



Cricket & Sustainability

Findings from Online Survey Recreational Cricket Players in England & Wales

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1. Introduction

A survey was completed amongst 548 recreational¹ players across England and Wales between 16th January and 24th January 2024, to increase understanding of cricket players' attitudes towards the potential use of sustainable materials to replace traditional materials², and interest in repair and refurbishment services for cricket gear. The research is part of the Advancements in Circular Cricket Gear (ACCG)³ project that runs from August 2023 to July 2024.

The survey builds on previous research⁴ amongst 42 cricket players - primarily male respondents and over the age of 55 – that was completed within Circular Cricket Gear (CCG)⁵ during August 2023. The new, extended survey reinforces the findings from the CCG survey which indicated that: 86% of (CCG) respondents (compared to 89% from the ACCG survey) were willing to trial repair and refurbishment services for cricket gear; and 71% of (CCG) respondents (compared to 89% from the ACCG survey) were willing to use cricket gear made from plant based vegan leathers (PBVL) and other sustainable materials.

The research was constrained by the survey design which was limited to two open-ended questions. Therefore, in-depth insights into the rationale behind responses are not available. The survey highlighted significant interest in willingness to use cricket gear made from sustainable materials and interest in repair/repair services. Additional research will be undertaken through a follow-up survey and focus group to probe these findings in more detail.

2. Survey Demographics

The following section aims to provide an overview of the respondent's demographics. It includes a breakdown for each player level category, a breakdown on players' age and gender, and number of annual games played by each respondent.

The demographic breakdown (%) of respondents was 87% (or 475 respondents) were identified as male and 73 identified as female. From the 548 sample, 28% of respondents were 25–35-year-olds followed by 25% being between 35-45 years old and an additional 25% aged between 18 and 25. Only 7% of respondents were within the category of over 55-year-olds. The respondents to the survey by age and sex appear to be reasonably representative of the cricket playing population, compared to the first survey which was biased towards responses from older players.

Below is a breakdown for each player level category (by %) based on the 548 responses. The graph shows that there is an even spread of level of play across the 548-respondent sample.

¹ Recreational player refers to a cricket player under the jurisdiction of the ECB, excluding: (i) the England Men's or England Women's teams; (ii) a First-Class County in relation to men's professional cricket; (iii) a Regional Host; or (iv) any Hundred Team.

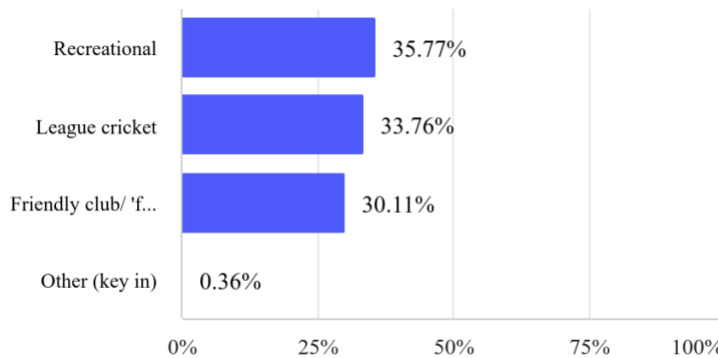
² Respondents were identified through a panel that was recruited by Centiment through social media sites e.g., Facebook and LinkedIn. The sample panel focused on respondents who actively play cricket, thus excluding individuals who only follow the sport.

³ <https://cfsd.org.uk/projects/accg/>

⁴ https://cfsd.org.uk/wp-content/uploads/2023/09/Survey-of-Cricket-Gear-Users_Players_August-2023.pdf

⁵ For further details on CCG project, see: <https://cfsd.org.uk/projects/ccg/research/>.

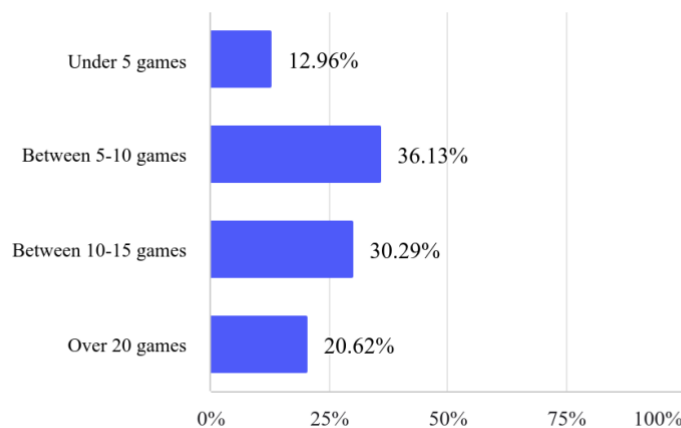
Figure 1: Breakdown of respondents' level of play



