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Tread Softly: Using Videography to Capture Shopping Behaviour

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TREAD SOFTLY: USING VIDEOGRAPHY TO CAPTURE SHOPPING BEHAVIOUR

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ABSTRACT

Rather than relying on participant recall or manual observations, videography was implemented to monitor supermarket shoppers as part of larger project investigating the influence of emotions on brand loyalists. It revealed that whilst there are obvious advantages in capturing real-time activities, there are limitations as well. Depth interviews viewing the recording were held to discuss the reasons behind shopping activities and this actually limited the conversation rather than expanded the topics. When the video was taken from the interview, a broader exchange resulted and revealed richer results. This doesn't negate the benefits of videography, rather, it provides a complimentary methodology which be translated into discerning research that develops consumer understanding.

INTRODUCTION

It seems like the answer to a researcher's prayer, a technology that can enable us to capture all of those non verbal cues at the moment purchase, not just the smile or the hovering hand but also the aisle plan and the direct influence of others. The implementation of videography allows researchers to capture this. But can it deliver to all that it appears to offer? The focus of this paper is on the adaptation of videography necessitated by the realities of using it in the field.

Capturing Consumer Behaviour and Attitudes

Success of any study in consumer behaviour is often dependent on an informant's ability to recall their actions and the researcher's ability to capture that moment. For many years, consumer behaviour has been reliant on recall measures to comprehensively record both the behaviour and the environment in which it takes place. Videography benefits both as there is less reliance on memory based retrieval systems when attempting to understand consumer actions. Luce & Bettman (2001) assert that whilst most consumer behaviour is goal orientated, utilising a memory system, individuals have their own processing ability based on the situation of choice and the characteristics of their choice at time of purchase. These decisions are often influenced by a myriad of judgments from the latent, subconscious through to the conscious, active decision processes. Including, identifying the underlying stimulus for consumer purchasing the above factors will be influenced by the functional utility of the product, the social association of the purchase, the emotional link between the product and the consumer, the need for knowledge, and finally the conditions under which the product is bought (Sheth, Newman, Gross, 1991).

This challenges traditional recording methods. With recent improvements in technology and increasing affordability, observations via the use of a video (or videography) as a means of providing hard evidence of consumer behaviour is gaining popularity. Accordingly, it is the responsibility of the researcher to ensure that any methodology employed in the exploration of this consumerbrand interaction is the one most suitable to allow the capture of this complexity. It is this that has lead to the increasing adoption of new technology as a means of reaching across existing barriers to understanding.

Quantitative measures of how consumers behave are complemented by our understanding the reasons why, and our having greater insight into their underlying motivations

This in turn, will provide a more holistic approach to the field under study. This increasing popularity in the 'why' of research has customarily been completed through the use of focus groups or depth interviews (personal, phone, diary and more recently, internet). And yet, regardless of method of choice, the bulk of the results have been based on the participants' recall of the purchase within the purchasing environment. In some cases, this may not have been the most reliable alternative in terms of research outcome. For example, Wind and Learner (1979) found that only 28% of participants, in a phone interview, correctly identified their purchased brand when it was compared to the details in their purchase diaries. Likewise, Schumann, Grayson, Ault et al (1991) discovered that only 4-6% of shoppers were able to recall the shopping cart advertising at the point of purchase. This is not to say that research employing recall techniques is outdated, but rather careful consideration on the research outcome needs to be encouraged.

An alternative to the recall approach has been the use of observation combined with an interview at the point of purchase (McIntyre and Bender, 1986). This amalgamation tends to capitalise on the increased accuracy of observational procedures with solid evidential reasons why specific products were chosen. The adoption of videography in this situation is an attractive choice as it allows the researcher to focus on understanding rather than the data capture.

The use of photographs and video images is not a new concept in the field of qualitative research (Heisley & Levy 1991, Donnenfeld & Goodhand, 1998, Underhill, 2000, Belk & Kozinets 2005,). Historically, focus groups have been the main driver of video usage because the expense of implementing this technology outside this formal environment has been inhibitive to its popularity of application. However with the advent of increasing affordability, portability and accessibility, the potential for videography is removing these limitations in consumer research.

