Considering Intentions
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Considering Intentions

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To Ilona, Isa, Hugo and Majken
Preface

This report is a result of a research project carried out at the Center for Consumer Marketing at the Economic Research Institute at the Stockholm School of Economics.

This volume is submitted as a doctor’s thesis at the Stockholm School of Economics. As usual at the Economic Research Institute, the author has been entirely free to conduct and present his research in his own ways as an expression of his own ideas.

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Stockholm February 4th, 2010

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Director of the Economic Research Institute at the Stockholm School of Economics

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Director of the Center for Consumer Marketing at the Stockholm School of Economics
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1. Introduction

When one searches for scholarly articles with “intention” in their title in one of the major databases for scientific research on business and economics one finds 3003 articles; if one expands the search to “intention” as a keyword, one finds 33074 scientific articles. It generally takes me a quarter of a day to read and analyze an average scientific article, meaning it would take me over 20 years to get through all material written on intentions so far, in that database alone, if I did nothing else. That would however only cover the business administration and economics-related dimensions of intentions. In philosophy, intentions have been researched on and off for several thousand years, often in relation to moral issues such as virtue, willpower, or character. In theology, “intendere” (meaning “to stretch toward, to aim at”) is a central concept when valuing an action in terms of good and evil. In law, the concept of “intent” is also central and can in some cases be a life and death issue (cf. mens rea in Anglo-American Law). I can only imagine the amount of text produced by scholars in these areas.

So, why on earth would one pick a Sisyphean task like that for a thesis? One reason of course is that the work could possibly be relevant to a large number of scholars. Another reason could be derived from a quote possibly by Bernard of Chartres, later used by Isaac Newton: “Nanos gigantum humeris insidentes”. Literally meaning “dwarfs standing on the shoulders of giants”, but the
meaning of the metaphor is that future intellectual pursuits are best developed by building on works created by thinkers of the past. Hence, instead of being intimidated by the plethora of texts, thoughts and argumentation produced on the matter, one could choose to view the previous research as a strength and an opportunity to do something incremental but substantial nonetheless.

Given the rich research on intentions, it naturally follows that a thesis on the subject will neither be exhaustive in its theoretical account of research on intentions, nor all-encompassing when it comes to researching all possible aspects of intentions. Instead I have chosen to concentrate on some distinct facets of the operationalization of intentions in a series of six articles.

One would think that with so much written on the subject, one would find thorough conceptualizations of intentions and an in depth discussion of what constitutes an intention. Furthermore, one would expect that the richness of the literature on the subject would trickle down into marketing and consumer literature. However, in marketing and consumer research you will be hard pressed to find anything of theoretical depth at all about intentions.

You will find empirical study after empirical study that employs the use of intention in some form as a variable though. In light of the frequent use of intention as a variable in marketing literature, and the fact that the presence of a variable is predicated on the existence of a theoretical construct, one would expect that there are also intentions
constructs in existing literature. However, this is rarely the case. It is very rare that researchers in this field include a conceptual discussion of intentions in their papers. In fact, the concept of intention is typically not even defined. At best, there is description of how intention was operationalized.

The thesis will focus on different ways, in which people can look into their own future. More specifically, the focus will be on people’s relationship with their own future behavior. The discussion will centre on intentions, widely defined.

Again, given the rich literature on intentions, the introduction and theoretical framework leading into the six articles will be of a somewhat unusual kind. It will not be a literature review in the traditional sense. It will be more of a highlighting, cleaning and sorting type of job. I will try to convey only the main ideas about intentions and intentionality from a number of different perspectives and I will paint that picture in broad and long strokes. I choose this way in the hope that it will be an interesting read and also, to hopefully instill some curiosity, in the reader, considering intentions.
1.1 Aim of the thesis

The purpose of the thesis is to increase the understanding of intentions, the planning process, the intention-behavior link and the attitude-intention link by theoretically and empirically studying intention formation, dimensions of intentions and the effects of common operationalizations of intentions.

1.2 Relevance for scholars and practitioners

The theoretical relevance of the thesis will mainly be tied to theories of intentions in relation to mental simulation, sense of ownership and memory. Furthermore, there is a methodological contribution in terms of an extension to the literature on characteristics of different operationalizations of intentions. The contribution of the thesis to methodology of research involving intentions is relevant to both scholars and practitioners. Also, the relevance extends to scholars and practitioners trying to increase the understanding of intentions and the planning process, the intention-behavior link and attitude-intention link.
1.3 Outline of the thesis

The thesis examines intentions theoretically and empirically. It consists of an introductory text and six articles.

The introductory text discusses intentions from several theoretical perspectives and provides a foundation and a common framework on which the articles build. The perspectives on intentions examined are; theological, philosophical, psychological, linguistics, and the perspective of the law. The common denominators of these five different perspectives are later summarized as dimensions of intentions.

The six articles contain theoretical development and additional theory specific to each study as well as empirical studies of different facets of intentions, for example, the evaluation-intention link, the intention-behavior link, intention formation, and multidimensionality of intentions.
2. Theoretical Background

2.1 Working definition of intention

In this thesis, I will use the word intentions to describe a person’s mental connection between himself/herself and his/her future before the future takes place. These connections can be in the form of an expectation of how a future event will play out; it can be desires about one’s own future or it can take the form of an actual plan or aim to affect the future in some way.

2.2 The foundations of intentions

A mental connection with the future is a complex mental entity. It is more complex than for example a belief or an attitude about something concrete and tangible. The future is uncertain and in order to connect to it we have to create a mental representation of it in some way. In fact, in the typical case, a singular mental representation of the future is not enough for us to value and decide upon an appropriate course of action, most often we have to imagine several alternative futures and we have to, in essence, create stories of our own future, often in the form of narratives (Fiske, 1993). We engage in this mental activity for a variety of reasons. Arguably, the most important reason is to form intentions in order to guide our own behavior and contemplate the possible sequence and consequences of our future actions (Sanna, 1999; 2000; Sanna and Meier, 2000; Gollwitzer and Bargh, 1996). I believe that we need to
briefly examine the foundations behind the intention forming process before we move on into looking closer at the intentions themselves. We will do that by discussing what it means that intentions, in a way, are memories of a future that may or may not come true and that intentions are structured much in the same way as sequential stories or narratives.

2.2.1 Memories of the future

Can you remember something that has not happened yet? Well, in a way you can. Let us say you imagine a future event. At a later time, you can recall what you thought of the future. There is some evidence that the mental representation of a future event is different compared to the mental representation of a past occurrence. There are of course differences between fantasies about the future compared to memories of actual events that you have experienced yourself. But aside from that obvious difference there are some other differences as well. For one, findings in the field of neurobiology (Ingvar, 2001) seem to indicate that memories of imagined events seem to “light up” different areas of the brain depending on if the imagined event was “in the past” or “in the future”.
From a brain scanning point of view, memories of the future show closer resemblance to fantasies and imagination than reminiscing, while imagined memories from the past show closer resemblance to reminiscing than imagining. Neither of the events was real, still the mental representations of the two events are very different.

Perhaps some clues can be found when we examine a large body of theories on temporal framing (e.g. Paget, 1988; Weick et al 2005). When we are asked to imagine something that will happen in the future, our mental representation of that event is a lot less detailed compared to if we are asked to imagine something that has already happened. Perhaps is this an effect of something lying deeply within human beings. It is easy to imagine the advantage it is to keep an open mind with regards to future events. If the schema for an event is too detailed it may become a hindrance when one encounters something similar but not identical. If the mental representation of that imagined future event is vague and conceptual in nature, it will be deemed applicable more often on new events one encounters. Thus making it more useful in terms of planning, predicting and anticipating. Reversely, when learning from past experience we are dependant on a precise account of what happened to be able to assess possible causal relationships. Intentions are mental representations of the future and as such it is very likely that they will show the same traits as other “memories of the future”.
2.2.2 Counterfactual Thinking

A characteristic of the intention is that it represents something imaginary. Something that has not happened yet but something that could very well happen in the future. It refers to a non-factual state that we expect, plan or want to find ourselves in, at some time in the future. Hence, to form an intention we have to think counterfactually.

We live in neither the best, nor the worst of worlds. I would argue that very few people would say that everything in their lives are as good as they can be, few people believe they have the best job, the best marriage, the best health, the best salary that they could possible get. Most people would also agree that things could be much worse than they are right now. They could have a less satisfying job, more fragile health, or a worse marriage.

This means that most people can imagine both better and worse alternatives to their present situation. The imagination of an alternative to present reality could be called imagining or maybe daydreaming but in an effort to narrow down the concept, to comprise only thoughts regarding oneself and oneself's situation, scholars have instead decided to call it counterfactual thinking (Kahneman & Miller, 1986; Kahneman & Tversky, 1982, Markman, Gavanski, Sherman & MacMullen, 1992)
There are different ways in which one can think counterfactually. If we take the present reality as baseline, it is possible to think of an alternate situation, which is better or worse than the current one. The rationale for counterfactual thinking is not self evident but it can be discussed in terms of costs and benefits. What are the costs and benefits of imagining what could have been?

There is a clear distinction in psychology between thinking about a situation better than the present one versus thinking of a situation, worse than the present one. The reasons for thinking of a situation which is worse than the current one, or downward counterfactual thinking are arguably more complex than the reasons for thinking of a situation better than the present one, or upward counterfactual thinking. (Sanna, 1999; 2000) A common denominator for both types of counterfactual thinking, however, is that they provide standards of comparison.

For learning about ourselves, for judging our opinions and abilities and for understanding, predicting and coming to grips with the outcomes of the situations in which we find ourselves, we often compare ourselves and our situations to certain standards of comparison (Markman et al, 1993). Often, these standards of comparison are people around us, people who can serve as reference points or as sources of information. Students compare their exam scores with each other to evaluate their study efficiency, children wrestle on the playground to evaluate their strength, and athletes compare results to evaluate performance levels. Sometimes,
however, there are no readily available standards of comparison and people have to make their own comparisons with regards to what could have been if things were different.

One possible explanation is that thinking of something worse than the present situation could provide comfort. Downward counterfactual thinking often starts with “At least…” An example of this could be the following statement:

*At least I’m not the worst doctoral student out there, I may be slow and I may be writing about yesterday’s news but I am still faster than Mr X.*

The fact that I am not *the worst doctoral student out there* might be somewhat comforting but that still does not explain the full extent of why we engage in downward counterfactual thinking and the reasons are still largely unknown (Sanna, 2000; Gollwitzer and Bargh, 1996).

The reasons for upward counterfactual thinking are more obvious. They are mainly about finding room for improvement in one’s current situation. If you find that your life would be much better, richer, and more fulfilling under different circumstances, then that is a possible seed for change. Some psychologists (e.g. Gollwitzer and Bargh, 1996) argue that humans are predisposed for devoting more time and effort to upward- compared to downward counterfactual thinking. The reason for this is said to be that upward counterfactual thinking is more productive in terms of survival, development and adaption. As
previously stated above, discovering room for improvement is a possible seed for change and a seed for change is also the beginning of an act in accordance with reaching the desired state. Hence, upward counterfactual thinking is the foundation for motivation and motivation is the foundation for intentional behavior.

If the discrepancy between your current and the counterfactual situation is considerable you may find yourself analyzing what it would take to actually approach the desired state. What is meant by “considerable” above is, of course, decided by situational circumstances. The human brain is a rather amazing piece of “machinery”. However, it has limitations in terms of capacity. When we have idle capacity, our brain can devote considerable resources to very trivial things (Ingvar, 2001). The other day, for example, I found myself sitting on the bus and thinking intensely, for over an hour and a half on paintbrushes and why they lose hairs that get stuck in the paint. I was trying very hard to come up with possible causes, weaknesses with the current design of paintbrushes etc. This, despite the fact that even if I ever found the answer it is highly unlikely that I would ever use it for anything. A total waste of brain capacity in other words.

As stated above, an intention represents something imaginary, meaning we need to think counterfactually to form an intention. It is tempting to conclude that only the upward counterfactual thinking would be relevant to intentions, in the sense that it provides a possible goal or vision of a desired future state. However, downward
counterfactual thinking possibly generates such things as risk assessments, comfort, and motivation to keep going despite of hardships. All of which are also possible inputs in an intention formation process.

2.2.3 Mental simulation

The role of mental simulation in intention formation is twofold. Firstly, process simulations provide a sequential and causally linked chain of events that lead up to a future state. Secondly, end-state simulations provide motivation to act in order to reach a desired end-state. (This is further developed in article 5 and partly also in article 6.)

Mentally simulating possible states or outcomes, before or after an event, is a natural and important part of people’s every day lives (Sanna, 1999; 2000, Sanna and Meier, 2000). It could be in the form of day dreaming whole scenarios and exploring all the corners of our imagination in regards to a recent event, or simply mentally simulating a simple task like taking a dance step.

Among others, Taylor and Pham (1996) have explored if mental simulation qualifies as a vehicle for linking and transforming thought into action. It is suggested that mental simulation increase the likelihood of actions consistent with the simulation. A mental simulation makes a line of thought more vivid and appears more true
or likely, thus invoking arousal and emotions connected to the simulated behavior and its expected/simulated outcomes. This serves as a catalyst, strengthening the motives for instigating an action sequence. This “pre-taste” of the end-result possibly yields, desires, wants, plans, anticipation and expectations.

Three kinds of mental simulations are distinguished (Gollwitzer and Bargh 1996; Taylor and Pham, 1996): Goal-focusing or outcome simulations, process simulations, and combined process-outcome simulations (Pham and Taylor, 1999; Taylor and Pham 1996; Taylor et al, 1998). Goal focusing or outcome simulations focus around an end state. For example how it would feel to own a house, get an A on an exam or win the love of a prospective partner and also the consequences of reaching the end state in terms of new opportunities etc. Most of us do this every now and then and it can be in the form of, for example, fantasizing about how it would feel to win the lottery and what you would do with all the money, or how it would feel to marry or perhaps even divorce someone.

Process simulations help us envision a path to reach an end state and not the end state itself. In other words, the process simulations delineate the sequence of events that lead to an end state. It focuses on decomposing actions and events needed to reach an end state and the simulation thus possibly helps us to modularize and analyze a complex series of events leading up to some type of change.
This is the antecedent of a plan as it’s most commonly defined and it contains all elements of a plan with the exception that there is not necessarily any thought on actually doing anything or acting in accordance with the simulation.

I vividly remember an article in a tabloid that I read when I was a small boy, I can’t remember the name of the paper or the author. Anyway, it was some sort of a reader survey where they asked how many of their readers had ever envisioned robbing a bank, committing murder, embezzling from their place of employment etc and a set of follow-up questions regarding the envisioned modus operandi. The result was that an astounding proportion of people had envisioned not only one or two of these heinous crimes but all of them and they had done so in great detail. The headline was to be expected, I suppose, and it was something along the lines of: “X% of our readers plan on pursuing a career of crime”. The problem with that headline is that it is very unlikely that many, if any, at all, of their readers “planned” anything. They were just toying with an idea without any serious thought of actually acting on it. The fact that they had envisioned the modus operandi, however, leads us to believe that they had performed a process simulation.

The third category of simulations is referred to as combined process-outcome simulations where one envisions both the road map and the end-state itself.
So, what is the reason for distinguishing between these three categories of simulations? Does it matter? Yes it does, at least sometimes. Taylor and Pham (1996) conducted an experiment in which students were asked to simulate different aspects of taking an exam. One group envisioned getting an A on the exam (goal focused, or outcome simulation). A second group was asked to envision how they would get an A on the exam, what would they have to do? (Process simulation) and a third group was asked to envision both the process and the outcome (Combined process-outcome simulation). Directly after the simulation exercise, students were asked to complete a questionnaire measuring several different constructs, such as anxiety with the upcoming exam, expected grade, what grade they were striving for and also motivation to study. No systematic differences between the groups were found with the exception of study motivation. More specifically, students who had envisioned the outcome were more motivated to study compared to students who had not envisioned the outcome.