Source: The Centre for Sustainable Design®, University for the Creative Arts

A range of cricket gear is used to play the game, however, there is a limited knowledge on the lifecycle of the equipment used. To understand more about the *use* phase (playing phase) issues related to deterioration of cricket gear, material and components, participants were also asked how many games they played. Figure 2 shows that 66% of respondents indicated that they played between 5-15 games per year, while 21% played over 20 games per year. Early indications do not show correlation between number of games played per year and age. However, there is a possibility that, generally, younger players (18-35 years old) are more likely to play more games and therefore keep their cricket gear for shorter periods.

Figure 2: Annual breakdown of games played.



Source: The Centre for Sustainable Design®, University for the Creative Arts

3. Findings

The below highlights the main findings from the survey. A more detailed analysis will be completed in a later report.

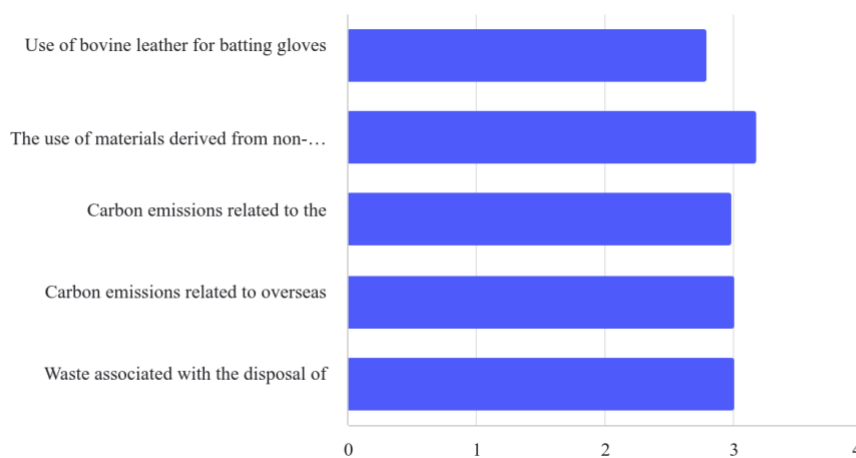
3.1 Sustainability Considerations

58% of respondents indicated that they had not considered the environmental impact of cricket gear (batting pads, batting gloves, and balls). With 70% of respondents indicating that

they were unaware of any organisations or programmes available to reduce the amount of waste generated in the cricket gear sector.

To explore respondents' environmental awareness levels, players were asked to evaluate a series of issues related to the production of cricket gear, where five was considered to have the highest impact and one the lowest. Overall, the respondents ranked the five topics as being of almost equal importance, which may indicate a potential lack of awareness of the specific environmental impacts associated with the production of cricket gear. Figure 3 shows that the use of materials derived from non-renewable resources was considered to have the highest environmental impact in relation to the production of gear, while the use of bovine leather for batting gloves and balls was considered to have the least negative impact.

Figure 3: Ranking of environmental topics related to the production of cricket gear⁶

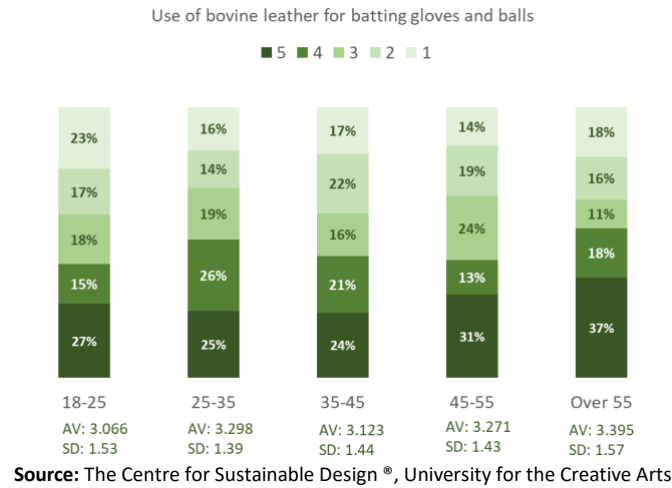


Source: The Centre for Sustainable Design®, University for the Creative Arts

An early cross-tabulation of the data has indicated that there appears to be a slight correlation between age and ranking >4.

Figure 4: Level of importance assigned to the use of bovine leather for batting gloves and balls in relation to environmental impact associated with the production of cricket gear by age.

