

RNLI | Research Project ID: 12-13e

Yacht sailors audience profiling

Sponsor: RNLI Community Safety Team, the Maritime and Coastguard Agency (MCA) and the Royal Yachting Association (RYA)
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Contractor: Substance
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This research was commissioned by the Royal National Lifeboat Institution (RNLI) in partnership with the Maritime and Coastguard Agency (MCA) and the Royal Yachting Association (RYA). It sought to examine the attitudes and behaviours of yacht sailors, and their approach to risk.

Summary

Yacht sailing in the UK offers a variety of experiences and opportunities. The sport can give sailors a sense of freedom and relaxation, and it's woven into the nation's maritime heritage. The three partners to this study all share a desire to see sailing enjoyed safely, and an aim to reduce the number of serious incidents and fatalities involving sailors in the UK.

Between 2010 and 2013, 11 people died while sailing yachts around the UK coastline¹. In addition, the RNLI's volunteer lifeboat

crews have aided almost 8,950 yacht sailors during the past 5 years. This research was therefore commissioned by the partners to better understand yacht sailors' motivations and approaches to risk.

The research involved initial consultation with sailors, a large scale survey and a significant qualitative element, including interviews and focus groups. The three partners received an overwhelming response to our call for sailors to complete the study survey, and we would like to extend our thanks to everyone who took part.

The evidence from the research was used to identify five segments of the yacht sailing audience and to advise the partners on the most appropriate approach to safety messaging. One of the findings that most struck the RNLI team was that 1 in 8 of the sample had fallen overboard at some point in their lifetime.

This summary presents our approach to the research and explains the five segments. It also describes how the partners are using the results from the research.



Maritime & Coastguard Agency



Lifeboats

Research aims and objectives

The project aimed to understand more about yacht sailors' attitudes to risk and safety, their patterns of participation and their behaviours.

The specific objectives for this project were to:

- Group the population of UK yacht sailors into segments according to their motivations for participation and their attitude to safety and risk.
- Detail the attitudes and motivations of each segment and provide evidence on the age, gender and socio-demographic status of the members of each group.
- Identify the groups of sailors on which the three partners could focus their safety messages.
- Identify effective methods of communicating with the high-risk segments.
- Produce a highly accessible report for the RNLI, the MCA and the RYA that clearly outlines the research findings and gives a detailed profile of each of the segments.



Method and approach

Crew of RNLI Poole's Atlantic 85 inshore lifeboat aid a stranded yacht.



This project was undertaken by a research partnership, Substance, between August 2014 and February 2015. It adopted both qualitative and quantitative methods involving:

- A set-up phase with desk-based research, initial qualitative interviews and consultation with stakeholders.
- A design and piloting stage for the survey.
- A large quantitative survey with both online and face-to-face surveys conducted.
- Qualitative research involving 25 in-depth telephone interviews and focus groups.

The research was aimed at yacht sailors based in the UK. The project focused on participants' experiences of sailing onboard yachts, including both cruising and racing. The project methodology took care to incorporate and allow for the different types of sailing in which respondents participate² and the differing roles they can undertake. The initial phases of the research were essential for understanding this diversity of activity.

Review of literature and set-up phase

During the initial stage of the work, the team reviewed existing evidence about the yacht sailing population in the UK. The Arkenford Watersports Participation Survey (AWP Survey), an annual research project which asks a nationally representative sample of UK residents about their participation in a variety of activities, was the most relevant pre-existing source of information.

The 2013 AWP Survey estimated the number of coastal yacht sailors to be around 270,000 adults. This was taken to be the target population for this study. The AWP Survey also provided more detailed insight into the yacht sailing population. It showed, for example, that the largest proportion of those who cruise are in the 55+ age category, whereas those who race are younger. Around two thirds of participants are male. Other relevant findings for this project included:

- People who participated in the survey often use many different classes of vessel.
- Yacht ownership is higher amongst those who race, than among those who cruise.

² Participation is defined in the survey as having done the activity at least once in the last year.