On the night before the exam, the researchers called the students and interviewed them regarding the exam on the following morning and at this point the effects of process simulation was beginning to show and the students who had envisioned the path to an A were less anxious. However, they still reported that they were less motivated than the group who had envisioned the outcome.

After the exam, students’ grades as well as their personal experience of the exam were compared. Students envisioning the outcome
gained on average 2 points on the exam, whereas students envisioning the path to the outcome gained 8 points on average. Also, the results were perfectly additive for students who envisioned both outcome and process; their gain was 10 points on average. Students who envisioned the process had studied for 3 hours, on average, longer than those who had only envisioned outcome and they had also started studying one and a half day earlier on average.

The results of this investigation are very informative regarding effects of different kinds of mental simulations on performance but also on emotional regulation and, even more importantly, they shed some light on the dynamics concerning how mental simulation translates thoughts into action.

Rehearsing your goals in your own head may instill a sense of motivation, arousal, and inspiration. However, we cannot be sure it will ever translate into a plan of action and even less sure that any laid down plan of action will be diligently pursued. Focusing on the outcome seems to create something Taylor and Pham (1996) calls “hype” and “free-floating” motivation. This hype of free-floating motivation creates arousal and a sense of excitement but does not translate into action in accordance with goal fulfillment. Why “free-floating” motivation or “hype” doesn’t lead to planning and subsequent behavior is largely unknown.

Process simulation and end-state simulation are both important processes in intention formation as well as in determining
attitude-intention and intention-behavior correspondence. As I stated in the beginning of this section, and as we will later see in articles 5 and 6, the role of mental simulation in intention formation is twofold. Firstly, process simulations provide a mental representation of a sequential and causally linked chain of events that lead up to a future state. Secondly, end-state simulations provide motivation to act in order to reach a desired end-state. This is further developed in article 5 and partly also in article 6 were I discuss the differences of three common intention operationalizations in terms of their ties to one or the other form of simulation.

2.2.4 Goals, motivation and the psychology of action

For centuries scholars have speculated about what motivates humans (Franken, 1994). When one starts digging into motivation as a novice, one is immediately struck by the diversity of explanations offered by different fields of psychology and medicine such as behaviorism, biological chemistry, genetics, cognitive psychology, didactics and so forth. There is however very little agreement of what motivation really is (Ibid.).

From a psychological standpoint, there has been, and still is to some extent, a schism between cognitive social psychologists and social psychologists interested in motivation with regards to what drives human behavior, or more precisely, what explains how, why and when action is initiated (Sorrentino and Higgins 1996, Gollwitzer and
Bargh 1996). As time has progressed, there has emerged growing consensus around the need to adopt a synergistic perspective, acknowledging that cognition does not simply lead to motivation or motivation to cognition; rather, the two concepts are properties or facets of each other and we need to understand both and, in particular, we need to understand how they interact. This paradigm is sometimes referred to as “the warm look” as opposed to “hot” (motivational) and “cold” (cognitive) paradigms. In this thesis, and in the following articles, inspiration is drawn indiscriminately from “warm”, “cold” and “hot” paradigms. I am but a layman when it comes to the finer distinctions between different psychological perspectives.

Many recent theorists in psychology have suggested that the study of goals and goal-related cognition is the study of motivation (Abraham and Sheeran, 2003; Ryan, Sheldon, Kasser and Deci, 1996; Pervin 1989). It has been suggested that the goals themselves are the instigators and directors of human behavior instead of being caused by deeper lying needs and motives. The goals, in turn, are generated by counterfactual thinking and subsequent mental simulations. As we will see, it is not unproblematic what specifically constitutes an intention, but one definition, of many, is however very close to the definition of a goal (Intentions-as-wants).
2.3 Intentions

2.3.1 What is an intention?

In the very beginning of the thesis I offered a working definition of what an intention is. I defined intentions in thesis as “a person’s mental connection between himself/herself and his/her future before the future takes place.” I also said that it can be in the form of an expectation of how a future event will play out, it can be desires about ones own future or it can take the form of an actual plan or aim to affect the future in some way.

A definition needs to be including as well as excluding. It is often the case with definitions that they are so broad, that basically anything will fit into that definition. If you need examples of this I recommend picking a handful of random textbooks on marketing and look up the definition of “brand”. On the other hand a definition should be broad enough to cover different perspectives of a concept, and in the case of intentions, combining these, is almost an impossible task. So it seems we are caught between a rock and a hard place. In this instance, I choose to not define intention further in this thesis. I recognize that the working definition offered is very wide. However, I would rather include one intention-like concept too many, than exclude relevant ones.

The definition of the term is not what is the most interesting. To me, it is sufficient to conclude that there are a lot of different definitions,
views and beliefs about what constitutes an intention and many of them are worthy of attention. In this section I try to give an account of the concept of intention from several different perspectives. We will come to see that although the nature of intentions varies between different fields of research, there are some common denominators that we can use in order to distinguish dimensions of intentions. Those dimensions are later summarized and built upon in the section that follows this one (The section called “Dimensions of intentions”).

2.3.2 A philosophical perspective

In philosophy there are probably a lot more, or at least as many scholarly texts concerning intentions as there are in business administration and economics (In the introduction of this thesis I stated that there were over 30,000 scholarly texts, in just one of the databases accessible to me at SSE). However, one of the main traditions in philosophy is moral philosophy.

Within moral philosophy, one specific question has attracted special interest. It is the relationship between wanting, planning and subsequent behavior. The main focus of the discussion is why people stray from a path that they want (and sometimes explicitly commit themselves) to follow. The phenomenon is called “Akrasia” and the discussion about akrasia is very old, Socrates (469 B.C. - 399 B.C.), Plato (427 B.C. - 347 B.C.) and Aristotle (384 B.C. - 327 B.C.) all discuss
akrasia, from slightly different perspectives but the core of the concept can be illustrated by a citation from Socrates in Plato’s Protagoras: “if one judges action A to be the best course of action, why would one do anything other than A?”. Expressions such as “weakness of the flesh” are said to originate from the Socratic position that akrasia can be derived from imbalances of bodily fluids, appetite (desired of the body in this case) and other equally hedonic causes. Aristotle on the other hand acknowledges that one can stray for other reasons, less emotional, as well, such as for example, relaxed versions of altruism or sense of duty.

Hume (1739; 1751), Kant (1797) and Dewey (1922) are extensions of the tradition and even if they do not explicitly mention akrasia, they do discuss the same concept and if I were to sort them into either camp of Socrates/Plato or Aristotle, I would put Kant (duty and virtue) and Hume (generosity and altruism) together with Aristotle and Dewey (will power) with Socrates and Plato.

There are also more contemporary discussions in philosophy concerned with intentions, often in relation to questions discussed throughout society and often partly from other scientific disciplines. The perspective of the law on intention is one such example (Kenny, 1966) and another is the psychological (Audi, 1973) and linguistic (O’Shaughnessy, 1973) perspective on intentions.
These contemporary discussions are not limited to volition and planning as was the case with classic moral philosophy. Foresight, anticipation, expectation and probabilistic judgments are very central as well.

2.3.3 A theological perspective

Theology is far away from my own comfort zone in terms of knowledge and expertise. However, Intention is a central theme in theology and I feel that the thesis would be lacking without at least a shallow account for the concept of intentions within theology. Especially since there, at some point in time, seem to have been a discussion regarding some rather unique versions of intentions that could possibly enrich the discussion in other fields as well. (I wish to extend genuinely felt gratitude to two extremely helpful priests of the Jesuit order in the S:ta Eugenia congregation of Stockholm and also to the staff of the Catholic Bookstore at Kungsträdgårdsgatan 12 in Stockholm for helping me understand this perspective)

Volition and velleity is a recurring subject in theology, with that follows discussions about virtue, what is good and what is evil, what is right and what is wrong and so on. The Swedish Bishop emeritea, Christina Odenberg, was interviewed in Swedish public service radio in January 2007. In that interview she spoke of intentions as the deciding factor when determining what is good and what is evil but not for what is right and what is wrong. She argued that volition and
resolve in combination comprises the concept of intention. Volition and resolve to do good or evil is what finally defines how an act should be viewed in that dimension.

For the most part, there seems to be little discussion about what intention really is within theology. However, there is some evidence of a discussion about different types of intentions. Delany (1910) argues that one should determine the value of an act by distinguishing the various sorts of intentions, which could have prompted it. He distinguishes between four types of intentions for this purpose.

Firstly, there is what he calls an actual intention (ibid.), operating with the full advertence of the intellect. It is an act in full accordance with an attentive mind guiding the act in every step.

Secondly, there is virtual intention (Ibid.). It is perpetuated by prior volition and resolve and is not necessarily an act of any current will. For example, imagine someone enrolled in a B.Sc program. He or she made his/her mind up a long time ago about going all the way to graduation. The actual volition, (i.e. the movement of the will and subsequently movement of the soul) took place before the education started and so did the intellectual processing. Once the education starts, the question of volition or intent is basically intellectually dormant and the person is most likely preoccupied with other things such as getting to know people, studying and so on and it is virtually impossible and not to mention unproductive to direct one’s full
attention to the goal, since that may impair your chances of actually reaching it. What remains is a virtual intention to reach the goal. In that instance the virtual intention is similar to a reflex, heuristic, or script.

Thirdly, habitual intention is another concept in theology (Ibid.). It is viewed as an intention that once existed but does not anymore. It is a trace of volition that once was but that is now gone. However, it existed long enough to establish a habitual behavior in the person and it is that habit that is still acted upon. One way of viewing it is that it is a type of intention that failed to cancel itself once the volition faded.

Fourthly, an interpretative intention (Ibid.) is one that never has been really elicited. There has been no decision, no thought devoted to the matter. However, the interpretative intention constitutes what one would have intended if one had given thought to the matter.

As previously stated, the concept of intention is used in theology to determine the value of an act. Different types of intentions yield different value. Of the four types above described by Delany (1910), actual intent is the type which is considered the most defining, in terms of valuing an act as either good or evil, followed by virtual intention, then habitual intention and then finally interpretative intention as the least defining. An act that is good in itself may become vitiated or corrupted by evil intent. For example, if one gives food to a poor man, that act in itself is good and right. However, if the
intention was to give food to the poor man in order to instill jealousy in another, the act in itself is still right but it is no longer considered purely good. Reversely, if a man steals, it is considered evil and wrong. However, if he steals with the intent to give what he stole to someone in need, the act is no longer purely evil. It is unlawful and wrong but not purely evil.

The distinction between the different types of intentions, however, does serve another purpose as well. It is used to instruct priests and ministers as to how they should think about or what state of mind they should be in when administering the sacraments, especially within the catholic church. To truly absolve or baptize, one should do so with either actual or virtual intention. Habitual or interpretative intention is regarded as enough to validate the other sacraments, at least on that end. On the receiving end of a sacrament, children, imbeciles, very sick or unconscious adults are excused when it comes to what type of intention that is required. However for an adult, at least virtual intention is required for the sacraments of penance and matrimony but one apparently only needs a habitual intention for the remaining ones to validate them. There is one exception among the sacraments where intention does not matter, and it is marriage. Marriage is considered to be a contract and as such it is a binding agreement regardless of what type of intention the husband, wife or priest had at the time.
2.3.4 The perspective of the law

When a legislator enacts a law he/she is inspired by certain motives. The term for this is legislator’s intent. In Swedish law, as well as in many other countries, these motives are publicized and recognized as a legitimate source for interpreting legal documents and legislations (Bernitz et al 2004.) However, one is considered to act in accordance with the law even if one does not act in accordance with the legislator’s intention. In that sense, intention in the eyes of the law is partly different from that of theologists regarding the sacraments and acting in accordance with God’s law. We do not need to intend to be lawful in order to be lawful. The mere act defines us in that case.

However, when one breaks the law, the concept of intention is suddenly crucial in the eyes of the law. The concept of intention is central to criminal law in, at least, the entire western world, despite rather disparate traditions in legislation and judicial practice.

Intention can be said to be rather widely defined in law. At the core of intentionality lies a concept called “malice aforethought” or “mens rea”, which literally means “guilty mind” and refers to the mental state the perpetrator was in when committing “actus reus” meaning “the guilty/faulty act” (Lacey, 1993). Mens rea, or criminal intent in some form is a necessary and sometimes even sufficient condition (for example, in the case of conspiracy) for punishment. The exception is crimes with a strict liability, which requires no form of intention.
To determine whether someone has a “guilty mind” lawyers use other Latin terms: “Dolus”, meaning “intent”; “culpa” meaning “recklessness”; and “dolus eventualis,” or in Anglo-American law, the term “oblique intention” is used almost synonymously to “dolus eventualis”, both terms express a special form of intent, central to criminal law.

The most serious type of criminal intent is “dolus”. Dolus means that one can foresee the consequences of an act and also desire the consequences. This is a strict form of intentions and in American law it is called specific intent. Specific intent is always sufficient for convicting someone for performing “actus reus”. However, the law is not entirely satisfied even here. For some crimes, in some countries, the legislation also takes into account whether the crime was committed in a very emotional state of mind or if it was committed in a calm, orderly and carefully planned fashion, so called “cold blood”.

For example, (1) a betrayed wife picks up a gun in a jealous rage. She knows it is loaded and deadly if fired upon another human being. She subsequently shoots the cheating husband in the head with the desire to kill him and succeeds. (2) a betrayed wife divorces her cheating husband and kills him following a careful laid down plan several years later. In western law, the wife in the first scenario will typically receive a less severe punishment than the wife in the second scenario.
Perhaps the most notable example of this notion was “crime passionnel”, the French term for crime of passion. Before the Napoleonic Code was updated in the 1970s, crime passionnel was a valid defense in French courts. In American law there is a similar concept called “temporary insanity” that includes crimes committed in such rage that a person can be deemed insane, without ability to be held accountable for his/her actions. There is, however, a difference between these concepts. According to the Napoleonic Code, the perpetrator was still seen as guilty but the punishment was a lot less severe, while in American law, the perpetrator could be seen as not guilty by reasons of temporary insanity, thus being acquitted of the crime.

The concept of oblique intention or dolus eventualis was mentioned above, and this special form of intent rest on the notion of “a foreseeable result of an act”. Meaning that a person is viewed to have an intention to achieve a consequence, as long as he/she foresees, or is able to foresee that it will happen or that there is a substantial risk that a consequence will occur as a result of an action. If this concept would be applied literally like this, prosecutors would have a very difficult job. How would they prove beyond reasonable doubt that a person foresaw a consequence? It will be nigh impossible to argue as long as the accused chooses to deny it. Therefore, another concept is introduced. It is the concept of the “bonus pater familias”, literally the good family father. In Anglo-American law the concept is similar but instead of bonus pater familias, it is called “the reasonable man” and it is used to describe basically the same thing, at least from an
intention-relevant perspective. The reasonable man is the foundation for determining whether an act is intentional in terms of dolus eventualis / oblique intention or recklessness.

An act is viewed as intentional even if an accused did not foresee a consequence, as long as “a reasonable man” would have. (In some judicial traditions this is only true as long as the accused cannot prove that he in fact did not foresee the consequence).

