

# Participant and Non-participant Observation in Gambling

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## Abstract

*One of the main research methodologies in studying small groups in natural settings is that of observational fieldwork which can either take the form of participant or non-participant observation. This paper examines the methodologies of participant and non-participant observation in studying the social world of slot machine gamblers and concentrates specifically on the advantages. It outlines the different ways in which observational data can be collated and systematically recorded in relation to slot machine gamblers in a variety of gambling environments. It is argued that this kind of methodology serves as a useful tool for establishing literature in a neglected research area.*

## A Framework for Participant and Non-Participant Observation

The boundaries between the qualitative methodologies of social anthropology, sociology and social psychology are diminishing. One of the main research methodologies in studying small groups in natural settings is that of observational fieldwork which can either take the form of participant or nonparticipant observation. Both of these methodologies have their advantages and disadvantages. This paper will concentrate more specifically on the advantages of such methodologies and highlights the sparse literature on observational methodologies in relation to gambling.

Observational fieldwork can be ideal for studying "social worlds". Lindesmith, Strauss and Denzin (1975, p. 439-440) defined "social worlds" as "those groupings of individuals bound together by networks of communication or universes of discourse and who share perspectives on reality". There are countless worlds frequently segmented into various sub-worlds (Strauss, 1978) many of which go unnoticed, so called "invisible worlds", because they may be problematic population in some way (Unrah, 1983). One of the less studied social worlds is that of the slot machine gambler (more commonly known as fruit machine players in the UK). This paper examines the methodologies of participant and non-participant observation in studying slot

machine gamblers.

When learning how to carry out, analyze and write-up participant and nonparticipant observation research, it is evident that there is limited consensus on best practice. Many authors (e.g., Crabtree & Miller, 1992; Jorgensen, 1989; Spradley 1980;) subscribe to a basic central tenet, namely that a 'unit' of data is collected by watching, chatting, experiencing, comparing and contrasting (observation and participation) in a reflective and critical cycle of enquiry for the scene in question. However, the exact procedure for doing so in a rigorous way in order to distinguish a 'layman's commentary' from the valid and reliable findings of a competent social scientist is not obvious or straightforward. In fact, the distinction may be, at first glance, a subtle one, whereby the latter is expected to:

- Be an 'ex ante', pre-meditated and focused act rather than an 'off the cuff' procedure done on an ad hoc or post hoc basis;
- Use a broad, open focus rather than a narrow, inflexible one;
- Be characterised by a desire to absorb and learn in an objective fashion, and;
- Impose a scientific framework wherever possible in order to identify the most useful and revealing components in a scene and maximize understanding of that scene.

Furthermore, the exact form in which the findings should be reported is equally unclear. For example, Spradley (1980) identifies Hayano (1978) and Agar (1973) as key pieces of ethnographic research in the gambling and drug usage fields respectively, where both report their findings in a clear, informative and interesting way. However, these findings are reported descriptively without making it clear how the author arrived at their observations to their eventual findings and conclusions. This approach has also been taken by other observational work in the gambling field such as Griffiths (1991), Fisher (1993), Cotte (1997), Rosecrance (1986a; 1986b), Neal (1998) and Bennis (2004).

Based on the above rationale, our recent research findings and papers (see Griffiths & Parke, 2003; 2005; Parke & Griffiths, 2002; 2006; 2007; Parke, Griffiths & Parke, 2003) were derived from using a theoretical framework as a starting point for observation. This framework was based on techniques as described by Spradley (1980; discussed below) which we believed provided the most rigorous techniques for coding and analysing observational data.

