

# 1 EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

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Maccaman Ltd has developed a device called TravelShades as a counter-measure to control motion sickness. This research consisted of a test of the TravelShades by means of an experimental approach involving participants going on two coach journeys, one without TravelShades and one in which they were instructed to wear them.

The aims and objectives were set at two meetings which took place between the Retail Institute (TRI) and Maccaman Ltd. These were to establish the effectiveness of TravelShades and to gather business insights for future commercial strategies.

### Effectiveness objectives:

- ⇒ Determine whether consumers perceive TravelShades to alleviate some symptoms of motion sickness if worn as instructed
- ⇒ Determine whether TravelShades are accepted by the consumer as a product that will reduce motion sickness
- ⇒ Provide a quantitative measurement of the effect TravelShades has on sufferers of motion sickness (SoMS).

### Business insight objectives:

- ⇒ Provide data to show the impact on consumers and show how TravelShades could potentially make a positive impact on the lives of SoMS
- ⇒ Gather participants' experience of, and attitudes towards existing motion sickness products
- ⇒ Investigate the overall experience of the TravelShades product
- ⇒ Ascertain preferences on design, shape, colour and overall aesthetics of the product
- ⇒ Establish the desired price point of the product but equally the flexibility of price depending upon the quality
- ⇒ Identify preferred channels of distribution - where and when would they be most likely to buy TravelShades
- ⇒ Find out the purchase intent of the TravelShades product by the participants.

## 1.2 METHODOLOGY

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The central method for this research was to evaluate the impact of wearing TravelShades, using an experimental approach. This consisted of taking a group of participants on two similar coach journeys (Journey 1 and Journey 2), taking place two weeks apart from each other, the first one using no form of motion sickness prevention and the second using the TravelShades.

Participants were recruited locally to TRI's Leeds location and, in total, 193 people responded to the invitation and completed the screening questionnaire. This included questions on susceptibility, based on the Motion Sickness Susceptibility Questionnaire, devised by Golding, from which an overall profile has been developed of the participants

who completed the study. The situations in which people were most likely to feel sick frequently as adults were on buses or coaches (55%), small boats (46%), ships/ferries (44%) and in cars (38%). 92% of respondents said that they sometimes or frequently felt sick on buses or coaches.

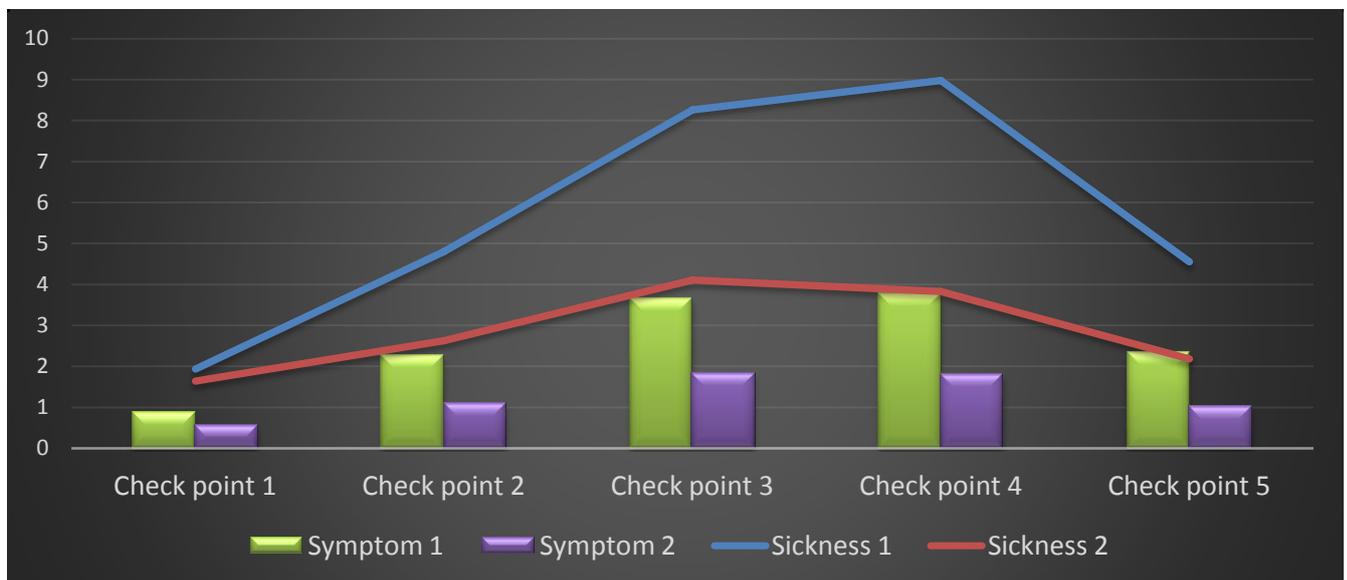
In total, 111 people were recruited for the coach journeys and a total of 93 people took a full part in the research, providing comparable results for Journeys 1 and 2.