In terms of legal texts and formulations there are five different levels or degrees of intentionality (Kenny, 1966) that is of interest to the lawyer when a potentially criminal act is committed. The law may wish to punish an act:

1. No matter whether the agent did know or could have known that he was committing actus reus. (Strict liability)
2. No matter whether the agent did know, but only if he could have known. (Recklessness / oblique intention)
3. Only if the agent did know, but no matter whether he wanted to commit it for some reason or other. (dolus eventualis/oblique intention)
4. Only if the agent did know and only if he wanted to commit it for some reason or other (Specific intent I)
5. Only if the agent did know and only if he wanted to commit it for some particular reason (Specific intent II)

The concept of intention is important in criminal law for a specific
reason. Similarly to the theological perspective, the judicial system is
designed to pass judgment on a person’s actions. Guilty or not guilty
is the first dimension that has to be distinguished. If one is found
guilty, one should be punished. However, the legislative system
recognizes that an act could be performed for different reasons and
that these reasons reflect the potential future danger emanating
from an individual towards the rest of the society. In the list above,
this is illustrated by the fact that there is a difference between (3) and
(4) and it is reflected in the severity of the punishment in some
crimes in the sense that an act performed intentionally is punished
harder than the same act performed recklessly. Similarly to the
theological perspective, which I presented briefly above, law ranks
different types of intention in terms of severity where specific intent
is the most severe and recklessness is the least severe form of
intentionality. The reason for keeping (4) and (5) apart conceptually is
more obvious. Imagine for example a surgeon trying to remove a
potentially lethal tumor from a patient. He willingly and knowingly
stabs that patient with a sharp knife, fully aware that it may kill the
patient. However, the law recognizes that there is a difference
between someone stabbing another with the intent to help him/her
is different from the act of stabbing someone with the intent to kill
him/her. Thus the act of stabbing another is only punishable if it is
done with malicious intent (specific intent).
To find another reference to the importance of the potential future danger emanating from an individual towards the rest of the society, let us go back to the two scenarios involving the betrayed wife above and imagine that we add: “Later she expresses genuinely felt remorse and, could not understand how she could have committed such a heinous crime” at the end. Then the notion of guilt would be unchanged, but the punishment would be potentially milder compared to if she did not show any remorse. There is a clear belief that an expression of remorse is a sign that the likelihood of a repeated offense is less than when there is no expression of remorse.

2.3.5 A linguistic perspective

Linguistics here refers to the branch of linguistic science that studies meaning and use of language and words. As the study of natural language, this branch of linguistics studies how a phrase or word is actually used in everyday life. Meaning I could well have used another name for this perspective such as “folk concept” as Malle and Knobe (1997) and Knobe (2003) do, or perspective of “the simple man” as Kenny (1966), or perhaps even “everyday perspective” as O’Shaughnessy (1973) uses.
The dictionary notion of intention illustrates the focus on plan, aim and purpose:


“Intention n. an aim or plan”


“Intention n. 1. (often followed by to + infin., or of + verbal noun) a thing intended; an aim, plan or purpose (it was not his intention to interfere; have no intention of staying). 2. The act of intending (done without intention). 3. Colloq. (usu. In pl). a person’s, esp. a man’s designs in respect to marriage (are his intentions strictly honorable?) 4. Logic a Conception.

Malle and Knobe (1997) and Knobe (2003) are two empirical articles examining what constitutes an intention in the eyes of “the public”. Malle and Knobe (1997) comprises the result from four different empirical studies and arrive at the conclusion that intentionality is constructed by five separate elements. (1) Belief, (2) desire, (3) intention, (4) awareness and, (5) ability. They are hierarchically arranged, such that belief and desire are necessary conditions for attributions of intention and, given an intention, skill and awareness are necessary conditions for attributions of intentionality. Malle and Knobe’s (1997) model of intention and intentionality
integrates and “cleans up” inconsistencies in several earlier models (Heider, 1958; Jones and Davis, 1965; Ossorio and Davis, 1968; Shaver, 1985) and they test them empirically. They also show that in the “folk concept” of intention, people distinguish between intention and intentional action. In previous theoretical discussions, those two concepts have sometimes been treated as synonyms (e.g., Jones and Davis, 1965; Shaver, 1985; Shultz, 1998). Malle and Knobe (1997) show that the term intention is associated with persons who have them, while intentionality is associated with actions in the sense that they are performed intentionally.

Knobe (2003) continues his research on “intentional” and partly go back on the definition of intentionality of Malle and Knobe (1997). He now believes that they were too hasty in their conclusion and that the folk concept is partly dependant on the nature of the act when it comes to determine the intentionality of that act.

He picks up a line of discussion that is quite familiar to someone who studied law. It’s the discussion of whether a side effect can ever be said to be intentional. In law, the main idea is that a side-effect is considered to have been intended if one could foresee that side effect, should have been able to foresee that side effect or if at least a “reasonable man” could have foreseen that side effect. Mele (2001), on the other hand, argues that a side-effect can never be intentional (He applies a strict folk concept of intention based on planning). Others (e.g. Bratman, 1984; 1987; Harman, 1976) are of another opinion however. They argue that there are circumstances under
which side-effects can truly be said to have been brought about intentionally. Knobe (2003) describes the disagreement within the field as “major” and argues that one should turn to empiric research to settle the matter and increase understanding of when a side effect can be seen as intentional. In two different experiments using scenarios, he shows that people are much faster to blame someone for malign side effects compared to how willing they are to praise or give someone credit for benign side effects on an action. It seems like the influence of the planning dimension is fairly stable across both conditions. However, the foresight dimension of intentions comes into play when determining whether a negative consequence should be considered intentional while it seems comparatively less influential when determining the intentionality of an action resulting in a positive consequence.

The focus on planning sets the linguistic perspective apart from all previous perspectives. Planning was of very limited concern to theology, and almost as little attention was devoted to planning from the perspective of the law. There is some concern in some very special situations (determining the punishment for several crimes and determining guilt in the case crimes that require specific intent). Instead, volition is undisputed as the main concern from these perspectives. Similarly, volition is also the dominant dimension of intentionality from a philosophical perspective, but not quite as dominant as in law and theology.
2.3.6 A psychological perspective

In psychology there has been a since long ongoing discussion about what constitutes an intention (e.g. Anderson, 1983; Courneya and McAuley, 1993; Netemeyer and Burton, 1990; Netemeyer et al, 1991; Rhodes et al, 2006; Sutton, 1998; Terry and O’Leary, 1995; Warshaw and Davis, 1985). It is fueled mainly by a desire to link mental constructs to subsequent action. In that sense, the use of intentions is mainly instrumental in psychology, researchers typically would have wanted to measure behavior but have to settle for second best: intentions.

Typically, intentions are depicted as the final consequence in researchers’ models, but it may also be used as an intermediate variable in attempts to explain behavior in the relatively few cases where researchers have actually measured actual behavior.

The lack of information on what intentions are, within the field of psychology, becomes particularly striking in light of all conceptual efforts devoted to antecedents to intentions (e.g., attitude and satisfaction). With few exceptions, the situation is the same in fields such as organization theory (Söderlund and Öhman 2005b). There is not complete darkness here however. There is some excellent research on intentions from a more conceptual point of departure (e.g., Hartwick, and Warshaw 1988; Knobe 2007; Malle and Knobe, 1997; Sheppard et al, 1988; Warshaw, 1980; Warshaw and Davis 1985)
In marketing and consumer research, intentions typically play a major role in much empirical research. Similarly to the role of intentions in psychology, the main role of intentions in marketing and consumer research is the role as a proxy for behavior. However, if the theorizing and conceptualization of intentions was weak in psychology, it is even worse in marketing and consumer research.

Söderlund and Öhman (2005b, p 1.) make a statement by using “variable” to describe the role of intentions in consumer research and marketing: “it is mainly as a variable (i.e., a method-related entity) that intentions appear in marketing and consumer literature.”

They further argue that the presence of a variable is predicated on the existence of a theoretical construct, and therefore one would expect that there are also intentions constructs in existing literature. However, they find that this is rarely the case. It is very rare that researchers in marketing or consumer research include a conceptual discussion of intentions in their papers. In fact, the concept of intention is typically not even defined. At best, there is description of how intention was operationalized. When one considers the operationalizations of intentions in psychology, consumer and marketing literature, one typically find two distinctly different ways of operationalizing intentions, (1) intentions as expectations, which is the most common variant (Belk, 1985; Söderlund and Öhman, 2003) and (2) Intentions-as-plans which is the second most common variant. There is a third type of operationalization, (3)
Intentions-as-wants, which is a lot less common. (Söderlund, 2002; 2003; Söderlund and Öhman, 2003).

The dominating operationalizations of intentions in psychology, consumer and marketing research: Intentions-as-plans and intentions-as-expectations, are often lumped together, (i.e., not distinguished or reflected upon) in a murky concoction called “behavioral intentions” (e.g. Belk, 1985; Bonfield, 1974; Cronin et al, 2000, Danaher and Hadrell, 1996; Escalas and Luce, 2003; 2004; Mittal et al, 1998; Ferber, 1954; Ferber and Piske, 1965; Katona, 1960; LaRoche and Howard, 1980; Patterson and Spreng, 1997a; 1997b; Reibstein, 1978; Taylor and Baker, 1994)

2.4 Dimensions of intentions

2.4.1 Dimensions of, and Perspectives on Intentions

No matter what perspective we take, we can make out three distinct dimensions of intention. Firstly, a volitional dimension, in terms of desires, wants, will and so on. Secondly, a planning dimension in terms of aim, purpose and plan. And thirdly, a foresight dimension in terms of foresight, personal causal beliefs, prediction and estimation of self-efficacy etc.

The Volitional dimension is very obvious in classic philosophy and
theology. It is the dominating dimension in both. In law, volition is also highly important. The dominance of volition is undisputed in philosophy and theology where it is contested by none. However, in law, volition is to some extent contested by foresight. Both foresight and volition can be sufficient conditions for intentionality. The planning dimension is also given some attention in the field of law and then mainly as a determinant of the severity of an intention, rather than as an intention in itself. However, in some very specific cases, some elements of planning are required for intentionality (specific intent).

In philosophy the notion of intentionality is very much discussed and there is no general consensus. Therefore, it is nigh impossible to determine what, if any, dimension is dominant. If we look at the branch of classic philosophy where the concept of intention is perhaps the most important, classic 16th to 19th century moral philosophy, there seems to be an emphasis on volition over the other two. However, the concept of intentionality is seen as so complex as to involve all three dimensions to a large extent. Furthermore, in modern philosophy, the foresight dimension is very obvious and sometimes dominating (Kenny, 1966; O’Shaughnessy, 1973)

From the “folk concept” or linguistic perspective, one must conclude that planning is undisputed as the dominant dimension. It is clearly at the centre of both the dictionary notion of intentions as well as the “general public’s” view of what “intention” means.
The planning dimension is also important from a psychological (and marketing and consumer research) perspective when scholars in the field actually reflect on intentions. At the core of the traditional intention, for example, we typically find an operationalization in the form of a plan to perform an act (Söderlund 2002; 2003). However, in marketing research and consumer research and when intentions are not discussed explicitly or reflected upon, it is more common to find an intention operationalized as a perceived likelihood that one will perform a certain act (Belk, 1985; Söderlund and Öhman, 2003). The reason for this is not clear, but I suspect that the reason is that the expectation is used as a proxy for behavior and expectations are generally seen a having a higher correlation with subsequent behavior compared to operationalizations built mainly from either volitional or planning dimensions (e.g. Ajzen, 1991; Ajzen and Fishbein, 1970; 1973; 1977; Ajzen and Madden 1986; Fishbein, 1985; Fishbein and Ajzen, 1975; Fishbein and Middlestadt, 1995; cf. Bagozzi and Edwards, 1998; Bagozzi and Yi, 1989).

### Dimensions of Intentions

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In Table 1, I have summarized my own reflections regarding the perspectives I have presented. The table illustrates the influence of three different dimensions on the intention concept in various fields of research. In the coming three sections I will go into each dimension one at a time and discuss the characteristics of each dimension.

2.4.2 Volition - Wants

Ask someone if they want to strain themselves to the brink of serious exhaustion, to experience the burning pain of lactic acid in every limb, to be so terrible short of breath as to experience the taste of blood in their mouth while thinking their lungs will either burst or collapse and the majority of people would probably say; no I don’t want that. Still people submit themselves to this (or similar experiences) regularly when working out. Those that are experienced at working out would perhaps make the connection between the afore mentioned scenario and the end goal of being fit and hence answer that they in fact would want to submit themselves to that treatment. They have internalized the process needed to reach the end state and thus aligned their “wants” accordingly. This illustrates the main problem with using “want” as an intentional construct. It is problematic at best, to separate a spontaneous “want” from a “want” resulting from internalizing both a process and an end-state. If someone said they want to:
“...experience the burning pain of lactic acid in every limb, to be so terribly short of breath as to experience the taste of blood in their mouth while thinking their lungs will either explode or collapse”

We would think that person was either insane, a fakir or someone who had internalized the process of getting fit, the trouble is that we do not know what conclusion to draw.

It is not difficult to find reverse examples of this phenomenon of “wants” based on either processes, end-state or both in combination, I use one of them in the fifth article (Öhman, 2010a):

- Do you want a Ferrari?
  - Yes I do. Of course I do!
- Are you prepared to make the sacrifices necessary to acquire said vehicle?
  - You mean, am I prepared to get a second job, sell my house and live on carrots and beets for all foreseeable future? No, I am most certainly not prepared to do that!
- So I ask again, do you want a Ferrari?
  - Well, then I guess no, I definitely don’t want a Ferrari.

In the example above, it takes only seconds to get from “Of course I want it!” to “I definitely don’t want it”. The point is that it is often impossible to judge what wants means. We need to either instruct the respondent to think of both process and end goal before answering what they want.
Nevertheless, wants have been explicitly referred to as an intention construct by Fishbein and Stasson (1990) and Norman and Smith (1995). This construct is found in several formal models of intentionality and in the "folk concept" of intentionality (Malle and Knobe, 1997).

Wants also appear when the distinction of goals is the focus of interest, which is often the case when psychologists are interested in motivation and related concepts. Sometimes volition is seen as the core of intentions, especially in older theories and models. This is the case in Heider’s (1958) book in which he stresses that intention is often taken as the equivalent of wish or wanting. Moreover, wants closely resembles Gollwitzer’s (1993) and Gollwitzer and Bargh’s (1996) notion of goal intentions that specify a desired end state.

Statements such as "I want to..." are expressions of intentions with volition at their core. In this thesis and in the articles at the end of this thesis, this type of intentions, built on volition, is labeled intentions-as-wants. It can be noted that in relation to intentions based on expectations of future behavior and intentions based on plans, intentions-as-wants is the least frequently used intention construct in consumer and marketing research.
Some scholars do explicitly argue that intentions-as-wants should not be seen as an intention construct (cf. Allport, 1935; 1947; Perugini and Bagozzi, 2001) who view wants (or desires as it is operationalized in that case as) antecedents of intentions (intentions in that study is of the type that I would classify as an intention construct built on planning). Thus, that desires represent an independent variable that affects intentions (a similar argument appears in Bagozzi and Edwards, 1998). Nevertheless, and given that volition is a very dominant dimension of intentions in other fields, we refer to them as an intention construct in this thesis.

2.4.3 Planning - Plans

In my sixth article (Öhman, 2010b) I describe how I interview golfers about their intentions to buy ecological coffee. However, I did not stop there. I am not a shy man, but I am not overly extrovert either so when I collect enough resolve and courage to strike up a conversation with an unknown person, I think it would be a terrible waste not to use that connection for something useful. In the study about ecological coffee, I was only really interested in those who wanted to buy coffee but instead of just “screening” the ones who had no intention of buying coffee, I decided to ask them other things.

In total, 552 players were approached over an eleven-day period, 100 of them declined to participate in the study, another 204 had no intention of buying coffee and were thus excluded from the other
study but still not left alone. Instead, I asked them (161 of them) about other matters.

One such thing was how they would describe their strategy for playing the first, and later on also the tenth hole of the course. I classified the answers in terms of volition, planning and expectation. Almost all golfers “wanted” (n=130), most of them “planned” (n=90) and several of them “expected or foresaw” (n=62). Many players spoke of their strategy in terms of several different dimensions of intentionality. When the players spoke about their wants and their plans, they almost always coincided and their plans were sometimes in perfect accordance with their wants but not at all in accordance with their expectations. One example:

- (Golfer) I want to steer clear of that tree, so I aim for the hill and plan on setting the ball up against the wind with a slight fade.
- (Me) So, will you succeed?
- (Golfer) Haha, no, probably not. (he had a hcp of 19, meaning he had quite average ability)

But quite often, the want and the plan did not express the same proposed action.
Another golfer said the following. “Well, I wish I could reach the fairway by cutting that corner, and maybe I could, but I dare not risk it so the plan is to play it safe and hope for a good second stroke instead.”