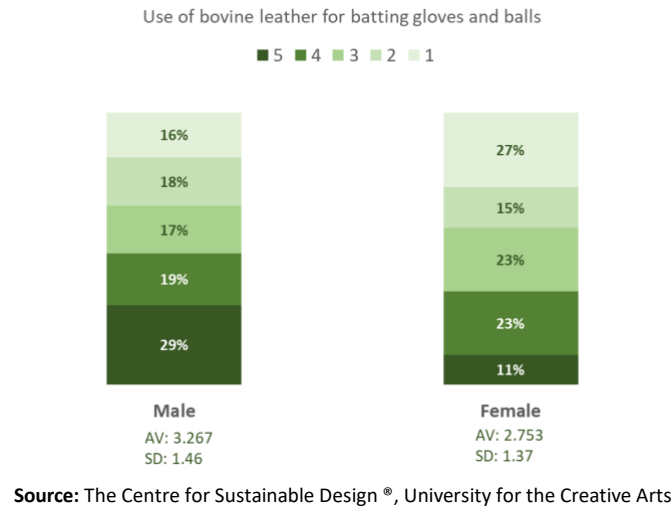
⁶ The five topics are the following: Use of bovine leather for batting gloves and balls, The use of materials derived from non-renewable sources (e.g. high-density foam used in batting pads, synthetic leather, etc.), Carbon emissions related to the manufacturing process, Carbon emissions related to overseas manufacturing and transportation, and Waste associated with the disposal of cricket gear.



For example, Figure 4 above shows that respondents between 45 and 55 years old (31% from the 548 sample) and over 55s (37% from the 548 sample) ranked the use of bovine leather as the highest contributing factor to the negative impacts associated with the production of cricket gear, compared to under 45-year-olds who ranked it <4.

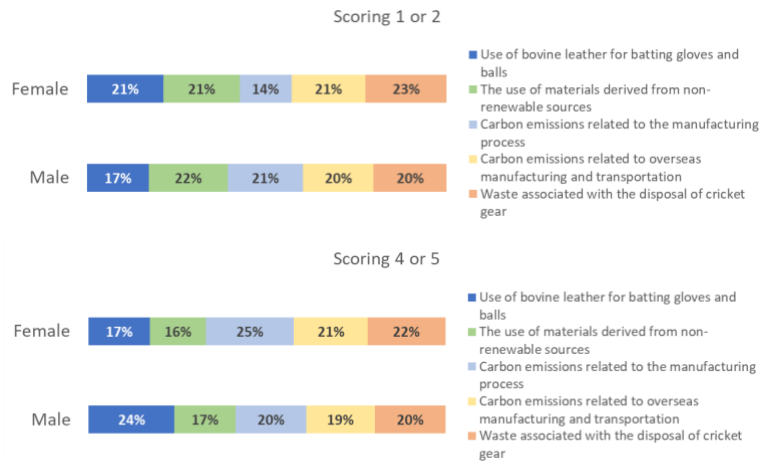
In addition, Figure 5 below shows a gender difference with regards to the importance assigned to the use of bovine leather (in relation to the environmental impacts associated with the production of cricket gear). The initial cross-tabulation of the data appears to suggest that male respondents ranked the use of bovine leather as having a higher impact compared to female respondents.

Figure 5: Level of importance assigned to the use of bovine leather for batting gloves and balls in relation to environmental impact associated to the production of cricket gear by gender.



When further analysing the data on environmental impacts considered by gender, Figure 6 highlights that female respondents were more likely to rank emissions from manufacturing more highly and all respondents were more likely to score the use of non-renewable materials as having the lowest environmental impact from the five topics presented.

Figure 6: Level of importance assigned to the use of bovine leather for batting gloves and balls in relation to environmental impact associated with the production of cricket gear by gender.



Source: The Centre for Sustainable Design®, University for the Creative Arts

A further question investigated the *use* of cricket gear. 46% of respondents indicated that they kept their batting pads for two to three seasons with 46% also keeping their batting gloves for the same period. The previous CCG survey - that had a smaller sample and a bias towards older players - indicated that 57% of respondents had kept cricket batting pads for more than eight 8 seasons. To confirm a potential relationship between age and usage of cricket gear, further investigation of the current survey is required to analyse whether the older players keep their cricket gear for longer.

It was interesting that both batting pads and gloves appear to be kept on average for two to three seasons. That was perhaps to be expected for batting gloves, due to palm damage resulting from the friction of players hands and bat generated during batting. However, it was expected that batting pads would be kept for longer, as usage is more passive.

