

## **“SHOPPING WITH CONSUMERS” AS A RESEARCH METHOD**

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## **Abstract**

“Shopping with Consumers” (SWC) is examined as process-oriented research approach to gain essential insights into consumer behavior at the point of purchase, i.e. in the store. Based on field studies, conducted at grocery and electronics retail stores, we introduce a standardized SWC-method, a modification of the original SWC, and present exploratory results with respect to issues of selectivity (participants versus non-participants) and reactivity of the research approach. With focus on methodical issues of SWC, we show the applicability of the SWC-method to collect data for analyses of consumer wayfinding and approach behavior in situ, and for examining in-store decisions concerning realization or failure (revising, postponing, dismissal) of purchase plans and the occurrence of unplanned purchases.

## **Keywords:**

Shopping with consumers, consumer behavior, point of purchase research, planned purchases, unplanned purchases

## **INTRODUCTION**

Consumer behavior at the point of purchase is dynamic in nature. This does not only constitutes itself in the fact that numerous purchase decisions are made or at least concretized at the point of purchase, but also in the various influencing factors underlying the shopping process. Even if the same person enters the same store and purchases the exact same goods, the shopping process and therefore the consumer’s behavior and experience are going to be different due to the variability of behavior and situations (Newman & Foxall 2003). An attempt to display the consumer’s shopping process shows that a store visit – a sequence of activities – can be divided into different behavioral elements. It stands to reason to distinguish between the following levels of consumer behavior: The consumer’s wayfinding (in-store movement), which refers to the orientation and the choice of the shopping path and second, the consumer’s approach behavior while shopping (Sorensen 2003).

The *shopping path* of a consumer (including its direction, length and duration) during a store visit is requisite for whether or not it comes to contacts with certain departments, offered products (Chandon et al. 2002; Sorensen 2003) or whether or not attention is paid to point of purchase marketing elements and likewise the shopping path also determines the number of these contacts (Silberer 2008a). *Approach behavior* comprises of activities such as looking at, attending to, touching or further examining a product, putting it back or taking it to buy (Wells & Lo Sciuto 1966; Hoyer 1984). This behavior defines the contact quality (Silberer 2008a) and intensity. Additionally, perceiving and obtaining information from, for example, point of purchase advertisement as well as interactions with sales staff or other customers in the store are counted among approach behavior activities.

Not only observable consumer behavior such as the wayfinding and approach behavior, which is the requisite for whether a product or brand is noticed at all (Chandon et al. 2002) but also consumer decision making processes and its determinants are of great relevance not only to manufacturers' and retailers' marketing practice but also marketing research. It is therefore not surprising that academic researchers as well as managerial marketing practitioners have eagerly proceeded to develop and apply methods for attempting to illuminate consumer behavior at the "scene of action", at the point of purchase (Granbois 1987; Newman & Foxall 2003; Sorensen 2003; Silberer 2005).

In order to capture crucial consumer behavior adequately and comprehensively, research techniques which only collect information from a static viewpoint, such as pre- or post-measurements, do not suffice (Büttner & Silberer 2007). They might be of use in registering changes, e.g. in attitude or mood before and after a store visit or in drawing comparisons between intentions and outcomes of shopping plans (Iyer 1989; Kelly et al. 2000). But they do not trace the actual processes leading to the outcome (Büttner & Silberer 2007). Research techniques with the aim to record the entire shopping process, the actual act of "shopping with consumers", i.e. accompanying the consumer while shopping, are required but rarely implemented. In this context the work of Otnes et al. (1995) needs to be adduced. Within the scope of various studies (Otnes & Lowrey 1993; McGrath & Otnes 1995; Otnes et al 1997; Lowrey et al. 1998; Lowrey et al. 2004) they were able to generate insightful data concerning the actual consumer shopping behavior by means of actually "shopping with consumers" (SWC) , i.e. accompanying the consumer and combining individual interviews and observation.

As comprehensive as the information obtained by SWC may be, especially techniques that incorporate open participatory observation with quite vast amount of effort on the part of

the informant, selectivity as well as reactivity can barely be avoided (Silberer 2008b) and therewith the issue of the data suffering from decrease of reliability and validity has to be addressed.

Deduced from this point of view, the contributions of this paper are the following: We aim at assessing the issues of selectivity and reactivity of “shopping with consumers” by suggesting a standardized approach, proposed by Silberer (2008b), a modification of the original SWC-method, in order to reduce selectivity and reactivity effects. Moreover, suitability of the technique for collecting data on consumers’ daily shopping tasks (comparison between grocery and electronics shopping) and applicability for collecting data on wayfinding and approach and behavior ought to be tested. The effectiveness of the method for exploring planned and unplanned purchases of consumers are presented in an initial exploratory study applying the standardized SWC-method with regard to the selectivity and reactivity issues.

The purpose pointed out above provides an outline for the remainder of the paper. After an overview of selected studies which incorporated SWC, we introduce the SWC-procedure, a modification of the original approach, as a standardized research technique. Applicability of the SWC-method is assessed by means of the conducted empirical studies. First findings on selectivity and reactivity of the method and the adequacy for collecting data on the consumers’ intentions and outcomes of the store visit concerning planned and unplanned purchases as well as consumer wayfinding and approach behavior are presented.

## **“SHOPPING WITH CONSUMERS” AS POINT OF PURCHASE RESEARCH**

### **Previous Studies applying “Shopping with Consumers” (SWC)**

The term “shopping with consumers” (SWC) stems from the work of Otnes et al. (1995) and depicts the act of repeatedly accompanying consumers in the retail setting combined with in-depth interviews (Lowrey et al. 2005) as a research methodology. The idea of literally “shopping with consumers”, i.e. accompany the consumer to gain insights into consumer’s shopping behavior at the point of purchase, is actually not novel to marketing or consumer behavior research. A glance at academic research literature shows various studies which have been conducted in the direction of attempting to trace consumer behavior – observable wayfinding and approach behavior as well as decision making – via accompanying the consumer (Alexis et al. 1968; Titus & Everett 1996). The classification of SWC into the

broad spectrum of research techniques, which are applicable and adequate to trace consumer behavior at the point of purchase, indicates a variety of possible alternative compositions of *interviewing and observation techniques* (Silberer 2008a).<sup>1</sup>

With the primary aim to apprehend the consumer's decision making process during the store visit, several SWC-studies incorporated the use of verbal protocols (Bettman 1970; Bettman & Zins 1977; Park et al. 1989; Alexis et al. 1968). Consumers, while accompanied in the field, were asked to think aloud while they are shopping. Bettman & Zins (1977) applied this methodology to analyze and categorize consumer's choice-making heuristics while in the store. Park et al. (1989) conducted an experiment on the effects of situational factors (time pressure and store knowledge) on planned and unplanned purchases. Alexis et al. (1968) likewise aimed at assessing decision processes for the case of shopping for women's clothing. A major advantage of in-store verbal protocols is the connectivity of the generated data to the events and occurrences during the shopping process of interest.

Some limitations of the method of verbalized thoughts are mentioned by Bettman & Zins (1977) who stated that the process of tracing in-store choice-making turned out to be quite difficult since the choices were often "complexly intertwined in the protocols". Moreover, the task of verbalizing thoughts leads to retrospection (Bettman & Zins 1977), e.g. why a particular brand or product is bought even if the consumer, under normal circumstances, would not engage in further thinking due to repeated purchases of the product (Hoyer 1984). Further, verbalizing while shopping is said to interfere with the natural shopping process (actual shopping task) as a result of the utilization of cognitive resources (Russo et al. 1989). Orientation troubles, other difficulties with the shopping task (such as comparing prices, making decisions) or needing more time than under normal shopping circumstances to locate products (Büttner & Silberer 2007) are possible consequences. A further problematic issue is constituted by the categorization or coding of verbal protocols, qualitative textual recordings/data, especially when the comments are ambiguous (Bettman & Zins 1977; Otnes et al. 1995). A conceivable modification is to shift the task of thinking aloud until directly after the shopping, i.e. verbalize thoughts retrospectively, in order not to interfere with the actual shopping (Silberer 2005), consequently decreasing the risk of altering the shopping behavior. Against this background, Silberer (2005) introduced video-cued thought protocols as a research technique to trace consumers' cognitive processes, applicable

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<sup>1</sup> Not regarded in the following are approaches which, even though, track consumer behavior at the point of purchase, do not incorporate the act of actually accompanying the consumer while shopping, e.g. via closed-circuit television (Newman & Foxall 2003) or RFID (Larson et al. 2005).

in two different manners: Either the consumer is accompanied/followed unobtrusively by a camera person who films the informant while shopping (Silberer 2005) (exterior perspective) or the participant shops by him-/herself, wearing a small head-mounted camera (Büttner & Silberer 2007) (self-perspective) which records his/her field of vision. Afterwards the video is presented to the participant and he/she is asked to comment on it including all the thoughts he/she remembers from the shopping process (also see Belk & Kozinets 2005). An advantage contains the possibility to pause the video at any time in order to clarify questions or record more details about certain occurrences. This technique constitutes a combination of interviewing and observations by camera. The above addressed issue of reactivity resulting from verbalizing thoughts while shopping might be reduced, but veridicality of the retrospective protocols may be compromised (Russo et al. 1989).