Some scholars mean that a plan is not a plan unless it has a substantial chance of success (cf. O'Shaugnessy, 1973; Audi, 1973). I would argue that the core is not in the chance of success. Instead, I prefer the approach used by psychologists and marketing and consumer researchers concerned with mental simulation, and process simulation in particular (cf. Abraham and Sheeran, 2003; Escalas and Luce, 2002; 2003; Taylor and Pham 1996; Taylor et al, 1998; Pham and Taylor, 1999). They mean that the core element of a plan is that it is sequential and contains implicit or explicit causal elements. I would definitely categorize both golfers’ statement as containing plans, even if one of them admits that the chance for success is very slim.

The planning dimension is at the core of an everyday notion of what an intention is. It refers to the individual’s planned choice to carry out a particular behavior in the future. An intention in this sense involves choosing or deciding to carry out the act (Conner et al, 1999; Malle and Knobe, 1997).

I stated above that some scholars see volition as an antecedent of intentions. The same is true to some extent regarding how some psychologists view plans. It has been argued that intentions in the
form of plans capture motivational factors that in turn influence behavior; "they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior" (Ajzen 1991, p. 181). Similarly, Bandura (1986) views intentions as "the determination to perform certain activities or to bring about a certain future state of affairs". Also, it is worth noting that in Fishbein’s (1967a; 1967b) original theory of planned behavior, “intention” was synonymous with “plan”.

Others see the planning dimension as the core dimension of intentions; Howard (1989, p. 35), for example, explicitly stresses the word "plan" in his intention definition. Similarly, Abraham and Sheeran (2003) view the planning dimension as central in the concept of intending. In typical applications, measurement items are "I am planning to...", "I intend to...", "Do you intend to...", "I will choose...", "I am going to choose...", and "I will select..." In this thesis and in the articles, I refer to intention of this type as intentions-as-plans. Examples of marketing and consumer researchers who have used intention in this sense are Mittal et al (1998) and Taylor and Baker (1994).

2.4.4 Foresight – Expectations

Let us return to the golfers I interviewed about their strategies for playing a golf hole (Öhman 2010b), and the statement given by one of them: “Well, I wish I could reach the fairway by cutting that corner,
and maybe I could, but I dare not risk it so the plan is to play it safe and hope for a good second stroke instead.”

This statement reflects the concept of self-efficacy (Bandura, 1977; 1997) which is adapted and included into the theory of planned behavior (Ajzen, 1998). It basically means that a plan to do something can only transform into an action if one has the ability to perform that action.

One frequently used intention construct takes this into account: behavioral expectations. It refers to the individual's assessment of the subjective probability that he or she will perform a particular behavior in the future. They are also sometimes labeled “self-predictions” (cf. Courneya and McAuley, 1993; Fishbein and Stasson, 1990, Gollwitzer, 1993).

Typically, this is measured with items such as "The likelihood that I would do A is...", "The probability that I will do B is...", "Rate the probability that you will do C", and "How likely are you to do D?"; the respondent is thus asked to estimate the probability that he or she will perform the act (cf. Gruber, 1970; Juster, 1966).

In the articles that follow, I will refer to intentions of this type as intentions-as-expectations. In marketing and consumer research, behavioral expectations seem to be the most popular type (Söderlund and Öhman, 2003). It appears, for example, in Brady et al (2002), Cronin et al (2000), Danaher and Haddrell (1996), Gotlieb et al

2.5 Link between Attitudes, Intentions and Behavior

The concept of attitudes has been described as the “most distinctive and indispensible concept in contemporary social psychology” (Allport, 1935, p. 798). That reference is a bit dated but there is evidence that it still holds. The quest for the core of attitudes is still very much alive and thriving. Maio and Olson (2000) argue that the largest and fastest growing field in psychology is still attitudinal research. The direction that seems “hot” nowadays is the function of an attitude. However, one single function of attitudes stands for an overwhelming majority of research: the function that attitudes serve to guide behavior (Armitage and Christian, 2003).

One of the first empirical studies of the link between a mental construct and behavior was LaPiere’s (1934) study. LaPiere (1934) travelled around the U.S. together with a young couple of Chinese origin. At the time, there was much racism in general and anti-Chinese sentiment in particular. This was known in advance to LaPiere but unknown to his travelling companions. Together, they visited 250 different establishments and LaPiere took notes on the way they were treated. Despite the anti-Chinese sentiments, they were only denied service at one time. When LaPiere got back from
the trip he wrote all 250 establishments a letter in which he asked whether they would serve a customer of Chinese origin. After some time, 128 of the 250 establishments wrote back to LaPiere. However, only 10 of those said that they would allow someone of Chinese origin to visit their establishment. That means that 118 said they would not serve someone of Chinese origin. LaPiere (1934) concluded that there was a large gap between attitudes and behavior and that questionnaire data could not always be trusted.

Two years later, Corey (1937) studied the correlation between attitudes and actual behavior by testing the correlation between a highly reliable measure of the attitude towards cheating and actual cheating behavior and found a Pearson coefficient of correlation of r=.02. Since then, there has been a myriad of studies of attitude-behavior consistency. In a review, Wicker (1968) find that in the 42 different studies he examined, the median correlation between attitude and behavior was r=.15 and rarely exceeded r=.30. Armitage and Christian (2003) view the review by Wicker (1969) as the death of a tradition of simply noting the degree of correspondence between attitudes and behavior. Armitage and Christian (2003) argue that after Wicker’s (1969) review, scholars have turned to looking at conditions under which attitudes were followed by a corresponding behavior.

A large number of different moderators of the attitude-behavior consistency have been researched over the years (cf. Armitage and Christian 2003; Abraham and Sheeran, 2003). The most important
one seems to be “attitude strength” (Armitage and Christian, 2003). There was also considerable work put into examining the role of reliability of measures in attitude-behavior discrepancies (e.g. Corey, 1937; Fishbein and Ajzen, 1975). Fishbein and Ajzen (1975) noted that the unreliability of measurements was not enough to explain the attitude-behavior discrepancies. However, they did note that very broad attitudes were often used to explain very specific behavior. For example, the attitude to religion was used to measure the behavior of going to church. Davidson and Jaccard (1979) and Kraus (1995) are two studies showing that specific attitudes are in fact better predictors of specific behavior. Still, specificity did not solve the puzzle in a satisfactory manner.

Interest, instead, turned to the examination of possible concepts that could mediate the attitude-behavior relationship. Armistad and Christian (2003) argue that only one such variable has been investigated in this regard: Intention.

2.5.1 Theory of Reasoned Action and Theory of Planned Behavior

Fishbein (1967a; 1967b) started developing the theory of reasoned action and that was later extended on by Ajzen and Fishbein, each of them alone, together and in combination with others (e.g. Ajzen, 1985; 1991; 1998; Ajzen and Fishbein, 1969; 1970; 1973; 1977; 1980;
Ajzen and Madden, 1986; Fishbein and Ajzen 1975; Fishbein and Middlestadt, 1995; Fishbein and Stasson, 1990) and the dominating model for the attitude – behavior correspondence is now Fishbein and Ajzen’s theory of planned behavior. Both models have the concept of intention as a mediator in the attitude-behavior relationship. The difference between the theory of reasoned action and the theory of planned behavior is that the theory of planned behavior also includes something sometimes called perceived behavioral control and sometimes it is called perceived volitional control. The concept is derived from Bandura’s (1977, 1997) concept of self-efficacy (Ajzen, 1998) and basically refers to the ability a person has to perform a behavior.

Intentions has subsequently been shown to be superior to attitudes in all respects when it comes to predicting behavior (see Sheeran, 2002 for a review). I view widespread acceptance of the theory of reasoned action and the theory of planned behavior as the single most important factor when one tries to understand why intentions are as important and frequently used today, across so many disciplines of social sciences.
3. Overview of the Six Articles

Looking at intentions broadly, this thesis examines different operationalizations of intentions and their relationship with different types of constructs relevant to consumer and marketing research.

The articles point out important concerns regarding some commonly used operationalizations of intentions. Furthermore, they sort out the main dimensions in which the operationalizations differ and describe the implications of these differences. Table 2 provides a brief overview of the articles.

Table 2
3.1 Article 1 – Behavioral Intentions in Satisfaction Research Revisited

(With Magnus Söderlund; Published in Journal of Satisfaction, Dissatisfaction and Complaining Behavior)

The first article examines three conceptually different intention constructs, Intentions-as-wants, Intentions-as-plans, and Intentions-as-Expectations. It also examines the relationship between these concepts and customer satisfaction, and it shows that the different intentions are related to customer satisfaction in different ways.

Previous research shows that the strength of the relationship between different operationalizations of intentions, attitudes, and overt behavior varies (Fishbein and Stasson, 1990; Norman and Smith, 1995; Sheppard et al, 1988; Warshaw and Davis, 1985). In this article we add customer satisfaction to that list as well. We show that satisfaction is influencing different intention constructs with different degrees of strength. We assumed that the strongest association between satisfaction and intentions would be at hand when the intention is of the intentions-as-wants type rather than of the intentions-as-expectations (and intentions-as-plans types). The data suggested that this was indeed the case for two common ways of conceptualizing satisfaction (i.e., an act-oriented way and an object-oriented way). The data also suggests a similar pattern when a
traditional attitude variable is used for predicting intentions.

One main implication of this study is that the researcher who is examining the link between satisfaction and intention should stop and think for a while before he/she selects an intention measure. Our findings, which show that the strength of the satisfaction-intention link appears to be dependent on how intentions are measured, and the link's strength, in turn, has important implications for managerial decisions. For example, a weak relationship between a satisfaction measure and an intention indicator may be interpreted as a weak causal link. The logical decision in this case, given that customer loyalty is an important objective (and given that intention is equated with loyalty), would be to abandon or devote less resources to, activities designed to improve on customer satisfaction.

In fact, in order to avoid dependency on one single indicator given the present state of knowledge about intentions, this article propose that a multi-intention construct approach is more viable. The main advantage, particularly for marketers who are interested in customer loyalty, is that it offers a more detailed picture of the customer's view of his/her future. That is to say, differences in levels between different intentions in the mind of a customer (or in customer segments) may provide important information.
Some customers, for example, may have strong wants but low behavioral expectations, whereas other customers have strong expectations but weak wants. And segments defined in those terms are likely to call for different activities in order to create stronger intentions.

Furthermore, if a single intention construct is preferred, it may appear as if intentions-as-expectations are superior - because previous research suggests that they predict behavior better than intentions-as-plans (cf. Sheppard et al, 1988). After all, it is the customer's behavior (not attitudes or intentions) that produces revenues and costs. Marketers, however, must ask themselves which behavior is most desirable: is it behavior resulting from intentions with a low sense of ownership, or behavior reflecting intentions with a high sense of ownership? This distinction may perhaps be insignificant in the short run, since both types of behavior produce outcomes in terms of revenues and costs. But in the long run, the case may be different. If marketers want highly loyal or strongly committed customers over time, intentions associated with a high sense of ownership appear to be a particularly useful marketing target. The main reason is that sense of ownership is assumed to go hand in hand with customer variables such as motivation and positive affect (cf. Pierce et al, 1991). It is also likely that target levels formulated in terms of different intention constructs produce different levels of challenge (and thus motivation) for employees. More specifically, it seems to be more inspiring to work for a firm that strives for a high level of wants ("Our target is that our customers
should want to come back!") compared to a firm striving for a high level of expectations ("Our target is that our customers should expect to come back..."). The marketer who cares for strong loyalty and commitment in the long run, then, may be advised to pay more attention to intentions-as-wants than intentions-as-expectations and intentions-as-plans.

3.2 Article 2 – Measuring consideration sets through recall or recognition: a comparative study

(With, Jens Nordfält, Hanna Hjalmarson and Claes-Robert Julander; Published in Journal of Retailing and Consumer Services)

This article examines two different ways of operationalizing consideration sets. Consideration sets is, I argue, a special case of intentions. We are used to reading and hearing about purchase intention, repurchase intention, repatronizing intentions, word-of-mouth intentions, information search intentions. However, consideration sets are rarely thought of as a set of intentions. Still, the typical operationalization of consideration sets bear close resemblance to a set of intentions. It can be viewed as intentions to include a certain object in a future choice process.

Consideration sets are sometimes used because ordinary intention questions are unreliable for some reason. For example, if the consumer can be suspected to rely on heuristics specific to the
purchase situation, to behave habitually or in a non-conscious manner, or if the decision is made too far in the future, to be able to convincingly form a reliable intention. Sometimes it is also valuable to relax the exclusive nature of a purchase intention or a brand preference and let a respondent report a set of possible future purchase intentions or brand preferences. If it was more important that the measure includes a future purchase than it is that the measure gives an estimate of the most likely purchase, a consideration set approach would be preferred over a traditional intention or brand preference measurement. Moreover, the composition of a consideration set is potentially more sensitive to marketing activities compared to an intention, and as such the set composition of a respondent would react earlier to changes in respondent’s attitudes or beliefs compared to the same respondent’s intentions.

In this article we used two different operationalizations. One type of consideration set based on unaided recall where we simply asked which brands of three different categories (Toilet tissue, coffee, and margarine/butter) would you consider buying? We called the set of brands mentioned recall-based consideration set. The other type of consideration set was based on recognition. We asked participants to select the brands they would consider buying from a list (one list for each of the three categories).
Later we examined the composition of the two different types of consideration set operationalizations and found a number of differences. The recognition-based measure produced larger sets than the recall-based measure. However, some strong brands were found to be included more often with the recall-based measure. Further, the recognition-based measure generated increased stated price sensitivity as well as reduced stated loyalty as compared to a recall-based measure.

Several important practical implications can be derived from our results. One is that there seems to be two ways to gain entrance into a consideration set for a product: Firstly, it is to be preferred, and secondly, it is to be recalled. Which of these ways is dominant depends on whether the consumer mainly uses memory or external stimuli at the time of decision. According to Lynch and Srull (1982) and Nordfält (2009) memory-based or mixed judgments (such as in a store) are prevalent. For example, Hoyer (1984) found that 95 percent of the consumers who bought detergents did not compare any brands at all before picking their chosen brand from the store shelf. So, it seems to be a strategic decision for the product manager if s/he sees it as the number-one concern to increase the brand’s preferences or ability to be recalled. To be able to make this decision s/he would have to know the target group’s expertise (Alba and Hutchinson, 1987), choice rules (Bettman et al., 1998), degree of planning (Kollat and Willet, 1967), as well as the most common decision context (Nordfält 2009, Lynch and Srull, 1982).
3.3 Article 3 – Intentions are Plural: Towards a Multidimensional View of Intentions

(With Magnus Söderlund; Published in European Advances in Consumer Research)

In this article, we set out to prove that the three different operationalizations of intentions described in article 1 are indeed different, given that a three-factor conceptualization captured the proposed tripartite view of intentions better than a one-factor model did. In addition, and as a further argument to support the distinctiveness of the three intentions constructs, we found that they were not associated to the same extent with theoretical antecedents in terms of global evaluation variables.

In this study, intentions-as-wants stand out as a particularly distinct construct, and we believe that one main reason is that such intentions correspond better with evaluation variables in terms of an perceived ownership dimension.