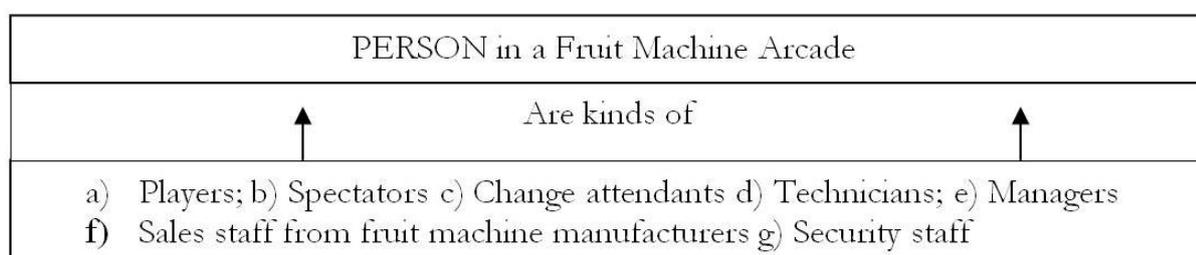
Spradley (1980) details an extensive 'research toolkit' for carrying out

participant observation that consists of a variety techniques to gather data from observation. He referred to this as the 'developmental research sequence'. Such techniques can be used for research for various levels of scope from microethnography (looking at a single social situation or social institution) to macroethnography (looking at a complex society or multiple communities making up a culture). The research in our own area of gambling – the social institution of fruit machine gambling – falls more towards the micro-ethnographic end of the spectrum.

Spradley's (1980) 'toolkit' comprises techniques that give consideration to the whole scene but also to making more selective and focused observations. Spradley (1980) acknowledges that ethnographic research will eventually gravitate to in-depth analysis of certain agents or activities, but does suggest that at an early stage, the researcher should give consideration to the wider scene, at least at a superficial level. This is to ensure that the basic characteristics of the overall environment are noted that might facilitate more focused and selective observations. For example, in order to understand how a customer interacts with a conductor on Nottingham's new tram system, it may be important to give initial consideration to the wider travel experience of tram riders which may include getting on, finding a seat, interactions with other customers and getting off.

We have used the following aspects of Spradley's developmental research sequence as a framework in our research for gathering information on situational and structural factors in the context of fruit machine playing:

*Domain Analysis:* This involves a systematic identification of components of the observed scene and possible sub-categories. This process familiarizes the researcher with the scene and offers a systematic methodology for identifying components and activities worthy of further, more in-depth observation and analysis. An example of a domain analysis would be: persons in a fruit machine arcade (see Figure 1);

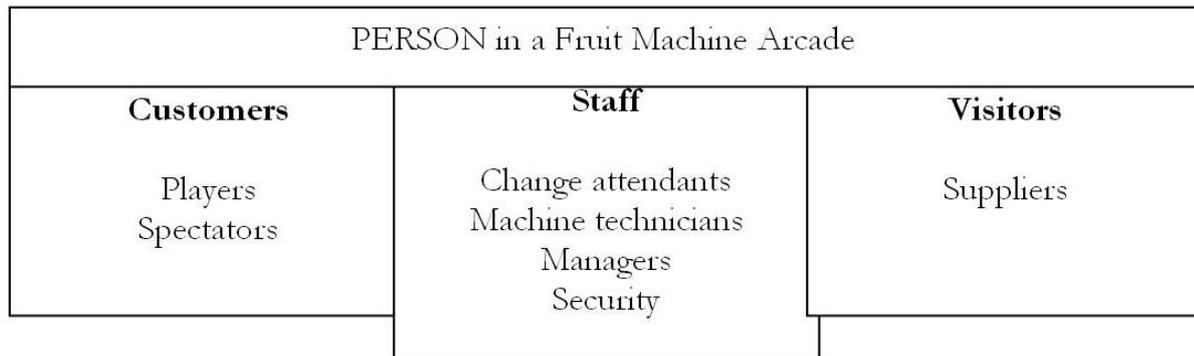


**Figure 1: Example of a Domain Analysis for a Fruit Machine Arcade**

This domain analysis would only be one possible example of a variety of potential domains within this scene. Other domains might include: spaces, feelings, events, goals, and objects that exist in the scene. Consideration of

such domains and their sub-components ensures that data are collected in a systematic way, with a wide research focus.

*Taxonomical Analysis:* This is a way of organising components in a scene but is usually done after more focused observations have been carried out. A taxonomical analysis organises sub-categories in a more meaningful way (see figure 2).



