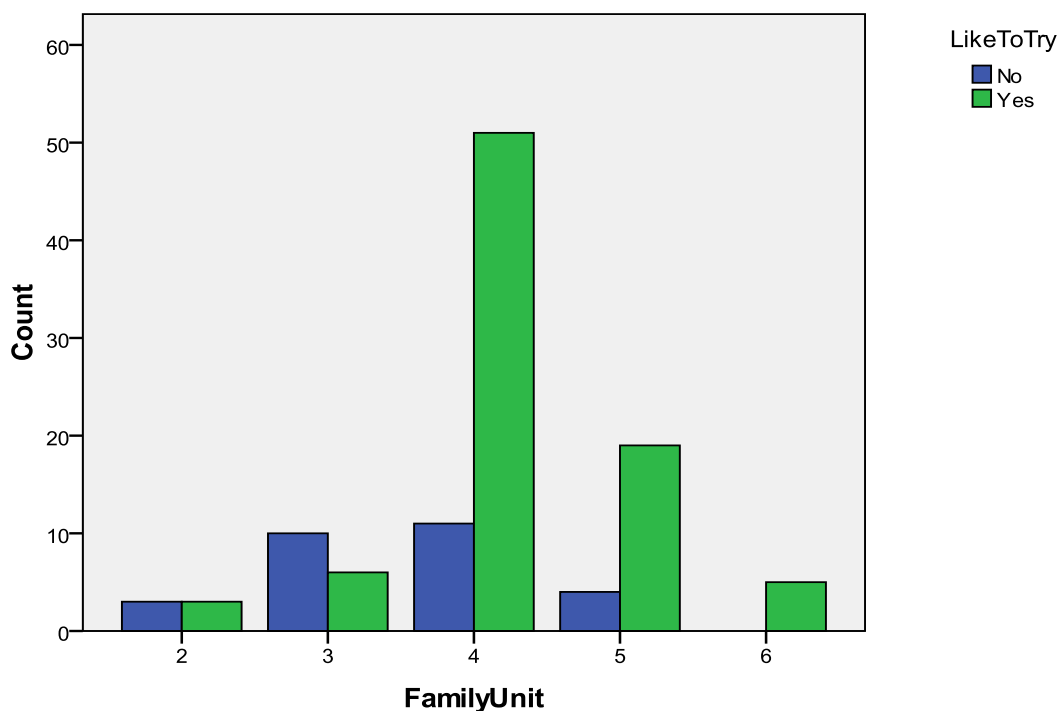


Figure 12: Frequency bar chart to show whether participants would 'like to try sailing' and family unit size (n = 120)

The distributions in Figure 12 suggest that participants that would like to try sailing come from larger family units (4 or more) and that those who would not like to try sailing come from smaller family units (2 or 3 persons).

Participants that stated that they would like to try sailing had a mean Socio Economic Class of 4.86 (S.D = 1.798) compared to participants that stated that they would not like to try sailing

($M = 5.32$; $S.D = 1.467$), this was not a statistically significant difference. Figure 13 shows the Socio Economic Class of participants that would like to try sailing and those that would not.

