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Understanding of Return to Player messages

Findings from user testing



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Executive summary

This research, commissioned by the Responsible Gambling Trust, explored machine players' understanding of the 'return to player' (RTP) messages displayed on gaming machines. These messages advertise what proportion of money is returned to players in prizes and form part of a package of measures to promote responsible gaming. The Gambling Commission has expressed concern that these messages are not understood by players. A small-scale, qualitative study, using cognitive interviewing methods was undertaken to explore players' understanding and perceived utility of RTP information, involving face-to-face interviews with 25 players.

Understanding of RTP messages

Evidence from this study suggests that current RTP messages are not well understood for a number of reasons, supporting the Gambling Commission's concerns:

- Messages use technical language that does not hold the same meaning for the general population as industry specialists.
- Messages use complex terms that have ambiguous or unclear meaning.
- The provision of messages in English only adds to difficulties with understanding them for those for whom English is a second language.
- The use of mathematical concepts and language such as 'average' payout, 'random' payout schedule and the expression of win chance as a percentage assume a level of mathematical literacy that some players do not possess.

For some, this lack of understanding promoted confusion and or mistrust of both the industry and regulator. Moreover there was some evidence to suggest that the current messages are being interpreted by some as meaning players are going to win. This is of concern as it may indicate that current messages rather than encouraging responsible gambling behaviour are in fact encouraging some people to continue to play beyond their limits.

Perceived utility of RTP messages

Participants in this study tended not to have seen or noticed the RTP messages prior to interview and no participant reported that RTP messages influenced their choice of machine. Perceived utility, post study exposure to the messages, was influenced by player's views on whether they thought the messages would have an influence on their own behaviour or that of others. Participants were largely split between those who felt RTP messages imparted useful information and those who did not feel they were useful. Typically, those who felt that messages were not useful were participants who thought that the RTP messages were unclear and therefore unhelpful. Those who did not understand the messages tended to express that they felt them to be misleading. Some participants were concerned that the messages would be

misinterpreted by players and that this could encourage them to gamble more than intended. This was especially true for the message around how RTP varies by stake, with some participants expressing concern that this would lead to players increasing their stake.

However, some participants did say they felt the messages could be useful in helping them to decide which machine or game to play. These were people who tended to understand the meaning of the messages.

Alternative messaging

The Gambling Commission considers that players may benefit from greater transparency around a range of other game and machine features. To explore this, participants were presented with a range of alternative messages ranging from the odds of winning any prize/jackpot/different prize levels to the average hourly loss rate and variations showing the amount of money spent.

Views were mixed with regards to whether these messages would be useful or not. There was no clear consensus over which messages were felt to be most important or most useful. Participants were split as to whether they felt monitoring how much money they had spent in a session was useful or not.

Learning points and further research

This study provides some useful insights that could be taken forward.

- Messages should be clear, more direct and use less complex terminology.
- Both the regulator and industry should think more carefully about how they communicate with those for whom English is not their first language. For example, if venues are in areas with high proportions of minority ethnic groups, then signage in appropriate languages should be considered.
- This study suggests people may not notice or use the RTP messaging. For any kind of responsible gambling messaging to be effective, people have to see it, understand it, reflect on the information conveyed in the message and then, hopefully, translate this into changed behaviour (in the direction intended).
- RTP messages may not influence players' behaviour at all or in the way intended. For example, whilst some participants in this study felt that knowing more about the total amount of money spent would be useful, others felt this could encourage chasing behaviour - the direct opposite of what this feature intends. The wording of messages needs to be carefully formulated and tested to ensure that they influence players

behaviours in the ways intended and do not have unintended consequences.

However this research was small-scale and further research is necessary to corroborate this study's findings. Specifically research should further:

- establish the extent and nature of misunderstandings, and how these vary across the wider population and between different subgroups;
- explore whether players actually look at messages in a 'real' play environment and if so in what circumstances, and identify the features of message presentations that encourage participants to read them; and
- further test alternative wordings of RTP messages, to assess their performance in terms of being of interest to players, being correctly understood, and in influencing players' behaviour as intended.

1 Background

1.1 Background and purpose

This project was commissioned by the Responsible Gambling Trust (RGT) in April 2014 to explore machine players' understanding of the 'return to player' (RTP) messages displayed on gaming machines. RTP messages are required to be displayed on all gaming machines in Great Britain. These messages provide information to players as to the proportion of money paid to use the machine that will, on average, be returned to players by way of prizes over a large number of games. These messages are intended to help consumers choose which machine or game to play, within the consumer choice paradigm (Blaszczynsk et al, 2008). There is, therefore, an implicit acknowledgement that these messages should influence behaviors by helping consumers better understand the potential outcomes of their gambling engagement.

Gaming machines have to include information about the proportion of total stakes returned in prizes on a machine, see section 1.2 for more details. The percentage RTP is generally measured over 10,000 or more game plays for compensated machines and over 100,000 or more game plays for random machines¹. With this concern in mind this research was designed, in agreement with the RGT, to explore players' understanding of the RTP information.

The specific aims of this research were to:

- explore players' understanding of key concepts used in the RTP information;
- explore the factors that may affect players' understanding of the RTP message; and
- collect information that will inform alternative forms of wording on RTP.

This research forms part of the RGTs broader research into category B gaming machines. Therefore, only category B machines were included in this project (see section 1.3 for an overview of machine categories in Great Britain).

However, similar messages are used on all other categories of machines and therefore findings from this project should be applicable to them also. In Great Britain, two types of gaming machine are available: one based on random

¹ Machines operating on a compensated payout schedule vary the chance of winning based on the outcome of previous play. However, the prize distribution is still determined by chance. In contrast, on machines operating on a random payout schedule, the odds of winning remain constant, and are not affected by previous wins or losses on machines.

probability event outcomes and one based on compensated payout methods. Both types of machines were included in this research.

The project design focused on exploring machine players' understanding of RTP messages with actual machine players. The need for research into machines to better replicate real play, using real life gamblers, was noted by the Responsible Gambling Strategy Board in their submission to the Department of Culture, Media and Sport's triennial review of machine stakes and prizes (RGSB, 2013).

1.2 Policy Context

As mentioned in section 1.1 gambling machines have to include information on the proportion of total stakes returned in prizes, or the odds of winning prizes from play on a machine known as the 'return to player' (RTP). This is required by regulation², and the Gambling Commission's gaming machine technical standards require the provision of such information in standard forms, through statements relating to the 'return to player' (RTP) or 'average payout percentage'³. The typical form in which the information is provided is as follows:

'This machine has an average percentage payout of at least 80%'

The percentage quoted in this message varies depending on the characteristics of the game. The Gambling Commission's technical standards also mandate a range of other information to be provided to the player, based on type of machine/game being played. This includes what category of machine it is (or where there are different categories of game within one machines, what category the game is) and whether the machine is based on random or compensated payout schedules.

Currently players are presented with gaming machines which look similar and may be described in an almost identical fashion but operate in a very different manner, depending on game design. This variability in game design poses a challenge in terms of how best to provide information on the RTP. The Gambling Commission consider that players may benefit from greater transparency around:

- the 'cost of using the machine';
- the (hourly) loss rate;

² The Gaming Machines (Circumstances of Use) Regulations 2007. Regulation 2 requires a gaming machine to display information about the proportion of amounts paid to use the machine that is returned by way of prizes; or about the odds of winning prizes from use of the machine. Regulation 3 requires a notice to be displayed on the machine at all times when it is available for use, indicating where the above information can be found, and that the information is readily accessible by a person using the machine.

³ Gambling Commission gaming machine technical standard 8.3, Display Notice Requirements

-
- the volatility of the game;
 - win/loss possibilities over a typical gambling session⁴;
 - greater transparency in respect to game features in terms of how they could affect the RTP; and
 - RTP – more accurately reflected by the above in combination.

To date, no research has been undertaken in the UK to explore how players, in real gambling settings, understand the current RTP messaging. This needs to be explored before further changes, such as those suggested by the Gambling Commission, are made. This research aims to fill this gap, providing practical and useful information about what players do and do not understand about RTP messaging and providing suggestions for improvements.

1.3 Gambling machines in Great Britain

Great Britain has a complex array of different types of gambling machines available to the public. They are categorised into 11 different types by the Gambling Commission (the industry regulator). This information is summarised in table 1.1.

⁴ 'Typical gambling session' in this context may need to be specific to the group at which the machine would generally be aimed as it will vary across different venues

Table 1.1 Gaming machine types and prizes

Category	Current max stake	Current max prize	New max stake	New max prize
B1	£2	£4000	£5	£10000*
B2	£100	£500	£100	£500
B3	£2	£500	£2	£500
B3A	£1	£500	£2	£500
B4	£1	£250	£2	£400
C	£1	£70	£1	£100
D non-money prize (not crane grab)	30p	£8	30p	£8
D non-money prize (crane grab)	£1	£50	£1	£50
D money prize	10p	£5	10p	£5 N
D combined money and non-money prize (coin pusher/penny falls)	10p	£15 (of which no more than £8 may be money prize)	20p	£20 (of which no more than £10 may be a money prize)
D combined money and non-money prize (other than coin pusher or penny falls)	10p	£8 (of which no more than £5 may be a money prize)	10p	£8 (of which no more than £5 may be a money prize)

*with option of max £20,000 linked progressive jackpot on premises basis only

Different categories of machine are available in different venues, according to the licensing regulations set out by the Gambling Commission. In bookmakers, adult gaming centres and casinos (the venues used for this research, see Section 2.1.2) machine categories B to D are permissible. In practice, bookmakers tend to have machines which offer B2 and B3 games, casinos tend to have B1 and B3 machines and AGCs have a range of B3 to category D machines (the precise composition can vary from venue to venue).

2 Study Methodology

This study employed a qualitative method – that of cognitive interviewing – to explore real machine players’ understanding of the RTP message. Cognitive interviewing methods explore what participants think about as they complete a task or review information - in this case the RTP message. Information on cognitive processes is gathered using a combination of think aloud and probing techniques (see for example, Beatty and Willis, 2007; Collins, 2003; Willis, 2005). The sampling strategy used for this study was purposive and findings are based on a thematic analysis of the interview data using the Framework method (Spencer et al, 2003).

The purpose of this study is to explore machine players’ understanding of the RTP message and to elicit in-depth accounts regarding why any confusion occurred from a player’s perspective. This study is not designed to address how often players actually read RTP messages or estimate the prevalence of misunderstandings that occur in practice.

In this report we document the number of study participants who misunderstood the RTP messages or who encountered particular types of misunderstanding, as a means of describing the patterns observed. However, these numbers are not indicative of how frequently problems will occur in real life as the purposive sampling methods we used for this study are not designed to produce a statistically representative sample from which robust population estimates can be derived. In the rest of this chapter we describe in more detail the methodology used for this study.

2.1 Data Collection

2.1.1 Ethical approval and protocol

All stages of this research were approved by NatCen’s Research Ethics Committee (REC), which includes external experts and specialists in methodology. In obtaining ethical approval for this study, a pre-specified research protocol was set out and agreed. Any subsequent amendments to this protocol were resubmitted and approved by the REC.

On the day of the research, a full description of what the research involved was given to participants prior to interview. Participants had the opportunity to ask any questions about the research and were only included in the project if they provided verbal consent (all did so).

2.1.2 Recruitment

Participants were recruited via gambling venues as this offered a cost effective means of recruitment. We also felt that testing the RTP messages within a gambling environment familiar to players would provide a more realistic test setting, albeit with interviews taking place in a private location within the venue. Gambling venues were recruited first. Once this was done, participants who actively use these venues were then recruited.

Recruiting venues

Venues were recruited through our network of contacts with industry members. This involved liaising with a number of operators, explaining the purpose of the research and outlining our requirements to negotiate access to the venues. There was a great deal of willingness to co-operate but, for some operators, other considerations prohibited full support when deciding whether to grant access to venues or not. Coral, Praesepe and Rank were the operators who agreed to grant access to their venues and ultimately supported this research. They provided the actual venues in which the research was conducted, supported us in recruiting participants and provided general oversight and points of clarification about their population of machine players. These operators, whilst providing support when needed, also understood that the research should be conducted independently and that our design should not be influenced by commercial considerations. They respected the views and directives of NatGen's Research Ethics Committee and adhered to these protocols.

The venues offered by Coral, Praesepe and Rank were two bookmakers in city centre locations, an adult gaming centre at a busy town centre location and an edge-of town casino respectively. All venues include category B machines. The findings from this research are based on machine players at these four venues. No other venues were approached.