**Figure 2 : Example of a Taxonomical Analysis for a Fruit Machine Arcade**

Through taxonomical analysis, the researcher can then begin to add meaning and develop understanding to the hitherto list of descriptive components in the scene.

*Componential Analysis:* This is a more sophisticated way to gather and organise data and involves asking questions of contrast (more specifically, what are the similarities and differences between categories?). For example, what are the key ways in which fruit machine players are different from each other? This could be (1) the amount of money staked (2) exhibiting aggressive or non-aggressive behaviour, and (3) spending substantial time or limited time. It is by considering key areas of contrast that depth of understanding and some causal meaning can begin to develop. For example, what are the conditions under which one type of fruit machine player will spend more than they can afford? This may have implications for understanding prevention, treatment or marketing among these players.

These techniques offer a systematic framework for gathering and analysing data when using a relatively underused research methodology about many scholars have different opinions on best practice. The fundamental principle underlying this methodology is the use of a circular rather than linear process of discovery. Spradley (1980) suggests that this 'cycle' should begin with a series of questions, followed by the collection of data, then by analysis and reflection. Following this, the start of the cycle is revisited, whereby the researcher asks more questions, or reformulates past questions to get to an accurate description and understanding of the situation in question. Using a cyclical approach to research is particularly important to

cases such as this one, where data are considered in a large variety of locations. Ideas from one location may be revisited in another location without having to start the whole process from the beginning. Answers to questions either become reinforced or throw up different answers that will lead the researcher(s) to identify nuances in the environments and to consider aspects of the behaviour that may not have been evident or obvious in other locations.

It should also be noted that non-participant observation usually relies on the researcher being unknown to the studied group. One distinct advantage of non-participant observation is that the researcher can study a situation in its natural setting without altering the conditions - but only if the researcher can blend in naturally. One obvious disadvantage is that non-participant observation relies on observing behaviour and only observing behaviour. Since the researcher cannot interact in the social behavioural processes, most data collected will be qualitative, interpretive and to some extent limited. However, by using other methodological research tools suspicions, interpretations and maybe even hypotheses can be confirmed.

## **Participant and Non-Participant Observation: Settings and Procedure**

Based on an initial scoping exercise (examining all the possible types of places and environments that house fruit machines), and guidance from preliminary informants, four key types of setting were selected for observation in our research. A fifth category included less common and less popular settings where fruit machines can also be played (see Figure 3). Sites according to these settings were pre-selected based on a variety of factors many of which identified as important by Spradley (1980):

- **Accessibility:** How easy it was access the scene
- **Unobtrusiveness:** The degree to which the researcher(s) could blend into the scene;
- **Personal Participation:** The extent to which the researcher(s) could personally participate where appropriate and;
- **Experience of broad range of settings:** Perhaps most importantly, it was necessary to experience and examine the broadest range of environments and locations to ensure that: (1) all dimensions of the social situation (specifically, fruit machine playing) were covered, and (2) to consider possible differences between locations and environments.



**Figure 3 : Scenes Selected for Participant Observation of Fruit Machine Playing**

In our research we provided a breakdown of time spent in each location and environment according to date is summarized in the tables in the appendices (Appendix 1 for England and Appendix 2 for Northern Ireland). These tables give readers an idea of the amount and type of systematic observation that were carried out. Security and supervision had a stronger presence in the casinos and amusement arcades compared to pubs, licensed betting offices and other environments. Therefore, more time had to be spent by the researcher(s) playing fruit machines or engaged in other consumer activities (such as playing pool, playing video games, eating and/or drinking) in supervised areas to avoid accusations by venue staff of loitering. In less supervised areas, it was occasionally possible to record responses from informants in situ. However, in order to conceal researcher status and remain inconspicuous in many environments, field notes and quotes were primarily written up immediately after the exchange.