In article 1, one main implication was that the investigator who is examining the link between evaluative constructs and intentions should select intentions measures with care, because the link’s strength appears to be dependent on how intentions are measured. And the link’s strength, in turn, has important implications for decision making. For example, a weak correlation between a
satisfaction measure and an intention indicator may be interpreted as a weak causal link. The logical decision in this case, given that customer loyalty is an important objective (and given that intention is equated with loyalty), would be to decrease activities designed to enhance customer satisfaction. In this article, however, we show that this decision may be premature given that other intentions measures produce a stronger association with evaluation.

In fact, in order to avoid dependency on measures of one single intentions construct given the present state of knowledge about intentions, we believe that a multi-intention construct approach is viable. The main advantage, particularly for marketers who are interested in customer satisfaction and loyalty, is that it offers a more detailed picture of the customer’s view of his/her future.

That is to say, differences in levels between different intentions in the mind of a customer (or in customer segments) may provide important information. Some customers, for example, may have strong wants but weak behavioral expectations, whereas other customers have strong expectations but weak wants. And segments defined in those terms are likely to call for different activities in order to create stronger intentions.
In addition, given our assumption that different intentions constructs may co-exist in every individual, it may be fruitful to allow for several intentions constructs in attempts to predict behavior. This accords to literature on different types of loyalty, that is, physical versus mental types of loyalty (cf. Söderlund, 2001).

3.4 Article 4 – Assessing Behavior Before it Becomes Behavior – An examination of the role of intentions as a link between satisfaction and repatronizing behavior

(With Magnus Söderlund; Published in International Journal of Service Industry Management)

In this study, we subject our tri-partite view (or at least two of the three constructs) to an empirical test of the intention-behavior link. The main findings in this study are that different intention constructs in a service context are capable of producing different strength in (1) the association with global evaluations; and (2) the association with repatronizing behavior.

The implications of this are: First, service researchers should be concerned with the particular intention constructs (and operationalizations) they use: the selection of one particular intention indicator over another may generate different conclusions about the role of satisfaction as a determinant of intentions. Given that behavioral data are relatively seldom collected by researchers
interested in customer perceptions of a supplier (i.e., intentions are often used as a proxy for behavior), different conclusions about the global evaluation - intention link are also likely to affect conclusions about customer behavior. Thus, we believe that the prevailing happy-go-lucky approach to intentions in much empirical research needs to be questioned, because it may obscure important links in the nomological net of intentions.

Second, given that intentions-as-expectations outperformed intentions-as-wants as predictors of repatronizing behavior, one might be tempted to suggest that expectation-based constructs should be used in future assessments of customers' intentions. After all, it can be argued, it is the customer's physical behavior that produces profitability, not their mental state. However, we believe that service marketers must ask themselves this question: which repatronizing behavior is really the most desirable in the long run?

Is it repatronizing behavior that results from the myriad of external factors that are captured by intentions-as-expectations? Or is it behavior that results from the customer's self-determined wants to repatronize? (cf. mental vs. physical loyalty in Söderlund, 2001).

If marketers want strongly committed customers over time, intentions associated with wants may provide a more viable approach.
This suggestion is based on the assumption that behavior predicated on a perception of "up-to-me-ness" is more motivating and committing in the long run than behavior that stems from external factors (Kiesler, 1971).

3.5 Article 5 - Dreaming versus Scheming - Implications of Different Operationalizations of Intention on Process- and End-State-Oriented Mental Simulation.

(Single authored; In review for publication for Journal of Consumer Behaviour)

In this article I examine three commonly used operationalizations of intentions (intentions-as-wants, intentions-as-plans, and intentions-as-expectations) in terms of the way they direct our thought when we are explicitly asked to form them. Furthermore, the degree of contextual influence, in terms of process or endstate oriented contextual cues (on the three previously described operationalizations of intentions), is also examined.

It is done in an experimental setting with two dependent variables; (1) The number of thoughts generated related to the endstate itself and (2) the number of thoughts related to the process to reach the endstate. I show that three different operationalizations (i.e., three different ways of asking people to form intentions) of intentions produce distinctly different mental processes. They are also very
different in terms how sensitive they are to the context in which they are measured.

The theoretical implications are that, again, the three operationalizations of intentions are different. It seems that the mere wording of the different operationalizations produces powerful results and that those results remain stable under deliberate manipulation attempts as well. This study also adds to the explanation of in which way the three operationalizations are different conceptually. The earlier articles have provided some ideas but none have been tested empirically.

3.6 Article 6 - Buying or Lying - The role of social pressure and temporal disjunction of intention assessment and behavior on the predictive ability of “good intentions”

(Single authored; Forthcoming in Journal of Retailing and Consumer Services)

This study addresses two possible explanations to why it is particularly difficult to predict socially desirable purchasing behavior. I examine a common phenomenon of overestimating “good intentions” and it is shown that good intentions are less reliable and more sensitive to framing in terms of time as well as more sensitive to social pressure compared to regular intentions. More specifically, I look at the intention to purchase eco-friendly products. A
quasi-experiment is conducted, where social pressure and temporal disjunction is manipulated and examined in the context of regular, as well as “good” intentions.

The study extends the literature on purchase predictions in general, in the sense that it provides some insight into the causes for discrepancies between stated and actual future behavior. Especially when it comes to predictions of socially desirable behavior such as buying eco-friendly products or other products with a corporate social responsibility profile and social pressure plays an important part in this. This is something that would fall under the label of “behavioral control” in the Fishbein and Ajzen (e.g. 1975) theory of planned behavior. I believe that construct needs to be researched further. It has been suggested that the construct should indeed be divided into several sub-constructs (cf. Armistad and Christian, 2003; Abraham and Sheeran, 2003). Perhaps social pressure and temporal framing could be such sub-constructs. Temporal framing has in fact already been suggested as a unique construct by behavioral economists and psychologists with an interest in for example drug-rehabilitation resolve, but on not on the grounds that I propose but rather on grounds of hyperbolic discounting, or other forms of non-linear discounting (e.g., Ainslie, 1974; 1992; 2001; Green et al, 1994; Madden et al, 1997; Perry et al, 2005; Vuchinich and Simpson, 1998).
4. Limitations and suggestions for further research

There are limitations to the thesis as a whole and to each individual article of this thesis as well. In this section I summarize the limitations and suggestions for further research related to the thesis as a whole. A detailed account of limitations and suggestions for further research related to each individual article can be found at the end of each article.

As previously stated, this thesis is far from exhaustive when it comes to acknowledging all possible versions of intentions, all researched dimensions of intentionality or all possible antecedents and consequences of intentions. The articles are lopsided in the sense that they have much more focus, both theoretically and empirically, on evaluation-intention links; this is a clear limitation and should be developed further with more research on actual intention-behavior correspondence.

The dimensions of intentions that I describe are only derived from a theoretical point of view. An empirical study of this, may find that the three dimensions that I have described is merely a subset of the true number of dimensions.
For example, some scholars in psychology have proposed habituation as a possible fourth dimension (cf. implementation intentions in Gollwitzer, 1999 and Gollwitzer and Bargh, 1996). A related dimension was also briefly discussed within the theological perspective (habitual intentions).

Furthermore, the tri-partite view of intentions applied in several of the articles is just one way of looking at different intentions. I have made some of the groundwork for creating a more complete taxonomy of intentions. However, if I had examined other possible ways, I may have come to different conclusions. Again, relating to the possible dimension of habituation, an investigation of habitual intentions/ implementation intentions in comparison with the three operationalizations researched in this thesis, could extend the knowledge on intentions.

I explicitly suggest a multi-item approach for intentions in two of the articles. However it is never tested empirically, it should be an easy feat to add a set of intention items to any study and examine how a combined measure would perform compared to the three individual measures I have examined in this thesis.

This thesis rest firmly on a western cultural foundation. The cultural and religious influence on such dimensions as fatalism, individualism, locus of control, morals, will and resolve are likely considerable. All of these dimensions are, in a sense, building blocks, instigators or defining dimensions of intentions. I would be very surprised if one
would not find cultural differences in terms of the intention concept in itself, as well as in terms of the dimensions that builds it. I believe that the research on intentions could be very much enriched by a cross-cultural approach to the concept and I strongly urge anyone with the necessary knowledge and competence to try.
5. Contributions

The contribution can be divided into three parts, (1) the individual contributions offered by the articles, (2) the contribution of the introductory text, and (3) contributions that draw on both articles and the introductory text.

The details of the individual contributions of each article are summarized in the overview of the articles as well as in the articles themselves. This text will summarize what I think are contributions related to point (2) and (3) above.

The aim of the thesis was formulated: “The purpose of the thesis is to increase the understanding of intentions, the planning process, the intention-behavior link and the attitude-intention link by theoretically and empirically studying intention formation, dimensions of intentions and the effects of common operationalizations of intentions.”

On an overarching level, the main contribution of this thesis, in my own view, is that it challenges the unreflected and sometimes reckless use of intentions in marketing and consumer literature and shows that it does matter. I argue that the thesis does that by, indeed, increasing the understanding of intentions, the planning process, the intention-behavior link and the attitude-intention link by theoretically and empirically studying intention formation, dimensions of
intentions and the effects of common operationalizations of intentions.

I increase the knowledge of intentions by showing that there are other fields of research where intentions are used differently and sometimes have very different meaning compared to what we as marketers and consumer researchers mean when we use intentions. Considering that much of consumer and marketing research rely on verbal or written questions in some form, it is important to be aware of the wide range of meanings intentions could have for people. Furthermore, I have derived three dimensions of intentions from five different perspectives in an attempt to lay some of the groundwork for a taxonomy of intentions and I argue that it is a contribution in itself.

Moreover, I show that it matters what operationalization of intentions that researchers use and that there are several options open to someone who wants to use intentions in their research. Moreover, I show that the link between attitude and intention as well as the link between intention and behavior are highly dependent on the way we operationalize intentions. This is done both empirically and theoretically.
I also increase the knowledge of intention formation and the planning process by examining (both theoretically and empirically) factors that influence intention formation and planning (e.g., type of mental simulation, social pressure and memory retrieval).
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7. Articles
Article 1 – Behavioral Intentions in Satisfaction Research Revisited

BEHAVIORAL INTENTIONS IN SATISFACTION RESEARCH REVISITED


ABSTRACT

Intentions are usually included as dependent variables in satisfaction models, but satisfaction researchers have paid little attention to the discussion in psychology and philosophy in which different intention constructs are distinguished. In this paper, we examine - empirically and conceptually - the satisfaction-intention link with respect to three different intention constructs. The main result is that satisfaction is not equally correlated with these three intentions, and it suggests that satisfaction researchers should be concerned with the particular intention constructs they use: the selection of one particular intention indicator over another will generate different conclusions about the role of satisfaction as a determinant of intentions. Since behavioral data are seldom collected by satisfaction researchers (intentions are often used as a proxy for behavior), different conclusions about the satisfaction-intention link are also likely to affect conclusions about customer behavior.
INTRODUCTION

Despite a frequently made assumption that customer satisfaction is affecting customer behavior, empirical studies of satisfaction's consequences seldom include data on behavioral outcomes. Instead, focus is on behavioral intentions. Repatronizing intentions, repurchasing intentions, and word-of-mouth intentions are examples of intentions often appearing as dependent variables in satisfaction research. There are reasons, however, to believe that satisfaction researchers have not paid enough attention to intentions. One particular deficiency is dealt with in this paper: satisfaction researchers have ignored the existence of different theoretical intention constructs. Yet scholars outside the field of customer satisfaction show that different types of intentions are not always strongly correlated with each other (Sheeran and Orbell, 1998) and that they produce different strength in associations with other variables (Fishbem and Stasson, 1990; Netemeyer and Burton, 1990; Norman and Smith, 1995; Sheppard et al, 1988; Warshaw and Davis, 1985). Moreover, at a conceptual level, scholars in psychology (e.g., Sheppard et al, 1988; Warshaw and Davis, 1985) and philosophy (e.g., Audi, 1973; Kenny, 1966) argue that several different intention constructs exist. To date, satisfaction research has not been informed by this development, since satisfaction researchers seem to merely select one particular operationalization of intentions without much explicit consideration.
Attention to different intention constructs, however, has not been completely absent from satisfaction research; Söderlund (2002, 2003) shows that satisfaction is affecting different intention constructs with unequal strength. Basically, Söderlund (2002) examined one specific satisfaction construct (current satisfaction with an object) and its impact on three different intention constructs, and Söderlund (2003) examined two satisfaction constructs (current satisfaction with an object and anticipated satisfaction with an object) and their effects on two intention constructs. The present paper should be seen as an attempt to replicate and extend this research. First, the present approach involves a different stimulus sampling method than those used by Söderlund (2002, 2003); in those two cases, all respondents were customers to the same firm, an airline, but in the present case several different firms served as stimulus objects. Second, neither Söderlund (2002) nor Söderlund (2003) used an act-oriented satisfaction construct, but it is included here. The main reason is that research on evaluations, particularly attitude research (cf. Ajzen and Madden, 1986), suggests that evaluations of an act are particularly useful in predicting intentions (to carry out an act) compared to evaluations of objects. Third, in relation to Söderlund (2002) and Söderlund (2003), a different explanation of why satisfaction is not equally correlated with different intention constructs is explored in the present paper.

The study, then, is based on the assumption that the strength of the satisfaction-intention correlation is different for different types of
intentions, and our purpose is to examine the assumption in conceptual and empirical terms. This examination, we believe, has important implications for both academicians and practitioners, particularly for those who equate intentions with customer loyalty - if different intention constructs result in different strength in the satisfaction-intention link, the mere selection of one intention indicator over another will generate different conclusions about the role of satisfaction as a determinant of loyalty.

THEORETICAL FRAMEWORK

The theoretical framework comprises three parts. First, we begin by introducing what we argue are three different intention constructs. Second, we present evidence that suggests that the strength of the link between (1) an evaluative judgment (such as a general attitude or a satisfaction judgment) and (2) an intention is contingent on the level of correspondence between the two constructs. Moreover, we introduce one particular correspondence element, sense of ownership, that we believe will contribute to an examination of the satisfaction-intention association. Third, we argue that satisfaction and the three intention constructs are located at different positions on a sense of ownership continuum, and that this is likely to produce different levels of association between satisfaction and the three intention constructs.
Intentions: Connections with the Future

An intention materializes when an individual makes a proposition that connects himself/herself with a future behavioral act. Generally, a proposition of this type has the form "I - connection - future act", and it is usually conceived of as evaluation-free (this distinguishes an intention from, for example, an attitude). Moreover, we view intentions as basic units in a network of propositions that emerge when individuals engage in future-oriented cognitive activities such as mental simulation, planning, imagination, and ruminations (a network of this type also includes the individual's perceptions of other people's intentions). The conceptual boundaries between these cognitive activities are far from clear, but they seem to share one basic function: they are windows on the future that help people perform tasks efficiently. Consequently, and with respect to intentions, we expect that they are continuously made with regard to many different acts. This is reflected in the marketing literature; propositions about the future which are explicitly labeled intentions by marketing scholars cover several acts in the marketplace. Search for product information, purchasing a product for the first time, repurchases, word-of-mouth, complaints, and contributing money are some examples. As already indicated, however, satisfaction researchers (and many other marketing scholars) do not distinguish between different intention constructs.
Yet an individual may connect himself/herself with his/her future behavior in different ways. In the following, three such ways are examined. They share one characteristic: each construct has been explicitly referred to as intention in the literature.

Intentions-as-expectations (IE).

One frequently used intention construct is behavioral expectations. It refers to the individual’s assessment of the subjective probability that he or she will perform a particular behavior in the future. Typically, this is measured with questionnaire items such as "The likelihood that I would do A is...", "The probability that I will do B is...", "Rate the probability that you will do C", and "How likely are you to do D?"; the respondent is thus asked to estimate the probability that he or she will perform the act (cf. Gruber, 1970; Juster, 1966). This is perhaps the reason why behavioral expectations are sometimes labeled self-predictions (cf. Courneya and McAuley, 1993; Fishbein and Stasson, 1990, Gollwitzer, 1993). We refer to intention of this type as intentions-as-expectations (IE). In satisfaction-related research, IE seems to be the most popular of the three constructs discussed in this section. It appears, for example, in Brady et al (2002), Cronin et al (2000), Danaher and Haddrell (1996), Gotlieb et al (1994), LaBarbera and Mazursky (1983), Lemon et al (2002), Mittal et al (1999), Mittal and Kamakura (2001), Oliver (1980), Oliver et al (1997), Patterson et al (1997), and Patterson and Spreng (1997).
Intentions-as-plans (IP).