Five sets of data were collected during and after the coach journey, consisting of two questions. The first asked participants to mark on a scale of 1 to 20 how sick they felt. The second question asked participants to indicate whether they had felt any particular symptoms since the previous checkpoint. A further brief questionnaire was completed after Journey 2 along with focus groups with all the participants.

### 1.3 COMPARING THE TWO JOURNEYS: SICKNESS AND SYMPTOMS

There was a wide range of responses on sickness levels from no sickness at all (score 1) to severe sickness (between 15 and 20), although the average level of sickness of the whole cohort remained within the mild sickness category in Journey 1 and was significantly reduced in Journey 2.

The data shows a similar trend for the number of symptoms at each check point. The combined average score for sickness and symptoms per checkpoint for both journeys is illustrated in the figure below:



Overall comparisons between the average scores of 93 participants in Journey 1 and Journey 2 show a significant fall in the level of sickness in Journey 2. However, there was a mixed response from a small number of participants who felt sicker in the second journey than the first. Nevertheless, data for the whole cohort shows a reduction from an average score of 5.7 in Journey 1 to a score of 3 in Journey 2.

A breakdown of the difference in the level of sickness between the two journeys shows that nearly 90% of participants (89.25%) had an average lower score in Journey 2 than in Journey 1.

1 by 2 to 8 score points. This indicates the level of sickness was significantly lower for the majority of participants.

The following table demonstrates a breakdown of the level of differences in the two journeys by number of people and score points:

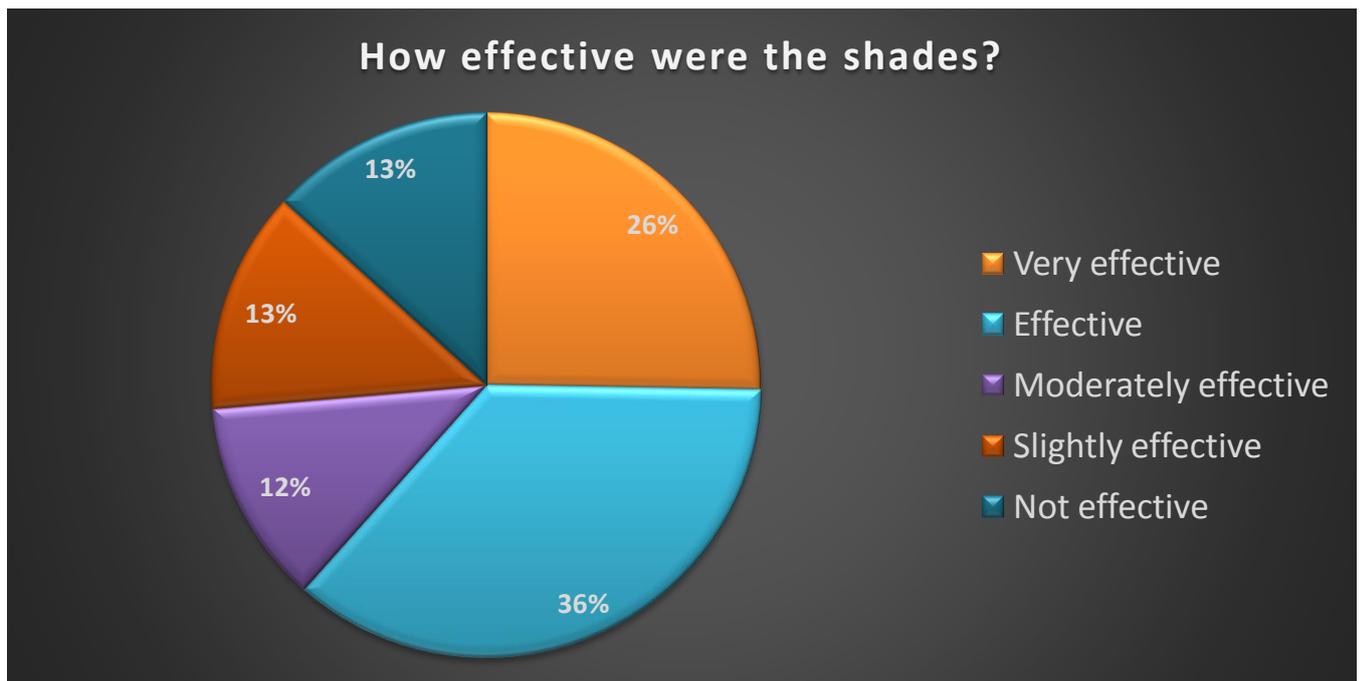
Compare score of Journey 2 against 1	Number	%
Higher score (up to 3 scores)	6	6.45
The same score	4	4.30
Lower score (up to 2 scores)	29	31.18
Lower score (2- 5 scores)	35	37.63
Lower score (5- 8 scores)	19	20.43
<b>Total</b>	<b>93</b>	<b>100</b>

**89% of participants recorded lower average score in Journey 2 than in Journey 1**

In the questionnaire following Journey 2, participants were asked to compare their perceived level of sickness between the two journeys. 76% of people thought they felt sicker in the first journey. This tends to imply the variation between translating from score to perception of how sick they felt. Nevertheless, 76% represents three quarters of the participants feeling better in Journey 2 compared to Journey 1.

The reduced level of sickness score in Journey 1 is reconfirmed by the subjective judgements of participants when they were asked to evaluate how effective TravelShades were in alleviating their motion sickness at the end of the second journey. *The feedback from participants shows 87% of the participants thought TravelShades were effective, ranging from slightly effective to very effective.* (See figure below)

*Percentage of people feel TravelShades were effective in alleviating motion sickness (Q3: 91 answers)*



#### 1.4 FEEDBACK FROM PARTICIPANTS VIA QUESTIONNAIRE

Participants were asked how TravelShades affected them on the first journey compared with the second journey. Over two thirds of the participants agreed that they felt more able on the second journey to move and to think about things other than being sick, although only about half agreed that they felt more able to look in any direction. The questionnaire also gathered views on:

- Comparison of recovery time between journeys
- Ease of adjustment to altered perception of distance when wearing TravelShades
- Comfort of TravelShades and the experience of swapping eyes
- Willingness to wear the disposable shades in public
- How much participants would pay for either the disposable or permanent versions of TravelShades

#### 1.5 FOCUS GROUPS

The focus group discussions highlighted some of the difficulties of wearing the disposable shades, including keeping them in the right position and side effects such as headaches and eye strain.

Some of those participants who felt that the Travelshades did alleviate their motion sickness described how this could change their future travel experiences and expressed enthusiasm for trying them on other modes of transport, particularly boats.