Recruiting participants

We used the same recruitment method in all venues to make contact with potential participants who played gaming machines. The process involved the research team working closely with venue staff, who acted as gatekeepers. The venue staff informed their customers about the opportunity to participate by putting up posters, handing out flyers and telling customers about the research. This method meant that the research team was dependent on the venue staff advertising the research. Would-be research participants were asked to contact the research team using a freephone number or email, who provided them with some background information about the study and asked them a short screening questionnaire to ensure eligibility for the study. Copies of the recruitment materials are included in Appendix A. In addition, on the day

the research took place the research team was, with the prior agreement of the venue manager, allowed to attempt to recruit machine players to boost numbers where this was necessary. This additional recruitment activity occurred in all three organisations' venues. Table 2.1 shows the split of interviews across venues by recruitment activity.

<i>Recruitment method</i>	<i>Bookmakers</i>	<i>AGC</i>	<i>Casino</i>
Pre-booked	4	5	2
On the day	5	6	3
Total	9	11	5

Qualitative sampling approach

This study involved a qualitative sampling approach. Unlike quantitative sampling methods, which are concerned with producing statistical estimates of the prevalence of characteristics or phenomena of interest to the study in the wider target population, qualitative sampling methods involve the study of far fewer people, but explore in more depth those individuals, settings, subcultures, and scenes, so as to generate a deeper understanding of individual perspectives, understandings and behaviours.

In contrast to the probability sampling techniques used in quantitative studies, qualitative studies, including those using cognitive interviewing methods, deploy purposive sampling approaches which involve the development of a framework of the characteristics that might influence an individual's contribution. The choice of framework characteristics is based on the researcher's practical knowledge of the research area and available literature and evidence, and participants are recruited based on these characteristics (see for example, Bryman, 2012; Ritchie et al, 2003).

Profile of participants

A purposive sample of 25 participants was recruited from all three venues. The recruitment strategy was designed to include the diversity of machine players in each venue with respect to age, sex, highest qualification, length and frequency of play. However, recruitment was limited by a) the venues conducting the recruitment process, b) clientele frequenting the four venues during the recruitment and fieldwork period, and c) those who agreed to participate. The profile of participants is detailed in the following tables.

Table.2.2 Sex, age and highest education qualification of study participants

	Venue			
	Bookmakers	AGC	Casino	Total
Sex				
Male	8	5	1	14
Female	1	6	4	11
Age				
18-30	1	1	0	2
31-50	5	6	2	13
51+	2	3	3	8
Not asked	1	1	0	2
Highest qualification				
A level or above	5	3	2	10
GCSE or below	3	7	3	13
Not asked	1	1	0	2
Total	9	11	5	25

Table.2.3 Sex, age and highest education qualification of study participants

	Venue			
	Bookmakers	AGC	Casino	Total
Time been playing				
Less than 6 months	0	1	0	1
More than 6 months	9	10	5	24
Frequency of play				
At least once a week	7	10	4	21
At least once a month	1	1	1	3
Less often than once a month	1	0	0	1
Total	9	11	5	25

As can be seen from table 2.2 we interviewed a mix of men and women with different levels of educational attainment. However, our study did not include many younger players – those aged 18-30 and particularly young men, who we know from survey evidence to be at greatest risk of having problem gambling behaviours.⁵ Another limitation of our study is that it included only one player who had been playing for less than 6 months, see table 2.3. Our participants tended to be experienced players, who in some cases had been playing for decades. These limitations are discussed in section 2.2 and should be borne in mind when considering the study’s findings.

⁵ The Health Survey for England 2012 showed that problem gambling rates among men aged 16-24 who played fruit machines were 2.2% falling to 0.3% for men aged 75 and over (Wardle & Seabury, 2012).

2.1.3 Fieldwork protocols

Before each interview, a member of the research team spoke to the participant individually about the study and answered any questions he or she had about the study. Once the participant fully understood the study and what taking part involved, verbal consent was gained. If the team member believed that the person did not understand the study or felt coerced or influenced in any way to take part in the study they were not interviewed. Some basic demographic information was collected at the recruitment stage. Everyone who took part in the interviews was given a £20 high street voucher, a thank you letter, and a leaflet providing them with details of organisations that they could approach, should they wish to, for further information about problem gambling and support services.

The research involved face-to-face in-depth interviews with one of four members of the NatCen research team⁶. All the interviews took place in designated areas in the gambling venue to ensure privacy and confidentiality at all times, for example in office spaces. The interviews were audio recorded, with the participant's consent, using encrypted digital recorders. At the start of the interview, the interviewer explained the structure and the purpose of the interview. The interviewer then showed the participant each card, containing an RTP message, in turn. The interviewer used an interview protocol, which contained instructions on when to use think aloud and when to probe, using scripted probes, to follow up on specific elements. Interviews varied in length, from 20- 50 minutes depending on how effusive the participant was and the time available for the interviews.

Interview protocol

An interview protocol was developed and used with all participants. In the interview, participants were shown a set of five different messages on win chances, which are included in different RTP messages.

- Message 1 showed a 'basic' RTP message.
- Messages 2a and 2b showed information indicating whether a machine was compensated or random.
- Message 3 showed an explanation that the odds of winning are not indicated by the game features or display.
- Message 4 showed a variation of an RTP message where the average percentage pay out varied depending on the stake size.

⁶ The fieldworkers for this study were Debbie Collins, Sophie Green and Jo d'Ardenne, who have between them 30 years' experience in undertaking cognitive interviews, and Kate Green a student working on a 12 month placement at NatCen, who had received training in cognitive interviewing methods and worked on several previous studies. All fieldworkers met to walk through the interview protocol in advance of fieldwork commencing and followed a written protocol.

Each message was displayed on a card and shown to the participant in turn. Following an introductory exercise to explain think-aloud techniques, participants were asked to think aloud when reading each message. Interviewers then asked a series of follow up cognitive probes following the think aloud. These interviewing techniques are described in more detail in the next section.

Appendix A contains a copy of the interview protocol and the probes used. Cognitive interviews are semi-structured and interviewers were encouraged to supplement the protocol with spontaneous probes in order to fully explore any issue that arise.

Think aloud

Think aloud, or verbal protocol, is a method that requires participants to talk aloud while solving a problem or performing a task. It was originally developed by Ericsson and Simon (1980) and has been widely applied in cognitive psychology research. Think aloud has become an established means of observing different forms of behaviour requiring individuals to verbalise their thought processes and actions (Gray & Wardle, 2013).

Think aloud can be carried out in two ways:

- concurrently: at the time the subject is solving the problem or completing the task (known as a 'live' report), or
- retrospectively: after the event.

Concurrent think aloud requires minimal input from the investigator (Ericsson and Simon, 1993) whilst retrospective think aloud data can either involve uninterrupted accounts of the event or can be facilitated by retrieval or other cues such as video recordings of the event or specific questions about what happened (Taylor & Dionne, 2000). Concurrent think aloud has previously been used within gambling research (Brochu et al, 2010; Gabour & Ladouceur, 1989; Griffiths, 1994; Husain et al 2013; Walker, 1992).

In this research concurrent think aloud was used to explore participants' initial reactions and thoughts on being presented with each RTP message.

Cognitive probing

Immediately after the think aloud, participants were asked a series of cognitive probes to explore in more detail their understanding of each RTP message to explore:

- their comprehension of each message;
- whether or not they had noticed the message (or a similar message) when playing machines;

-
- their view on whether the message was useful to game players or not; and
 - their views on whether the message could be improved (or made clearer) or not.

Probing is a qualitative technique, involving both scripted and spontaneous probes that aim to elicit further information about participants thought processes, including understanding of information and phrases contained therein (see Beatty, 2004; d'Ardenne, 2014). Probes were asked concurrently, after each message had been viewed. After participants had been shown all the messages they were asked further questions on what other types of messages, if any, would be useful for game players. Work by Conrad and Blair (2009) suggests that respondent-driven cognitive interviewing techniques, in which think aloud takes place prior to any probing, improves the reliability of error detection.

2.1.4 Analysis

A Framework approach to data management and analysis was used. Framework is a matrix approach where data is summarised into cells with a row representing an individual case and a column representing a common theme across the data. The advantage of this approach is that it facilitates the analysis of different aspects of an individual's processing of information and the information features that influence understanding as well as enabling analysis of particular themes across different cases (see Collins, 2014).

All notes and transcripts were 'summarised' into an analytical framework set up in Excel. This analytical framework consisted of a number of descriptive and analytical categories, reflecting the interview protocol. The framework included a summary of the characteristics of participants: such as their sex, age, frequency they played on the machines⁷, highest educational qualification and interview location. The framework was organised by each of the five RTP cards shown to participants during the interview. Under each card, a summary was made of each interview's findings pertinent to the think aloud and each cognitive probe. An additional 'other' category was included for each card, to capture any other comments made by the participant that had not been anticipated in the design of the probes. Thus, data could be read horizontally as a complete case record for an individual, or vertically by statement, looking across all cases.

⁷ The following frequency of play question was asked at the end of the interview: In the last 12 months, how often have you spent money on fruit/slot machines? Answer options: Everyday/ almost every day; 4-5 days a week; 2-3 days a week; About once a week; 2-3 days a month; About once a month; 6-11 times a year; 1-5 times a year.

2.2 Study limitations

This study has a number of limitations that should be born in mind when considering its findings and these are discussed below.

Limitations of cognitive interviewing

Cognitive interviews are qualitative in nature, involving an in-depth interviewing approach and typically small, purposive samples. In these interviews we can explore the cognitive processes that go on while a participant is attempting to make sense of the information provided. The method helps us identify different types of problem that participants encounter and provides us with evidence about why these problems occur. However, cognitive interviewing cannot provide quantitative information on the extent of the problem or the size of its impact on survey estimates. Samples are usually too small, and cases not selected with a known and equal chance to support such extrapolation.

The method relies on participants' ability to articulate their thought processes; however not everyone can do this (well). Moreover it is thought that cognitive interviewing favours people with a higher level of education, as they find it easier to articulate their thoughts, particularly when using think aloud (Fowler, 1995). A further point to note is that not all thought is conscious and therefore capable of being articulated. Our interview protocol was designed to use a range of cognitive interviewing techniques to ameliorate these problems.

The method may also change participants' usual behaviour, for example participants may spend more time reading and considering information presented than they would in a real life setting and this could lead to spurious findings (see for example Wilson et al, 1995). In our study we were not principally concerned with participants' reading behaviour rather we assessed understanding of the messages using a range of cognitive techniques and then asked participants if they ever read the messages.

Limitations of our sample coverage

As noted in section 2.1.2, our sample included few young men or inexperienced machine players (those who had been player machines for less than 6 months). Young men aged between 16 and 34 are more likely to have played slot machines than women and older men and are more likely to exhibit problem-gambling behaviours (Wardle and Seabury, 2012). It is possible that these groups may have interpreted the return to player messages differently to those included in our study. However it seems reasonable to hypothesise that younger players and/or those with less gaming experience would exhibit the same level, if not less, understanding of RTP than older, and or more experienced players and this is something that should be empirically tested, (see section 9.5 for more details). Moreover, the concept of RTP is applicable

to slot machines and thus younger players are likely to be familiar with the concept.

Limitations of the recruitment method

The lack of younger machine players, particularly young men, and less experienced players is in part likely to be a result of the recruitment strategy we used for this study: that of recruiting through gaming venues. This limited our pool of potential participants to those who frequented the selected venues, saw our recruitment materials/ were approached by venue staff, were available during our fieldwork session and volunteered to take part. Recruitment through other methods, such as following up survey participants who are machine players and have given their consent to be recontacted about future research may have provided a wider pool of players.

2.3 Report structure

In the rest of this report we describe the main findings from the cognitive interviewing. Chapter 3 provides contextual information about the factors influencing machine choice that participants mentioned and the role of the RTP message in this choice.

Chapters 4 to 7 explore participants' understanding of the 'simple' RTP message (chapter 4), RTP messages for different stake values (chapter 5), messages for compensated and random games (chapter 6), game features (chapter 6) and the odds of winning (chapter 7). Each chapter also look at participants perceptions of the utility of each message. Chapter 8 looks at participant's views on what types of messages they think would be useful, and on the views on the utility of a number of alternative messages. Finally, in chapter 9 we provide a summary of the main findings from this study, their implications for gambling policy, suggest what the next steps might involve in developing new messages and make recommendations for further research.