Another intention construct comes perhaps closer to the everyday notion of intention. It refers to the individual's planned choice to carry out a particular behavior in the future. An intention in this sense involves choosing or deciding to carry out the act (Conner et al, 1999; Malle and Knobe, 1997). It has also been argued that such intentions capture motivational factors that influence behavior; "they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior" (Ajzen 1991, p. 181). Similarly, Bandura (1986) views intentions as "the determination to perform certain activities or to bring about a certain future state of affairs", and Howard (1989, p. 35) stresses "plan" in his intention definition. In typical applications, measurement items are "I am planning to...", "I intend to...", "Do you intend to...", "I will choose...", "I am going to choose...", and "I will select..." Here, we refer to intention of this type as intentions-as-plans (IP). Examples of satisfaction researchers who have used intention in this sense are Mittal et al (1998) and Taylor and Baker (1994). It can be noted that IP represent a potentially more homogenous group of intentions than IE and IW (cf. below), in the sense that an individual may not view his/her propositions about intending, choosing, selecting and planning as identical. However, since a clear typology in this area is yet to be developed, we will subsume them under the same general label (i.e., intentions-as-plans) in the present paper.
An additional intention construct is a conceptualization in terms of wants. It has been referred to as an intention construct by Fishbein and Stasson (1990) and Norman and Smith (1995). This construct is found in several formal models of intentionality and in the "folk concept" of intentionality (Malle and Knobe, 1997). And, wants also appear in Heider (1958) who stresses that intention is often taken as the equivalent of wish or wanting. Moreover, wants closely resembles Gollwitzer's (1993) notion of goal intentions that specify a desired end state. Measures of this type of connection with the future usually take the form of Likert-type statements such as "I want to..." In the present paper, we label them intentions-as-wants (IW). It can be noted that in relation to IE and IP, IW is the least frequently used intention construct in marketing research. And, in some models in which it does appear, either as wants or in terms of a similar construct, desires, it is conceived of as an antecedent to intention, not an intention construct per se. For example, Perugini and Bagozzi (2001) argue that desires provide the motivational impetus for intentions (in their case, and with our terminology: intentions-as-plans) and thus that desires represent an independent variable that affects intentions (a similar argument appears in Bagozzi and Edwards, 1998). Nevertheless, and given that wants serve to connect the individual with his/her future acts, we refer to them as an intention construct in this paper.
Effects of Evaluations on Intentions

Thus, so far three types of intentions have been identified, and in the following sections we examine the potential of satisfaction for affecting them with unequal strength. In order to make contact with previous research (basically attitude research) in which it is shown that an evaluation (of an act) is unequally correlated with different types of intentions to carry out this act, we are assuming here that satisfaction is one particular type of evaluation. The general evaluative nature of the satisfaction construct is stressed by, for example, Anderson and Sullivan (1990), Garbarino and Johnson (1999), and Hunt (1977). Moreover, several authors suggest that satisfaction is an emotional response (Babin and Griffin, 1998; Gotlieb et al, 1994; Hausknecht, 1990), and, given that emotions can take on values ranging from feeling bad to feeling good, emotions and thus satisfaction represent evaluations. We argue, then, that satisfaction shares an evaluative component with the traditional attitude construct. If satisfaction is an attitude, or a particular type of attitude, however, remains unclear, even though authors have referred to satisfaction as an "attitude-like judgment" (Foumier and Mick, 1999) and "similar to attitude" (Churchill and Surprenant, 1982). Yet for our purposes here, we deal with both attitudes and satisfaction as subjective evaluations.
Previous Research.

Only a handful of studies have examined the potential for differences in the attitude-intention associations' strength given different intention constructs - but the studies that indeed deal with this topic generally indicate that differences exist. For example, it has been shown that attitudes are more strongly associated with IW than with IE (Fishbein and Stasson, 1990; Norman and Smith, 1995). Furthermore, Sheppard et al (1988) and Netemeyer and Burton (1990) found that attitudes were better predictors of IP than of IE. Given that satisfaction is one specific type of evaluation, this pattern suggests that we would expect the satisfaction-intention association to become increasingly stronger as we move from IE to IP and then further on to IW. This is also what Söderlund (2002) and Söderlund (2003) found in his exploratory studies of the satisfaction-intentions link. Why, then, do such differences exist? In the following, we will pursue an explanation attempt with the notion of correspondence as the point of departure. First, we briefly restate the importance of correspondence for obtaining strong associations between variables in the attitude-intention-behavior chain. Second, we extend this line of reasoning with a correspondence element - sense of ownership - that we believe has been overlooked in traditional views of correspondence.
The Importance of Correspondence.

Basically, it is argued that the level of correspondence between the predictor and the criterion variable (e.g., an attitude and an intention) must be high if strong correlations are to materialize. It has also been argued that there are four elements that define any predictor and criterion - target, action, context, and time - and that a high level of correspondence (and thus a high empirical correlation) requires equivalence in all four elements (Ajzen and Fishbein, 1977; Fishbein and Middlestadt, 1995). Some empirical studies - in which the researchers have allowed for variation in correspondence in terms of target, action, context, or time - show that correspondence in those terms does indeed affect the ability of the predictor variable to be related to the criterion variable (cf. Conner et al, 1999).

Several authors have applied an implicit correspondence perspective - in terms of other elements than target, action, context, and time - on the strength of associations between selected entities in the attitude-intention-behavior chain. Examples of such elements, particularly with respect to the link between intentions and behavior, are degree of formation (Bagozzi and Yi, 1989) and volition (Sheppard et al, 1988). For example, it has been shown that IE perform better than IP in predicting behavior, and Sheppard et al (1988) argue that one reason is that behavior is often affected by uncontrollable factors that IE take account for better than IP (since IE allow more room for low-volition factors than IP).
Sense of Ownership.

In an attempt to offer fuel for more research on correspondence elements, we propose an extension of the list of elements by building the present explanation on sense of ownership (which we believe will capture additional aspects compared to degree of formation and volition). This variable, sometimes referred to as psychological ownership, is derived from research on ownership and possessions. In this research tradition, it is observed that (a) ownership is a subjective variable, (b) ownership is a continuum rather than a dichotomy, and (c) subjects do not only perceive that they own physical possessions, but also mental entities such as beliefs, ideas, attitudes, memories, and emotions (cf. Abelson, 1986; Dittmar, 1991; Pierce et al, 1991; Pierce et al, 2001; Rudmin and Berry, 1987; Rudmin, 1994a; Rudmin, 1994b). Our main premise here is informed by this research tradition, in the sense that we argue that differences in sense of ownership with respect to satisfaction and the three intention constructs can explain why satisfaction is not equally strongly associated with the intention constructs. It is the content of this premise that we turn to in the following.

Satisfaction and its Link to the Three Intention Constructs

With regard to satisfaction, we make two assumptions. First, satisfaction refers to an evaluative judgment made by customers who have personal experience with an object. That is to say, in order to arrive at a satisfaction judgment, the customer must have consumed
the product in question. This means that the satisfaction judgment is likely to occupy a special place in the customer's mind compared to evaluations of products that the customer has heard about through such channels as word-of-mouth, advertising, and newspaper articles, but not yet consumed. This assumption is consistent with the view that the customer’s personal experience represents a particularly salient base for judgments (Hoch and Deighton, 1989). Second, satisfaction has an emotional content (Babin and Griffin, 1998; Gotlieb et al, 1994; Hausknecht, 1990). Indeed, some authors argue that satisfaction is one among several emotions (Bagozzi et al, 1999). As such, it is characterized by partiality; it expresses a personal perspective (Ben-Ze'ev, 2000). Another emotion characteristic is its tendency to be associated with physiological reactions (Ben-Ze'ev, 2000). This makes an emotion qualitatively different from, say, the judgment that one brand has higher quality than another and the belief that one particular car is blue and not yellow, in the sense that the emotional state is likely to have a higher level of self-association. Therefore, we expect that an emotional state is not only "own" (i.e., subjective) but also "owned" (i.e., perceived to be possessed). In other words, my satisfaction, derived from my personal experience, and real to me, can be "mine" in the same sense that my car or my clothes are mine. In fact, we believe that my satisfaction, thus something referencing an event that has indeed taken place, is likely to produce a higher sense of ownership than any type of intention (since all intention types, by definition, reference a future event that is yet to take place). The consequence, we believe, can be seen in all existing empirical examinations of the satisfaction-intention link, in
the sense that satisfaction is never explaining all variation in the selected intention measure. Nevertheless, we assume that the three different theoretical intention constructs introduced above are subject to variation in sense of ownership. In order to explore this assumption, we use a model developed by Pierce et al (2001). This model contains three main factors that determine the sense of ownership of an object (control of the object, intimate knowledge of the object, and self-investment in the object), and it is assumed that the higher the scores on each of these three factors for one particular object, the stronger the individual perceives that s/he owns the object. Of these three determinants of sense of ownership, control is perhaps the most widely discussed to date (cf. Belk, 1988; Furby, 1978).

Consider, then, the case of IE. The individual who is forming IE judgments (e.g., "How likely am I to return to the Hilton hotel in Porto for my next vacation?") needs to take into account a variety of factors beyond himself/herself. For example, in a vacation context, and if the individual is considering spending his/her vacation with the family, s/he needs to assess the likelihood that family members want to go back to the same hotel. This individual must also estimate the chances of obtaining a room at the hotel given that many other people, who s/he does not know, and whose plans are even less known, desire to stay at the same hotel. The IE judgment, then, involves substantial attention to external factors that are likely to be uncontrollable, and we believe that this results in a perception that the IE judgment is associated with a relatively low level of control.
Given many external factors to take into account, we also expect that a relatively low level of knowledge is involved in the IE judgment. And again given many external factors, we expect that the IE judgment is associated with a relatively low level of self-investment. Interestingly, in Rudmin's (1994a) open-ended attempt to identify, in empirical terms, what people believe that they own, estimations of probabilities regarding future behavior did not surface at all as a possession.

With regard to IP, the judgment task becomes slightly different. In forming such judgments (e.g., "To what extent do I plan to return to the Hilton hotel in Porto for my next vacation?"), focus is transferred to factors that affect the individual's conscious choice. Several of the factors from the IE task, including external factors, such as other persons' wills, are likely to remain in the assessment. But we expect that at least some of those factors are eliminated - and that more room is allowed for self-related factors. For example, when I assess the extent to which I plan to do X, I am likely to look relatively less closely at my non-cognitive habits and the uncontrollable parts of my environment - and more at "myself". This view is consistent with, for example, Azjen's (1991, p. 181) notion of intentions-as-plans; they are "indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior." Moreover, it is not difficult to change one's plans. In fact, planning can easily - at will - take different routes without much effort. Therefore, we expect a relatively closer connection with the individual's volition and thus control in the IP case compared to the IE
case. We also expect a relatively higher association with knowledge, since the individual is assumed to know more about his/her plans than external factors such as other persons plans. In addition, we expect that forming IP judgments involves more self-investment than forming IP judgments, since planning involves elements of activity in which the individual himself/herself is the agent (i.e., when I plan my future, I also make some kind of choice).

Moving further on to IW, the cognitive task (e.g., "To what extent do I want to return to the Hilton in Porto?") changes again. Compared to IE and IP, the number of external factors to consider is likely to decrease, since to "merely" want something is subject to few external restrictions. Thus, we are assuming that a relatively high level of control is involved in wanting things to happen in the future. Moreover, since my wants have a closer self-connection than the wants of people in the environment, and a closer self-connection than many external factors needed for a probability estimation, we assumed that the level of knowledge is relatively high in the formation of IW judgments. We also expect that what the individual wants matters more than what he or she expects will happen and what he or she plans to do, and thus that a relatively high level of self-investment is involved in the IW task. In addition, we assume that the individual is more attached to his/her wants compared to his/her expectations and plans, and given that attachment goes hand in hand with sense of ownership (cf. Carmon et al, 2003), we assume a relatively high sense of ownership in the case of IW. The relative frequency in empirical studies of the "items" people believe that they
own also suggests that wants and desires are conceived of in terms of ownership to a larger extent than estimation of probabilities and plans (cf. Rudmin, 1994a). Moreover, it has been shown that "want" has a higher semantic proximity to the verb own than has "plan" (Rudmin, 1994b).

Thus, given that the strength of the attitude-intention association is affected by the correspondence between attitude and intention, that both attitude and satisfaction are evaluative judgments, that satisfaction is an entity with a relatively high sense of ownership, and that IE, IP, and IW are located at different points on the same sense of ownership continuum, we assume that the satisfaction-intention association becomes increasingly stronger as we move from IE to IP and then to IW. We turn now to our attempt to examine this assumption in empirical terms.

METHOD

Research Design

We selected one specific consumption act, having lunch at one particular restaurant, as the source of satisfaction and intentions responses, and the data were collected with a questionnaire. The respondent was instructed to select one particular lunch restaurant that he or she had been visiting during the past month, and s/he was asked to answer the subsequent satisfaction and intention questions with this particular restaurant in mind. We included an open-ended
item in the beginning of the questionnaire to capture the name of the selected restaurant, and our examination of the names revealed that very few respondents selected the same restaurant as any other respondent. This, then, means that stimulus heterogeneity was encouraged by our approach. The research design was an attempt to respond to an argument made by psychologists about stimulus sampling; it can be argued that if all respondents are exposed to the same stimulus, and only one stimulus, effective sample size may be reduced to $n = 1$ regardless of the number of respondents - which in turn threatens validity (cf. Wells and Windschitl, 1999).

The respondents (n = 101) were participants in seminars on customer satisfaction. Thus, we used a convenience sampling procedure. We distributed the questionnaires to the participants at the beginning of the seminar, we supervised the completion task, and we controlled the environment in the sense that no talking amongst participants was permitted. Moreover, responses to all questionnaire items were explicitly encouraged. This reduced non-response behavior to a minimum. In order to obtain variation in the satisfaction and intentions scores, four different groups of participants - who participated in seminars at different geographical locations were included in the study (in the analysis, however, they were treated as one single sample).
Measures

Customer satisfaction was measured in two ways. First, the following question was asked: "Think about your accumulated experience during the past month of the selected restaurant. How would you summarize your impressions of the restaurant?" It was followed by three satisfaction items used in several national satisfaction barometers (cf. Johnson et al, 2001). Examples of specific studies in which the satisfaction scale consists of the three items are Anderson et al (1994), Fornell (1992), and Fornell et al (1996). These were the items: "How satisfied or dissatisfied are you with the restaurant?" (1 = Very dissatisfied, 10 = Very satisfied), "To what extent does it meet your expectations?" (1 = Not at all, 10 = Totally), and "Imagine a lunch restaurant that is perfect in every respect. How near or far from this ideal do you find the selected lunch restaurant?" (1 = Very far from, 10 = Can not get any closer). Cronbach's alpha for this scale was .83, and we used the unweighted average of the responses to the three items as the measure (i.e., a reflective measurement approach was used). It should be noted that this object-oriented way of assessing satisfaction is different from the act-oriented way of capturing evaluations that is called for by many attitude theorists who are interested in predicting intentions with regard to an act (cf. Ajzen and Fishbein, 1973). Therefore, as a second (and act-oriented) measure of satisfaction, we asked the participants the following question: "How would you summarize your view of your decision(s) to have lunch at the selected restaurant during the past month?". The question was followed by three items: "I am happy about my decision(s) to go
there", "I believe I did the right thing when I selected it", and "Overall, I am satisfied with the decision(s) to go there" (1 = Do not agree at all, 10 = Agree totally). Similar satisfaction measures have been recommended by Oliver (1997) and used by, for example, Butcher et al (2001) and Cronin et al (2000). In our case, alpha was .92, and we used the average of the responses to the three items as the (act-oriented) satisfaction measure.