To generate insights into data related to cricket gear waste issues, respondents were also asked to indicate how they disposed of unwanted gear 27% of respondents indicated that they donated unwanted gear to a club bag. This is contrary to conversations with players in the South-East of England that had highlighted an increase in ownership of individual cricket gear and the overall decline in the use of the 'club bag' to share cricket gear. Anecdotally, there are indications that the club bag might be primarily used by players who play on irregular basis rather than league or regular players. The second largest route for disposal of unwanted gear is through donations to charity (26%), followed by passing items on directly to family and friends (21%). This needs further investigation as the volume of cricket gear being received by Lords Taverners Cricket Gear Recycling Unit – the main cricket reuse scheme in England and Wales - does not align with these findings.

3.2 Market Trends

To assess market acceptability of sustainability initiatives related to cricket gear, respondents were asked to answer a series of questions related to their views on substituting bovine leather with a plant-based vegan leather for cricket balls and gloves, and the use of repair and refurbishment (R&R) services for cricket gear.

The survey indicated that 89% of respondents would consider using cricket gear made from plant based vegan leathers (PBVL), renewable and/or recycled materials and 72% of

respondents indicated that they would be willing to use this gear, even if the unit prices were slightly higher. The first CCG survey indicated a similarly high interest. Due to such a high positive response, it is felt that further research is required to assess the motivations for potentially using cricket gear made from sustainable alternative materials.

Respondents were also asked to indicate their level of interest in using an R&R service for cricket gear. 89% responded positively, with 46% indicating that they would consider using R&R services for both financial and economic reasons. 43% also indicated that they would be prepared to pay up to half of the total cost of purchasing new gear to have their gear repaired. Over half of respondents (57%) indicated a willingness to wait between one and two weeks for their gear to be returned and 32% of respondents indicated that they were prepared to wait up to one week for their gear to be returned. With cricket being a seasonal game, repairs would need to take place during the winter months or pre-season or have a quick turnaround e.g. within one week between games. Further research will be conducted to investigate the rationale behind a significant number of respondents being willing to pay to have their gear repaired compared to purchasing new. Initial insights suggest that this may be due to players developing an emotional attachment⁷ to their gear e.g. the 'feel' of batting gloves and due to the rising price of new gear.

However, when asked to further elaborate - within an open-ended question - on the reasons for opting to either repair or refurbish their cricket gear compared to purchasing new, the 59 respondents to this open-ended question indicated concerns in relation to the durability and reliability of repairs. Additionally, the open-ended responses appear to indicate a strong inclination towards purchasing new items for reasons of better quality and efficiency, with respondents valuing the assurance of performance and safety that comes with new gear. In turn, while this open-ended question was answered by only 59 respondents from the 548 sample, the findings indicate a potential concern by some players in relation to the quality and therefore acceptance of repaired or refurbished cricket gear. To increase understanding of these issues, further research will be completed into the R&R of cricket gear that takes account of user concerns and expectations related to quality and durability.

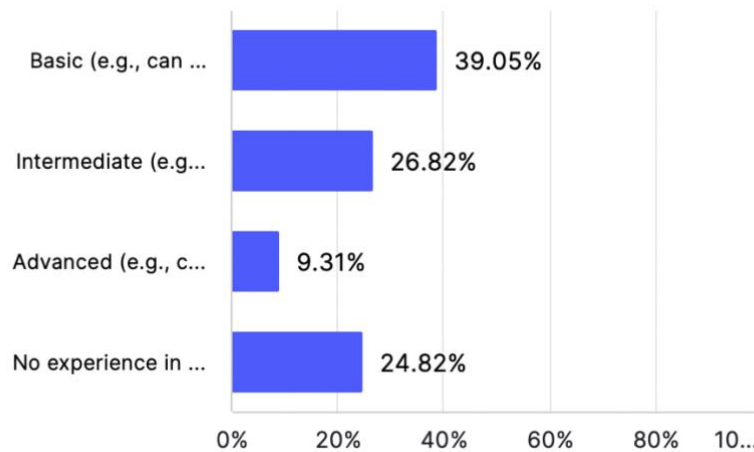
To further assess market acceptability for R&R services for cricket gear, respondents were asked to indicate how important they considered repair aesthetics and visibility of repair. The findings highlight that, surprisingly, 53% of respondents considered moderate signs of repair e.g. minor stains, stitches and/or visible patch work as being acceptable. This, despite conversations with Lords Taverners Cricket Gear Recycling Unit (LTCGRU) that indicated that the visual appearance of cricket gear is important, particularly for young players. Of note is that young players within the England and Wales tend to reject stained and/or slightly ripped gear, compared to other countries. As a result, LTCGRU donates slightly damaged gear overseas as there is a lack of market for it in England & Wales.