Similar data collection patterns were employed when observing as a change attendant. Although every effort was made to ensure accuracy when recording data, it should be noted that some of the excerpts in our research papers are not verbatim. Although all agents (including staff, visitors and management) in the gambling environments were included in the analysis (at least at a superficial level), the foci of the observations were the fruit machine gamblers and their interactions with the machines and with their social and physical environment. Observations included all gamblers regardless of frequency, amount spent or possible pathologies that may have been present.

Our observational work was undertaken in two forms - as a change attendant in an amusement arcade (180 hours) and as a 'patron' in slot machine environments (975 hours). Both were vital to the ethnographic process since both offered different perspectives. As a staff member, full attention could be given to observation when no patrons required change. Being a staff member also entitled the researcher(s) to substantial information (through dialogue and questions) from other members of staff and management, primarily occurring during less busy periods. Conversing with other staff members proved to be more difficult when observing as a patron. This would have been discouraged and considered divulging 'trade secrets'.

Although the management, staff and the players were aware of our status as researchers, the novelty subsided almost immediately (in fact, many players and staff had disbelieved the researcher identity and questioned whether the researcher was even a researcher at all). As a player, there is an expectation that the machines are played since loitering is prohibited. However, there are distinct advantages to observing as a fruit machine player. Firstly, it provided an opportunity to observe all venues and locations rather than remaining in one environment in one location. Secondly, as a fellow player, the researcher was afforded more respect than as a change attendant. Respect in this sense removed social barriers that were present as a change attendant, and reflected in a greater willingness to discuss their behaviour and knowledge of gambling.

The setting for research as a change attendant was a large amusement arcade situated in the town centre of Nottingham (UK). The shifts were eight hours in duration, varying across days of the week and across shifts (early = 8am to 4:30pm; day = 11am to 7:30pm; evening = 1:30pm to 10pm; and night = 3:30pm to midnight). Change attendants were permitted a series of 15 to 30 minutes breaks throughout the day. Brief notes were written during the shift. However, critical reflection and most field notes were written during these rest breaks and immediately following the shift. A useful methodology for recording details across all scenes (but working as a change attendant in particular) was using a licensed betting office (LBO) betting slip (see figure 4). These were useful as players and other staff, including management, would use these during the shift to place sporting bets usually in the LBO located next door to the amusement arcade. Given that such paper slips did not raise any particular interest or concern, condensed notes could be taken during the observation session to aid memory to develop expanded notes post-session.