3 Research context

Prior to being shown the RTP messages participants were asked how they decided which machine or game to play. The aim of asking about machine choice in this context was to see whether participants spontaneously mentioned using RTP messages (or other messages explaining win chances) when making decisions about which games to play.

Collectively participants mentioned a range of factors in deciding which game to play. These were:

- whether the game is familiar to the participant – one that he or she knows how to play;
- features of the game, such as how noisy or colourful it is;
- how complicated the game looks to play;
- how enjoyable the game is to play;
- the type of game: whether it is new; has screens, reels, roulette; is a community game; and or has special features such as the chance to have free spins and goes;
- the cost per play;
- the size of the maximum payout or jackpot;
- how the machine is playing – whether the jackpot has been won recently; and
- whether the participant has won playing the game before.

The features mentioned by participants as influencing their choice of game varied and reflected personal preferences, such as whether the participant liked playing ‘reels’ or roulette, higher or lower stake games, or games that were noisy or quieter. RTP messages, or odds displayed, were not mentioned spontaneously by any participants as a factor influencing game choice.

4 Return to player message

4.1 The message tested

The first message shown to participants on a card was a standard RTP message including a single percentage value (see Appendix C). The message read as follows: “This machine has an average pay-out of at least 90%”. We explored how players understood terms in the message using a four-step process:

- 1) Participants were first asked to think aloud as they reviewed the message.
- 2) The interviewer then asked some general cognitive probes to establish, qualitatively, their understanding of the message, the terms ‘average’ and ‘average payout’, and whether they use similar messages when deciding which machines to play.
- 3) Participants were then given a multiple-choice question and asked to select the answer they thought was closest to what the RTP message means, thinking aloud as they did so, (see insert).

Multiple choice question presented to participants:

This machine has an average percentage payout of at least 90%

Which of the following **best describes** what the message means:

- 90% of people who play this machine will win something
- This machine will give out a prize 9 times in 10
- If you put £1 in this machine you are guaranteed to win 90p
- For every £100 put in to this machine about £90 is paid out in prizes

The purpose of this question was to help facilitate further qualitative exploration of participants’ understanding of the RTP message.

- 4) Finally, further probing followed, in which the correct answer was revealed and participants were asked to comment on the clarity of the message, to suggest ways in which it could be made clearer and what they thought of the usefulness of the message. In this section we discuss the qualitative findings from this process.

4.2 Understanding of the return to player message

Participants’ understanding of this message was variable and can be summarised in terms of those who:

-
- understood the message correctly;
 - misunderstood the message, interpreting it in a different way to that intended; or
 - did not understand it at all.

Understanding of the RTP message was judged on the basis of what participants said during the think aloud and subsequent probing, their response to the multiple choice question and their rationale for their choice of answer. We developed a typology of participants' understanding of the RTP message based on reviewing the aforementioned qualitative data. The lead researcher developed the initial typology, which was then used to code each case. Coding was undertaken by the lead researcher and another member of the team independently. Codes were then compared and discrepancies discussed and reviewed. The initial typology was revised in light of this process to clarify the boundaries between each category and cases were subsequently recoded independently again by the same two coders, who discussed and agreed on an appropriate 'final' code, where necessary.

This is a small-scale, qualitative study, not designed to estimate the prevalence of different interpretations of the RTP message. We include the number of participants who understood the RTP message in a particular way merely to indicate the pattern of interpretations encountered among those who took part in this study. The numbers presented have no statistical significance. Among those who took part in this study it was more common for the message to be misunderstood than for it to be understood as intended; 18 of the 25 participants interviewed misunderstood the meaning of the message and this pattern of understanding /misunderstanding persisted across the other RTP messages we tested.

In the rest of this section we look in more detail at these different interpretations.

4.2.1 Those who understood the message correctly

A minority of participants (six) were judged to understand the RTP message as intended. They understood that winning was based on chance, that this chance was determined by the machine, and that '90 per cent' referred to the proportion of takings the machine would pay out over a (unspecified) period of time.

"Although it has an average payout of at least 90% that doesn't mean that if you spin the wheel 100 times 90 times out of those you will in, or even that if you put £100 in £90 will come out because it's random."

Female, 51+, A level or higher, plays every day

This group included men and women of different ages and educational attainment. All had been playing gaming machines for many years and set themselves limits⁸ of either the amount of time they would play for or the amount of money they would play with.

4.2.2 Those who misunderstood the message

Misunderstanding of the RTP message was common among participants in this study: 18 participants were judged to misunderstand the meaning of the message, interpreting it in a different way to that intended (i.e. to the guidance set out by the Gambling Commission). Two distinct types of misunderstanding were identified.

Type 1 - Participants interpreting the message as meaning 'you are going to win'

This type of misunderstanding involved participants mistakenly inferring that the RTP message was telling them that they were going to or were very likely to win if they played the machine. They did not appear to understand that the 90% average payout referred to the proportion of the total value of money staked by all players that will be returned in prizes over a large number of games and that winning a prize was subject to chance. Rather they thought that the payout was pretty much guaranteed and would occur within their play session.

"...guaranteed to win really...well pretty much."

Male, 18-30, played for 6 months or more, at least
once a week

"[the machine] will tend to pay out quite a lot. Out of the times I play it I'm more than likely to win on it."

Female, 31-50, played for 6 months or more at least
once a week

"Is it true that any customer is showing to be winning at least 90% average payout?"

Male, 31-50, played for 6 months or more, at least once a week,
English not first language

This group included men and women of different ages, with differing levels of education. They all described themselves as people who had been playing for more than 6 months, and who played several times a week. This group included people who did not have English as their first language.

⁸ These were not machine-based limits, but strategies that participants employed themselves.

Type 2 - Participants being confused about the relationship between how much you (the player) put in to the machine and your chance of winning

This type of misunderstanding was more common among those in our study, although as a small scale study we make no claims regarding its prevalence in the wider player population. It involves misunderstanding the message as referring to a player's own individual chance of winning during a play session rather than it referring to the proportion of the total value of money staked by all players that will be returned in prizes over a large number of games.

"I couldn't understand average payout here as I never win £500... I spend a lot of money here but I don't win nothing; just £50, £40, I win. Yesterday I put £100 in but I didn't win nothing. I can't understand this payout average."

Male, 18-30, GCSEs or lower, played for less than 6 months,
English not first language

In addition there was a lack of understanding of what an 'average' payout was among this group. Some participants thought that it meant that you might get *"a bit more or a bit less"* than 90% or that you would get a proportion of 90% - *"you get 50% of 90%"* or that out of *"£500"* you put in you would *"get back £150-£200"*.

In other cases participants took the 90 per cent average payout information to mean that they would get back exactly 90⁹ per cent of what they put into the machine in any one play session. In some cases participants spontaneously described¹⁰ this in terms of for every £1 or £100 they put into the machine they would get back 90p or £90 within their play session.

There was some scepticism about the 'truth' of the RTP message. Where this was expressed it took two forms:

- those who did not believe it because in their experience they rarely or never won (90% of what they put in);r

"If you put say £100 in, you should get £90 back, within playing that £100 ...although its total rubbish."

Male, 31-50, A levels or higher, plays at least once a week

- or those who thought that the machines at the venue(s) they played at had been *"turned back"* and were actually operating at a lower RTP than

⁹ This was the % quoted in the message shown to participants. It is likely that they would think they would get back whatever % was quoted in the message.

¹⁰ This occurred during the think aloud or when probed on their understanding of the message, prior to being asked the multiple choice question.

advertised. In these cases participants believed the machines were set to a 70% RTP.

In the case of the first form of scepticism, the dissonance between participants' gaming experience and their understanding of the RTP message exacerbated their confusion.

Confusion about the meaning of the RTP message was found among men and women of different ages and educational attainment who took part in our study. This group had all been playing for 6 months or more – in some case for many years - and played at least once a week. Among this group were participants who had English as a second language and some players who described chasing their losses.

4.2.3 Those who did not understand the message

Only one participant said he did not understand the message. He had been playing gaming machines for more than six months but played less than once per month now as he had lost *"lots of money"* playing roulette in the past. This participant did not speak English as his first language and had, by his own admission, difficulty reading and understanding English. It is possible that this affected his ability to understand the message and to articulate what the message meant in English. This participant did not understand any of the subsequent messages tested and we make no further reference to him in describing participants' understanding of the test messages in this report.

4.3 Perceived utility of the return to player message

At the end of stage 2, after the initial think aloud and probing on the RTP message, players were asked whether they used the RTP message when deciding whether to play particular games. Most reported they did not use it but two players said they did use this information. In one case the participant said he used the RTP information routinely to select games to play that had high payouts. This participant, a male aged 31-50, casino player, understood the message correctly. In the other case the participant, a female aged over 50, used the information to select games to play where she thought she had a chance of winning the jackpot. She wrongly assumed that the message was telling her that someone else had been playing the game beforehand and that she might not therefore win the jackpot if she played. She had been confused by the RTP message and misunderstood it.

There were two other cases where participants said they used the RTP information sometimes to select a game, although how they used the information was unclear. Both were participants who had misunderstood the

RTP message – one thought it meant she was going to win and the other was confused by the message.

After further probing on the multiple choice question, see section 4.1, participants were asked how clear and useful they thought the message was. Those who thought the message to be clear and useful were in the minority. They thought the message useful because, with one exception, they had misunderstood the message as intended. All those who misunderstood the message, thinking it meant that they were guaranteed to win, thought the message was clear. In addition some of those who were confused by the message thought that, if the message was described as in option 4 of the multiple choice question, that it would be clear and could encourage people to play. The exception was the case of the aforementioned gentleman who used the RTP information to select games with a high payout, who understood the message correctly.

The majority of participants in this study thought the RTP message was unclear and therefore unhelpful. Reasons for these views were:

- they had misunderstood the message;
- the use of percentages and averages was confusing to those with self-reported low levels of mathematical literacy;
- the message was seen to be misleading because:
 - it didn't specify a time period over which the average payout would happen; or
 - because participants didn't believe the RTP was 90% based on their experience or view that the machines operated at a lower RTP;
- they played for fun and enjoyment; and
- whether you win or not depends on other factors, such as whether someone has just won the jackpot, how long you play for, how the machine is playing or how lucky you are.

In addition, those who were sceptical about the RTP message felt it was only displayed because there was a legal requirement to do so.

Various suggestions were made at this point as to how the RTP message could be improved. These were:

- use the wording in option 4 of the multiple choice question;
- don't use percentages but instead describe the RTP in pounds and pence;
- add a time period to the message, such as '*over a month or a week the typical RTP is...*';
- Change the message to say '*The more money you put in the more chance you have of [winning] it*';

-
- add the word '*overall*' to average; and
 - state that the RTP is independently verified.

It should be noted that some of the suggestions for improving the RTP message were provided by participants who misunderstood the original RTP message.

Chapter 8 looks in more detail at alternative forms of wording of the RTP message and participants views on these and their own suggestions.

5 RTP messages for different stakes

5.1 The message tested

Later in the interview, after discussing the simple RTP message, participants were shown a more complex RTP message which described how the average percentage pay out varied depending on the amount staked. This message was tested because some machines in Great Britain have a number of different games that players can choose and the RTP may vary based on the individual game characteristics. RTP can also vary within games based on the features accessed and used, and the staking level. This makes the RTP messaging more complex in reality as one machine can house different games with different RTP payouts. The messages, shown to participants on a single card, were as follows.

At 50p stake, this game has an average percentage pay-out of at least 88%.

At £1 stake, this game has an average percentage pay-out of at least 90%.

At £2 stake, this game has an average percentage pay-out of at least 92%.

Participants were asked to think aloud as they reviewed the messages and were then asked some scripted probes to further explore their understanding and their views on the utility and clarity of the messages.

5.2 Comprehension of the message on different rates for different stakes

5.2.1 Interpretation of the message

This message was interpreted in a number of ways.

- The higher the stake the greater the payout.
- The more you put in the greater the chance of winning.
- That there is little difference in the percentage payout by stake value.

The second interpretation was more commonly cited by participants in this study and occurred among those who had been confused by the simple RTP message, discussed in chapter 4. The first interpretation (the higher the stake the greater the payout) was provided exclusively by participants who had correctly understood the simple RTP message, see chapter 4. The third was provided by two female participants with lower level qualifications (GCSE or below) who had been confused by the simple RTP message. In addition, a few participants who had been confused by the original RTP message and

expressed scepticism about the accuracy of it spontaneously expressed their scepticism about the truth of this message.

5.2.2 Understanding the term ‘stake’

Specific probes were asked to explore what participants understood by the term ‘stake’ and this was understood in one of two ways.