- Club membership amongst those who race is higher (21.5%) than among those who cruise (13.8%).

The evidence from the survey demonstrated that the primary research design needed to accommodate both competitive and non-competitive yacht sailing, the variety of vessels required to undertake the sport, and the variety of training and certification available.

Initial qualitative research

Following a review of the AWP Survey, consultation and interviews were undertaken with a range of yacht sailing organisations and individuals. Stakeholder interviews focused on the nature of yacht sailing in the UK – exploring types of yacht sailors (and assumptions about participant behaviour), and getting the support of stakeholders for the research, especially in publicising the survey.

The stakeholders consulted included the RYA, MCA and RNLI, as well as the Marine Accident Investigation Bureau and cruising associations, clubs, commercial operators and individuals.

Quantitative survey

A quantitative survey was then developed and piloted via an online survey of yacht sailors and stakeholders from the first stage of the research. A further pilot was then conducted at the Southampton Boat Show. Finally, the survey was tested with RNLI research volunteers who were part of the study team. After each stage, amends were

made to ensure that the survey was logical and clear to participants.

The final survey had three main sections:

- 1 Participation in sailing
- 2 Risk and safety onboard yachts
- 3 Demographics.

The full survey was launched on 9 October 2014 and ran until 9 November 2014. A bespoke webpage was created to act as a portal for the survey and to provide additional information about the research³. The website link was publicised through a number of means, including:

- An RNLI press release.
- The RYA's *Cruising News* and *InBrief* newsletters.
- Distribution of the survey link to 6,000 yacht sailors who had received RYA Day Skipper qualifications in the preceding year.
- Postal mail-out by Substance, utilising RYA database of clubs, marinas, harbours and training centres.
- Communications by partners, including the Cruising Association, Yacht Harbour Association and the RNSA website.
- Distributions of business cards by RNLI volunteers.

Online activity was supported by face-to-face surveys conducted by Substance fieldworkers and RNLI volunteers at harbours and marinas, sailing clubs, training centres and chandleries.

At the closing date of the survey, 4,996 responses had been submitted to the team. To create a dataset for analysis, the survey population was amended to remove all responses for those under 18 and those who did not answer the demographic questions in the survey. This produced a final survey population of 4,638.

Qualitative research

The qualitative research element focused on three main objectives:

Firstly, to provide greater depth and understanding from yacht sailors on how different contexts and conditions can shape their behaviour and assessment of risk.

Secondly, the qualitative research helped to provide depth to some of the findings in the segmentations, as well as helping to challenge the findings from the survey.

Finally, the qualitative research served as a valuable consultation with yacht sailors regarding how to effectively communicate safety messages.

To meet these objectives, semi-structured interviews with 25 yacht sailors were undertaken. These were complemented in four focus groups with yacht sailors. These took place in Largs, North Ayrshire; London; Lytham St Annes, Lancashire and Parkstone, Dorset.



Crew of RNLI Poole's Atlantic 85 inshore lifeboat assist a yacht in strong winds.

Analysis

As a first stage to the analysis, the research team assessed the study sample to check for bias against known population data, from the Arkenford Watersports Participation Survey 2013. The analysis suggested that the survey sample had significantly more males, as well as an older profile, than the yachting population as a whole. The sample also had considerably fewer taking part infrequently in yacht sailing than in the national sample.

The research team adopted a method to weight the sample using age and gender from the survey. The effect of the weighting on age is shown right. Following the weighting of the survey sample, responses to questions relating to risk (attitudes and behaviour) and experience were scored to generate ratings for each participant. The risk score formed the basis of segmentation analysis using k-means clustering⁴ to identify where statistically significant differences exist between different groups.

Key findings

Analysis of our weighted sample was used to provide a brief profile of respondents. Some of the key findings from the weighted sample are shown below:

Demographics

- Yacht sailors are typically aged over 40 (58%) and most are male (63%).
- A high proportion of yacht sailors are employed (49% full time, 16% self-employed and 7% part time). 19% are retired.
- Two thirds are married or cohabiting.