Concerning the consumer wayfinding and approach behavior, interviewing techniques are limited. Observational methods, either hidden (Wells & Lo Sciuto 1966; Hoyer 1984) or open (Payne & Ragsdale 1978) are most adequate to collect comprehensive data. Iyer (1989), for example, conducted a study in which researchers followed the subject discretely and recorded the purchase sequences, backtracking, information search patterns and purchase time during a store visit. Videography (Belk & Kozinets 2005) can likewise be applied to generate extensive data material. In general, video recordings bear great potentials in assessing not only the consumer's behavior per se but also the situational variables and indicators of the shopping environment (Silberer 2008a). Nevertheless, issues regarding the obtrusive nature of video recordings have to be considered (Belk & Kozinets 2005). Consents have to be obtained, not only on part of the informants, but also of other customers and clerks that might appear on the recordings as well (Belk & Kozinets 2005; Newman & Foxall 2003). All things considered, methods implementing the act of accompanying the consumer while shopping in order to record and analyze the wayfinding and attention behavior have rarely been applied in the field.

### **An Approach for Standardized Use of the SWC-Method**

Otnes et al. (1995) clearly contrast the SWC-method to sole interviewing and observation methods. While interviewing embodies a recollection (of in-store experiences, attitudes, opinions) and observation contains notations or recordings (of open in-store behavior), the data resulted from SWC are “immediate, informant-driven experiences in retail settings” (Otnes et al. 1995). They build the advantages of SWC on the proximity to the

consumer (Otnes et al. 1995; Lowrey et al. 1997), based on which the opportunity to clarify questions is given constantly and immediately. This fact results in high degree of credibility of the generated data (Otnes et al. 1995; Lowrey et al. 1998), allowing valid and reliable insights on shopping activities deducted from the actual situation and not from recall (Lowrey et al. 2005).

Nevertheless, the SWC-method bears quite critical issues. First and foremost, the fact that the very act of accompanying the consumer into the store unavoidably has an influence on the shopping process of the consumer, has to be addressed. The mere presence of a “stranger” calls for an alteration in the shopping behavior (Otnes et al. 1995), compromising the objectivity, reliability and validity (internal and external) of the generated data, consequences of *reactivity aspects* (Silberer 2008b). Examples are the emergence of the feeling on part of the consumer of perhaps being judged by the researcher while shopping; concerned about being perceived as a “good” and smart shopper, he/she might attempt to project a different image of him-/herself or justifications of certain behavioral aspects may occur. In general, one has to bear in mind that there is the possibility of reactance due to the lack of privacy to emerge during the shopping trip, which alters shopping behavior. Otnes et al. (1995) found this phenomenon to dissipate after the first trip, they believed it to decrease as the number of encounters and the level of trust increases. In this context, attention should also be directed towards the fact that, so far, SWC has mainly been applied to special (not ordinary and daily) shopping events, such as wedding or Christmas shopping (Lowrey et al. 1998; McGrath & Otnes 1995; Otnes et al. 1992). Moreover, characteristic for SWC-studies is the repeated accompaniment of informants combined with an individually (not standardized) designed procedure and development of the interviews, which rather possess the character of informal conversations, depending on the prior (in previous interviews) addressed issues (Lowrey et al. 1998; Lowrey et al. 2005). Otnes et al. (1995) point out that the familiarity between the researcher and the informant, which arises due to repeated shopping trips, permits the informants to regard the researcher rather as a shopping companion which allows for less interference and therewith less alteration of the natural shopping behavior. Critically viewed, while this SWC-technique allows the researcher to foster trust and „to capture the true nature of consumers” (Otnes et al. 1995), apparently the higher the degree of familiarity the more difficult it becomes for the researcher to remain neutral without offending the informant (Lowrey et al. 2005) and not to intervene into the shopping behavior.

Another noteworthy difficulty concerns the type of the generated samples. Even though the previously conducted SWC-studies barely report difficulties regarding the recruitment of

participants, not even when wearing microphones and other equipments was involved (Otnes et al. 1995), issues of *selectivity* have barely been considered and have to be discussed with regards to the inferential representativeness of the drawn samples, and therewith the external validity of the generated data (Silberer 2008b). Wells & LoSciuto (1966) suggest the sample to be representative, cover all aspects of the store and be recorded at different times. Undeniably, since the SWC-method costs more time and effort on the part of the informant compared to sole interviewing or observation and, moreover, often include the request to reveal private aspects, selectivity results from acceptance or refusal of participation. Second, SWC is likewise a costly endeavor (Otnes et al. 1995) for the researchers, consequently studies have only been conducted within the scope of small samples (see Bettman (1970), Payne & Ragsdale (1978), Lowrey et al. (1998), Lowrey et al. (2004)).

While we are convinced of the advantages of the SWC-approach which allow for thoroughly recording the entire shopping process with all its facets, the issues regarding selectivity and reactivity of the method endangering the objectivity, reliability and validity of the generated data ought not to be neglected. In order to diminish the addressed effects, it calls for a rather standardized procedure, desirably maintaining the advantages of accompanying the consumer into the field but facilitating replication of the SWC-procedure, reducing costs and effort on the part of the researcher as well as the participant and therefore, ensuring applicability to everyday shopping situations.

Since consumer shopping behavior consists of observable (wayfinding and approach behavior) and non-observable (internal processes) elements of activities, the suggestion is to maintain the combination of interviews and observations. Preferably, a single (not repeated) three-stage procedure comprising of a pre-interview, the shopping observation and a post-interview is to be conducted. The interviews serve as explanations and clarifications of the observed behavior (Agafonoff 2006), since in the retail setting the researcher cannot control for important variables, so the effects are often indistinguishable (Wells & Lo Sciuto 1966). Besides, the pre-interview provides the basis of building trust, without which the further observation procedure would not be possible (Otnes et al. 1995).

Proposed is a structured SWC-procedure for each informant, i.e. structured questions and order. We suggest the accompaniment/observational part to be of non-participant observation (Agafonoff 2006). In this manner, we assume the standardized SWC-method to be less intrusive concerning the privacy of the informant which would increase acceptance on the part of the potential participants and therefore positively affect the representativeness of the sample (increasing external validity). Moreover, we aim at developing a technique to



collect data on everyday shopping situations, e.g. grocery shopping, with as little alteration of the natural process due to the technique as possible. Despite all, the sequence of activities (of the entire shopping process), including attention for certain products or advertising elements and interaction with store employees, needs to and should be noted. Moreover, aspects regarding the shopping path may be recorded as well. Additionally, the researcher can always make use of the opportunity to ask questions, if not during the shopping process, in order not to affect and alter the shopper's behavior, then subsequent to the shopping process. Furthermore, standardized interviewing and observation procedure would allow for measuring certain aspects on the basis of operationalized variables and utilization of established scales.