- The cost per game, such as the *“price per spin, if you are playing a one pound spin, each stake is one pound.”* (Male, aged 31-50), or for Roulette the odds being offered, such as 36 to one.
- The money gambled, bet or invested in trying to win - the *“money you put in. The money you are risking.”* (Male, aged 30-50).

5.3 Perceived utility of the message on different rates for different stakes

This message was seen as being clear and no improvements were suggested.

The perceived utility of this message varied and was generally linked to whether participants thought that the message could influence their own and or other players’ behaviour. Those who thought the message could influence behaviour thought that the message was useful. However some participants expressed concern that the message could be a marketing ploy designed to encourage people to up their stake and that might, in some cases, encourage people to bet more than they could afford.

“I think it’s to encourage you to try to increase your likelihood of winning by upping your stake.”

Male, over 50, A levels or higher, plays at least once a week

In addition, there were two participants who did not think the message would change their or others’ behaviour but who felt this information was useful to know. These were the two participants mentioned in section 5.3.1, who interpreted the message as meaning that there was little difference in the percentage payouts between the three stakes. Both these participants said they would play the lowest stake.

Those who did not think the message would influence their own or other players’ behaviour thought the message was not useful.

It is worth noting that a few participants questioned whether it was fair to offer different average percentage payouts based on the size of the stake. They felt that the size of payout should be the same irrespective of the cost per play.

6 Messages on ‘compensated’ and ‘random’ games

6.1 The messages tested

As mentioned in section 1.2, the Gambling Commission’s technical standards mandate that information on whether a machine uses a compensated or random payout schedule must be provided to players and it affects the odds of winning. This research study covered both types of payment schedule.

Participants were shown a message explaining that a game was ‘compensated’ or influenced by previous play. This message is as follows: “This game is compensated and may be influenced by previous play.”

Participants were then shown a message about random play. The message is as follows: “This game is random”. They were asked to think aloud as they were shown each message on a card, and were then asked more specific probes to elicit their understanding of the messages and their perceived utility.

6.2 Comprehension of ‘this game is compensated’

This message was not always understood. Those who spontaneously said they did not understand the message were unsure what ‘compensated’ meant,

“I don’t understand what this means, compensated...this game is compensated. What does this mean?” Female, aged over 50, no qualifications, confused by the initial RTP message

“I don’t know what that means, am I stupid?” Female, aged 31-50, GCSEs or lower, was confused by the initial RTP message

In addition, one participant questioned what previous play means, asking whether it means *“it encourages you to go on it because it’s paying out, you mean?”* Female, aged over 50, confused by initial RTP message.

Those who did not understand what the message meant included participants who did not speak English as a first language.

Where participants thought they understood the message, in most cases they interpreted it as meaning that the chance of winning is influenced by the

outcome of previous play. However, they did not always grasp the fact that the prize distribution is determined by chance.

“My interpretation of this message is that if the last guy has lost you are more likely to win.” Male, 31-50, A levels or higher, was confused by the initial RTP message

“If it has paid out a lot of money already, it may not pay out as much.” Female, over 50, A levels or higher, understood the initial RTP message.

Those who understood it in this way included participants of different ages, levels of education and those who did and those who did not understand the initial RTP message, discussed in chapter 4.

However, there was one case where the participant considered that the message was saying *“you could win some money playing this game”*. This participant, a female aged 31-50 with GCSEs or lower, had been confused by the initial RTP message.

6.3 Comprehension of ‘this game is random’

On machines operating on a random payout schedule, the odds of winning remain constant, and are not affected by previous wins or losses on machines. Only one participant in our study interpreted the message in this way. This participant was a male aged 18-30, who had been confused by the initial RTP message, discussed in chapter 4.

Occasionally participants said that they were uncertain what the statement meant and not having English as a first language was a factor here. However, unlike with the message ‘this machine is compensated’, see section 6.2, the ‘random’ message elicited a wide range of interpretations that were not in line with the intended meaning. The difficulties participants had with understanding the message related to the term ‘random’, which caused confusion. The range of interpretations was as follows.

- Winning is down to *“chance”* or *“luck”* - you could put a pound in and win the jackpot or put in £100 and win nothing
- It’s unpredictable – there’s no way of knowing what is going to happen next
- Some games will payout the big prize
- The odds of winning are not fixed
- Staff haven’t *“fixed”* the odds of winning

- If you play it at the “*right time*”, the machine will pay out in “*a sequence*”. If you pay out at the “*wrong time*”, you will keep losing
- It means you are winning
- It means it’s an “*exclusive*” machine or game that is a speciality of each gaming venue
- That the game is “*different*”.

In terms of random being interpreted as meaning “*different*” this interpretation was provided by a young, male respondent aged 18-30 who used the analogy “*you might share a photo and call it random because it is different*”. This usage illustrates how language can change over time and that different generations may interpret the same word or phrase in very different ways.

6.4 Differentiation between ‘compensated’ and ‘random’ games

There was some uncertainty about the difference between random and compensated games, which stemmed from players not knowing what either or both ‘random’ and ‘compensated’ meant. However others were clear that the messages were different, although as we have discussed in sections 6.2 and 6.3, participants’ interpretations of these two statements were not always in line with the intended meaning. Figure 6.1 presents the differences cited by participants who felt the messages were different.

Figure 6.1 Differences in understanding between ‘compensated’ and ‘random’ games among participants

Understanding of term compensated	Understanding of term random
Chance of winning affected by previous play	Chance of winning not affected by previous play
	Game is exclusive to a particular gaming establishment
Chance of winning and size of win affected by previous play	The game can do what it likes / Game programmed to include some ‘random’, unpredictable elements
Player has more influence over the odds of winning	Player has no influence of the odds of winning

6.5 Perceived utility of messages on ‘compensated’ versus ‘random’ games

Views were mixed about the utility of these messages and whether or not participants understood them influenced their views on their usefulness. Moreover, as reported in earlier chapters of this report for the other messages, other factors influencing views on utility were whether participants:

- read such messages before playing the game; and/or
- whether they felt that the message would influence their, or another player’s choice of game.

In addition, there was a view expressed by some that the information about the game being compensated would (only) be useful if you knew the outcome of the previous play. There was some doubt expressed over whether operators would be willing to include this type of information on machines, as this might affect players’ decisions about whether to play a particular game, for example, if the jackpot had recently been won.

Participants made some specific suggestions about how these messages could be made clearer and thus potentially more useful. These are summarised in Figure 6.2.

Figure 6.2 Suggestions to improve the clarity of the ‘compensated’ and ‘random’ game descriptions

Compensated	Random
If this machine has already paid out then future payouts may be influenced	This game is random and is not affected by previous payouts
Don’t play this machine because it has just paid out	This game is random and you stand an equal chance of winning regardless of previous wins

7 Game features and the odds of winning message

7.1 The message tested

The percentage RTP average payout can be affected by the features of particular games. For example, on a reel gaming machine ‘three cherries’, three orange’ and ‘three apples’ may contribute 40%, 40% and 10% to the overall 90% RTP in one game and 30%, 40% and 40% to the overall 90% RTP in another. Contribution to the overall RTP of each feature is a combination of the odds of achieving the prize multiplied by the prize value (e.g. if the contribution of ‘three cherries’ is 40% and the prize value is £1, that would mean that the chance of ‘three cherries’ occurring would be 40 in every 100 games, e.g. for each £100 wagered I would on average receive £40 back as prizes). Since the distribution of prizes is random there is no guarantee you will win £40 for every £100 gambled. Assuming that the prize value for ‘three cherries’ remains the same, then the chance of winning the prize changes if the contribution is altered from 40% to 30%. Hence it would not be possible to deduce the odds of winning a prize from the RTP unless the game is either very simple and/or the odds can be calculated from game format (e.g. roulette). Since gaming machines use virtual reels and do not display true odds (in most cases) they are required to display the notice ‘the outcome of any game or feature is not necessarily that shown by the odds displayed’. We tested the following message, which can appear on some games.

‘The outcome of any game or feature is not necessarily that shown by the odds displayed’.

Testing was carried out in the same way as for other messages, described in earlier chapters. Participants were asked to think aloud as they were shown the message on a card, before being asked more specific probes to elicit their understanding of the message and its perceived utility.

7.2 Comprehension of message

This message was particularly problematic and participants struggled to understand it when it was first presented. There were several factors that contributed to participants’ difficulty.

- Terms such as ‘necessarily’ and ‘outcome’ were confusing, particularly for those people in our study who did not have English as a first language.
- The message was seen as being complex and “*long-winded*” and this was off-putting.

-
- There was some confusion about how the 90% average payout information related to this particular message.

Some participants thought that they understood the message but in fact it transpired in probing that they misunderstood it. Earlier misunderstandings of what the simple RTP message meant coloured participants' understanding of this message, see section 4.2.2. The following quotes illustrate these misunderstandings.

"Putting £100 in and getting 90% of your money back [is] so remote now."

Female, over 50, GCSEs or lower

"So you're displaying odds of 90% payout...and the outcome of any game is not featured...oh yeah clearly, everyone knows it's not."

Male, aged 31-50, A levels or higher

"It's basically saying it doesn't matter what it's saying up there [on the screen], the chances are you might not win...we won't accept any responsibility"

Male, over 50, education level unknown

Only one participant understood the message correctly, that is that the odds of a particular game feature can vary from the overall RTP of the game. He had correctly understood the earlier messages.

7.3 Perceived utility of the messages

There were some suggestions about how the message could be made clear. These were:

- *"If a feature is awarded on a game, the feature may not necessarily return a 90% rate of play"*
Male, 31-50, A level or higher, understood the simple RTP message
- the information displayed in the message on the machine may not reflect the actual odds for the specific game being played; and
- different machines work in different ways so the RTP may vary from that advertised.

It's worth noting that these suggestions were provided by people who did not understand the message. In the case of the latter two suggestions, these were influenced by the discussion of the message during probing immediately beforehand.

Views on the utility of the message were mixed and were influenced by whether participants could understand the message (even when explained by the interviewer) and whether they thought players would use it.

If participants did not understand the message then they were inclined to think that the message was not that useful.

Some participants thought this information would be useful because they or other players would use it when selecting what game to play. However, others thought it was not useful because people would not use this information. This was because either:

- the information was felt to be too long-winded and complex for people to understand; or
- that people do not read these messages: they know it is a game of chance, with risks and they just want to get on and enjoy playing it.

8 Player's views on alternative messaging

At the end of the interview we asked participants for their views on the types of messages they thought should be on machines and for their views on the utility of providing the following, additional or alternative information.

- The odds of winning any prize per game
- The odds of winning the jackpot prize per game
- The odds of winning prizes of different sizes for example whether small prizes are given frequently or large prizes are given infrequently
- The average hourly loss rate
- The total amount of money you have put in the machine in your gaming session

In this chapter we discuss participants' reactions to each of these.

8.1 What types of messages, if any, do you think should be on machines to explain win chances to player?

Views were divided about whether there should be messages on games that explain win chances between those in favour and those opposed. Those opposed, played for fun and the thrill. They knew the risks and did not think there should be any messages. They do not want to have to read a 'prologue' before playing. Mostly these were players who did not read these messages.

Those in favour of messages felt that they could inform either their own, or others' choice of game. However there was no real consensus on which messages would be the most useful. Figure 8.1 illustrates the types of messages participants suggested should be on machines.

Figure 8.1 Messages that should be included that explain win chances

Current information

- The basic RTP message providing the percentage average payout information
- Whether the game is compensated or random, and if compensated, whether the jackpot has been won already
- RTP information for different stakes, making it clear that there are no guaranteed payouts e.g., all percentages are not guaranteed all of the time
- Odds of winning the features

New/ additional information

- The maximum prize which can be won/ jackpot prize, this can attract people to play

Improvements to the presentation/ accessibility of information

- A help button for new players which explains how to play or interact with the game
- A panel, which displays the messages separately. Information needs to be shown at the beginning of each game.

Participants were then read a list of suggested alternative messages and asked to say if they thought these messages would be useful or not and why. In the rest of this chapter we look at participants comments on these alternative messages.

8.2 The odds of winning any prize per game

Views on this message varied and are summarised below.

Those who did not understand what this would entail

This group did not understand what was meant by this suggestion or thought this was confusing. For example, if a machine has more than one game and the RTP message said the average percentage payout was 92% players may assume that the 92% applies to all of the games on the machine.