In order to put the satisfaction-intention link into context, and since we are assuming that both satisfaction and attitudes are evaluative constructs, we included a traditional attitude measure to capture the respondent's overall evaluation of the selected lunch restaurant. We used a 5-item scale with 10 points and with adjective pairs common in marketing communications research (e.g., Mitchell and Olson, 1981). The question was worded as follows: "Which are your impressions of the restaurant, given your experience of it during the past month?". These adjective pairs were used to capture the responses: bad-good, dislike it-like it, unpleasant-pleasant, uninteresting-interesting, and negative impression-positive impression. Alpha for this scale was .90. Again, the average of the scores on the five items was used as the measure in the subsequent analysis.

Turning to the intention measures, a decision had to be made about the use of multiple-item or single-item operationalizations. On the one hand, a single-item approach means that reliability in terms of internal consistency cannot be computed, and in the typical case no
other reliability assessment is made. This approach, then, means that a measure with unknown reliability may have a low reliability, and low reliability in the measure of one particular variable is known to attenuate correlations with other variables (Peter, 1979). This argument was adopted in one of our previous attempts to examine differences between intention constructs; Söderlund (2003) developed multiple-item scales (three items in each scale) for intentions-as-expectations and intentions-as-plans and obtained acceptable levels of reliability in two different samples of participants. On the other hand, however, many assessments of the attitude-intention link have been made with single-item intention measures (Sutton, 1998). Courneya (1994), for example, argues that multiple-item measures invite the possibility of a confounded measurement. More recently, Rossiter (2002) has strongly argued that intentions should not be captured with multiple-item scales. In the present case, we were persuaded by his arguments to use single-item measures for the intention constructs.

Intentions-as-expectations (IE) were assessed using the following statement: "I will have lunch at the restaurant during the coming month" (1 = Very unlikely, 10 = Very likely). Similar items, with an emphasis on probability/likelihood, have been used by Boulding et al (1993), Brady and Robertson (2001), Brady et al (2002), Cronin et al (2000), Gotlieb et al (1994), Krishnan and Smith (1998), LaBarbera and Mazursky (1983), Patterson et al (1997), Shim et al (2001), and Zeithaml et al (1996). Intentions-as-plans (IP) were assessed with the response to this statement: "I will choose to have lunch at the restaurant during the coming month" (1 = Do not agree at all, 10 =
Agree completely). Intention items of this type, explicitly stressing "choose", appear in Ajzen (1971) and Taylor and Baker (1994). As indicated in the theoretical section on intentions-as-plans, however, other authors prefer items in terms of "will try to" (Ajzen and Madden, 1986), "will make an effort to" (Madden et al., 1992), "plan to" (Bagozzi and Yi, 1989; Bentler and Speckhart, 1979; Morwitz et al., 1993), "intend to" (Ajzen and Madden, 1986; Bagozzi and Yi, 1989; Mittal et al., 1998; Netemeyer et al., 1991; Terry and O'Leary JE, 1995), and "intend to try" (Bagozzi and Warshaw, 1990). Yet to date there is little empirical evidence about the potential for differences in the meaning of such items (except that some authors, who use multi-item scales in which several of these aspects are included, show that they are internally consistent in terms of high alphas). Finally, intentions-as-wants (IW) were measured with this item: "I want to have lunch at the restaurant during the coming month" (1 = Do not agree at all, 10 = Agree completely). Intention items with a specific "want-content" have been used by Fishbein and Stasson (1990) and Norman and Smith (1995). Questionnaire items based on "want" also appear in Bagozzi and Edwards (1998) and Perugini and Bagozzi (2001).

ANALYSIS AND RESULTS

Before we move to the main analysis, the assessment of the strength of the satisfaction-intention link for each of the three intentions constructs, it should be observed that we have assumed that the three intentions constructs represent three different ways for the
individual to connect himself/herself with the future. At the same time, given that all of them are loaded with some level of sense of ownership (but not to the same extent), we expect them to be interrelated. That this is the case can be seen from an examination of the zero-order correlations between them; \( r = .89 \) for the IE-IP link, \( r = .70 \) for the IE-IW link, and \( r = .81 \) for the IP-IW link (\( p < .01 \) in each case). Thus, they share a significant amount of variance. On the other hand, however, they did not reach the same level in terms of absolute values. When the intention means were compared with each other, it could be seen that IE (\( M = 7.21 \)) was higher than IP (\( M = 6.80 \)), and that IP was higher than IW (\( M = 6.14 \)). Indeed, all mean differences turned out to be significant (\( p < .01 \) in each case). This indicates, we believe, that the three constructs are tapping different aspects of the customer's connection to his/her future acts.

We assessed the strength of the satisfaction-intention link for each of the three intention variables with correlation analysis. As already noted, two satisfaction measures and one traditional attitude measure were used to capture the customers' evaluations. This means that it was possible to assess the evaluation-intention link with three evaluation variables and three intention variables. In total, then, nine bivariate correlation analyses were performed. The outcome is presented in Table 1.
Table 1

Zero-Order Correlations between the Evaluations and the Intention Variables

<table>
<thead>
<tr>
<th>Satisfaction (object-oriented)</th>
<th>Satisfaction (act-oriented)</th>
<th>Attitude (object-oriented)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentions-as-expectations (IE)</td>
<td>0.392</td>
<td>0.443</td>
</tr>
<tr>
<td>Intentions-as-plans (IP)</td>
<td>0.466</td>
<td>0.501</td>
</tr>
<tr>
<td>Intentions-as-wants (IW)</td>
<td>0.598</td>
<td>0.621</td>
</tr>
</tbody>
</table>

a: all correlation coefficient are significant ($p < .001$)

Table 1

Zero-Order Correlations between the Evaluations and the Intention Variables (a)

Table 1 shows - as predicted - that the satisfaction-intention correlations are increasing in strength as we move from IE to IP and then further on to IW. This pattern is also consistent with Söderlund (2002) and Söderlund (2003) and with previous studies in which the potential for differences in correlation strength was examined regarding attitudes (Fishbein and Stasson, 1990; Netemeyer and Burton 1990; Norman and Smith, 1995; Sheppard et al, 1988). It can also be seen in Table 1 that a similar pattern was obtained for the traditional attitude variable, and this adds some support to our belief that both satisfaction and attitude are evaluative variables.
The data in Table 1 also allow a comparison between object-oriented and act-oriented measures; in our case, the highest correlations with intentions were obtained with respect to the act-oriented satisfaction measure. This part of the pattern illustrates that it may indeed be worthwhile to pay attention to the traditional correspondence elements. That is to say, satisfaction with an act (having lunch at the restaurant) is doing a better job in predicting intentions to carry out the act again than satisfaction with the restaurant per se.

DISCUSSION

Summary of Main Findings

Previous research shows that different intention constructs covary unequally strong with attitudes and overt behavior (Fishbein and Stasson, 1990; Norman and Smith, 1995; Sheppard et al, 1988; Warshaw and Davis, 1985), and we can now add that satisfaction (in our view, one particular evaluation variable) is influencing different intention constructs with different degrees of strength. We assumed that the strongest association between satisfaction and intentions would be at hand when the intention is of the intentions-as-wants (IW) type rather than of the intentions-as-expectations (IE) and intentions-as-plans (IP) types. The data in this study suggest that this is the case for two common ways of conceptualizing satisfaction (i.e., an act-oriented way and an object-oriented way). The data also suggest a similar pattern when a traditional attitude variable is used for predicting intentions.
Limitations and Suggestions for Further Research

Given that entities in the attitude-intention-behavior chain must be subject to a high level of correspondence in order to correlate strongly, that sense of ownership is a correspondence element, and that sense of ownership is not equally strong for satisfaction and the three intentions constructs, we are not surprised by the patterns obtained in this study. One obvious limitation, however, is that we (the researchers) allocated the entities to various positions on a sense of ownership continuum. Thus, the extent to which satisfaction and the intention constructs actually differ - in the minds of the respondents - was not assessed empirically. Clearly, an important task for future research is to do better than this. One way is to develop questionnaire items for assessing respondents' judgments of intentions (and satisfaction) in terms of the three determinants of sense of ownership (control of the object, intimate knowledge of the object, and self-investment in the object); this will allow for the use of sense of ownership as a moderating variable.

Future research must also examine other characteristics of the entities (e.g., degree of formation, volition, and accessibility) than sense of ownership, since such characteristics may explain why the correlations are not equally strong. Moreover, these characteristics are likely to be interrelated in cause-and-effect terms, and future research needs to untangle this causal web before the final word is said about why the strength in satisfaction-intentions associations are
different for different intention constructs.

Another limitation is that our approach allows us to say little about how the intentions constructs are related to each other in conceptual terms. Wanting a future act, for example, may influence the planning of the act (an assumption made in Perugia and Bagozzi, 2001), and planning may affect the perceived likelihood of the act. It is also possible, particularly from a consistency theory point of view, that one's expectations regarding the likelihood that an act takes place may affect planning activities and wants. This calls for a process approach to studying the formation of intentions. Above all, since our results suggest that all forms of intentions should not be considered the same, future research ought to pull the intention construct apart and develop typologies that include more intention constructs than those in focus in this paper. Consider, for example, propositions linking the individual with his/her future of the following type: "I have already decided to do X", "I must do X", "I need to do X", and "I will consider doing X" (this is an intention measure that is sometimes used in commercial studies); how are they positioned vis-a-vis the three constructs used in this paper?

Managerial Implications

One main implication of this study is that the investigator who is examining the link between satisfaction and intention should select the intention measure with care, since the link's strength appears to be dependent on how intentions are measured. And the link's
strength, in turn, has important implications for decision making. For example, a weak correlation between a satisfaction measure and an intention indicator may be interpreted as a weak causal link. The logical decision in this case, given that customer loyalty is an important objective (and given that intention is equated with loyalty), would be to abandon activities designed to enhance customer satisfaction.

In fact, in order to avoid dependency on one single indicator given the present state of knowledge about intentions, we believe that a multi-intention construct approach is more viable. The main advantage, particularly for marketers who are interested in customer loyalty, is that it offers a more detailed picture of the customer's view of his/her future. That is to say, differences in levels between different intentions in the mind of a customer (or in customer segments) may provide important information. Some customers, for example, may have strong wants but low behavioral expectations, whereas other customers have strong expectations but weak wants. And segments defined in those terms are likely to call for different activities in order to create stronger intentions.

Furthermore, if a single intention construct is preferred, it may appear as if intentions-as-expectations are superior - since previous research suggests that they predict behavior better than intentions-as-plans (cf. Sheppard et al, 1988). After all, it is the customer's behavior (not attitudes or intentions) that produces revenues and costs. Marketers, however, must ask themselves which
behavior is most desirable: is it behavior resulting from intentions with a low sense of ownership, or behavior reflecting intentions with a high sense of ownership? This distinction may perhaps be insignificant in the short run, since both types of behavior produce outcomes in terms of revenues and costs. But in the long run, the case may be different. If marketers want highly loyal or strongly committed customers over time, intentions associated with a high sense of ownership appear to be a particularly useful marketing target. The main reason is that sense of ownership is assumed to go hand in hand with customer variables such as motivation and positive affect (cf. Pierce et al, 1991). It is also likely that target levels formulated in terms of different intention constructs produce different levels of challenge (and thus motivation) for employees. More specifically, it seems to be more inspiring to work for a firm that strives for a high level of wants ("Our target is that our customers should want to come back!") compared to a firm striving for a high level of expectations ("Our target is that our customers should expect to come back..."). The marketer who cares for strong loyalty and commitment in the long run, then, may be advised to pay more attention to IW than IE and IP.
REFERENCES


Measuring consideration sets through recall or recognition: a comparative study

Jens Nordfält, Hanna Hjalmarsen, Niclas Öhman and Claes-Robert Julander

Abstract
Marketing researchers have studied consideration sets for a long time and many different operationalizations of this concept have been used. This empirical study, with 670 households, compares two widely used operationalizations, recognition-based and recall-based measures of consideration sets. The results indicate several differences between the measures. The recognition-based measure produces larger sets than the recall-based measure. However, some strong brands are found to be included more often with the recall-based measure. Further, the recognition-based measure generates increased price sensitivity as well as reduced loyalty as compared to a recall-based measure.
1. Introduction

The consideration set concept (e.g., Andrews and Srinivasan, 1995; Hauser and Wernerfelt, 1990; Howard and Sheth, 1969; Kardes et al., 1993; Roberts, 1989; Roberts and Lattin (1997) and Roberts (1989)) has in previous research been operationalized as memory-based (e.g., free recall, Desai and Hoyer, 2000; Nedungadi et al., 2001), recognition-based (e.g., checklists, Nowlis and Simonson, 2000; Neelamegham and Jain, 1999), or as actual purchases revealed through panel or scanner data (Abrahamson et al., 2000; Andrews and Srinivasan, 1995). The self-report measures (recall and recognition) are of special interest since they generate the brands actually considered, not only the brands that are chosen. In this study we will compare consideration sets measured with recall and recognition.

It is seldom explicitly recognized that these two (self-report) measures may generate different results in terms of size of the consideration set or the inclusion probabilities for the brands in the product group. Furthermore, if such differences are at hand, the explanatory variables may also vary between the two ways of measuring the consideration set (such as how product involvement affects the set size). In addition, the mere use of one method rather than the other may cause effects in the consumer's mind, leading to effects on the levels of other variables often studied in consideration set studies (for example price sensitivity). The structure or the pattern of results may thus be affected. If this is the case, it is
imperative for the researcher to know about the possible consequences of the choice of measurement model. Memory research, (cf. Anderson, 1995) as well as advertising literature (Du Plessis, 1994; Bagozzi and Silk, 1983), has shown that these two types of measures yield different results. Furthermore, studies on memory-based consideration sets have found various factors to inhibit recall of some brands (Alba and Chattopadhyay (1985a); Alba and Chattopadhyay (1985b) and Alba and Chattopadhyay (1986), 1986), and yet other factors to facilitate inclusion of other brands (Desai and Hoyer, 2000; Kardes et al., 1993; Nedungadi, 1990; Nedungadi et al., 2001; Posavic et al (2003) and Posavic et al (2001), 2003).

Despite this, no study has looked at all the inhibiting effects at once, or in a real world setting. Therefore, it is both from an academic and a practical point of view important to know to what extent different operationalizations of the same concept generate similar results. If results differ, comparisons of studies using different operationalizations must be made with caution, since results may be measurement dependent. The purpose of this paper is to compare these two ways of measuring consideration sets. We study differences occurring in terms of set size and brands included in the set, and also test to what extent recognition- and memory-based consideration set measures generate differences in other variables or relationships between variables which are often included in consideration set studies. Three product categories are examined: coffee, margarine, and toilet tissue.
We see two reasons why it is necessary to approach this question. The first is that earlier findings indicating differences between the measures have all been experiments (e.g., Nedungadi, 1990). Further, many studies have used one or the other measurement without reflecting about its limitations (Lynch and Srull, 1982). The second reason is that it is sometimes declared that recall and recognition are two entirely different processes (Rossiter and Percy, 1993; Krugman, 1977). However, this does not imply that only one of these processes is at hand at the time. As Lynch and Srull (1982) point out; many judgments are mixed, such as in a store. Also it does not imply that the type of process, recall vs. recognition, is given by the context. For example, individual differences such as involvement and knowledge (Alba and Hutchinson, 1987), or degree of planning (Kollat and Willet, 1967), as well as temporary aspects (Park et al., 1989), or decision rules (Bettman et al., 1998), have proven to affect the use of recalling from memory as compared to recognizing external information in the decision situation.