## **DESIGN OF THE EMPIRICAL STUDY OF SHOPPING WITH CONSUMERS**

### **Preliminary Survey – Assessing the Willingness towards Participation**

Prior to the main empirical SWC-study a preliminary survey regarding the topic of the SWC-method was conducted. The actual act of accompanying the consumer in the field while shopping was not implemented into this preliminary study. But rather the willingness of potential informants to participate in such type of study, i.e. willingness to be accompanied (interviewed and observed) on a shopping trip by an unknown researcher, was surveyed by means of a structured questionnaire. The main goal of this pre-survey was to introduce the project, to assess its feasibility with respects to the social acceptance by the potential participants and to possibly recruit participants for the subsequent empirical SWC-study. Data was collected on the following topics:

- Demographic characteristics of potential participants versus those of consumers who would decline participation
- Degree of willingness to be accompanied once while shopping (6-point rating scale ranging from 1 = “very low” to 6 = “very high”)
- Degree of willingness to be accompanied up to three times (6-point rating scale ranging from 1 = “very low” to 6 = “very high”)
- Degree of willingness to be accompanied in a variety of grocery and electronics retail stores (6-point rating scale ranging from 1 = “very low” to 6 = “very high”)
- Preferred incentive (either €5 cash, a shopping certificate or other)
- Preferred gender and age of the interviewer/observer (researcher)

- Reasons for participation, reasons for rejection
- Contact details (name, mail address, e-mail address, phone number) and available times of potential participants

## **Main Empirical SWC-Study**

### ***Method and Procedure***

Four university students were trained for the required task for SWC, i.e. conducting observations (including making notations while observing the participant's shopping process) and interviews. Electronic notebooks and observation forms were prepared for the data collection. For the pre- and post-interview the standardized questionnaires were programmed on the notebooks. During the interviews the participant's answers and comments were entered into the program immediately as the interview was performed, ensuring comprehensive data collection. Also, no further data input concerning the interview parts was necessary. As to the data resulted from the observational part, recordings and notations were made on prepared observation forms. The observation forms were constructed on the basis of floor plans of the stores (for each of the selected stores). After adapting the basic floor plan, the layout of all shelves (fixed shelves and moveable gondolas) and location of the products/product categories and other elements and areas, such as the checkout counter, recycling center etc., were documented on the floor plan as well. Numerical and color-coding was deployed to mark and assort the different types of shelves, locations, product categories and products. Moreover a division of each store (utilizing letters and numbers) into "store areas" (precise disposition) and "category areas" (rough disposition) was undertaken (see *figure 1* as an example for grocery store 1).

### ***The Pre-Interview***

In the first step of the three-stage procedure a short pre-interview was conducted with the participant. This interview was carried out at a specially for this purpose with sweets and beverages decorated table close to the entrance of each of the selected stores, where the participant was approached for the study (or in the case of a beforehand scheduled appointment, where the researcher and the participant met up). The aim of the pre-interview was mainly to assess the following topics:

- The participant's mood at the beginning of the store visit and the degree of fun or stress the participant associates with shopping (6-point rating scale ranging from 1 = "very bad" to 6 = "very good" and 1 = "very stressful" to 6 = "very much fun")
- The amount of time available or planned for the store visit, extend of time pressure (6-point rating scale ranging from 1 = "very low" to 6 = "very high") and the participant's knowledge of the store (including the time span since the first store visit, the frequency of visits and store knowledge on a 6-point rating scale ranging from 1 = "not at all" to 6 = "very good")
- The participant's shopping plans (including concretization: product, category, brand, type) and the degree of certainty of those plans (4-point rating scale ranging from 1 = "very certain" to 4 = "not certain at all" and shopping preparation in the form of a shopping list (or other)
- The participant's further intentions/goals for the store visit (e.g. to obtain information, to have a look etc.)
- The participant's planned shopping path through the store: The participant is asked to verbally describe his/her planned shopping path through the store, if existent, and then sketch it on a prepared floor plan. The floor plan in which the participant sketches his/her planned shopping path resembles the observation form with the difference that the participant's floor plan does not contain the numerical codes but the actual terms of the product categories and products.

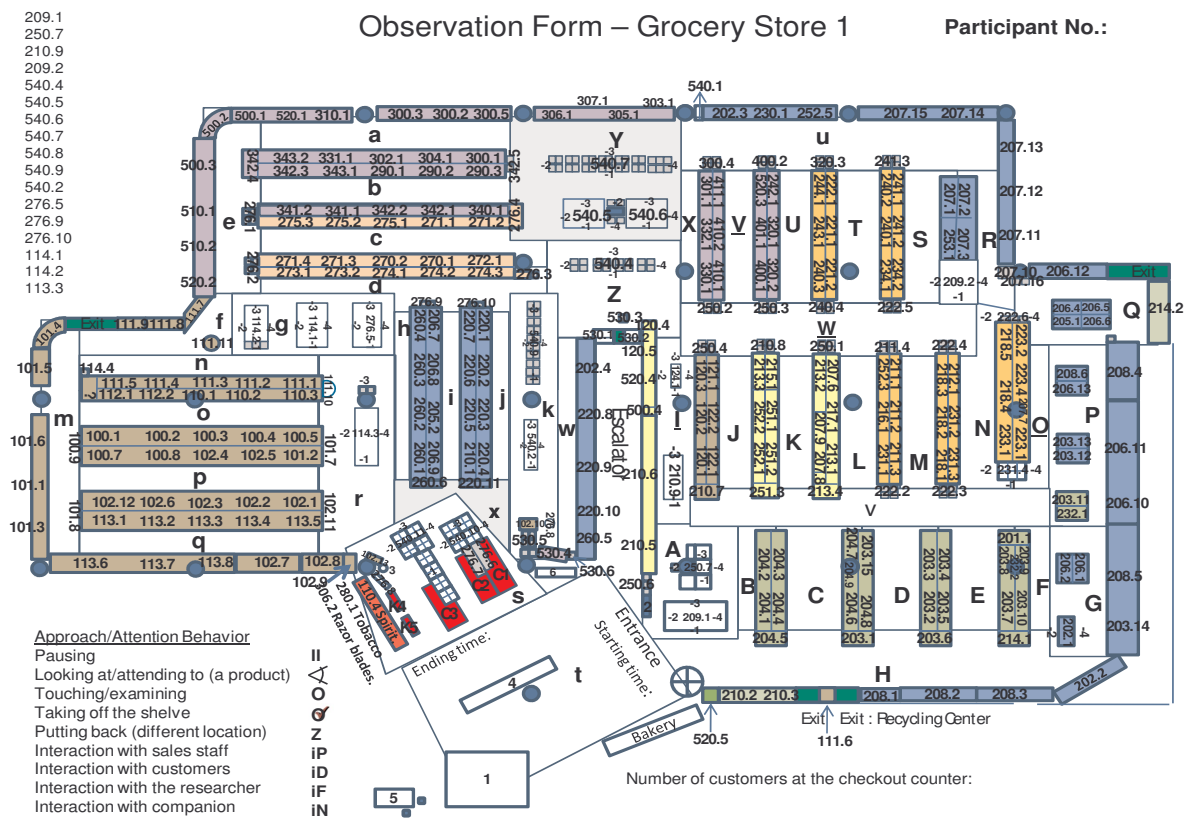
### ***Observation of the Shopping Process***

After the pre-interview is completed the participant is asked to start the shopping in company of the researcher. In this context, the researcher is not to embody a shopping companion as in previous SCW-studies, but rather to perform the task of following unobtrusively and remaining neutral and objective. During the entire shopping process the researcher's task is to observe and record the shopping behavior of the consumer comprehensively. The following issues are recorded on the observation form (see *figure 1*):

- **Shopper movement/wayfinding behavior:** The actual *shopping path* (recorded as a sequence of coded areas which the participant enters and crosses) during the store visit, beginning at the entrance and ending at the checkout counter.
- **Approach activities** (utilizing coded symbols for each activity): Locations in the store where the consumer pauses to

- look at something/attend to something (product, shelf, point of purchase marketing elements)
  - touch a product/examine a product
  - take a product to buy
  - put back/put away a product
  - interact with
    - sales employees
    - shopping companion
    - other customers
    - researcher/observer
- Actual **duration** of the shopping process

**Figure 1: Observation Form for Grocery Store 1**



**The Post-Interview**

After the shopping observation the participant is interviewed a second time. This post-interview serves to obtain information on the currently passed shopping process. The goal is to analyze the outcome of purchase decisions, to obtain evaluation of the shopping process, especially of elements that were not open to observation.