There was a general preference for wearing a permanent version of TravelShades over the disposable ones, as they were considered to look more 'normal' and less obvious as a medical device. However, some thought that the designs which were shown were a little masculine in look. There was a general preference for the darker designs of the permanent shades.

Participants indicated a range of prices that they were willing to pay for the disposable and permanent TravelShades and some said they would pay more for versions that looked good. Pharmacies, supermarkets and travel areas (such as train stations and airports) were the most popular places to buy TravelShades.

Finally, the focus groups gathered different perspectives on how the two types of shades may be used. The disposable shades may be useful as a way for customers to test the product before buying the more expensive, permanent option. Although most participants felt that TravelShades should be used as a preventative, several agreed that they may prefer to carry TravelShades just in case they are needed.

## 1.6 CONCLUSIONS AND RECOMMENDATIONS

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A very general conclusion that can be drawn from this study is that TravelShades have been proven to be effective at alleviating motion sickness. The research has generated three key figures that can be used as a declaration of the effectiveness of the device, namely:

**89% of participants recorded a lower average sickness score in Journey 2 (wearing TravelShades) than in Journey 1 (without TravelShades)**

**76% of participants said that they felt sicker in Journey 1 (without TravelShades) than in Journey 2 (wearing TravelShades)**

**87% of participants felt that Travelshades were effective in relieving most or some of their symptoms**

However, there are other important details to consider when making statements about effectiveness, and when planning both business strategy and further product innovation. These factors include:

- ⇒ Not all participants recorded an improvement in their scores and 6.45% of people felt worse/more sick on the second journey
- ⇒ Whilst both scores are very positive, the 13% difference between recorded sickness and perceived sickness is unexplained
- ⇒ Some of the people who felt less sick on the second journey experienced symptoms which appeared to be side effects of wearing TravelShades
- ⇒ From the reported comments, it is likely that the permanent version of the shades will be more effective and acceptable than the disposable shades used in the study
- ⇒ There are inevitable limitations of the study design, including the specific mode of transport used and the possibility of respondent bias.

The research has provided a stronger understanding of the effectiveness of TravelShades, consumer perceptions and the commercial potential of this product. From this, the following conclusions and recommendations have been drawn:

**Conclusions:**

1. Based on the feedback of 93 participants we can conclude that the TravelShades were effective in alleviating motion sickness on coach Journeys.
2. The TravelShades were effective for the majority of motion sickness sufferers with a minority experiencing no improvement in their motion sickness levels.
3. There appear to be side effects to wearing TravelShades, including headaches, drowsiness and disorientation, that require further understanding and consideration.
4. Although the disposable version of TravelShades was tested for this study, it is possible that the more permanent version could be perceived as more effective and more comfortable.
5. The fact that most people in the study said the TravelShades worked and that they were willing to pay for the product, suggests that TravelShades can be a commercially viable product.
6. The permanent versions with shaded lenses were greatly preferred over the disposable shades.
7. The commercial potential of the disposable shades is unclear, but they could play a role in the promotion of the product or be used as a back-up or emergency option.
8. The price point for TravelShades is influenced by the price of other sunglasses and their aesthetic appeal.

**Recommendations:**

1. The two key statistical findings can be used to promote the effectiveness of TravelShades.
2. This report contains numerous positive endorsements by participants in the study that could be used to highlight the potential benefits of wearing TravelShades.
3. The disposable shades could be sold in particular situations, either as an emergency option in travel-based retail areas or online to enable people to try them in advance of buying a permanent pair.
4. The disposable shades could also be distributed free of charge to promote the permanent version.
5. The designs with the greatest commercial potential are those that are closest to designs imitating standard pairs of sunglasses.
6. Some way of making the permanent designs look less masculine or more feminine should be considered.
7. In addition to travel areas, the most natural place people would expect to buy TravelShades is in a chemist (such as Boots).
8. Most people were willing to pay between £10 and £40 for TravelShades.