Those who thought it would be useful

Many participants in this study felt that this information would be useful because it would provide information on your chance of winning. However the misunderstandings about what the average percentage payout meant persisted, see chapter 4. Some participants suggest that the information would be more useful if:

- it was provide for different stakes;

-
- talked about the odds of winning rather than an average percentage payout; and
 - included information on whether the machine is compensated or random.

Those who did not think it would be useful

Those who felt the message would not be useful expressed concerns that it would encourage people to put more money in the machines because they think they are going to win. This misplaced belief that you are going to win stems, in this group's opinion, from people misunderstanding the percentage average payout as referring to your chance of winning in that play session rather than it being based on a much longer period, perhaps a year.

Undecided

There were a few participants who felt this message might be useful but queried how it could be displayed if each game has different prizes/ how you can compare one game to another. There was a view that the message would raise players' expectations that they would win. It should not be displayed unless there was a guarantee that the game would pay out as promised.

8.3 The odds of winning the jackpot prize per game

As with the previous message, view about the utility of this message varied.

Those who thought it would be useful

This information was considered useful because winning the jackpot is rare. This information would provide a sense of how hard it is and participants thought that providing this information might temper people's play. However the odds of winning any prize per game were considered, in some cases, to be more useful.

Those who thought it would not be useful

Some participants felt that this information could put people off playing or encourage players to watch each other playing so that you can see if they have won the jackpot. This would be off-putting. Other participants also felt that the message should simply say that winning the jackpot was impossible!

Undecided

These participants felt there were both advantages and disadvantages to displaying the odds of winning the jackpot. They felt that knowing the chance

of winning the jackpot may decrease your enjoyment of playing the game as the odds will be very high. Conversely, they felt that it may be useful to identify which games you might have more of a chance on than others.

8.4 The odds of winning prizes of different sizes

Views were split regarding the utility of this message.

Those who thought it would be useful

Those who thought this information would be useful wanted to know: if large prizes are given and how often small prizes are given, as it was thought that there is more of a chance of winning a smaller prize. One participant described having recently seen “*roller coaster graphics*” on a machine to show whether it gives lots of frequent small payouts or big payouts less frequently. He stated that he found this very useful as in the past he played blindly, whereas now he chooses games based on the payout.

Those who thought it would not be useful

A variety of reasons were given as to why this information would not be that useful based on players beliefs, which are summarised below.

- No one is interested in small prizes only large ones so this information is not that useful:
- Winning money is not the only reason for playing, participants played for enjoyment, the lights and colours.
- Having lots of information about the odds of winning different prizes would be confusing or too complicated to understand, knowing the average payout all that is needed.
- This information is unnecessary because:
 - most players know this anyway; or
 - winning is down to luck.

Undecided

One participant was unsure if people would read this amount of information.

“you’ve got a limited timeframe in which to get this information across. it could take me a number of visits or days to read all of the different instructions.” Male, 18-30., GCSEs or lower, confused by the initial RTP message.

8.5 The average hourly loss rate

Those who thought this would be useful

This was seen by some participants as a potentially useful addition. The rationale given was that sometimes players can lose a lot and this might make people realise that the longer you play the more you will lose.

Those who thought this would not be useful

Where this was seen as not being useful this was because:

- participants felt that people wouldn't read the information: they just want to play the game;
- that the information could be misleading. For example, if people think that if it has a high loss rate they may think that it will eventually have a high payout; or
- because they simply do not want to know this information: it would deter participants from playing.

Undecided

Where participants were unsure as to whether this would be useful or not, it was mainly because they felt this information might be misleading, noting that there can be so much variation between stakes it would be confusing.

8.6 The total amount of money you have put in the machine in your gaming session

Views on the usefulness of this message were split.

Those who thought this would be useful

Where this was seen as useful participants thought it may stop people going out of control with their spending. Participants talked about their own loss of control, of *"getting carried away"* and not keeping track of what you are spending, particularly now that you can use debit cards to buy stakes.

"That is definitely needed...so we know how much we spend. Last week I got upset as in the last two days I put £200 in the machines and my mind every few minutes is 'freezing' - my £200 is gone" Male, 18-30, GCSEs or lower

Those who thought this would not be useful

Those who felt this message would not be useful stated that they did not really want to know how much they spent, or said they knew (or believed they knew) how much money they put into the machine. There was also a concern that it might encourage people to gamble more to try and re-coup their losses if they saw how much they were spending.

One participant, a male aged 31-50 with GCSEs or lower, did not understand what was meant by this message.

8.7 Should money put in include prize money that has been re-staked using credit transfer or not

This message, on the whole, was not seen as being that useful. The consensus was that only the money you, the player, put into the machine should be included as ‘most people’ do not count re-staked money but rather just the amount they put in the machine. Where participants felt this may be of use was for those who wanted to know how much money has ‘churned’ through the game compared to how much a player has won.

8.8 A record of the amount you have put in a single gaming session minus the money you have in the bank

Views on the utility of this message were evenly split.

Those who felt that this would be useful

The arguments put forward in favour of this information being provided were that it would remind people of how much they are losing; it helps with control to show what you have put in and what you have won; and that knowing if you are winning or losing can help you make decisions about whether to cut your losses or not.

Those who felt that this would not be useful

The arguments put forward against it being useful were that people already know this information so it is not necessary to provide it and that “*when you have the fever, you have the fever*” and that having this information would make little difference to gambling behaviour.

8.9 Other types of message about win chances that could be useful for game players

Participants were asked what other messages about win chances they thought might be useful for machine players. A number of suggestions were made. These were as follows:

-
- providing a clear example of the odds you get back from a £10 stake;
 - creating a statistics button, which displays all the winning ratios and odds, if you want to see them;
 - showing how much you lose. This was felt to be important to make people realise the costs associated with playing the game; and
 - a message saying that a payout is not guaranteed. One participant felt the current message was misleading as it can make you think you will win. This participant also felt that a message saying ‘this is just for entertainment and it is not a way of subsidising your income’ would be helpful.

In addition, some participants wanted to be given information about how much a machine had paid out recently as this would influence their machine choice:

“when did they pay their last big win, good to know the last time somebody took 3 grand out of that machine”

Male, over 50, A levels or higher

Other participants wanted to know what machines had paid out over a longer time frame. For example, one stated that it would be useful to know whether major prizes which have been won recently e.g., over the last 7 days ‘*because you can lose track of what’s happening if you don’t go into the venues frequently*’. It is not clear whether this participant was referring to random or compensated machines but for some there is clearly an entrenched association between recent payouts and their own estimations of winning.

Finally, one participant stated that no message would be useful because gambling should be fun and you should only gamble what you can afford to lose. This was supported by another participant who suggested that the message should be simply *“be prepared to lose your money... only put in what you can afford to lose”*.

9 Discussion and implications

9.1 Understanding return to play messaging

The findings of this research support the Gambling Commission's concern that return to player (RTP) messages are not well understood. This study found that the meaning of the percentage average payout and how this information relates to an individual player's win chance in any one given play session are particularly problematic. Dissonance between participants' gaming experience, i.e. not winning (90%) of what they put into the machine, and their understanding of the RTP message exacerbated their confusion. For a group of participants, this confusion led to the perception that the RTP message was telling them that were going to win. This is particularly concerning as this might lead some players to play more than they intended.

There was some cynicism about the 'truth' of the RTP information being presented. This scepticism was fuelled by the aforementioned dissonance between individuals' past experience and their understanding of the RTP messages and/or a wider distrust of the venue/gambling industry and its motives for displaying the RTP messages. Again, this is concerning as this is an unintended consequence of these messages. RTP messages are intended to provide players with greater transparency about the proportion of the total value of money staked by all players that will be returned in prizes, on average, by a particular machine or game. However, misunderstanding of the messages is leading some to question how reliable the information provided is and could promote mistrust of this type of messaging.

Understanding of technical terms such as compensated or random was found to be variable. Some players did not understand what the term compensated meant or the clarification that the outcome of the game may vary based on previous play. A common mistake was thinking that outcomes would (rather than may) vary based on previous play. The term random was particularly problematic and was interpreted in several different ways. This was confused with the payout schedules attached to 'compensated' machines and in some cases the term random was not understood in statistical or probabilistic terms but rather as meaning something different, strange or odd. This highlights the risk of using technical language used by industry and regulators alike in messages aimed at the general population. What sector specialists understand by certain terms is not always the same as the broader general population.

Finally, the message focusing on how the outcome of any game or feature is not necessarily that shown by the odds displayed was particularly poorly understood. It was viewed as long winded, the meaning of the terms 'outcome' and 'necessarily' in this message were often unclear and participants struggled to explain what this message meant.

9.2 Use of the message

We explored how useful participants found RTP messages. Typically participants in this study had not seen or noticed the RTP messages prior to interview and no participant reported that RTP messages influenced their choice of machine. Therefore, findings about the utility of these messages need to be contextualised based on this understanding: for most participants what was tested was perceived utility now that they had been made aware of these messages. Perceived utility was influenced by player's views on whether they thought the messages would have an influence on their own behaviour or that of others. Participants were largely split between those who felt RTP messages imparted useful information and those who did not feel they were useful. Typically, those who felt that messages were not useful were participants who thought that the RTP messages were unclear and therefore unhelpful. Those who did not understand the messages tended to express that they felt them to be misleading. Some participants were concerned that the messages would be misinterpreted by players and that this could encourage them to gamble. This was especially true for the message around how RTP varies by stake, with some participants expressing concern that this would lead to players increasing their stake.

However, some participants did feel that the messages could be useful in helping them to decide which machine or game to play. These were people who tended to understand the meaning of the messages.

This research did not look at how and if people use the messages in practice, so the evidence is limited to perceptions of usefulness or concerns about impact on other people. We suggest further research in this area, see section 9.5

9.3 Alternative messaging

The Gambling Commission considers that players may benefit from greater transparency around a range of other game and machine features. To explore this, participants were presented with a range of alternative messages ranging from the odds of winning any prize/jackpot/different prize levels to the average hourly loss rate and variations showing the amount of money spent.

Participants were mixed as to whether they felt these messages would be useful or not. Some players seemed keen to have better information that they could access about game statistics, including the odds of winning different prizes or winning jackpot prizes. Others were concerned about the impact this might have on their play experience but also because they felt that these messages would still be misunderstood by most. One suggestion was that a

game statistics feature could be included in machines to display all the relevant information for those who wanted to use it.

There was no clear consensus over which messages were felt to be most important or most useful. Interestingly, participants were split as to whether they felt monitoring how much money they had spent in a session was useful or not. There was clearly a group of players who felt this could be effective in helping to control machine expenditure. Conversely, some participants felt this may have an unintended consequence of prompting people to chase their losses. This deserves further attention, see section 9.5.

9.4 Implications for responsible gambling messaging

This project aimed to assess understanding of RTP messages, the factors that might affect players' understanding of them and to provide insight into alternative forms of wording. Evidence from this study has shown that current messages are not well understood for a number of reasons. These include:

- use of technical language that does not hold the same meaning for the general population as industry specialists;
- use of complex terms that have ambiguous or unclear meaning;
- provision of messages in English only making these difficult to understand by those for whom English is a second language; and
- use of mathematical terms, especially percentages, average and the term 'random', which are difficult for less mathematically literate people to understand.

For some, this lack of clarity promoted confusion, misunderstanding and mistrust of both the industry and regulator. The confusion and misunderstanding are particularly important as this could have unintended consequences in terms of impact on play. Of concern are those who interpreted the message to mean that they were going to win. It is of interest that some participants themselves were concerned about the potential impact on behaviour of these messages. These themes suggest clear learning points when thinking about responsible gambling messaging more broadly.

Firstly, messages should be clear, more direct and use less complex terminology. For example, of the options presented to participants, the message which said 'For every £100 put into this machine about £90 is paid out in prizes' was typically judged to be clearer than the original message which used percentages. Some participants noted that this could be qualified with a direction that if you play this machine, you should be prepared to lose.

A second suggestion is that both the regulator and industry should think more carefully about how they communicate with those for whom English is not their

first language. For example, if venues are in areas with high proportions of minority ethnic groups, then signage in appropriate languages may be considered. Evidence from the Health Surveys and the BGPS has shown that those from minority ethnic backgrounds are at greater risk of harm from gambling. These groups are more likely to read and speak English as a second language. Therefore, further attention should be given to how best to communicate with these groups.

A third learning point is that many people included in this study had not noticed or used the RTP messaging to date. For any kind of responsible gambling messaging to be effective, people have to see it, understand it, reflect on the information conveyed in the message and then, hopefully, translate this into changed behaviour (in the direction intended). As evidence from evaluations of health warning messages for similar products, like cigarettes, tells us, this is easier said than done (Wardle et al, 2010). This study focused only on comprehension and this can be improved but more work needs to be done around how best to present and situate these messages so that they are noticed in the first place.