Yacht sailing participation and behaviour

- Many respondents had been sailing for long periods of time and over half for more than 20 years.
- However, there was also a significant proportion who had taken gaps in their sailing, with 14% reporting that they had a gap of 5 years or more in their sailing participation.
- The majority owned their own yacht (60%) and a similar proportion usually acted as skippers when sailing (57%).

Attitude to risk and experience of unsafe incidents

- Some activities were undertaken by the majority before their last trip: 84.9% had checked their fuel before sailing, 92.7% had a VHF radio onboard and 76.7% reported wearing a lifejacket.
- Some precautions were less frequently taken: 58% said they didn't wear a harness or lifeline.
- Respondents were asked about their experience of unsafe incidents during their lifetime of sailing. The most common incident they reported was equipment failure (65%), followed by running aground (51%). Over a quarter (26%) had been stranded, 24% had capsized and 12% had been overboard.

Table 2 illustrates the proportion of respondents who had experienced or nearly experienced each type of incident.

Table 1: Age comparison (weighted and unweighted)

Age range	Survey count	Un-weighted percentage	Weighted percentage
18–30	191	4%	24%
31-40	292	6%	17%
41-50	636	14%	20%
51-60	1,313	28%	19%
61-70	1,620	35%	15%
Over 70	586	13%	4%
Grand Total	4,638	100%	100%

Table 2: Experience of incidents

Incident	Happened to you	
	Count	%
Gone overboard	539	12%
Capsized	1,130	24%
Vessel sank	97	2%
Run aground	2,394	51%
Stranded	1,230	26%
Been hit while gybing	628	13%
Another form of injury/medical issue	1,042	22%
Had a fire	246	5%
Collided with another vessel	977	21%
Had equipment failure	3,032	65%
Other	261	6%

Of these experiences, the danger of 'person overboard' situations, in particular, was raised by focus group participants, who highlighted the difficulty of recovering crew members from the water:

"If I went overboard could you rescue me?", it's the one thing I worry about... I think it's very difficult if one of you goes overboard in a big sea... there's just such a lot to do.'

'Having taken part in a man overboard training session I don't think there's any way [my wife] could get me back on the boat if I was unconscious. Prefer not to think about the risk.'



⁴ K-means clustering is a way of partitioning full sets of data observations (such as survey responses) into a smaller number of sets or clusters. This is done through an iterative process of placing each data item into a cluster with the nearest mean (the mean of whatever is being used to underpin the clustering – in this case the risk score).

Yacht sailing segments

Five segments of yacht sailors have been identified through the project. The segments are described here in order of risk, from highest to lowest. It is important to note that in many instances the differences between groups can be marginal.

Segment 1 – Self-Taught, Settled Yacht Sailors

12.5% of the population
(579 sailors in sample)

Many Self-Taught Settled Sailors started sailing at least 20 years ago and have plenty of experience, but have no formal training. They are now relatively infrequent sailors compared to other groups, with a higher than average proportion sailing between 2 and 5 times per year.

They will usually be a crew member rather than skipper and will race more often than average with friends and family. Our research suggests that a lower proportion of this group regard actions such as drinking alcohol as high risk. They were also more likely to have experienced an unsafe incident – hit when gybing or going overboard.

'Drinking alcohol is something that I do, and I think as long as one is responsible then I don't think it's necessarily a problem.'

Segment 2 – 'Empty Nest' Yacht Cruisers

17.9% of the population
(832 sailors in sample)

As with the sample as a whole, sailors in this group are likely to be middle aged and male, but are also more likely to be retired 'empty nesters' with children having left home. Typically, they may have started sailing over 20 years ago and are more likely to have done fewer courses than the average across our entire sample.

They are most likely to go cruising at the weekend, usually in Wales or Scotland, and want to experience freedom and relaxation.

Our research showed that while they consider themselves to be cautious, they are the least likely to have rigged a gybe preventer or worn a lifejacket on their last trip.

'I don't wear a lifejacket in most scenarios. When you are sailing on a 50ft+ boat with a nice safe cockpit you are not likely to fall over the side... it is a hassle... especially if the weather is fine.'