- Each in the pre-interview mentioned shopping plan (product) is assessed with respect to its realization as planned or possible changes made (revising, postponing, dismissing of the purchase plans) and the reasons behind the buying decisions
- Occurrence of unplanned purchases (for the purpose of this study defined as purchases not listed in the pre-interview as a planned item and not resulting from changes of planned items) with explanation for the buying decision
- Evaluation of the store design with respect to orientation and evaluation of the advertising practices of the retailer (POP and in general) by the participant (6-point rating scale ranging from 1 = “very bad” to 6 = “very good”)
- Evaluation of the shopping trip (6-point rating scale ranging from 1 = “not at all satisfied” to 6 = “very satisfied”)
- The participant’s mood at the end of the store visit (6-point rating scale ranging from 1 = “very bad” to 6 = “very good”)
- Perceived differences by the participant regarding the shopping trip accompanied by the researcher compared to usual shopping trips
- Evaluation with respect to the research method by the participant

The complete procedure of the pre-interview, the shopping observation and the post-interview was pre-tested in one of the selected grocery stores.

### ***Participants and Recruitment Procedure***

The preliminary survey was conducted in a small town in Germany, where, on the one hand, university students were asked to complete the questionnaires, on the other hand consumers in a city center pedestrian area in front of retailer stores of interest (for the main study) were approached and asked to take part in a short interview. This resulted in a sample of  $N=542$ . The percentage of female respondents for this sample was 58.3%, the average age = 29.39 ( $SD = 12.45$ ).

For the purpose of the main empirical study three retail stores were selected. Included were two grocery stores of the same retail chain (grocery store sample 1/grocery store sample 2 for the remainder of the paper) and one electronics retailer (sample 3). Within the scope of the main study the recruitment of participants was conducted in two different manners. First, respondents of the preliminary SWC-survey, who stated their willingness to participate in a

SWC-study and revealed contact details were contacted by phone or advance letters (mail or e-mail) and, if they accepted, an appointment for shopping in company of the researcher was scheduled (“*appointment recruitment*”). In addition, consumers or store visitors, respectively, were approached directly near the entrance of the selected retail stores and asked to participate (“*cold-calling recruitment*”). The latter form of acquisition was also performed in cases in which a scheduled appointment with a participant was not kept by the participant. Incentives in the form of shopping certificates (5€ for the selected stores) for participation were only incorporated in the appointment recruitments. Each participant was offered beverages and snacks during the interviews.

The data collection in all three stores was accomplished within the time span of two months, split into two phases. In the first phase data collection was conducted for grocery store 1 ( $N = 50$ ) and the electronics store ( $N = 50$ ) as a *comparison between the grocery and the electronics sector*. The second wave included repeated data collection in grocery store 1 ( $N = 50$ ) and newly added grocery store 2 ( $N = 50$ ) as a *comparison between two stores of the same retail chain*. The first wave of data collection was started by contacting the respondents of the preliminary SWC-survey whose personal data were available. Out of the  $N = 542$  respondents of the preliminary study, a total of  $N = 190$  were willing to reveal contact details for further soliciting. As to the recruitment of participants for the main study, 169 were chosen and contacted. Regarding the time span of almost five months between the preliminary survey and the main study, a relatively positive resonance can be reported: a total of 58 (34.32%) appointments were scheduled and carried out as well. Hereafter, cold-calling recruitment was performed. Within the second wave of data collection the participants were recruited only via cold-calling directly in front of the selected stores before the store visit. The two phases of data collection resulted in the main samples showed below.

**Table 1: Descriptive Data of the Main Samples**

|                            | Sample 1<br>(Grocery Store 1) | Sample 2<br>(Grocery Store 2) | Sample 3<br>(Electronics Store) |
|----------------------------|-------------------------------|-------------------------------|---------------------------------|
| <i>N</i>                   | 100                           | 50                            | 50                              |
| Females                    | 77%                           | 72%                           | 36%                             |
| Age                        | $M = 29.06$ ( $SD = 10.8$ )   | $M = 47.84$ ( $SD = 12.94$ )  | $M = 26.54$ ( $SD = 7.78$ )     |
| Recruited via appointments | 43%                           | 0%                            | 30%                             |

## RESULTS OF THE EMPIRICAL SWC-STUDY

By means of an exploratory analysis first insights into the feasibility of “shopping with consumers” as a standardized research technique were gained. The acceptance by the participants and the extent of selectivity and reactivity this method brings about, i.e. the qualification for research at the point of purchase was assessed. Moreover, first findings on consumer in-store behavior and on the intentions and outcomes of the store visit were obtained.

### Results regarding Selectivity Issues of the SWC-method

Out of the 542 respondents of the preliminary survey, 190 (35.06%) stated their interest to participate in a main SWC-study and agreed to reveal contact details for further solicitation when needed. Referring to the 190 potential participants, the degree of willingness to be accompanied one time averaged at  $M = 4.52$  ( $SD = 1.07$ ) for grocery shopping and a rather low  $M = 2.91$  ( $SD = 1.34$ ) for shopping at an electronics store. Contrary to expectations, the willingness to be accompanied up to three times held an average of  $M = 3.34$  ( $SD = 1.34$ ).

Evidence indicating that age plays a crucial role, when distinguishing between participants and consumers who were not willing to participate (“decliners”), was found in the sample of the preliminary survey. Sample t-test showed a significant difference ( $t = 3.950$ ;  $p < .001$ ) in the means of age between potential participants ( $M = 26.80$ ;  $SD = 10.1$ ) and “decliners” ( $M = 30.8$ ;  $SD = 13.36$ ). This result was supported by the main study: In the second phase of the data collection a demographic comparison between the actual participants and those consumers who declined when approached in front of the stores was attempted on the basis of short documentation of the “non-participants”, including the gender, estimated age, extend of perceived time pressure and the articulated reason for rejection. This was conducted for the two selected grocery stores. Sample t-tests yielded a significant difference in the means of age ( $t = -3.488$ ;  $p < .001$ ) for grocery store 1. Participants were significantly younger ( $M = 29.06$ ;  $SD = 10.8$ ) than non-participants ( $M = 38.75$ ;  $SD = 17.91$ ), the same finding as in the preliminary survey. For grocery store 2 no significant difference in the averages of age could be found. When the distribution of gender is regarded, the percentages of the genders are relatively equally distributed for the participants and the non-participants. Contingency analysis neither detected any significant results for the preliminary survey nor for the samples of the main study.

The most frequently mentioned reason by the potential participants (of the preliminary survey) for willingness to participate in further studies was based on “interest in such type of study” with a percentage of 75%. Similarly, 61% would do so “to support research”. This finding complies with Otnes et al. (1995) stating that consumers who agree to participate in such a research project are more likely to be interested in human behavior as well as shopping (see also Groves et al. 2000; Groves et al. 2004). Significant positive correlation between the degree of fun associated with shopping of this type of goods and the evaluation of feeling associated with the study was obtained for the sample of grocery store 1 ( $r_{xy} = .202$ ;  $p < .05$ ) but not in the cases of sample 2 and 3.

All respondents of the preliminary study, including potential participants and “decliners”, were surveyed about negative aspects associated with the SWC-study. The most frequently mentioned reason by the respondents arguing against participation was the effort of scheduling and keeping the appointment for the study. Interestingly, also behavioral aspects were mentioned by the respondents such as alteration of buying behavior due to the presence of the researcher, which will be discussed in the next section. *Table 2* summarizes the obtained answers.