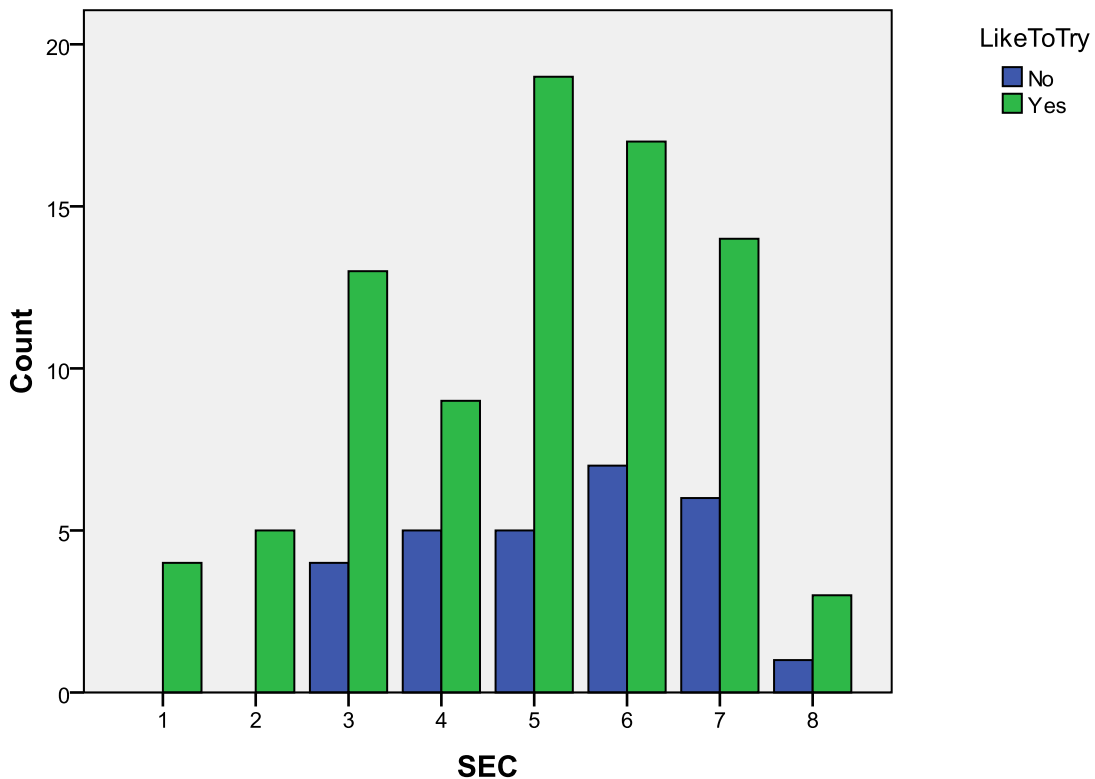


Figure 13: Frequency bar chart to show whether participants would 'like to try sailing' and socio economic class ($n = 120$)

The distributions in Figure 13 suggest that participants that would like to try sailing come from similar socio economic class as those who do not want to try sailing, however, socio economic classes 1 and 2 (upper classes) are the only ones where all participants would like to try.

Finally, age, gender, school, where participants first tried sailing, what type of sailing, frequency of participation, participation in other sports, family unit size and socio-economic class failed to reject the null hypothesis in Chi Square Tests for Independence; therefore, there are no statistically significant differences for these variables between those that would like to try sailing and those that would not.

4.2 Interviews

A summary of the results of the three interviews is given below; full summaries for each participant can be found in Appendix J:

- The interviewees deemed that youth participation was “very important” for the future of sailing.
- There was a discrepancy in responses regarding observed trends in participation; participants 1 and 3 felt that rates were ‘increasing’ and participant 2 felt that they were ‘decreasing’.
- The participants differed in their views of the best age to try sailing for the first time; participants 2 and 3 stated that 8-11 years is the best age bracket, whereas participant 1 stated that the best age to try sailing is unique to each individual child (i.e. dependant on physical size and confidence/adventure threshold).
- The following factors were identified by participants as determinants of desire to try sailing: Socio Economic Class, parental participation, social influences (friends) and access to sailing equipment. Furthermore, the perception of sailing as a “rich man’s sport” (Participant 3) was seen as a detrimental influence.
- The following factors were identified by participants as determinants of continued participation: peers, participation in other sports and moving away from home for school/university.
- Strategies/tactics adopted by the interviewees to attract new participants were: open days, day sails and advertising.
- Measures taken in order to retain participants after they have tried sailing for the first time were detailed as: minimising cost, the use of bursaries and treating each person as an individual to ensure that their specific needs are met.
- Measures taken to recruit new members were detailed as: low membership fees, selection of user friendly equipment available, friendly instructors or staff (customer service) and advertising.
- With regards to target markets, participant 1 stated that they targeted the “middle classes” as they felt that this was who would “normally sail”. Participant 2 stated that they target youths whose parents are members of the sailing club i.e. those who own their own boat.
Participant 3 was set up as a charity to work with a specific group in the local area, therefore they target this group. However, they have since been able to further expand into the wider community.
- Participants 2 and 3 provided estimates of participation and desired participation rates for the youth population in Plymouth. The mean of these scores are as follows:

Youth population in Plymouth

- 40% want to try sailing
- 30% have tried sailing

Of those who have tried sailing

- 50% continue to sail
- 50% do not sail again

5. Discussion

The questionnaire successfully identified participants within each participant variable based on product usage and was therefore able to quantify levels of participation for each. Furthermore, potential bases for segmentation were identified for those that have tried sailing and those that would like to try. Following a brief discussion of the sample, the specific results for each participant variable are discussed below.