Crew of RNLI Yarmouth's Severn class lifeboat assist yacht sailors during the 2011 Round the Island Race.



Segment 3 – Young Racers

25.7% of the population (1,191 sailors in sample)

This group are more likely than average to be young, female, employed or in education and starting out in life, most likely living alone. They are likely to have started sailing less than 20 years ago but may be frequent sailors with a lot of training.

This group are more likely than any other to go racing and be motivated by competing. Those that are members of a club are more likely than average to be an active club member or volunteer. Responses showed that people in this segment are more likely than other groups to not wear a harness or have a personal identification device, and may sail further than anticipated. However, they are likely to be safety conscious.

'I like the challenge of racing and I get training to help me do that more effectively and be safe.'



Segment 4 – Cautious Skippers

24.3% of the population (1,125 sailors in sample)

People in this group are predominantly male and are likely to be in later middle age, self-employed and tend to be settled or with children who have left home.

They are likely to have been sailing for more than 10 years but may have had a gap in that time. However, they are frequent sailors and are the most likely segment to own their own yacht. They may be a member of a club and sail with a crew, motivated by being on the water.

Cautious Skippers are more likely than the population average to have had a Personal Locator Beacon (PLB) and used a gybe preventer on their last trip. They are also more likely to have communicated back-up plans to their crew and sailed using a paper chart as well as GPS.

'Individuals have a responsibility towards their other shipmates. Safety is an attitude of mind which should be taken on by all crew members.'



Segment 5 – Trained Independents

19.7% of the population (912 sailors in sample)

This segment is the youngest of all and contained the highest proportion of females in our sample. These sailors are more likely than other groups to be employed and settled with children at home. Although many have been sailing for between 5 and 10 years, or maybe more, they are the least likely to have sailed for more than 20 years. People in this group are very likely to have had a lot of training and gained a number of sailing certificates or qualification.

Trained Independents probably won't own their own boat but will skipper yachts more than average (possibly on charters). They are unlikely to be a member of a club and are the most likely group to have used an identification device, gybe preventer and lifejacket on their last sailing trip. Trained Independents are the most likely to practice how to use their safety equipment and get their life jacket checked in the preceding 12 months. They are unlikely to have had a serious unsafe incident.

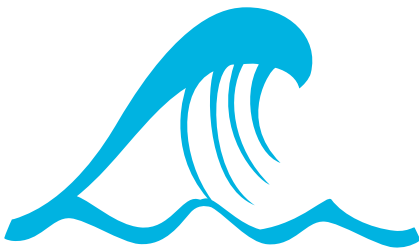
'Sailors should refresh their skills to improve safety... If you charter your own boat you have to have so many qualifications, but if you go out and buy a boat you don't have to have any of them – and I think that's wrong.'

Communications messages

Respondents to the survey were asked to submit a suggestion for 'one thing that would improve general yachting safety'. In total 3,982 were submitted. Training, greater regulation of aspects of sailing, and more education featured most prominently in the responses. Recommendations relating to lifejackets were the fourth most common suggestions. The qualitative research also explored sailors' perceptions of the best way to promote safety. While some highlighted the lack of any mandatory qualification or training before sailing a yacht as a key issue, others argued against any regulation of the sport. The focus groups also captured specific suggestions from participants, such as the importance of planning and preparation and of using appropriate equipment when yacht sailing.



How the RNLI is using the evidence



The evidence collected will be invaluable as the RNLI, MCA and RYA seek to raise awareness of the causes of sailing accidents, incidents and fatalities; and advocate for action to prevent them.

The evidence has already been used by the RNLI to inform a campaign aimed at yacht sailors' understanding of 'person overboard' risk and their knowledge of how to recover

someone from the water. Further messaging is likely to focus even more closely on the groups outlined in this summary.

If you are interested in finding out more about the study, please email Madeleine Spark, Research Assistant for the RNLI Operations Research Unit, at Madeleine_Spark@rnli.org.uk.

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