A final learning point, and arguably the most important, is that RTP messages may not influence players behaviour at all or in the way intended. For example, whilst some participants in this study felt that knowing more about the total amount of money spent would be useful, others felt this could encourage chasing behaviour - the direct opposite of what this feature intends. The wording of messages needs to be carefully formulated and tested to ensure that they influence players behaviours in the ways intended and do not have unintended consequences.

9.5 Recommendations for further research

This research highlights a number of issues with the current RTP messages that call into question their effectiveness in providing players with clear information that they can understand. Further research is necessary to corroborate this study's findings. Specifically research should further:

- establish the extent and nature of misunderstandings, and how these vary across the wider population and between different subgroups;
- explore whether players actually look at messages in a 'real' play environment and if so in what circumstances. Identify the features of message presentations that encourage participants to read them; and
- further test alternative wordings of RTP messages, to assess their performance in terms of being of interest to players, being correctly understood, and in influencing players' behaviour as intended.

The latter point is particularly important: even if RTP messages are produced that are clear and understood correctly, and are situated in a way that

facilitates them being seen and read by players, this may not mean that they will have any influence on player behaviour. If the purpose of the RTP messages is to encourage 'responsible gambling' through informed consumer choice then the effectiveness of such messages needs to be tested through a program of quantitative experiments.

References

Beatty, P. (2004) The Dynamics of Cognitive Interviewing. In S. Presser, J.M. Rothgeb, M.P. Couper, J.T. Lessler, E. Martin, J. Marting, E. Singer. *Methods for Testing and Evaluating Survey Questionnaires*. John Willey & Sons: Hoboken, New Jersey: pp445-66.

Beatty, P. and Willis, G. (2007) 'Research synthesis: the practice of cognitive interviewing', *Public Opinion Quarterly*, 71: 287–311.

Blaszczynski, A., Ladouceur, R., Nower, L., Shaffer, H. (2008) 'Informed choice and gambling: principles for consumer protection'. *The Journal of Gambling Business and Economics*. 2:1:103–118

Brochu, P., Dufour, J., Giroux, I. & Sévigny, S. (2010). *Comparison of Internet Texas Hold'em players' perceptions and reported behaviours according to their level of gambling related problems: a step toward adapting treatment*. Poster presented at 11th Annual NCRG (National Center for Responsible Gaming Conference on Gambling and Addiction, Las Vegas.

Bryman, A. (2012) *Social Research Methods* (4th edition). Oxford: Oxford University Press.

Collins, D. (2014) Analysis and Interpretation in D. Collins (ed) *Cognitive Interviewing Practice*. Sage: London

Collins D. (2003) 'Pretesting survey instruments: an overview of cognitive methods', *Quality of Life Research*, 12(3): 219–27.

Conrad, F., Blair, J. (2009) Sources of error in cognitive interviews. *Public Opinion Quarterly*, 73 (1): 32-55.

d'Ardenne, J. (2014) Developing test materials and interviewing protocols. In D. Collins (ed) *Cognitive Interviewing Practice*. Sage: London.

Ericsson, K.A., and Simon, H.A. (1980) 'Verbal Reports as Data', *Psychological Review*, 87:215-51.

Ericsson, K A., Simon, H.A. (1993) *Protocol Analysis: Verbal Reports as Data*. MIT Press, Cambridge, MA.

Fowler, F.J. (1995) *Improving Survey Questions: Design and Evaluation* (Vol. 38). Thousand Oaks, CA: Sage.

Gabour, A., Ladouceur, R. (1989) Erroneous perceptions and gambling. *Journal of Behaviour and Personality* 4:411–20.

Gray M., Wardle H. (2013) *Observing gambling behaviour using think aloud and video technology: a methodological review*. NatCen Social Research. Available at: www.natcen.ac.uk.

Griffiths, M.D. (1994). The role of cognitive bias and skill in fruit machine gambling. *British Journal of Psychology*, 85: 351-369.

Husain, F., Wardle, H., Kenny, T., Balarajan, M., Collins, D. (2013) *Examining Machine Player Behaviour: a qualitative exploration*. NatCen Social Research. Available at: www.natcen.ac.uk

Responsible Gambling Strategy Board (2013). *RGSB advice to the Commission on the Triennial Review consultation*, June 2013. Available at: <http://www.rgsb.org.uk/publications.html>

Ritchie, J. Lewis, J., and Ellam, G. (2003) 'Designing and selecting samples' in J. Ritchie and J. Lewis (eds) *Qualitative Research Practice: A guide for social research students and researchers*. Sage: London. pp 77-108.

Spencer, L., Ritchie, J. and O'Connor, W. (2003) 'Analysis: practices, principles and processes', in J. Ritchie and J. Lewis (eds) *Qualitative Research Practice* (1st edition). London: Sage Publications. pp. 199–218.

Taylor, K., Dionne, J.P. (2000) Assessing Problem-Solving Strategy Knowledge: The Complimentary use of Concurrent Verbal Protocols and Retrospective Debriefings, *Journal of Educational Psychology* 92(3): 413-425.

Wardle H, Pickup D, Lee L, Hall J, Pickering K, Moodie C, Mackintosh A (2010). *Evaluating the impact of picture health warnings on cigarette packets*. Public Health Research Consortium: York.

Walker, M. (1992) Irrational Thinking Among Slot Machine Players. *Journal of Gambling Studies* 8(3).

Willis, G. (2005) *Cognitive Interviewing*. Thousand Oaks, CA: Sage.

Wilson, T.D., LaFleur, S.J. and Anderson, D.A. (1995) 'The validity and consequences of verbal reports about attitudes', in N. Schwarz and S. Sudman (eds), *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research*. San Francisco: Jossey-Bass. pp. 91–114.

Appendix A. Recruitment documents

This appendix contains a copy of the screening questionnaire used by NatCen's Telephone Unit to recruit participants.

Return to Player Cognitive Testing Screening questionnaire

Introduction

My name is [AS APPROPRIATE] and I work for NatCen Social Research, an independent research institute.

We are looking for people who play games machines to help us with a piece of research. In particular we are looking for people who play 'category B' machines. These are also known as slot machines, reels or fruit machines.

By law these machines have to have certain messages on them. The Responsible Gambling Trust has commissioned us to talk with players about these messages and how clear they are.

If you would like to/ are eligible for an interview then during the interview you will be shown these messages and asked for your opinion on whether they could be made clearer. By doing this we can see if they could be improved in the future.

We would like to talk to some people who play these games regularly and some people who only play these games occasionally.

What will taking part involve?

Taking part in this study will involve talking to one of our researchers.

The interview, which would take place at a gaming machine venue, would last about half an hour, and, if you take part, you will be given a 20 pound high street voucher for your time. All information will be treated in the strictest confidence and used for research purposes only.

Taking part is entirely voluntary. With your consent, we would like to audio record the interview. This will allow the researcher to focus completely on what you are saying. No one outside the research team will have access to the audio recording or to any information that could identify that you took part in the study. The audio recording will be deleted at the end of the project.

IF WILLING TO TAKE PART GO ON. IF NOT, THANK THEM AND END

Screening Questions

Can I just ask you a few questions to see if you are eligible to take part in the interview?

Q1 Do you use ever play category B game machines, such as slot machines, reels or fruit machines?

- **[If the participant is unsure]:** The types of machine we are interested are called 'type B' machines. There are lots of variations between the machines and the names of the games you can play on them. They typically have a top prize of £500 although the prize can be bigger for machines in casinos.

Q2 Through which of the following venues did you hear about the research?

- List of participating venues [not shown to protect confidentiality]

Q3 Would you be available to take part in an interview at? We can do daytime and evening slots.

Q4 Sex of participant (do not ask this, just record)

Male

Female

Q5 Are you?

18-30

31-50

Or 51+

Q6 What is your highest qualification?

A-level or higher

GCSE or lower

Q7 How often do you use gaming machines?

At least once a week

At least once a month

Less than once a month

Less than once every 6 months

Q8 How long have you been using gaming machines for?

Less than 6 months

More than 6 months

Check your individual quota sheets to decide if the participant is eligible to take part in an interview or is a reserve.

If the participant is not eligible, thank them and ask if we can contact them to take part if someone else drops out on the day. If participant eligible ask them what time appointment they would like.

Collect contact details for ALL screened in people::

Explain that you will be sending the written note to the participant confirming details of the study and the time/ location of the interview (this can be sent by post or email depending on their preference).

Thank the participant

Appendix B. Interviewer protocol

This appendix contains the interviewer protocol used during the interviews.

P11125 Return to Player: User-testing probe sheet

Stage 1: Introduction

Aims: To introduce the study and collect informed consent.

- Thank participant
- Introduce yourself and NatCen Social Research. We are an independent, not for profit, research organisation.
- Explain we are doing this study on behalf of the Responsible Gambling Trust. The project is about how clear the messages on games machines are (such as slot machines and fruit machines).
 - The types of machine we are interested are called ‘category B’ machines. There are lots of variations between the types of games you get on these machines. They typically have a top prize of £500 although the prize can be bigger for machines in casinos.
 - INTERVIEWER: Double-check that the respondent plays ‘category B’ machine [if required can show example picture or describe where these machines are in the venue].
- Explain that different messages, by law, have to be displayed on games machines. During the interview they will be shown these messages and asked how clear they think the messages are and whether they could be improved.
- Taking part is entirely voluntary – emphasise that this isn’t a ‘test’ and there are no ‘right or wrong’ answers. If they find the messages unclear it is really important that they say so, because if they do other people will too. We want to improve the messages if people don’t find them helpful.
- Stress confidentiality. The findings from all the interviews will be written up as report on what people think of the messages. We never include the names of the people who take part in our reports.
- Explain that you will be recording the interview so that you don't have to make lots of notes during the interview.
 - Recorder is encrypted and only the research team at NatCen will have access to the recordings.
 - Check this is OK with the respondent.
- The interview will last around 30 minutes. Everyone who takes part receives a £20 high street voucher to thank them for their time.
- Ask whether they have any questions before you start.

Stage 2: Context of using venue/ gaming

Aims:

- To 'warm participant up'.
- To double-check screening details are correct.
- To get background information on why the participant comes to the venue.
- To get background information describing the situations in which the participant plays game machines.
- To get background information on how participant selects their gaming machine.
- To start to explore what information (if any) the participant looks for when selecting a machine.

- Explain before we show the messages we would like to collect a little bit of background about you
- Double check details from screening.
- Explore use of venue:
 - Length of time since they started coming to venue/other venues of this type.
 - Frequency of attending.
 - Who they come with (alone/ with others).
 - Activities they like to do at the venue.
- Use of games machines
 - Length of time since they started playing play games machines.
 - Frequency of playing
 - How often they use machines
 - How long they spend on them once they start playing
 - When do they play games machines.
 - Other activities they do [if any] whilst gaming
 - Who do they play with (alone/ with others)
- Factors that impact choice of gaming machine.
 - PROMPT: What else?

Stage 3: Think aloud training and placement of RTP message 1

Aim:

- To explain the 'Think Aloud' process and to encourage thinking aloud behaviours.
- *Explain that you are about to show the participant some messages that are shown on games machines. Whilst they look at these you want to know their first impressions of these messages and what they are thinking about.*
- *Explain the 'Think Aloud' technique using a scenario of your choice (the windows example is given below but you are welcome to use an alternative). Part of this is to get the participant used to talking.*

Windows example: I would like you to have a practice at 'thinking aloud.' I am going to ask you a question and I want you to tell me what you are thinking as you work out your answer...

'How many windows are there in your home?' Please describe what you are thinking as they work out your answer....

- *Encourage think aloud through rest of interview...*

Stage 4: Understanding of RTP message 1

Aims:

- To get first impressions of a standard RTP message
- To explore whether the participant has seen these messages before and whether they use this information when selecting a machine.
- To explore understanding of the RTP message in more detail using a quiz item.

- Show the participant message 1: "THIS MACHINE HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST 90%"
- Give them time to read this... PROMPT: Tell me what you are thinking?....

General probes on RTP messages

- Have you seen a message like this before?
- In your own words what do you think this message means?
- What does the word 'average' mean?
- What does 'average payout' mean?

- Do you use this message, or similar messages when deciding which machines to play? Why/ Why not?