Videography has also allowed for the recording of other methodologies such as depth interviews from a purely written or audio perspective to one where the informants' non-verbal cues can also be captured relatively easily. Thus by not only listening to what people say, but by having visual evidence, the non-verbal cues will provide an increased richness to the results. Direct imagery of consumers is also seen as a way to capture more detailed information about emotions, motivations, and underlying value systems that previously relied on more survey based methods. (Heisley & Levy, 1991, Heath, 1997, Belk & Kozinets, 2005,). These topics are often difficult to articulate, however the visual images often reveal so-called 'hidden' meanings which may be the main driver behind the research study. And whilst videography may increase the amount of research involvement and data analysis, this is outweighed by the fact that there is permanent record of what actually happened rather than relying on traditional observational methods, survey data or consumer recall. Researchers now have the ability to scrutinise people in their naturalistic environment, and in this instance, to further understand the interactions between consumers and their brands (Heath, 1997, Underhill, 2000)

It is with this premise in mind that a study was undertaken to further investigate the relationships that consumers have with specific brands within non-durable consumer goods, primarily fast moving consumer goods (FMCG). This particular market was selected due to the perceived transient nature of the consumer-brand relationship. For example, brand substitution doesn't involve a high financial risk to the consumer, and the market is highly competitive with an abundance of brand choice offering plenty of opportunity to switch. The line of investigation discussed in this paper took an ethnographic format using the benefit of visual records as well as the traditional written and audio transcripts. The focus was on understanding how consumers react to in-store conditions, and in particular to brands regularly purchased.

It should be noted that the use of video revealed the emergence of positivistic elements within the study, however it was only one data collection method within the early stages of a larger project. At the cumulation of the endeavor, it is expected that a greater adoption of an interpretive approach will be implemented

Interpretive studies generally attempt to understand phenomena through the meanings that people assign to them. These interpretive assumptions rely on the role of language and comprehension within the social sciences. Chua (1986) uses Shulz (1967, 1966, 1964, 1962) to explain that these assumptions include a belief about the physical and social reality, to make sense of human actions, and that by showing what people are doing we enable greater understanding between theory and practice. Interpretive research involves challenging reality with the involvement of human subject and where the researcher interacts with these subjects (Walsham 1995). These are key factors playing an important role in final outcome of our study, however, for our videographic stage there is greater emphasis on the practicalities of capturing the data in order to provide quality interpretive based results further

Methodological Selection

It was proposed that capturing visual evidence of the purchase occasion would provide solid evidence for future review and analysis not only on the part of the researcher, but also on the part of the informant. The assumption was that by providing this kind of verification, accurate and detailed discussions for the reasons of choice would be possible which then provided precise findings.

Prior to taking the camera into the field, a focus group of grocery buyers was held to understand what were the key influences about choice of brand. The result of this was then transferred into a depth interview format for pretesting with further grocery buyers prior to the actual video fieldwork. Once this had been completed, and minor adjustments made to the interview, a further group of twelve grocery buyers agreed to take part in the videographic element. The sample selected was chosen to maximise heterogeneity so that it included a wide range of age groups, household unit and other demographic factors (eg. income, postcode)Before videography was decided upon to capture the observational component of the study, other methodologies were investigated. These included

- 1. Completing surveys immediately post-shop
- 2. Participant involvement with an audio tape during the actual shop
- 3. Observations making skeleton notes which were to be expanded upon immediately post shop
- 4. In-home pantry observations were also suggested, however, this would not provide the circumstances under which the product was bought.

The majority of these methods did not allow for a similarly accurate recording of non-verbal cues which were

a key component of the research. Belk & Kozinets (2005) discuss the possibility of 'autovideography' in this emerging field – where the informant is responsible for the filming of their actions and environment. Under the conditions of our study - shopping in a supermarket - it was foreseen that it wouldn't be practical for the consumer to select their preferred brands, and at the same time capture this on video. Hidden cameras were not considered because of the degree of difficulty for the informant to gauge their own emotions and motivations combined with potential ethical issues. The alternative of an 'external' camera for autovideography would most likely require the presence of an additional family member or friend, who may not normally participate in the shopping visit. And whilst it could be argued that the attendance of a familiar person may reduce any undue influence from an observant researcher, the quality of the final result may not be to expected standards.