**Table 2: Reasons for Acceptance and Rejection of Participation**

| <b>Preliminary Survey</b>   |                          |
|---|--------------------------|
| <b>Reasons for participation (N = 190 with contact details available)</b>                     | <b>Quota<sup>a</sup></b> |
| “interested in such type of study” <sup>b</sup>   | 75% <sup>c</sup>         |
| “to support research”   | 61%                      |
| “like to go shopping in the company of others”  | 15.8%                    |
| “to learn something about myself”   | 12.6%                    |
| “for the sake of the incentive”   | 11.6%                    |
| “like talking about shopping to others”   | 7.9%                     |
| “like talking about stores to others”   | 5.3%                     |
| <b>Reasons to reject participation (N = 542)</b>  | <b>Quota<sup>d</sup></b> |
| “would feel obligated to participate if an appointment was scheduled in advance” <sup>b</sup> | 40.2% <sup>c</sup>       |
| “do not like to be observed in general”   | 31.9%                    |
| “scheduling an appointment in advance would cost too much time”                               | 26.1%                    |
| “would feel disturbed while shopping/browsing”  | 25.7%                    |
| “do not like to be interviewed in general”  | 17.9%                    |
| “would refrain from buying certain products due to the company of the researcher”             | 13.3%                    |
| “do not want others to know about my shopping behavior”                                       | 7.6%                     |
| “would be incited to buy certain things due to the company of the researcher”                 | 6.5%                     |

<sup>a</sup>100 % correspond to the 190 respondents of the preliminary survey whose contact details were available for further studies; <sup>b</sup> multiple answers were possible; <sup>c</sup> means that 75% of 190 would participate because they are interested in such type of study; <sup>d</sup> 100% correspond to the entire sample of 524 of the preliminary survey; <sup>e</sup> means that 40.2% of the 542 would reject participation because they would feel obligated to participate if an appointment was scheduled in advance;



In the light of selectivity issues regarding the acceptance or refusal of participation with respect to a comparison between the grocery and the electronics store, a remark has to be made: When conducting recruitment by scheduling appointments, a difference in feasibility between the two sectors, grocery and electronics, was perceived. Slight difficulties in recruitment of “electronics shoppers” were encountered, out of the 58 scheduled appointments only 15 were willing to participate for the electronics retailer, the low degree of willingness assessed in the preliminary study was supported by this observation. The remaining percentage of the electronics store sample was acquired in situ.

### **Results regarding Reactivity Issues of the SWC-method**

In previously conducted SWC-studies the compatibility of the researcher and the informant was addressed (Otnes et al. 1995; Lowrey et al. 2005). Differences between male and female researchers to accompany the consumers on the shopping trips were observed (Otnes et al. 1995). Female consumers tend to bring along a friend or family member when accompanied by a male researcher (Otnes et al. 1995). Moreover, the combination of a male researcher and a female informant was perceived to be less open (Otnes et al. 1995), leading to the assumption that one source of reactivity is the researcher him-/herself (see also Spano 2006). Similarly, Alexis et al. (1968) stated, after having pre-tested the method of verbal protocols in the field, that a female “interviewer” would be more appropriate to accompany the participants. In our data only two participants appeared in company and neither due to the circumstances of the study. Nevertheless, the pre-survey sample likewise revealed a tendency towards a preference for a female researcher in general: 15.3% of the respondents preferred to be accompanied by a female researcher, only 0.5% of the respondents by a male researcher, 84.1% were indifferent. A significant difference in the preference between the genders was not found. Surprisingly, compatibility with respect to the age is highly significant ( $F(2, 107) = 15.886; p < .001$ ). The age of the participants seems to play a role concerning selectivity effects in the sample and reactivity effects with respect to the compatibility between the researcher and the participant.

Concerning the evaluations, given in the post-interview, with regard to the perceived differences in own behavior due to the researcher’s presence, overall positive results were obtained in general and for each store (see *table 3*). Consisting of a rather equal distribution of participants with and without scheduled appointments, sample 1 was drawn on to investigate possible effects resulting from the manner of acquisition of participants (appointment or cold-

calling). The difference between the two acquisition groups was tested for each listed answer. The results of contingency analyses yielded significant correlations. Significantly more participants who scheduled an appointment perceived differences ( $\chi^2 = 32.518$ ;  $p < .001$ ) and more of them felt observed ( $\chi^2 = 8.965$ ;  $p < .05$ ) than those asked for cooperation in front of the store. Based on the assumption that the act of scheduling an appointment prepares the participant for the shopping in advance, it is not surprising they perceive more alteration in their own behavior.

**Table 3: Perceived Differences in own Behavior due to the Presence of the Researcher**

|                              | Grocery Store 1      | Grocery Store 2    | Electronics Store  | Total              |
|------------------------------|----------------------|--------------------|--------------------|--------------------|
| “No difference” <sup>a</sup> | 39.0% <sup>b,f</sup> | 76.0% <sup>c</sup> | 32.0% <sup>d</sup> | 46.5% <sup>e</sup> |
| “Felt observed”              | 39.0%                | 14.0%              | 48.0%              | 35.0%              |
| “Shopped more deliberately”  | 11.0%                | 4.0%               | 4.0%               | 7.5%               |
| “Shopped faster than usual”  | 9.0%                 | 2.0%               | 8.0%               | 7.0%               |
| “Different store”            | 9.0%                 | 0%                 | 0%                 | 4.5%               |
| Other                        | 16.0%                | 6.0%               | 24.0%              | 15.5%              |

<sup>a</sup> Multiple answers were possible; <sup>b</sup> 100% correspond to  $N = 100$  of grocery store 1; <sup>c</sup> 100% correspond to  $N = 50$  of grocery store 2; <sup>d</sup> 100% correspond to  $N = 50$  of the electronics store; <sup>e</sup> 100% correspond to the entire sample over all three stores; <sup>f</sup> means that 39.0% of the 100 perceived no difference in their own behavior

As presented in *table 4*, quite positive results were obtained for the evaluation of the study and the researcher as well. When tested for effects stemming from the manner of acquisition (appointment or cold-calling), significant results appeared in all cases for grocery store 1 whereas no significant differences for the electronics store were yielded. The evaluation of the study ( $M = 4.98$ ;  $SD = .641$ ) and the researcher ( $M = 5.23$ ;  $SD = .824$ ) by the participants who were recruited in front of the store resulted in significantly lower means (evaluation of study:  $t = 2.643$ ;  $p < .01$  and of researcher  $t = 3.693$ ;  $p < .001$ ) than the participants acquired from the preliminary study ( $M = 5.33$ ;  $SD = .644$  respective to the study and  $M = 5.72$ ;  $SD = .504$  to the researcher). On the other hand, the willingness to repeat participation is significantly higher (same store:  $t = -2.060$ ;  $p < .05$  and different store:  $t = -2.083$ ;  $p < .05$ ) of those participants (same store:  $M = 5.37$ ;  $SD = 1.046$  and different store:  $M = 5.42$ ;  $SD = .731$ ) than that of the ones with scheduled appointments (same store:  $M = 4.86$ ;  $SD = 1.338$  and different store:  $M = 5.02$ ;  $SD = 1.080$ ).

**Table 4: Evaluation of the Study/Researcher and Willingness to repeat Participation**

|   | Grocery Store 1                        | Electronics Store          | Grocery Store 2            | Total                      |
|---|--|----------------------------|----------------------------|----------------------------|
| Evaluation of the feeling associated with participation in the study <sup>a</sup> | <i>M</i> = 5.13<br>(.661) <sup>c</sup> | <i>M</i> = 5.18<br>(.596)  | <i>M</i> = 5.12<br>(.961)  | <i>M</i> = 5.14<br>(.730)  |
| Evaluation of the researcher as shopping companion <sup>a</sup>                   | <i>M</i> = 5.44<br>(.743)              | <i>M</i> = 5.76<br>(.431)  | <i>M</i> = 5.10<br>(.886)  | <i>M</i> = 5.44<br>(.754)  |
| Probability of repeating participation in this store <sup>b</sup>                 | <i>M</i> = 5.15<br>(1.201)             | <i>M</i> = 4.98<br>(1.079) | <i>M</i> = 5.52<br>(.909)  | <i>M</i> = 5.20<br>(1.121) |
| Probability of repeating participation in a different store <sup>b</sup>          | <i>M</i> = 5.25<br>(.914)              | <i>M</i> = 4.98<br>(1.020) | <i>M</i> = 5.22<br>(1.130) | <i>M</i> = 5.18<br>(1.000) |

<sup>a</sup> Evaluation of the study and the researcher was measure on a 6-point rating scale ranging from 1 = “very negative” to 6 = “very positive”; <sup>b</sup> the probability of repeating participation was measured on a 6-point rating scale ranging from 1 = “very unlikely” to 6 = very likely”; <sup>c</sup> standard deviations in parentheses

Further significant results concerning the reactivity of the method are the following: Sample t-test showed a significant difference ( $t = 5.444$ ;  $p < .001$ ) in the average number of purchase plans between the two groups of participants (with appointments:  $M = 6.98$ ;  $SD = 4.056$  and without appointments:  $M = 3.04$ ;  $SD = 2.841$ ) for grocery store 1, indicating that the group with appointments presumably came more prepared for the shopping. This may be a negative aspect with regards to the alteration of the natural shopping behavior due to the research technique. No significant difference could be found for the electronics retailer though. Moreover, within the sample of grocery store 1 participants with appointments were feeling better ( $t = 3.335$ ;  $p < .001$ ) and in a significantly better mood ( $t = 2.199$ ;  $p < .05$ ) at the beginning of the pre-interview and stated to be more satisfied with the shopping ( $t = 1.773$ ;  $p < .05$ ) and in a better mood at the end of the post-interview ( $t = 2.775$ ;  $p < .05$ ). As far as the electronics store is concerned, astonishingly, results indicate the opposite: participants without a scheduled appointment were feeling significantly better ( $t = -2.513$ ;  $p < .05$ ), were in a better mood ( $t = -2.248$ ,  $p < .05$ ) and had a better day ( $t = -3.534$ ;  $p < .001$ ).