- *Explain that the message you have just shown them is called a 'return to player' message. Explain you would now like to explore their understanding of the message in more detail. This is important as we want to check whether the messages could be made clearer.*
- *Explain that you are going to give them a multiple choice question on a piece of paper. You would like them to read the options and tick the box which is closest to what the message means.*
- *As they read each option you would like them to think aloud about why they are selecting it or not selecting it.*
- **Give the respondent the quiz.**

Follow up probes on RTP messages

- How easy or difficult did you find it to pick a statement? Why?
- Explain that the closest answer to what the message means is OPTION 4. [Now you know this] how clear do you think the message is?
- Could the message be more clear and, if so, how?
- How useful do you think this message is for game players? Why do you say that?

Stage 5: Understanding of RTP message 2

- **Aim: To explore whether participants understand messages on compensated play versus random play and whether these could be made clearer.**

- *Show the participant message 2a: THIS GAME IS COMPENSATED AND MAY BE INFLUENCED BY PREVIOUS PLAY*
- *Give them time to read this... PROMPT: Tell me what you are thinking....*

Probes on compensated play

- Have you seen a message like this before?
- In your own words what do you think this message means?

- *Show the participant message 2b: THIS GAME IS RANDOM*

Probes on random play

- In your own words what do you think this message means?
- What do you understand by the word 'random' in this context?
- What do you think is the difference between a machine that is 'compensated' and a machine that is 'random'?

- *Explain the different between a compensated game and a random game:*
- *READ OUT: A 'compensated game' is when the odds of winning a prize are influenced by how much money the game has already given out. For example, if the game has just given out a prize the likelihood of winning a prize may decrease. A 'random' game is not influenced by previous games at all (the odds of winning are the same regardless of whether or not the game has just given out a prize).*

Further probes on compensated play and random play

- How useful do you think this message is for game players? Why do you say that?
- Do you use these messages, or similar messages, when deciding which machines to play? Why/ Why not?
- Could message 2a (on compensated play) be made clearer and, if so, how?
- Could message 2b (on random play) be made clearer and, if so, how?

Stage 6: Understanding of RTP message 2

Aim: To explore whether participants understand variations and caveats that are shown with RTP messages.

- *Show the participant message 3: THE OUTCOME OF ANY GAME OR FEATURE IS NOT THAT NECESSARILY SHOWN BY THE ODDS DISPLAYED*
- *Give them time to read this... PROMPT: Tell me what you are thinking....*
- *Interviewer note: This message is trying to convey the fact that visual display of a game [e.g. the number of symbols per reel] is not indicative of the odds of winning. For example, there may be 12 symbols per reel but the odds of any symbol occurring is NOT 1 in 12].*

Probes on how games have variable odds dependant on game features

- In your own words what do you think this message means?
- [Explain the meaning of the message to participants] Could this message be made clearer? How?
- How useful do you think this message is for game players? Why do you say that?

- Would you personally want any information on *how* game features influence the likelihood of winning a prize? What sort of information would you want?

- *Show the participant message 4: AT 50P STAKE, THIS GAME HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST 88%, AT £1 STAKE, THIS GAME HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST 90% etc*

- *Give them time to read this... PROMPT: Tell me what you are thinking....*

Probes on how games have variable odds dependant on stake size

- In your own words what do you think this message means?
- What does the term 'stake' mean?
- Could this message be made clearer? How?
- How useful do you think this message is for game players? Why do you say that?

Stage 7: What messages would be most useful for gamers going forward

Aims: To explore what information participants think should be displayed on machines in relation to the likelihood of winning a prize. This includes:

- **The odds of winning any prize/ the jackpot.**
- **The volatility of the game (e.g. whether small prizes are given frequently or large prizes are given infrequently).**
- **Average hourly loss rate.**
- **The total amount of money bet per session.**
- **The cost of a gaming session (the money put in minus the money in the bank).**

- *Explain you are now going to talk to them about what alternatives there might be to Return to Player messages.*

Probes on alternative messages on win chances

- What types of messages, if any do you think should be on machines to explain win chances to players?
- How should these messages be phrased?
- I am now going to read you a list of things that other people have suggested may be useful. For each suggestion please say whether or not you think this type of message would be useful to have on gaming machines:

- 1. The odds of winning *any* prize per game** [Why do you think this would/ wouldn't be useful?]
- 2. The odds of winning the jackpot prize per game** [Why do you think this would/ wouldn't be useful?]
- 3. The odds of winning prizes of different sizes for example whether small prizes are given frequently or large prizes are given infrequently.** [Why do you think this would/ wouldn't be useful?]

-
4. **The average hourly loss rate.** [Why do you think this would/ wouldn't be useful?]
 5. **The total amount of money you have put in the machine in your gaming session.** [Why do you think this would/ wouldn't be useful?] *Explore with participants whether 'money put in' should include prize money that has been re-staked using credit transfer or not.*
 6. **A record of the amount you have put in a single gaming session minus the money you have in the bank** [Why do you think this would/ wouldn't be useful?] *Explore with participants whether money put in should include prize money that has been re-staked using credit transfer or not.*
- Are there any other types of messages about win chances that you think could be useful for game players?

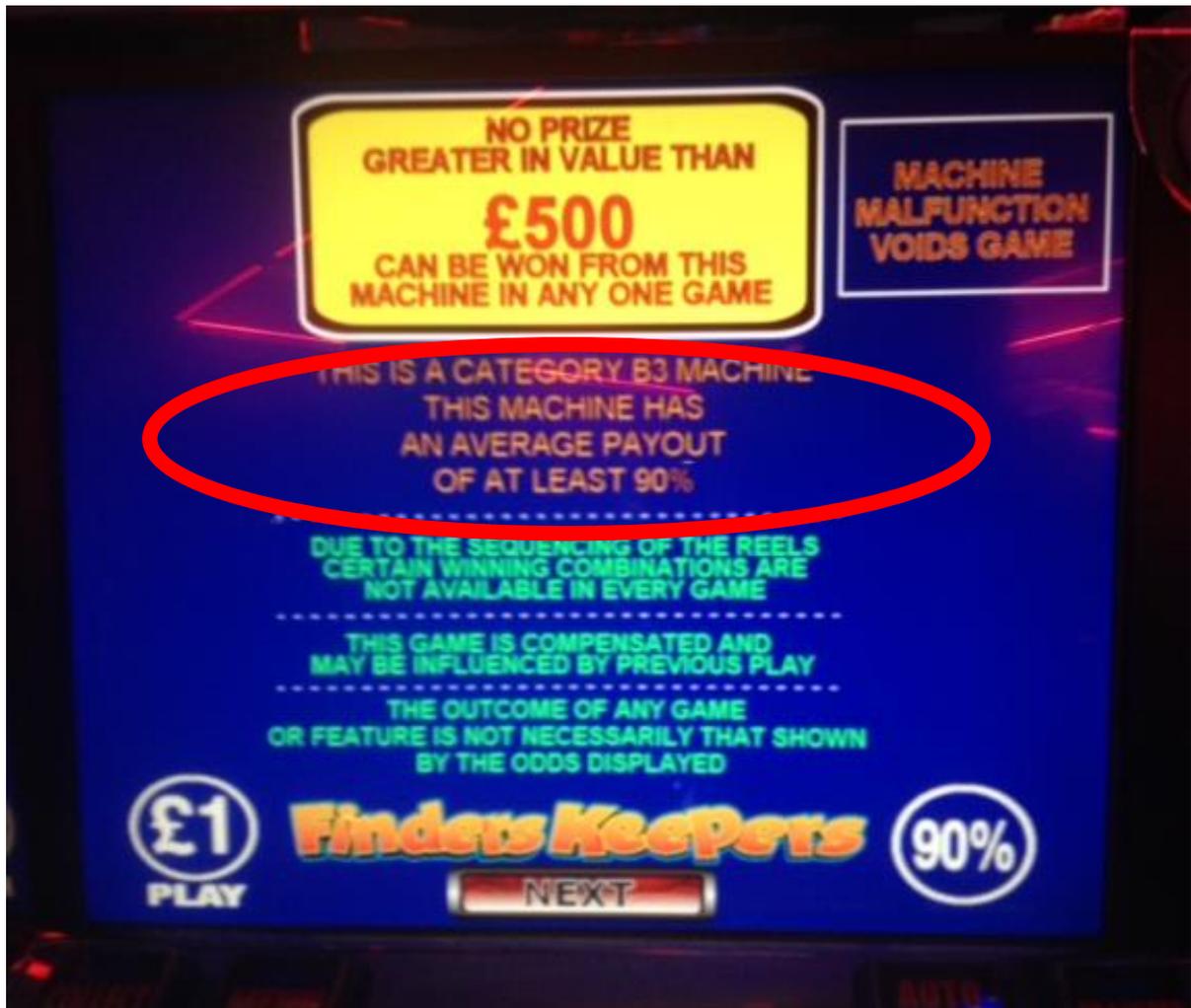
End of interview

- *Thank the participant for their time and give them their incentive voucher.*
- *Provide the 'further resources' leaflet. Explain that you will be giving this to everyone who takes part.*
- *Reassure them about confidentiality*
- *Answer any questions they may have*

Appendix C. Showcards

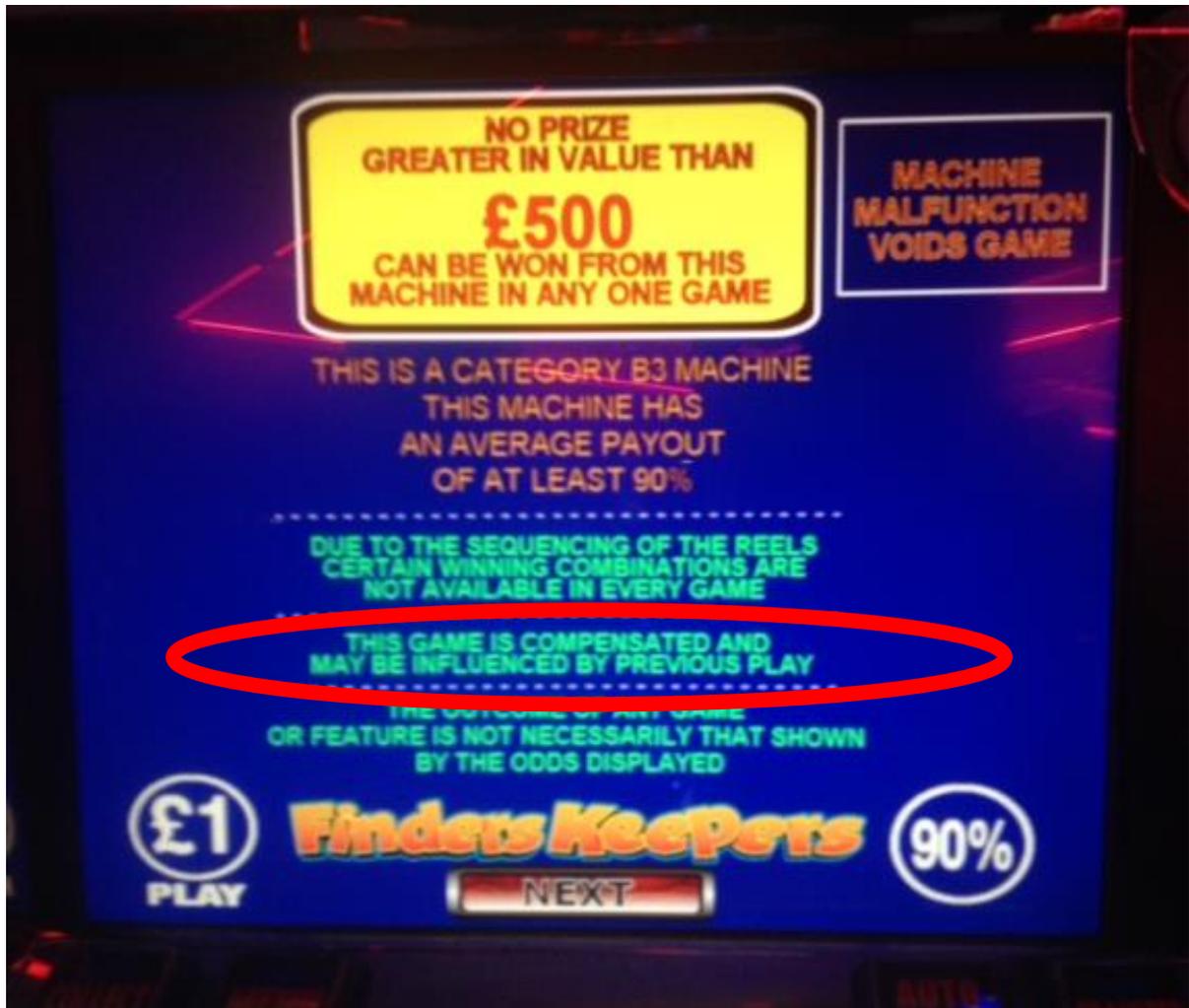
The following showcards were presented to participants at appropriate points during the interview.