A further question explored the potential interest in self-repair through, for example, the provision of tutorials for players to mend their cricket gear. Respondents were asked if they

⁷ Emotional attachment in the context of objects, relates to fostering a deep connection between users and a product. It occurs due to various factors including but not limited to product aesthetics, usability, and associated memories; and "fate/good luck" including the "mascot/lucky charm" factor.

had any previous experience in sewing⁸ and to rank their experience from no experience to basic, intermediate, or advanced. The figure below (Figure 7) highlights that 39% of respondents have at least a basic⁹ level of sewing experience, followed by 27% indicating an intermediate¹⁰ level and 25% indicating no experience. These figures were unexpected as it was anticipated that the majority of respondents (primarily male) would have a zero to basic level of experience in sewing.

Figure 7: Level of player sewing skills



Source: The Centre for Sustainable Design®, University for the Creative Arts

The findings have indicated that if provided with sufficient knowledge and/or online training on how to repair or refurbish cricket gear, 83% of players would seek to repair/refurbish rather than replace with new gear. In addition, 51% indicated that they would prefer to access training materials online via videos, compared to 29% opting for printed materials at point of purchase. Lastly, when asked to indicate the greatest barriers to the reuse, repair and refurbishment of cricket batting pads and gloves, an open-ended question, highlighted the following barriers:

- The main barrier appears to be the potential stigma associated with the use of refurbished cricket gear and hygiene considerations, particularly for batting gloves.
- There appears to be a desire to keep up with the latest design developments in gear by some players, which is potentially perceived as being restricted by the refurbishment of old gear.
- Concerns were also highlighted in relation to the practicality of refurbishment for the average consumer (e.g., identifying a local repairer, dropping off repairs, postage costs associated with repair services, waiting times, etc.) and the cost effectiveness of repair versus purchasing new cricket gear.

⁸ Participants were asked specifically for sewing skills, as this appears to be the predominant skill requirement for repair batting pads and gloves.

⁹ Basic level was qualified as “can sew on/replace a button and repair a simple tear”.

¹⁰ Intermediate level was qualified as “can sew a trouser hem”.

4. Conclusions and Recommendations

A survey amongst recreational players in England and Wales during January 2024 was conducted covering sustainability considerations in relation to cricket gear and interest in repair and reuse services and the use of PBVL (to recap - plant based vegan leathers) which contained 25 questions (23 closed and 2 open-ended questions). 548 responses were achieved and the profile by age and gender was felt to be a reasonable representation of recreational cricket players in England & Wales.

The key conclusions are the following:

- Players' awareness of sustainability topics vis-a-vis cricket gear production appears to be low. This is evidenced by respondents assigning similar importance to five topics associated with the production of cricket gear and their contribution to the negative environmental impacts.
- An initial cross tabulation of data has indicated that there appears to be gender differences in relation to perceived environmental issues associated with the production of cricket gear. A larger female sample is required to validate the results.
- Unwanted gear appears to be primarily donated to charity, communal club bags or passed on directly to other players. However, there is some contradictory anecdotal evidence that the use of the 'club bag' has declined or used in specific instances. This in turn suggests that there is a wider reuse of cricket gear than previously anticipated. However, further research is required to probe these findings.
- 89% of respondents to the survey indicated a significant interest in cricket gear made from plant-based vegan leathers or renewable and/or recycled. The high levels of interest warrant further investigation.
- The survey also highlighted a high interest in repair and refurbishment (R&R) services (89% of the 548 respondents). However, an open-ended follow-up question revealed that 59 respondents raised concerns related to the durability and quality of repaired and/or refurbished gear.
- While there are indications of positive attitudes towards the use, cost and turnaround of R&R services for cricket gear, the survey also highlights a gap in respondents' understanding of the benefits associated with R&R services e.g., environmental or cost benefits. Therefore, there is a need to increase the visibility and benefits associated with R&R services to shift consumer behaviour towards sustainable choices.
- The survey also highlighted that there is a potential stigma associated with the use of repaired/refurbished cricket gear, specifically related to hygiene and safety concerns. This could potentially be overcome through increased education.
- The findings highlight positive attitudes towards new R&R services and a high percentage of repair skills amongst cricket players (39% indicated to have a basic level of sewing skills and 26% an intermediate level). This presents an opportunity for the implementation of new business models focused on product life extension.
- While there are very high levels of interest in R&R services, it felt that these results require further validation. Therefore, more specific follow-up survey and focus groups will be completed to probe further and rule out any respondent bias. The follow-up

research will be conducted by The Centre for Sustainable Design[®] (CfSD) at UCA in April 2024.