As to the time and effort SWC requires on the part of the participant, fatigue (presumably due to the study) was only noticed in very few cases (5% of the entire sample over  $N = 200$  of all stores). At this point it has to be noted that, overall, among the participants of all three stores, the duration of the shopping trip remained relatively short. Regarding the shoppers of grocery store 1, the duration averaged out at  $M = 9.0$  minutes ( $SD = 5.035$ ),  $M = 7.62$  ( $SD = 5.624$ ), as to the sample of grocery store 2 and the electronics shoppers on average spent  $M = 10.98$  ( $SD = 7.891$ ) in the store.

## **Results regarding Intentions and Outcomes of the Shopping Trip and In-Store Behavior**

Purchase plans of the consumers, including the certainty of the intention was measured in the pre-interview on a 4-point rating scale ranging from 1 = “very certain” to 4 = “not certain at all”. Furthermore, the degree of concreteness concerning the definition of the planned products was assessed (category, brand or type). For grocery store 1 data on a total of 467 planned products (shopping plans) were collected. On average each customer planned to buy 4.73 products ( $SD = 3.923$ ). For more than half of the plans the customer was able to name the category (60.25%), 15.01% were concretized regarding the brand and in one fourth of the cases even the type was already defined (25.37%). More than  $\frac{3}{4}$  of the purchase plans were rated as “very certain” (82.88%). If compared to the electronics store, quite the opposite is indicated: Only a total of 39 purchase plans were referred to in the pre-interview. Almost half of the sample (46%) visited the electronics store without any plans, another 42% mentioned only one planned item when asked (64.1% of the planned items were rated as “very certain” and another 25.64% as “rather certain”). The remaining percentage had two to five planned items in mind. The category was named in more than half, the brand in 17.94% and the type in 28.21% of the cases. For the grocery store 2 a total of 187 plans were assessed with again almost half of them (47.06%) with categories, 18.18% brands and 33.16% being concretized down to the type of the planned product, again with a very high proportion of 86.1% of the plans rated as “very certain”. Similar to the sample of grocery store 1, on average each customer planned to buy 3.74 ( $SD = 3.475$ ) products. As to both grocery stores, little above  $\frac{1}{4}$  of the consumers intended to purchase products on sale.

The results concerning the intentions and outcomes of the store visit – the extent of realization of the purchase plans, rate and reasons of purchase plan failures (revising, postponing, dismissing) as well as unplanned purchases – are summarized in *table 5* and *6*. Remarkably high proportions of purchase plans were fulfilled (either realized as planned or concretized in the store) in the case of the grocery shoppers (both stores) as opposed to electronics shoppers, which seems plausible and typical as a comparison between the two sectors. This shortfall, which refers to the “count of the items that a shopper intended to purchase but did not” (Iyer & Ahlawat 1987), in our case the purchase plans that were “not fulfilled or revised” were similar in the case of the two grocery stores, for the sample of the electronics store it amounted to almost half of the planned purchases though. Also not absurd is the fact that “revised plans” constitute the highest proportion (43.59%) in the electronics sample – due to the type of goods offered – “changed intentions” and “postponed purchases”

are typical. On the other side, availability plays a major role for groceries shopping (see also Kelly et al. 2000).

As to the preparation of the shopping trip, around one third of the grocery shoppers prepared a shopping list, plausibly none of the electronics shoppers did. Correlations between the actual outcomes of shopping plans and the variables concerning the store knowledge (knowledge, time span since the first visit and frequency of visits) were assessed, but did not yield any significant results in most cases, except for the case that the number of purchase plans which were “realized exactly as planned” is significantly positively correlated with the store knowledge ( $r_{xy} = .20$ ;  $p < .05$ ) in the case of grocery store 1, which makes contextual sense. As far as the sample of grocery store 2 is concerned, the correlation between the number of planned items which were “realized as planned” and the time span since the first store visit is significant ( $r_{xy} = .442$ ;  $p < .001$ ). Further significant, in this case negatively, correlation was detected between the number of “not fulfilled/revised” plans and the frequency of store visits ( $r_{xy} = -.557$ ;  $p < .05$ ). Those results support the assumption that store knowledge contributes to the fulfillment of shopping plans (see Iyer & Ahlawat 1987).

**Table 5: Intentions and Outcomes concerning Purchase Plans**

|  | <b>Grocery Store 1</b> | <b>Grocery Store 2</b> | <b>Electronics Store</b> |
|--|------------------------|------------------------|--------------------------|
| <b>Number of purchase plans</b>                  | <b>473</b>             | <b>187</b>             | <b>39</b>                |
| Purchase plan realized as planned                | 62.58% <sup>a</sup>    | 79.14% <sup>b</sup>    | 33.33% <sup>c</sup>      |
| Purchase Plan concretized in the store           | 20.51% <sup>d</sup>    | 9.09%                  | 25.64%                   |
| Purchase Plan not fulfilled/revised              | 16.49%                 | 10.70%                 | 43.59%                   |
| <b>Not fulfilled/revised plans</b>               | <b>78</b>              | <b>20</b>              | <b>17</b>                |
| Changed intention                                | 37.18% <sup>e</sup>    | 15.00%                 | 47.06%                   |
| Dismissed the plan                               | 34.62%                 | 65.00%                 | 17.65%                   |
| Postponed the plan                               | 15.38%                 | 5.00%                  | 35.29%                   |
| Neglected the plan                               | 8.97%                  | 10.00%                 | 0.00%                    |
| <b>Changed intentions</b>                        | <b>29</b>              | <b>3</b>               | <b>8</b>                 |
| Product not found                                | 6.90% <sup>f</sup>     | 0.00%                  | 0.00%                    |
| Product not available                            | 27.59%                 | 33.33%                 | 0.00%                    |
| Product was too expensive                        | 6.90%                  | 0.00%                  | 12.50%                   |
| <b>Dismissed or postponed plans</b>              | <b>39</b>              | <b>14</b>              | <b>9</b>                 |
| Product not found                                | 12.82% <sup>g</sup>    | 0.00%                  | 22.22%                   |
| Product not available                            | 35.90%                 | 42.86%                 | 33.33%                   |
| Product was too expensive                        | 28.21%                 | 0.00%                  | 22.22%                   |
| At least one supplementary product not available | 0.00%                  | 0.00%                  | 0.00%                    |
| Planned to buy products on sale                  | 26% <sup>h</sup>       | 28% <sup>i</sup>       | 13.3% <sup>j</sup>       |
| Prepared shopping list                           | 27%                    | 36%                    | 0%                       |
| Had shopping path planned                        | 79%                    | 82%                    | 86%                      |

<sup>a</sup> 100% correspond to 473 purchase plans of grocery store 1; <sup>b</sup> 100% correspond to 187 purchase plans of grocery store 2; <sup>c</sup> 100% correspond to the 39 purchase plans of the electronics store; <sup>d</sup> means that 20.51% of the 473 plans were concretized in the store; <sup>e</sup> means that out of the 78 not fulfilled/revised plans in 37.18% of the cases the intention was changed; <sup>f</sup> means that for 6.9% of the 29 the intention was changed because the product could not be found; <sup>g</sup> means that 12.82% out of the 39 the plan was dismissed or postponed because the product could not be found; <sup>h</sup> 100% correspond to the  $N = 100$  of grocery store 1; <sup>i</sup> 100% correspond to the  $N = 50$  of grocery store 2; <sup>j</sup> 100% corresponds to the  $N = 50$  of the electronics store