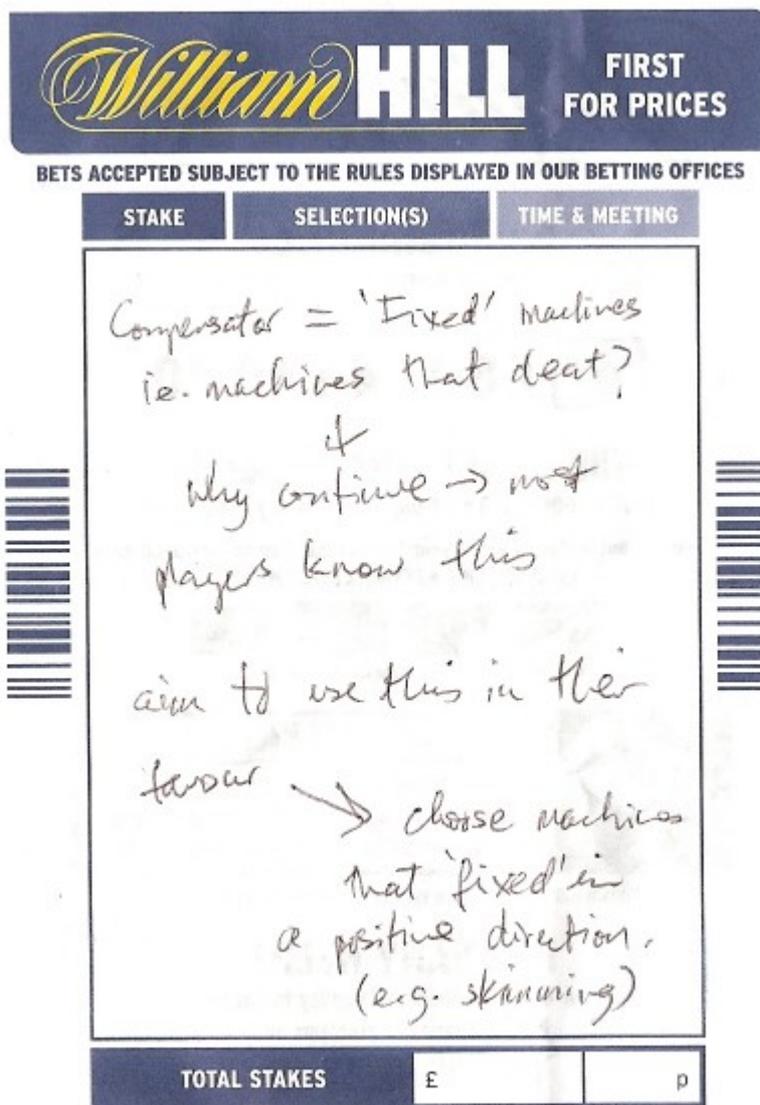


Figure 4 : A “Note-Taking Device” for the Field – Example of a Betting Slip from a Licensed Betting Office

While observing as a patron, the status as a researcher was concealed in the majority but not all cases. This, of course, may raise ethical issues, but there were two necessary primary reasons for such concealment. Firstly, it was important to avoid problems relating to gatekeeper issues and management concerns (namely, that they do not want their customer disturbed in the name of research). Secondly, in cases where researcher status was revealed, natural dialogue appeared inhibited in comparison to sessions where researcher status was concealed. This ‘researcher effect’ appeared to encourage more socially desirable answers and inadvertently made the verbal exchanges more formal leading the fruit machine gamblers to contrive responses more than they would in a casual conversation with a peer. Whilst some may question whether observation of gambling behaviour without player consent infringes on player privacy, it should also be noted

that all of the observations were in 'public' places. Such observations are acceptable within the ethical guidelines of the British Psychological Society and are the guidelines that were adhered to by the researchers.

The participant and non-participant observation methodology we used was not intended to provide evidence for causal relationships, nor was it intended to offer an exhaustive set of findings. It aimed to explore a relatively under-researched area in the hope of establishing useful information that would: (1) serve as a basic (even temporary) source information regarding fruit machine gambling in the UK and more importantly, (2) provide a research agenda for further empirical research.

### **Participant Observation: Validity and Reliability**

Although participant and non-participant observation can yield rich and informative data, it can be criticised for its subjectivity (see Wood and Griffiths [2007] for an overview on reliability and validity of quantitative and qualitative methodologies in relation to gambling). Such subjectivity may compromise the validity and reliability of the data being collected. For this reason, we took several precautions to minimize these risks. Firstly, triangulation was employed by assessing and comparing information being collected by a variety of means: (1) observations, (2) dialogue with population, (3) informal interviews, and (4) researcher participation within the environment. Formal interviews and recordings were not permitted as part of the agreement between the researchers and management regarding working as a change attendant to collect data. Furthermore, as Hayano (1978) points out in his own ethnographic research, formal interviews are not well received in the gambling context nor could we be confident regarding the voracity of their formal comments in the gambling environment (Hayano, 1978; p. 477):

*“Formal interviews or questionnaires were not used, nor could they be considered to be practical due to the desire of many players to remain anonymous or secretive regarding their personal gambling lives.”*

However, checks on validity were further employed by comparing information across a variety of respondents including patrons, staff, management and even technicians who were called in for repairs. However, it should be noted that triangulation across researchers was generally not possible since data collection was mainly carried out by a single researcher (the first author). In lieu of interobserver-corroboration, peer debriefing (informally sharing experiences of the same social situation and scene) was used to assess, evaluate and develop ideas as they emerged from the

observation. Ideas were discussed with two other academics with considerable expertise in this area: (1) a researcher who also engaged in participant observation in a fruit machine environment with aim of investigating aggression and gambling and (2) a prominent researcher in the field of fruit machine gambling in the UK.