5.1 The sample

The sample was representative of 8-11 year old children of every socio-economic class from five different schools in and around the Plymouth area. It consisted of approximately equal male and females and participants and non-participants of other sports. Furthermore a broad spread of family unit sizes was represented and the parents of most children who participated in the study did not participate in sailing.

5.2 Participants that have tried sailing

Firstly, the study successfully quantified the number of participants that have tried sailing within the sample. Furthermore, differences were identified between the number of participants that have tried sailing and the mean estimates given by professional organisations; results from the interviews suggest that fewer youths have tried sailing than was identified by the questionnaire. Such a discrepancy could result in professional organisations undervaluing the importance of introducing new participants, which could in turn, be detrimental to long-term participation rates.

Secondly, the study identified statistical differences between youths that have tried sailing and those that have not; these differences can be used as bases for market segmentation. Family unit size was shown to be smaller for those who had tried sailing than those who had not; this influence falls under the 'general-observable quadrant' of Wedel and Kamakura (1998) and is therefore a viable base by which to segment the market. Additionally, it was identified that parental participation in sailing returned a significant difference between those that had and had not tried sailing; youths who had parents that sailed were more likely to have tried sailing. Parental participation is therefore a psychographic influence and forms a viable base by which to segment the market according to the work of Taks and Schreeder (2006).

Sports marketers should utilise this information to align products and services with those who are unlikely to try sailing as this would increase the overall number of opportunities for youths to try sailing in the local area. Additionally, by using strategies such as low cost taster sessions or day sails (as identified in the interview results) organisations can further increase the number of youths that have opportunities to try sailing. Therefore, marketers of local sailing organisations should firstly target youths who come from larger families and/or do not have parents that sail, and secondly, they should minimize restrictions such as cost. This process of target marketing aims specifically to increase overall participation by creating opportunities for youths to try sailing that are unlikely to try otherwise.

Although the study successfully quantified the number of participants that have tried sailing and identified two bases of segmentation, the study was limited by small sample size of those that had tried sailing. Therefore, the validity of the statistical analysis is reduced. Further research would benefit from a larger sample of those that have tried sailing as this would

allow for more detailed statistical analysis, modelling and ranking of the determinants of youths trying sailing.

5.3 Participants that have continued to sail

The study successfully quantified the number of participants that have continued to sail having tried it. Differences were identified between the number of participants that still sailed, the mean estimates given by professional organisations and figures from secondary data relating to UK adult participation rates (APS, 2009; WLPS, 2009). Specifically, in both cases the current study measured a higher participation rate, which suggests firstly that local organisations may underestimate the number of overall participants, and secondly that proportionally more Plymouth youths are sailing than the national average for adults. The latter of these can be explained by Plymouth being a coastal location; therefore one can expect more people to participate in sailing (WLPS, 2009). Furthermore, interviews revealed that some youth participants stop sailing when they get to University age; this implies a subsequent drop in adult participation rates.

It was not possible to identify any statistically significant differences between those that have continued to sail and those that have not; thus suggesting that continued participation in sailing is not determined by the situational and contextual variables investigated by the current study.

Of particular interest is that socio economic class was not found to be different for those likely to continue sailing and those not. Interview results suggested that the perception of sailing was as a middle class sport. The current study suggests socio economic class has no influence on the likelihood of youths continuing to sail in Plymouth. However, given that such differences were identified for the UK adult population, the increased numbers of lower class participants could be a positive result of strategic measures such as reducing cost currently employed by local organisations. Local companies should therefore endeavor to target all socio economic classes, rather than specifically the middle or higher classes. Therefore, local organizations should use charitable organizational structures and bursaries to provide equal opportunities for lower socio economic classes.

The high youth sailing participation rates in Plymouth support the substantiality and stability of potential market segments derived from the market. However, given that no statistical differences were found for situational or contextual variables, no bases of segmentation were established for continued participation in sailing as they would not be identifiable (Schreeder *et al*, 2005). Therefore it seems reasonable to conclude that all those trying sailing should be targeted equally. This is further supported by interview results that suggested that it is important to respond to the individual needs of youths in order to maintain their participation.