**Table 6: Occurrence of Unplanned Purchases**

|   | Grocery Store 1     | Grocery Store 2     | Electronics Store   |
|---|---------------------|---------------------|---------------------|
| <b>Number of unplanned purchases</b>              | <b>177</b>          | <b>85</b>           | <b>11</b>           |
| <b>Type of Unplanned Purchase</b>                 |                     |                     |                     |
| Reminded of the product in the store <sup>c</sup> | 27.68% <sup>a</sup> | 44.71% <sup>b</sup> | 36.37% <sup>c</sup> |
| Bought after deliberate consideration             | 13.56% <sup>d</sup> | 14.12%              | 54.55%              |
| Bought quickly without any consideration          | 40.11%              | 34.11%              | 27.28%              |
| Having a habit of buying this product             | 20.90%              | 14.11%              | 0%                  |
| <b>Reason for Purchase</b>                        |                     |                     |                     |
| Offer on a shelf <sup>c</sup>                     | 7.35% <sup>e</sup>  | 4.71%               | 0%                  |
| Special presentation for offer                    | 11.86%              | 23.53%              | 36.37%              |
| Special product attribute                         | 19.21%              | 30.59%              | 9.1%                |
| Curiosity/Try something new                       | 15.82%              | 8.24%               | 18.19%              |
| Other   | 46.89%              | 32.95%              | 72.73%              |

<sup>a</sup> 100% correspond to 177 unplanned purchases of grocery store 1; <sup>b</sup> 100% correspond to 85 unplanned purchases of grocery store 2; <sup>c</sup> 100% correspond to the 11 unplanned purchases of the electronics store; <sup>d</sup> means that 13.56% of the 177 unplanned items assessed for grocery store 1 were bought after deliberate consideration; <sup>e</sup> multiple answers were possible

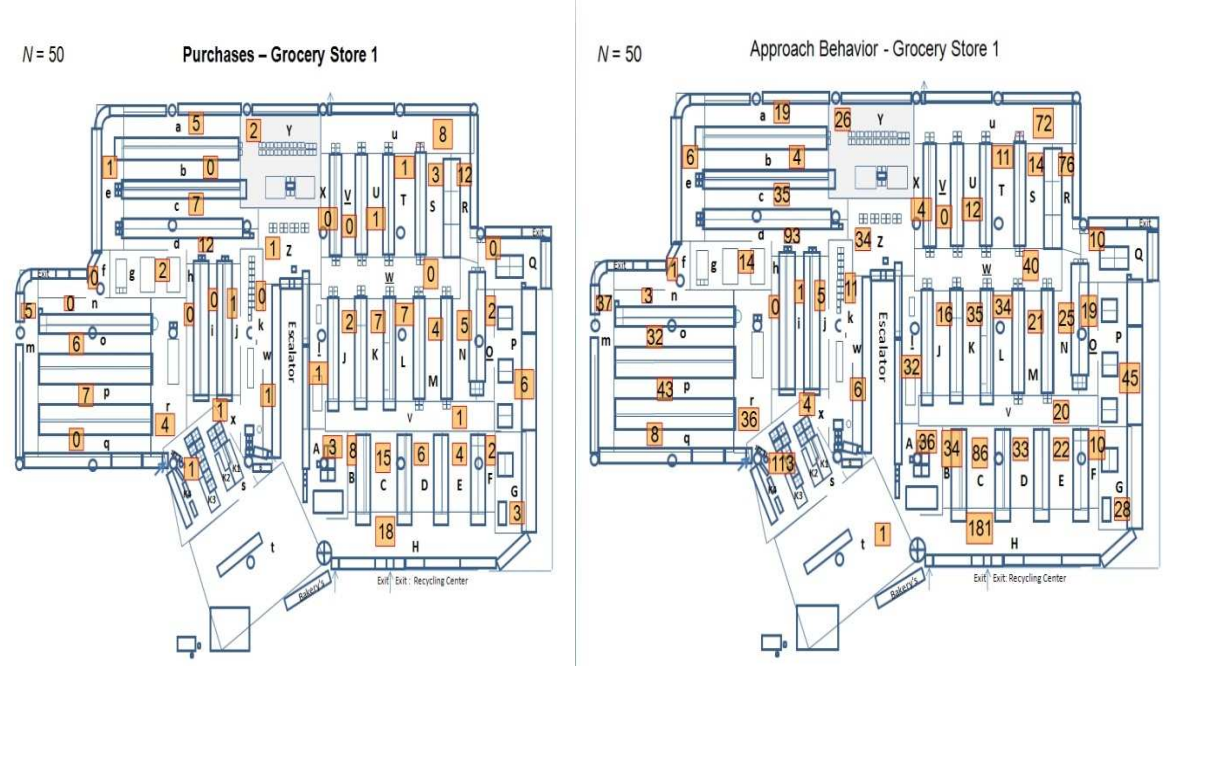
Considering unplanned purchases, data on a total of 177 within the sample of grocery store 1 was collected. The average number of unplanned purchases per shopper is 1.77 ( $SD = 1.734$ ). Eight unplanned items was the maximum. With regard to grocery store 2 the total number of unplanned items amounted to 85, eight products was also the maximum in this case ( $M = 1.7$ ;  $SD = 2.073$ ). Electronics shoppers' unplanned purchases occurred even in fewer cases than purchase plans were made before visiting the store. Eleven items were bought without planning beforehand by only eight shoppers. Significant positive correlations between the time spend in the store and the number of unplanned purchases was found for both grocery stores ( $r_{xy} = .418$ ;  $p < .001$  and  $r_{xy} = .389$ ;  $p < .05$ ). As expected, this result does not hold for the electronics shoppers, since electronics rarely represent impulse shopping goods, whereas grocery stores contain a sufficient number of those.

Taking the data collected on the consumer's shopping path, a sequence of store areas and categories areas, into the examination, significant positive correlations were obtained between the number of unplanned purchases and number of areas entered or crossed by the consumer while shopping. Again, this only holds for the cases of both the grocery stores (sample 1 :  $r_{xy} = .354, .363$ ;  $p < .001$ ; sample 2:  $r_{xy} = .389, .400$ ,  $p < .05$ ), not for the electronics store, letting one assume that the more areas a consumer passes the higher the chance to encounter a product for an unplanned purchase. Especially in the matter of the grocery stores even further significant results were obtained: First, positive correlation exist between the number of purchase plans and the number of store areas passed by (sample 1:  $r_{xy} = .629$ ,  $p < 0.001$ ; sample 2:  $r_{xy} = .631$ ,  $p < .001$ ), as this number is also significantly

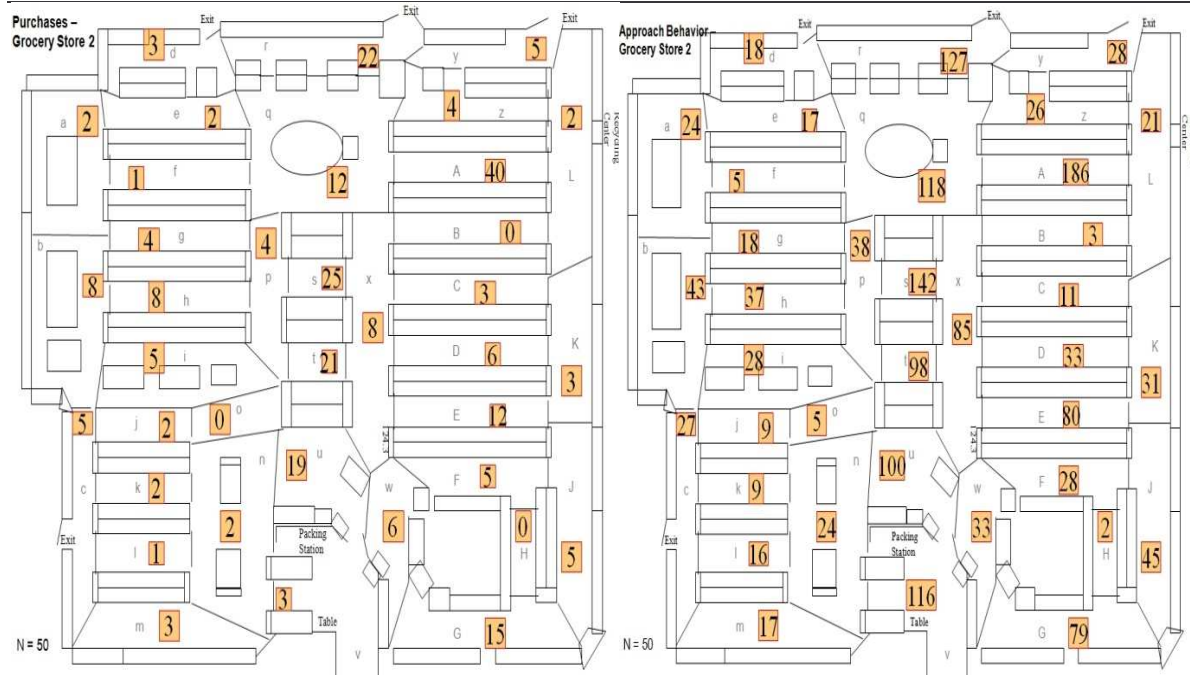
correlated to the number of fulfilled (realized as planned and concretized in the store) purchase plans (sample 1:  $r_{xy} = .592, p < .001$ ; sample 2:  $r_{xy} = .607, p < .001$ ). An analysis of the number of category areas is redundant, since this number is plausibly highly correlated with the number of store areas.