There have been other studies where consumers were accompanied during a shopping visit without the presence of a video camera (Lowrey, Otnes, McGrath, 2005) but as our focus was on the underlying motives of the consumer, It was agreed that video, by the researcher, was the most appropriate tool for data collection. To enhance this, it was also decided to maintain a non-participant observatory role rather than becoming actively involved during the actual shop. By doing so, this allowed for the informant to maintain as much 'normal' shopping behaviour as possible. If the researcher became concerned with the purchasing of the product, then there was a greater risk of informant distraction, possible introduction of bias, and increasing the actual time taken to complete the task. Participants often have difficulty in defining the parameters of their relationships without the need for aided recall and the use of videography provides this without unnecessary bias. Accordingly, all discussions between the researcher and informant could be kept until the end of the visit.

Although videography has the potential to reveal so much more about consumer behaviour, it is also this revelation that raises the importance of strict ethical guidelines. Belk & Kozinets (2005) highlights the importance of this when deciding to use videography as the key methodology. In our study, a small hand-held camera was being used to track the informant through the shop, which, whilst it remained as unobtrusive as possible, also meant that other shoppers were inadvertently captured on film. Generally, these were only for a brief moment as they were not the subject of focus and given the position of the researcher, it was rare that any person was identifiable for a long period of time.

Fieldwork Process

The proposed field collection process was a two stage modus operandi – the first step was to silently follow and observe the informant completing a normal shop. This non-participatory role of the researcher was to encourage a pattern and format familiar to the informant. During this time, several key behavioural patterns were noted. These included,

- 1. The time taken to select a brand: in some cases the informant picked up the desired brand immediately with little or no investigation of any other product. In other cases, two or three brands were picked up and compared, whilst in other instances, visual comparison was made before the final choice was made, or even after a detailed judgment no product was selected at all.
- 2. The interaction of other family members at the time of shop: in some cases there was general discussion about the selection of brands, in other cases, it

was the secondary member who made the final choice whilst at other times, it was the informant who made the final choice regardless of the input from other members

- 3. The impact of in-store promotional activities: in some cases the informant totally ignored the large displays (and even suggested they were a hindrance), at other times, they paid great attention to the promotion and bought several items of the one brand
- 4. The aisle pattern: Some informants only focused on the aisles that contained the brands they sought and ignored all other aisles. Other informants followed a regular pattern of visiting every aisle, even though brands were not scrutinised or even bought in many of these.
- 5. The number of times shopping lists or advertising material were referred to in relation to brand selection

Utilising videography made data collection of the first stage extremely easy in comparison to other methods. There was no need to constantly take note of what the shopper was doing, which section they were looking at, how many products they picked up and so on. The interactions between the informant and in-store conditions were easily identifiable, again without relying on skeleton notes which may have missed a cue. There was little burden on the informant, all mannerisms and interactions were accurately captured at the time of occurrence, and the resulting replay would provide easier future data analysis.

It has been said that the presence of a camera can skew the behaviour of those being filmed (Heath, 1997, Smallbridge 2003) – and yet we found that this was not a significant factor in any of the recordings. After the initial self-consciousness, the informants' attention was focused on fulfilling their shopping requirements. The researcher also ensured that they were a comfortable distance from the informant so as not to feel intrusive to any 'personal space'.

Even the children, after only a few moments of surveying the camera, became more interested in providing input to the selection of brand rather than the presence of a third person. This may also have been partly due to all informants being aware of the methodology and their level of participation well before the event. This prepared them for how the fieldwork was going to be conducted and set a specific level of expectation. To do otherwise in future research would not be recommended.