## **Conclusions**

In this paper we outlined how we adopted Spradley's (1980) 'research toolkit' as a framework for our own observations, and demonstrated how such a subjective research method as observation can be – to some extent – standardized, and made more systematic and objective in both data collection and analysis, in relation to the topic of gambling. Furthermore, Spradley's (1980) 'toolkit' helped us to prepare, conduct and analyse our findings. In the case of studying slot machine gamblers in their natural settings, participant and nonparticipant methodologies clearly served as a useful methodology for establishing literature in a neglected research area. Research of this kind has also witnessed several successful applications both in the gambling field (e.g., Hayano, 1978, 1982, 1984; Rosecrance, 1986a; Griffiths, 1991; Fisher, 1993; Bennis, 2004) and also in other leisure research (e.g., Belk, Sherry & Wallendorf, 1988; Celsi, Rose & Leigh, 1993; Holt, 1995). We are convinced that without such methodologies being used, various social worlds (such as those of the slot machine player) would remain relatively unexplored.

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## Appendices

Observation Type	Hours	Examples of Key	Venues Dates
As a Change Attendant	180	Namco Station Amusement Arcade, Market Square, Nottingham	August 2001; September 2001; October 2001; November 2001
As a Patron (pubs)	120	Weatherspoons, Market Square, Nottingham; Bensons; Milton Street, Nottingham; Larwood and Voce Tavern, Fox Road, West Bridgford	January 2001; February 2001; March 2001; May 2001; June 2001; August 2001; September 2001; October 2001; November 2001; May 2004; June 2004; July 2004; August 2004; July 2006;
As a Patron (casinos)	50	Gala Casino, Maid Marion Way and Bridlesmith Gate, Nottingham	January 2001; February 2001; March 2001; May 2001; June 2001; August 2001; September 2001; October 2001; November 2001; July 2006
As a Patron (arcades)	550	Sun Valley (Trinity Square; Clumber Street; Upper Parliament Street ); Skegness (Lincolnshire); Falmouth (Cornwall)	October 2000; November 2000; December 2000; January 2001; February 2001; March 2001; May 2001; June 2001; August 2001; September 2001; October 2001; November 2001; December 2001; April 2002; May 2002; June 2002; July 2002; August 2002; May 2004; June 2004; July 2004; August 2004; July 2006; January 2007; February 2007
As a Patron (licensed betting offices)	90	Ladbrokes, Radcliffe Road West Bridgford; Ladbrokes, Pelham Street, Nottingham; William Hill, Clumber Street	January 2001; February 2001; March 2001; May 2001; June 2001; August 2001; September 2001; October 2001; November 2001;
As a Patron (other)	35	Stranraer - Belfast ferry; Irish Club; Nottingham; Mister Pizza, Musters Road, West Bridgford; Watford Gap Service Station, M1	December 2000; July 2001; September 2002; October 2002; October 2006
Total	1025		

Appendix 1: Participation Observation in England According to Type, Location and Date

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Observation Type	Hours	Examples of Key Venues	Dates
As a Patron (pubs)	20	Lavery's Bar, Botanic Avenue, Belfast; The Anchor, Portstewart, Co. Londonderry; The Windsor, Bangor Co. Down;	December 2000; April 2001; December 2001
As a Patron (arcades)	95	Ocean Beach, Portstewart, Co. Londonderry; Sportsland Portrush, Co Antrim; The Palladium, Quay Street, Bangor, Co. Down; Trunps, The Promenade, Bangor, Co. Down	December 2000; April, 2001; August 2006; December 2006
As a Patron (other)	15	Stranraer - Belfast Ferry; Belfast International Airport; Europa Bus Station, Belfast;	December 2000; April, 2001; August 2006; December 2006
<b>Total</b>	<b>130</b>		

Appendix 2: Participation Observation in Northern Ireland According to Type, Location and Date