A further comparison regarding occurred purchases was drawn between the two grocery stores including the analysis of the store categories crossed by the consumers and the approach activities which were likewise recorded during the part of the observation of the shopping process. In order to ensure comparability of the two samples, for this comparison only the participants of the second phase of data collection were entered into the analysis ( $N = 50$  and 100% recruited via cold-calling for both stores). *Figure 2* and *figure 3* each illustrates the floor plans of the two grocery stores and the numbers of the purchases (on the left) and the number of the observed approach activities (on the right) inserted into the floor plans on each of the store areas where the approach activity occurred, respectively from what location of the store the product was bought. With respect to both grocery stores, our assumption that the occurrence of approach behavior should be positively correlated with the purchases was supported by the data (grocery store 1:  $r_{xy} = .896; p < .001$ , grocery store 2:  $r_{yx} = .897; p < .001$ ).

**Figure 2: Numbers of Purchases and Numbers of Approach Activities – Grocery Store 1**



**Figure 3: Numbers of Purchases and Numbers of Approach Activities – Grocery Store 2**



## DISCUSSION AND CONCLUSION

With focus on methodical issues, we examined the method of shopping with consumers as a technique of point of purchase research in consumer behavior, besides presenting some findings on consumer in-store behavior. Especially in the light of issues concerning the selectivity (participants versus non-participants) and the reactivity of this method (interference with the natural process by research), we were able to gain essential insights. Selectivity and reactivity arise due to the fact that this technique incorporates accompanying the consumer while shopping, meaning interviewing and observing the process openly.

Based on our conducted studies we contribute to the concerns of the feasibility of the method by suggesting a three-stage standardized and structured procedure ensuring the applicability as to illuminating shopper behavior on everyday, or in the case of grocery shopping even routinized (Iyer & Ahlawat 1987), shopping tasks, attempting to generate larger samples increasing the inferential value of the generated data (Silberer 2008b). Recommendations regarding further application of the method are stated in the following:



The *recruitment of participants* constitutes an essential part of the SWC-procedure. As to the solicitation of participants, we encountered convenient willingness on part of the approached consumers, mostly of those who were interested in the study, human behavior as well as shopping. While both manners of acquisition worked well, it should intuitively be clear that the act of scheduling an appointment in advance for accompanying the informant on the shopping trip constitutes more of an intervention into the natural shopping situation as oppose to asking for participation in front of the store without any preparation time. Our data supports this assumption. The shopper might plan ahead, even if he/she normally would not do so, which alters shopping behavior. Other significant differences in the mood and attitude towards the study were also yielded in the analysis. Moreover, approaching the consumers directly before the store visit ensures data collection on only those consumers who genuinely intended to go shopping, not altering the shopper's motivation for the store visit.

*Incentives* to elicit wider participation (for the sake of representativeness of the sample) were only utilized for participants with scheduled appointments, since there was more effort involved. Nevertheless, besides the difference in age, no significant results could be found in the demographic structure of the samples. Consequently, we assume our standardized SWC-procedure not to be as time and effort consuming as that the incentive would have affected participation significantly. The remaining selectivity in the data set is a consequence of general circumstances of empirical studies in which voluntary participation is required.

As far as the previously addressed issue of *compatibility* between the consumer and the researcher is concerned (see Otnes et al. 1995), supported by our findings, we understand this not to be of essential relevance in applying the structured procedure. Nevertheless, the deployment of well-trained researchers (observers and interviewers) is inevitable (Lowrey et al. 2005). The ability to find a compromise between being polite and courteous in order to gain the consumer's trust, but remaining passive and neutral in order not to interfere with the shopping process depends on the researcher's skills.

Implications for the marketing sciences concern the potentials and limitations of the applied SWC-method. With regard to the *effectiveness of the method to explore in-store behavior, purchase intentions and outcomes* of consumers, one problematic aspect may be the assessment of planned behavior prior to the act. The idea of asking the participant to list his or her planned items as well as to explain and sketch the planned shopping path and explain further goals for the store visit yields interesting and valuable insights but also makes the

consumer attentive to his/her own behavior (Silberer 2008b). To shop faster, more deliberately, with less browsing or less unplanned purchases are only some of the possible consequences. Moreover, the recruitment of participants via appointment in some sense prepared the consumer for the shopping trip. The question arises whether, due to those above mentioned factors, the assessment of planned shopping and the certainty of the plans may be overstated in the data while unplanned purchases might be understated. A last aspect concerns the shoppers of the electronics stores: Our findings indicate that, compared to grocery shoppers, electronic shoppers clearly have fewer purchase plans and also realize fewer unplanned purchases. While this may be plausible with respect to the unplanned purchases due to the type of goods offered, questions remain with respect to the number of purchase plans prior to the visit. While it is not an odd occurrence that a lot of customers of the electronics store visit the store only for browsing and entertainment without purchase plans, it is still to be assessed whether the SWC method also has an effect in this matter. A positive aspect is that we obtained similar results if compared to other studies concerning hypothesis on certain in-store behavior (see Granbois (1987), Gutierrez (2004), Iyer & Ahlawat (1987), Kelly et al. (2000)). This may be an indication for the adequacy of the method for capturing intentions and outcomes of stores visits and in-store behavior. All in all, we were able to assess the evaluations and the perceived differences by the participants compared to other shopping trips. But direct effects could not be estimated in our study.

On the other side, our suggested approach bears great potentials. By applying the three-stages approach (pre-interview, shopping observation, post-interview), we were able to generate rich data on shopping plans for a store visit and the outcome of those, but even more on the consumer wayfinding and approach behavior. As far as further analysis is concerned, sequence analysis can be applied to evaluate and analyze consumer in-store behavior (see Silberer et al. 2006) on the basis of the collected data on the sequences of activities during the store visit (including sequences of passed/crossed category areas or store areas and sequences of approach activities) aiming at detecting relations in the shopping paths and approach behavior activities. Moreover, sequence analysis would allow for customer segmentation (Silberer et al. 2006) on basis of the collected consumer shopping paths.

Our contribution is not only to marketing research, this technique can be of value for the practical application at the point of purchase research yielding tremendous insights into consumer behavior for the managerial marketing practice. One possible application of the method would be to analyze the effectiveness of certain point of purchase marketing elements, such as displays, special presentations (Granbois 1968) or sales offers (Kelly et al.

2000). Another conceivable application would be to assess the effects of store design and layout (Granbois 1968). Identification of store areas/category areas with the highest rate of, for example, unplanned purchases or in which the most approach activities occurred would bear valuable insight as well. Moreover, with regard to the analysis of the consumers' intentions (shopping plans and goals) and outcomes of the store visit or shopping trip, respectively, if the deployment of point of purchase marketing elements can be directed towards the increasing of unplanned purchases and minimization of failures of purchase plans – postponement or dismissal – a contribution to the success of the store is made (Iyer & Ahlawat 1987).

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