Message 1



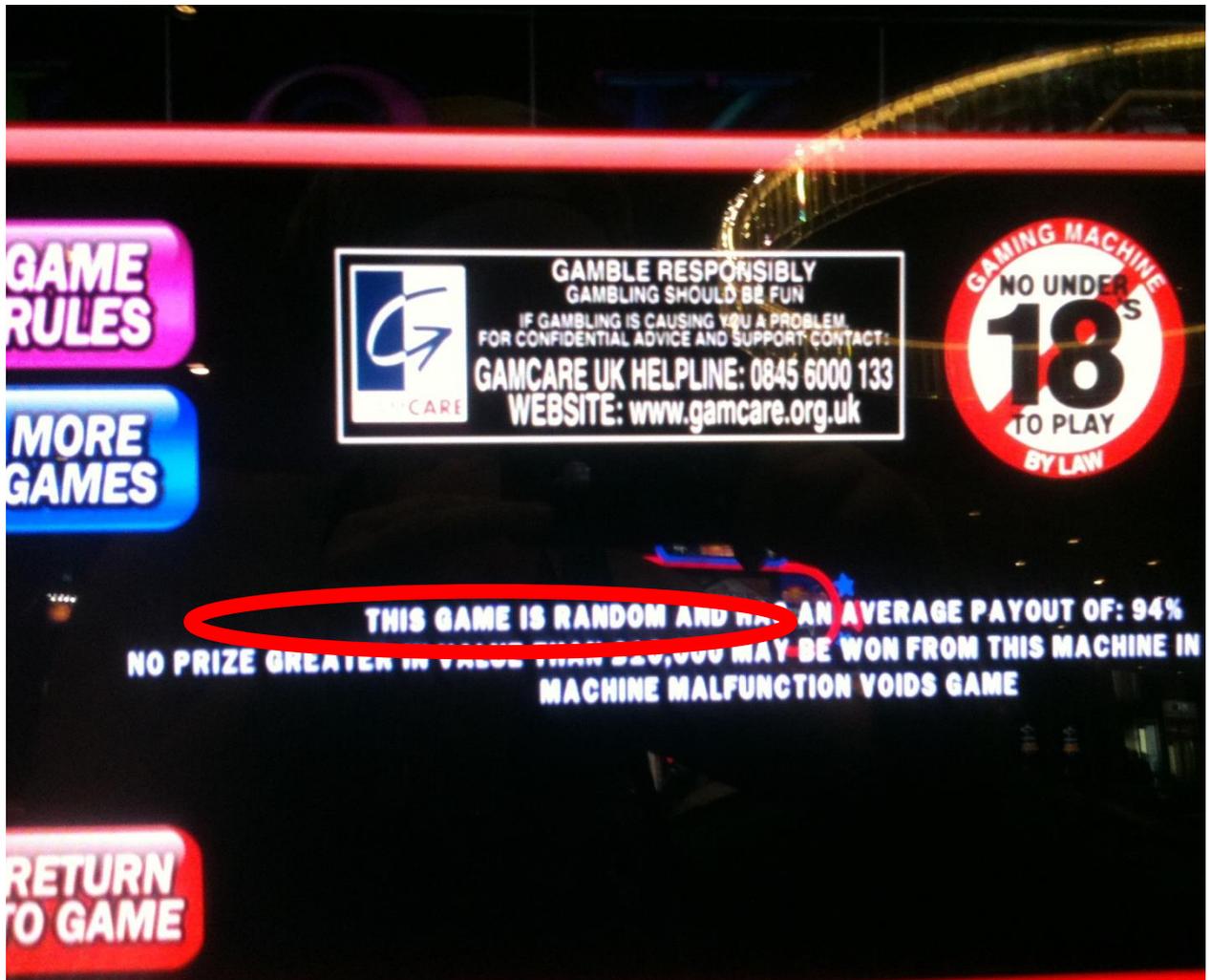
**“THIS MACHINE HAS AN
AVERAGE PAYOUT OF AT
LEAST 90%”**

Message 2a



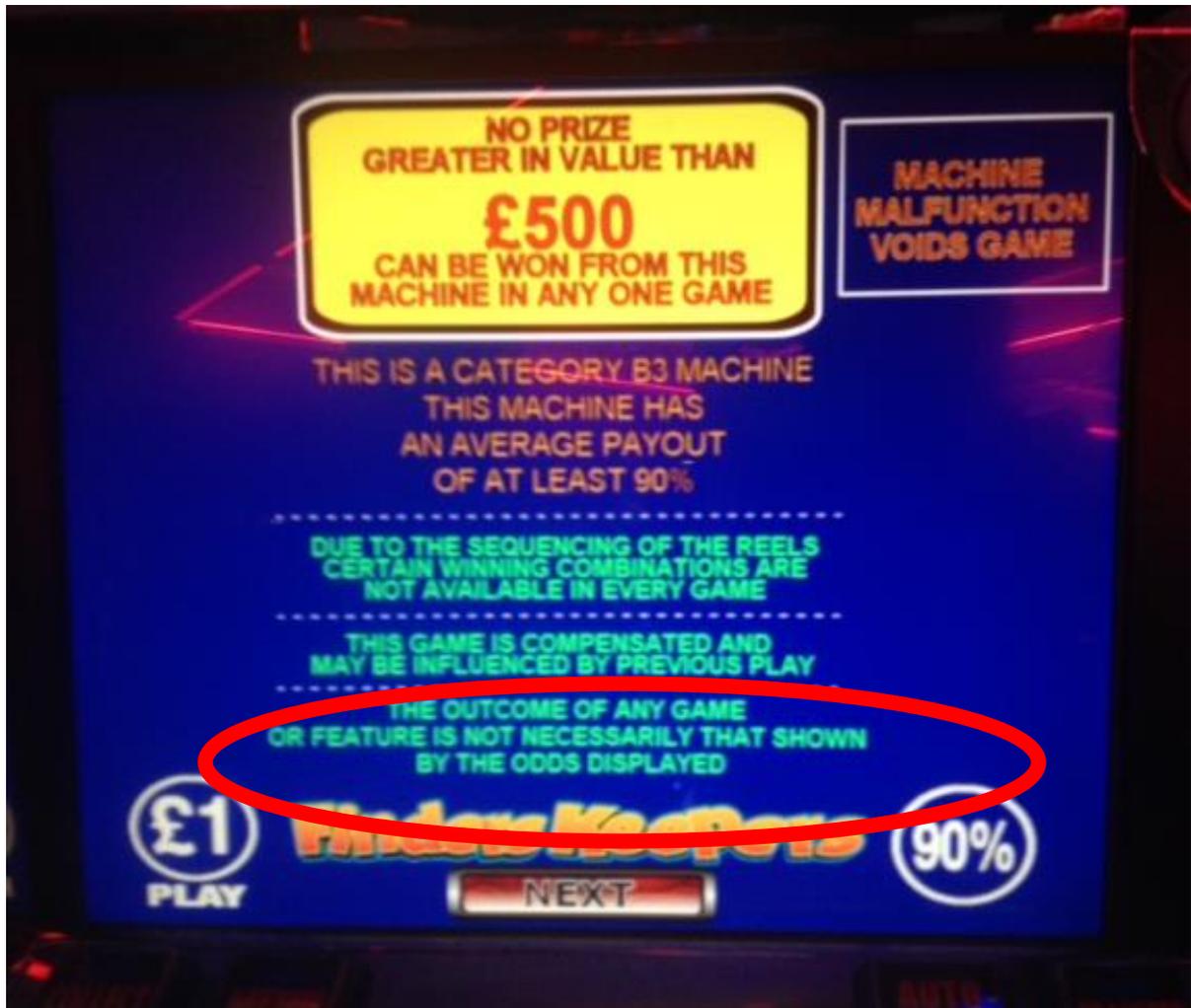
**“THIS GAME IS
COMPENSATED AND MAY BE
INFLUENCED BY PREVIOUS
PLAY”**

Message 2b



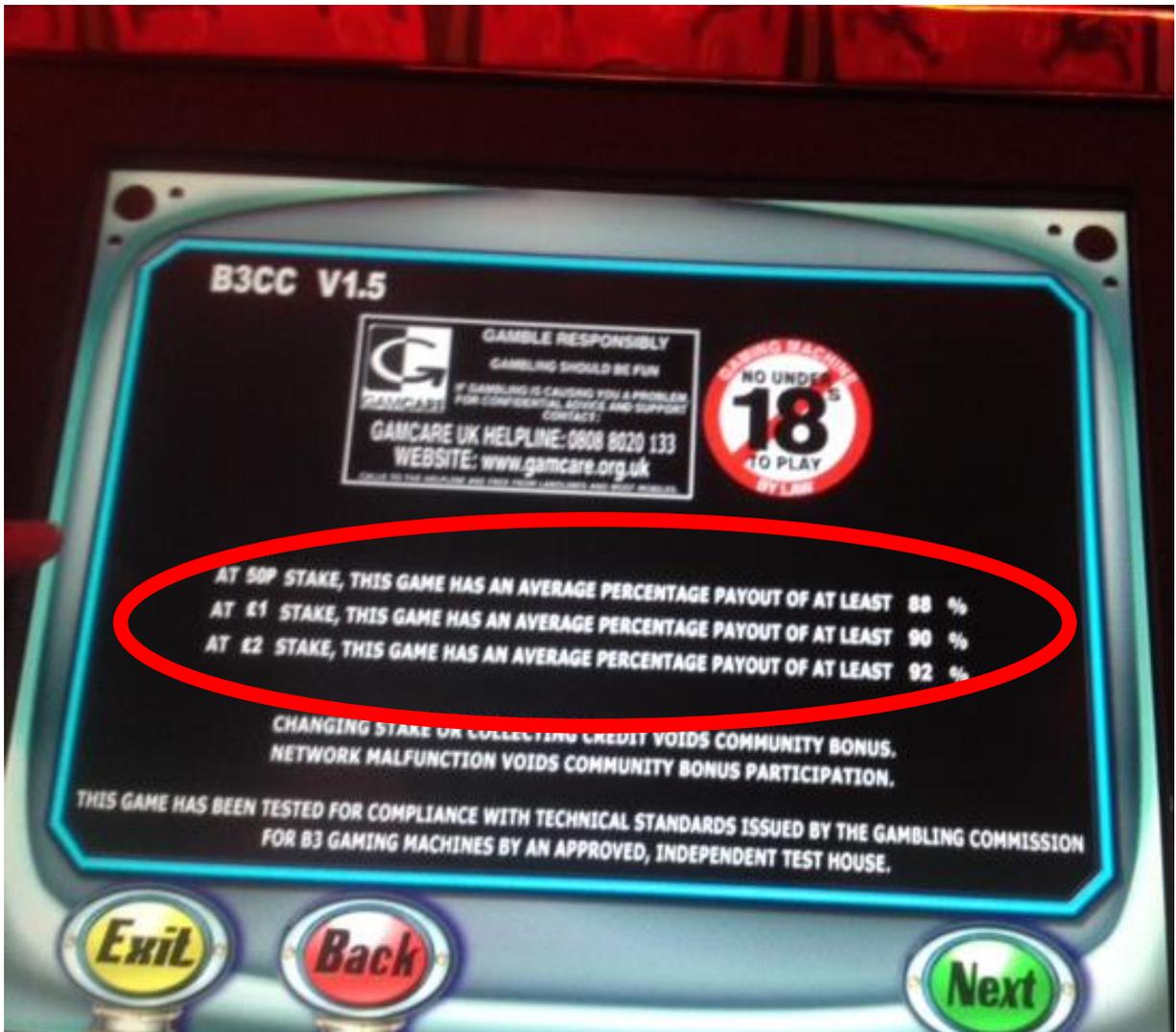
“THIS GAME IS RANDOM”

Message 3



“THE OUTCOME OF ANY GAME OR FEATURE IS NOT NECESSARILY THAT SHOWN BY THE ODDS DISPLAYED.”

Message 4



AT 50P STAKE, THIS GAME HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST 88%

AT £1 STAKE, THIS GAME HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST 90%

AT £2 STAKE, THIS GAME HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST 92%