The second stage was to then play back the video with the informant and encourage a detailed interview as to the reasons why certain products were selected and the resultant attitudes based on specific behaviour. This was to occur immediately after the shop to ensure that all activities were top of mind and easy to recall. It also aimed to reduce the number of drop-outs if subsequent interviews were required from the informants. This second interview was also audio recorded to provide a complimentary source of information for further analysis into the subject matter.

Because several video interviews were planned and these were deemed to be a major source for subsequent findings, a further pre-test of the process was implemented. This would ensure that proposed methods were realistic and manageable whilst still meeting the objectives of the study. The pre-test consequently revealed that the actual filming of the shop was relatively efficient in capturing the previously mentioned activities. However, the second stage interview surprisingly exposed several key disadvantages in methodological practicality.

Firstly, as it was considered appropriate to interview the informant immediately after the shop, extra equipment was needed for the video playback. The small screen that came with the camera meant that the researcher and the informant needed to be seated very close to each other, and this potentially risked interfering with the casual, relaxed manner in which the interview was to take place. Alternatively, it may have been possible to use the larger screen on a notebook PC as most of these have the capability of playing back video directly from a camera (or even play DVD's that have been directly recorded onto by the camera). By using this additional piece of equipment, there was an initial setup process which took up valuable time and increased the complexity of the process especially within the confines of a shopping mall.

Another alternative was to book a subsequent time with the informant either at their own home or in more formal surrounds where equipment could already be set up – however, there were too many variables that could hinder the process. These included informant availability for further research, correct equipment for playback at the informant's home, and greater reliance on recall if there was a long time between the actual shop and ensuing secondary interview. Booking another time at formal research rooms would negate the benefit of making the interview as informal as possible, and informants may not be willing to meet else where.

The second major disadvantage with the playback interview was that by using the video as the main backbone to the depth interview meant that the informant was more focused on how they 'looked' on the video rather than what they were doing. Therefore, the discussion was often on their appearance despite attempts to review the brands they selected. This ultimately degraded the purpose of why the video method was being used to capture valuable data. It increased the time taken to discuss core topics and encouraged the possibility of boredom in some areas of the tape.

An adjustment to the methodology was then needed to accommodate for this outcome. Given it was important to have the shopping occasion still fresh in the informants mind, it was decided that priority was given to the timing of the interview so that the data could be gathered without an over reliance on recall. Therefore, the interview was still held immediately after they had completed their shop, at a local café recognizable to the informant, with the aim of encouraging familiar surroundings and subsequent open discussion.

Rather than referring to the video playback, they were instead asked to select a small number of key brands that they had just bought. The purpose of this was twofold – the brands chosen were to be an ice-breaker topic to open the discussion and the brands selected were familiar to the informant and tended to make a meaningful contribution to their everyday lives. Also, by asking the informant to select the brands for discussion this would be another instance where there would be a reduction of bias on the part of the researcher. An audio recording of the interview was maintained as part of the interview, mainly to lessen the need to make too many field notes and attention towards the informant was maintained.

The outcome of having a frank discussion without the presence of a video resulted in several key benefits –

- 1. The informant wasn't distracted by any visual appearance of themselves
- 2. The informant had the freedom to select and discuss brands that they felt were important to them and not the researcher. This incorporated important attitudes and motivations that may not have necessarily been uncovered if the video recording had been solely relied upon.
- 3. It allowed much broader topic digression away from the activities on the video, thus revealing hidden meanings behind their reasons for brand choice.

4. Greater flexibility to discuss the influence of intangible factors on brand choice such as familiarity, memories of childhood and trust, how they use the products, how others use the product, the perception of the different supermarkets, the integration of the brands into lifestyle and community involvement.

However, one of the most important outcomes was the consistent response that whilst there were important brands bought at the time of the shop, often there were *other* brands that contributed to a strong relationship regardless of how frequently they purchased them. Without the video, the informant had the freedom to move the discussion in this area and openly talk about which brands were really important to them, and why.