Although the study successfully quantified the number of participants that have continued to sail, the study was limited by small sample size of those that had tried sailing. Therefore, the validity of the statistical analysis is reduced. Further research would benefit from a larger sample of active participants as this would allow for more detailed statistical analysis, modelling and ranking of the determinants of youths continuing to sail.

5.4 Participants that are club members

Of those that had continued to sail, the majority of participants had joined sailing clubs. By differentiating between members and non-members, it was identified that club members are likely to participate more frequently than non-members; this is supported by the findings from ALPS (2009) for adult UK sailing and Taks and Schreeder (2006) for wider youth sports participation. Clubs should therefore make every effort to recruit new members to their club, not just for the financial income generated by membership fees, but also in an attempt to increase the frequency of participation in youth sailors. Examples of strategies that could be employed to do this are low membership fees, the selection of user friendly kit and friendly instructors as suggested by the current interview results.

The study failed to identify any statistically significant differences in situational or contextual variables between those that were club members and those that were not. Therefore, no bases of segmentation have been established for club membership as they would not be identifiable (Schreeder *et al*, 2005). Clubs should therefore target all potential members equally.

Although the study successfully quantified the number of participants that were club members, the study was limited by small sample size of those that were club members. Therefore, the validity of the statistical analysis is reduced. Further research would benefit from a larger sample of both members and non-members as this would allow for more detailed statistical analysis, modelling and ranking of the determinants of club membership.

5.5 Latent demand

The study successfully quantified the number of participants that would like to try sailing within the sample (latent demand). Furthermore, differences were identified between the number of participants that would like to try sailing and the mean estimates given by professional organisations; results from the interviews suggest that considerably fewer youths want to try sailing than was identified by the questionnaire. Such a discrepancy could result in professional organisations failing to make adequate efforts to resolve the problem of latent demand. Moreover, current interview results suggests that financial constraints and misguided opinions about sailing being for middle and upper classes are key factors in the creation of latent demand.

Secondly, the study identified statistical differences between youths that wanted to try sailing and those that did not; these differences form potential bases for market segmentation. Family unit size was shown to be larger for those who wanted to try sailing compared to those who did not; additionally, those who wanted to try sailing were shown to be more likely to regularly participate in other sports. Given that family unit size and participation in other sports fall under the 'general-observable quadrant' of Wedel and Kamakura (1998), they make viable bases by which to segment the market.

Local organisations should utilise this information to align their products and services with those most likely to accept an offer to try sailing. This could potentially increase the overall number of youths likely to accept an offer to try sailing in the local area. Additionally, information given by local organisations in the current study can be used to further increase the likelihood of youths accepting opportunities to try sailing; this may include open days, day sails and the development of a suitable advertising mix. Therefore, marketers of local sailing

organisations should firstly identify youths who participate in other sports and/or come from larger family units, and secondly, use open days, day sails and specific advertising to recruit as many youths as possible into becoming participants. This is a viable way of increasing youth participation in sailing as a reasonable percentage of participants that had tried sailing were shown to continue.

6. Conclusions

Local organisations must be careful not to underestimate the latent demand for youth sailing; where possible, they should offer opportunities to sail to youths most likely to accept and those least likely to try sailing otherwise. However, it is evident from the current study that there are no significant indicators of which youths will then go on to continue to participate or become club members. Therefore, once youths have accepted an offer to try sailing, sports marketers and those delivering the sessions must ensure to meet each person's individual needs to maximise the chances of continued participation. By doing this it is hoped that participation in youth sailing will increase within the Plymouth area.

The current study therefore suggests that local sailing organisations should employ a differentiated marketing strategy to attract new participants to the sport and then to retain them. However, at all times they must remain indiscriminate and welcoming to all potential members, from all situations and backgrounds. Additionally, by removing restrictive boundaries that reduce continued participation e.g. cost and the exclusive image of sailing, participation is likely to increase further.

To summarise, four different sailing participation styles for Plymouth youths were quantified; those that have tried sailing, those that have continued to sail, those that have become members of sailing clubs and those that have not tried sailing but would like to. Secondary data and retrospective interviews were then used to compare and explain results. In addition to this, potential determinants of participation were successfully used as bases for market segmentation for two participation styles; those that have tried sailing and those that would like to try sailing. Finally, results from the interviews conducted with professionals from local organisations (specialising in youth sailing) were used to support a differentiated target marketing strategy to increase youth sailing participation in Plymouth.

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