This adaptation to the final methodology is not to negate the advantages of using videography. The resultant techniques ultimately provided two sources of data for further analysis – both complimentary to the outcome. That is, the video captured the confirmed behavioural component of the study, whilst the interview encapsulated not only opinions and attitudes towards the brands bought during the shop, but it also encouraged open candor about their overall repertoire of brands. The results of this stage of the research will provide a good source of reference as the study progresses onto the next stag

CONCLUSION

So where does this leave the field of videography for consumer qualitative researchers?

As with any other research method, it is not recommended to be used as a sole source of information for interpretation because the limitations of videography should not be ignored. And as we found in our fieldwork, there are considerable ethical issues which need to be recognised, especially those where children are involved. Access in areas to use a video camera may be limited without degrading the quality of the recording and in some cases, if a camera would be permitted at all. We also found that immediate playback restricted the focus of the topic under discussion as the informants were more interested in their physical appearance rather than the meanings behind their actions. This provided excessive distraction during the interview process.

And yet, there is still so much potential contribution for videography. It has improved our ability to watch what people are doing within the context of their reality. This ultimately aids a researchers' ability to develop interpretive research. As discussed by Chua (1986), we seek to understand how people interact within their natural environment with emphasis on observation and careful attention to the details. If we can gather this level of interpretive knowledge we can then enrich our understanding of the meanings behind consumer behaviour and attitude. With videography, we are accurately able to capture people in their naturalistic environment as it occurs rather than relying heavily on recall.

Taking this into perspective and the purpose of this study, we are now able to move onto the next stage of our research. This fieldwork has provided solid evidence of non-verbal cues which adds to understanding the deeper meanings behind consumer-brand relationships. All of which can be translated into discerning, actionable research that ideally, develops our potential to reach across the borders of consumer understanding.

REFERENCES

- Belk, R., and R. Kozinets (2005). "Videography in Marketing and Consumer Research." *Qualitative Market Research: An International Journal 8(2):* 128-141
- Chua, W. F. (1986). "Radical Developments in Accounting Thought," *The Accounting Review (61): 601-632.*
- Donnenfeld S., and G. A. Goodhand (1998). "A picture is one thousand words." *Marketing and Research Today* 26(1): 4-16 Heath, R. (1997). "Seeing is Believing." *American Demographics: March 1997*, 4-8.
- Heisley, D. and S. J. Levy (1991). Autodriving, A photoelicitation Technique." *Journal of Consumer Research* 18(3): 257-272.
- Lowery, T., C. Otnes, and M. McGrath, (2005). "Shopping with Consumers, reflections and innovations." *Qualitative Market Research: An international Journal* 8(2): 176-188.
- Luce, M. F. and J. R. Bettman, et al. (2001). And Integrated Model of Trade-off Difficulty and Consumer Choice. Emotional Decisions: Tradeoff Difficulty and Coping in Consumer Choice. D. R. John. Chicago, University of Chicago Press: 11-35.
- McIntryre, S. and D. F. G. Bender, (1986). "The Purchase Intercept Technique (PIT) in Comparison to Telephone and Mail Surveys." *Journal of Retailing* 62(4): 364-383.
- Schuman, D., J. Grayson, J. Ault, K. Hargrove, L. Hollingsworth, R. Ruelle, and S. Seguin (1991). "The Effectiveness of Shopping Cart Signage: Perceptual measures tell a different story." *Journal of Advertising Research* 31 (1): 17-22.
- Sheth, J. N., B. I. Newman, et al. (1991). "Why We Buy What We Buy: A Theory of Consumption Values." *Journal of Business Research* 22(2): 159-170.
- Smallbridge, J. (2003). "The Human Zoo." *Canadian Business* 76(10): 155. Underhill, P. (2000). "Why We Buy: The Science of Shopping". New York, Simon & Schuster.
- Walsham, G. "Interpretive case studies in IS research: nature and method," *European Journal of Information Systems* (4), 1995, 74-81.
- Wind, Y. L., D. (1979). "On the Measurement of Purchase Data: Survey vs Purchase Diaries". *Journal of Marketing Research* 16(1): 39-47.