2. Theory and hypotheses

Research has shown that different consumers choose products from the same category in different ways (Lynch and Srull, 1982; Hoyer, 1984). For example, in a FMCG setting: One customer might choose what brand to buy in front of a fully stocked shelf without any intention of going to another store in case the favorite brand happens to be missing (recognition-based approach). A second customer gets
instructions from someone else, not in the store, on what brand to buy (recall-based approach). A third customer gives the shelf a hurried glance, looking for a specific brand decided on in advance but can’t find it and grabs another (mixed approach). A fourth customer writes a detailed shopping list before entering the store and will not deviate from it (recall-based approach). A fifth customer shops in an on-line store (approach depends partly on the web design of the store as well as on the consumer’s decision strategy).

Hence, a one sided, category-adapted approach may not be the best way to operationalize consideration sets for all consumers within a given category. Instead, we believe that both measures have their pros, cons and biases, and that we should analyze results from different measures with their respective pros, cons and biases in mind.

Our hypotheses build on two general differences between the two methods. Firstly, the methods differ in their reliance on the respondent’s memory for the formulation of the consideration set and secondly, they differ in their propensity to trigger or cue the respondent to compare the brands in the studied product groups.

That is; (1) in the recall based measure of consideration sets, the task for the respondent is two-fold: s/he has to try to remember the brands in the product group and then judge which of those remembered brands that should be considered (Watkins and Gardiner, 1979). In the recognition task the consumer only has to
read through the list of brands and evaluate which of the brands that should be in the consideration set. Obviously the task of generating a consideration set is much more difficult for the consumer facing the recall based measure compared to the recognition based measure.

And; (2) in the recognition based measure, the respondent is presented with all the brands in the product group. The fact that the respondent can see all the brands simultaneously could trigger other decision heuristics than in the recall case (Lynch and Srull, 1982). For instance, comparison processes between brands leading to increased price sensitivity could be expected. Further, when respondents’ do not have to allocate cognitive capacity towards searching through memory for relevant brands to retrieve, more capacity could be used to compare the brands. Hence, there are two factors advocating increased comparison when the recognition measure is used. These two general ideas lie behind the six hypotheses, so that hypotheses 1–5 build on the first idea, and hypothesis 6 builds on the second.

2.1. Consideration set size

Regarding consideration set size, several theories point in the same direction, namely that a recognition measure should result in a larger set than a recall measure. One branch of research related to this issue (Rossiter and Percy, 1993; Krugman, 1977) states that different types of memory are used for recall and recognition. Recall is more of a verbal phenomenon involving an ‘inner speech’. Recognition, on the other hand, is a visual phenomenon. In addition, numerous studies
have shown that visual memory is extremely strong in comparison to verbal memory (see for example Bower, 1970; Freides, 1974; Shepard, 1967; Tulving, 1983; Standing, 1973). A conclusion from this would be that recognition would make the consumer aware of a greater number of brands than recall. Further, Du Plessis (1994) makes an extensive overview of earlier research on recognition and recall for advertisements. He concludes that recognition is always higher than recall. Hence, the research reported so far, views recall and recognition as two rather different phenomena, where the recognition measure produces a larger awareness set than recall.

Furthermore, if the creation of a consideration set is based on unaided recall, it is probable that the consumer not will be aware of all the brands in the market while composing his/her consideration set. According to associative network models of memory, the information a consumer has stored about a brand, or product category, is arranged in a network of nodes (Srull, 1992). Priming of nodes in an associative network will influence what information is retrieved, and in the case of consideration set formation, which brands could be included (Nedungadi, 1990). Therefore, first of all we would usually expect a smaller number of brands to be stored in a consumer's memory, than the total number of brands available in the market (Biehal and Chakravarti, 1986). Secondly, apart from not knowing all brands in the market, retrieval would be yet another limiting factor in the recall situation. When about to recall the brands, several retrieval restrictions such as; weak category-brand associations (Posavac et al., 2001), part-category cues (Alba and
Chattopadhyay, 1985a), low interest in the category (Posavac et al., 2003), a focus on a specific occasion (Brown and Wildt, 1992), and inadequate free capacity in short-term memory, may limit the number of known brands that are retrieved.

Hence, verbal and visual memories are believed to be two distinct types of memory with only some correlation (even though Du Plessis, 1994, claims no correlation, Tulving, 1983, assumes there is). The visual memory is believed to be stronger than the verbal memory. The use of visual memory which is stronger than verbal memory, plus the retrieval cues that the pictures in a recognition measure provide, lead us to expect that the number of brands that the respondents are aware of will be greater in a test of recognition than in a test of recall.

If the consumer is aware of more brands, more brands can also be considered. The logic is that consumers using recall may forget (not retrieve) preferred alternatives that could have been remembered and included in the consideration set if cues (or recognition) were used. Therefore we believe that the consideration sets based on recognition (visual memory) will be larger than consideration sets based on unaided recall (verbal memory).

H1. The consideration set size will be larger with a recognition-based measure than with a recall-based measure.
2.2. Effects of strong brands

Given that consideration sets based on recognition are larger than consideration sets based on recall, will all brands within a product category be considered more often when using recognition than recall as a measure? The investigation of recall and recognition studies made by Du Plessis (1994) concludes that recognition is always higher than recall.

Besides the memory research described above, studies on consideration sets have shown the following. In a situation where a consumer is to compose a consideration set for a product category without any memory aid, it is possible that s/he will pick brands that are top-of-mind (Kardes et al., 1993) or have strong category-brand associations (Posavac et al., 2001). (For the sake of simplicity we choose to call these brands, strong brands.) It has been shown that memory cues can influence which brands are included in a memory-based consideration set (Nedungadi, 1990). If the product category is provided as a memory cue, a spreading activation in the associative network may prime the brands with strong category-brand associations. Hence, brands with strong category-brand associations would have a larger inclusion probability than brands with weaker category-brand associations. In an experiment by Posavac et al. (2001), it was shown that a simple categorization task, designed to strengthen the association between some brands and their super-ordinate categories, increased the probability for the brand to enter the consideration set. Thus,
salience in the consumers’ minds may not only come from personal experience but from other sources, such as marketing communication (Nedungadi, 1990). Therefore, when a consideration set is composed from memory, the reason for inclusion in the consideration set may not only be the respondent’s own experience and preference but also other sources, such as marketing communication, that have built a strong brand.

On the other hand, in the recognition situation, when all brands are displayed, other brands may be winners. Favored but weak brands may have been forgotten when there was no memory aid. Seeing all available brands in a category, those brands will be recognized, and therefore their probabilities for inclusion in the consideration set increases in a recognition situation. Following this logic we believe that brands with strong category-brand associations have a greater inclusion probability in consideration sets in recall situations versus recognition situations.

H2. Strong brands will be included more often in a consideration set with a recall-based measure than with a recognition-based measure.

2.3. Cognitive effort

As mentioned above it can be expected that it is more difficult to form a consideration set from memory than from a list of brands. This difference may also impact, besides being a basis for our first hypotheses, the evaluation of brands as well as the relationship
between the consideration set and other variables for the two measurement methods. This difference in difficulty of forming the consideration set is thus a basis for other hypotheses in the study. Thus it is important to test whether it really exists.

H3. The cognitive effort will be greater when composing a recall-based than a recognition-based consideration set.

2.4. Evaluation of brands

If memory retrieval were perfect, we would assume the most preferred brands to enter the consideration set at all times. Given retrieval problems, recognition- versus recall-based consideration sets will be more likely to contain the most favored brands (Nedungadi, 1990). With a recognition-based measure that makes all brands accessible, the respondent is free to choose the brands s/he really likes. With a memory-based measure, there is a risk that favored brands are not retrieved and that other brands are retrieved due to other reasons than a high evaluation, e.g. because of strong category-brand associations, as a consequence of marketing activities (see Posavac et al., 2001; Bettman et al., 1998; Hutchinson et al., 1994).

Since recall, as mentioned above, can be expected to entail a greater effort from the respondent, this by itself may also create a lower evaluation of brands measured in recall situations compared to a recognition test. In recall, the respondent is required to pick out
brands from long-term memory and in short-term memory evaluate whether these brand can be considered, whereas only the second step is required with a recognition-based measure (Watkins and Gardiner, 1979). Frustration may also be felt when the respondent recognizes that s/he fails to remember brands. This experience may have an impact on the evaluations of the brands. If this holds we also expect that the easier the respondent finds the construction of the consideration set, the higher s/he will evaluate the brands in the consideration set. This leads to our hypotheses four a and b.

H4a. Brands will be more positively evaluated in a consideration set composed with a recognition-based measure than on a recall-based measure.

H4b. The ease of the construction of the consideration set is positively correlated with the size of the consideration set.

2.5. Involvement

Involvement has been found to be associated with consideration set size. Jarvis and Wilcox (1973) found that a high level of ego-involvement lead to a smaller set, whereas Belonax and Mittelstadt (1978) found that the number of choice criteria used, also diminished set size. Van Trijp et al. (1996) found low involvement to be positively correlated with brand switching, which implies a larger consideration set. Hence, we expect a negative correlation between level of involvement and consideration set size. Thus, it seems that
highly involved consumers are more brand-loyal, because they have taken the time to carefully evaluate brands and settled on one or a few brands that they like the best.

However, if using a memory-based consideration set measure, respondents may name a small number of brands for two reasons. Either because: (a) their level of involvement is high, causing them to only accept a small number of brands (i.e. the same logic as in the previous section); or (b) their level of involvement is low, causing them to only remember a small number of brands (Posavac et al., 2003). That is, those two reasons (a and b) counteract each other. For example, a highly involved consumer would remember many brands but only accept a small number of brands. We find some support for this reasoning in the Posavac et al. (2003) study, where it was found that increased decision importance made subjects generate more alternatives. This was valid only in recall, but not in recognition. Thus, with a memory-based measure, the relation between level of involvement and consideration set size will for this reason not occur.

H5. Involvement is negatively correlated with the consideration set size with the recognition-based measure, but not with the memory-based measure.

2.6. Loyalty and price sensitivity

There is also reason to believe that survey responses following the two consideration set measures will differ, mainly due to differences
in how they trigger comparisons between the brands in the product group. An associative network of memory need not be restricted to product category structures, but could also be connected to appropriate purchase behaviors. A possible explanation for differences in subsequent responses between respondents exposed to a memory-based versus a recognition-based consideration set measure is that the task of recalling versus recognizing one's consideration set activates different nodes, due to different framings or contexts of the tasks (see Bettman et al., 1998). Perhaps those who see an array of brands subconsciously start a price comparison process similar to what could happen in the store, while those who come up with brands from memory justify their choice by expressing more loyalty and less price sensitivity. Indeed, the design of recognition tests triggers comparisons between brands, which is not the case for recall tests.

H6. In a recognition-based consideration set composition, respondents will be less loyal and be more price sensitive than when composing a recall-based consideration set.

3. Research method

Respondents were selected from the customer base of a large grocery retailer. We had access to their purchases and could thus select households that were active in the product groups we were interested in. 1376 respondents were sampled and they received a mail questionnaire. The number of responses was 670 (49%).
In the analysis, recognition- and memory-based consideration set measures, brand evaluations, and composite measures of; cognitive effort, loyalty, involvement and price sensitivity for each of the three product categories; coffee, margarine, and toilet tissue were used. All items (except the consideration set measures) were measured on 10-point Likert-type scales. The product categories where chosen since they have often been used in consideration set studies. Further, we believed the three categories to differ in level of involvement, with coffee at the higher end and toilet tissue at the lower.

Consideration set size: Half of the respondents received a questionnaire where they were asked to write down which brands within the three product categories they could consider buying (the memory-based measure). The number of brands considered is regarded as the consideration set size. The other half of the respondents received a questionnaire with a picture of the package of all brands in the respective product categories. From these pictures, they were asked to indicate which brands they could consider buying (the recognition-based measure; Roberts and Lattin, 1991). Here, the number of checked brands is regarded as the consideration set size. Interestingly, the response rate for surveys with the recognition-based measure was 54%, while for the memory-based measure it was only 43%. A $\chi^2$-test shows that the difference is significant ($\chi^2[1,N=670]=8.62, p=0.05$). This could be an indication that it was perceived as easier to construct a consideration set based on recognition.
Cognitive effort: Three questions measured this concept. They were placed immediately after the consideration set questions and measured whether the respondent found it easy to state their consideration set, whether s/he had to think a lot to remember, and whether s/he quickly could retrieve the brands from memory. These questions were summed and formed an index of cognitive effort. Cronbach’s alpha was 0.95 (coffee), 0.94 (margarine) and 0.96 (toilet tissue).

Brand evaluation: When the respondents had written down or checked the brands they considered, they were asked to evaluate each considered brand on a 10-point scale (“How much do you like the brand”; 0=not at all, 10=very much).

Loyalty: The loyalty measure was composed of the following five items (adapted from van Trijp et al., 1996): (1) I like to switch between different brands (reversed); (2) I switch between brands in order not to get bored (reversed); (3) If the brand I intended to buy is out of stock, I postpone the purchase; (4) I always choose the same brand; (5) When buying coffee/margarine/toilet tissue, I know what brand to get before I enter the store. Cronbach’s alpha was 0.77 (coffee), 0.77 (margarine), and 0.71 (toilet tissue).

Price sensitivity: Price sensitivity was measured by the following three items: (1) I usually choose the cheapest brand; (2) I usually choose a brand that is on sale; (3) I often take advantage of special
offers for coffee/margarine/toilet tissue. Cronbach's alpha was 0.74 (coffee), 0.76 (margarine), and 0.81 (toilet tissue).

Involvement: The five items below (adapted from van Trijp et al., 1996) measured involvement: (1) When I buy coffee/margarine/toilet tissue, I choose the brand carefully. (2) Compared with other product categories, the choice of coffee/margarine/toilet tissue is important to me; (3) I have good knowledge of coffee/margarine/toilet tissue; (4) The difference between various brands of coffee/margarine/toilet tissue is large. (5) I spend more money than others on coffee/margarine/toilet tissue. Cronbach's alpha was 0.70 (coffee), 0.69 (margarine), and 0.73 (toilet tissue).

4. Results

4.1. Set size

Our first hypothesis was that the recognition-based measure would yield a larger consideration set than the recall-based measure.

We used an independent samples t-test for equality of means to test this. In support of hypothesis 1, more brands were, on average, included in the consideration set when respondents used recognition (Table 1). For the coffee and margarine categories the recognition measure increased the consideration set size with approximately 15% in comparison to the recall measure. The corresponding figure for toilette tissue is around 50 percent, which is due to the fact that the
respondents only mentioned a little more than 1.5 brands in the recall situation for this product group, while the results for recognition is on the same level as the two other product groups. This supports the hypothesis that recognition based measures of consideration set size will generate larger sets than recall measures.

<table>
<thead>
<tr>
<th></th>
<th>Recognition</th>
<th>Recall</th>
<th>p  &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>2.95</td>
<td>2.56</td>
<td>0.01</td>
</tr>
<tr>
<td>Butter</td>
<td>2.31</td>
<td>2.04</td>
<td>0.01</td>
</tr>
<tr>
<td>Toilette tissue</td>
<td>2.61</td>
<td>1.68</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Table 1. Average consideration set size for recognition and recall (H1)

4.2. Effects of strong brands
The second hypothesis concerns how the content of consideration sets differ between the two measurement methods; i.e., is the proportion mentioning the various brands always higher for recognition based measures than for unaided recall measures and are the inclusion probabilities significantly different between the two methods?

For each brand it was tested to what proportion it was included in the consideration sets and the proportions were compared between the two groups (recall and recognition). As can be seen in Table 2, of all 39 brands, 32 (25 significantly at p<0.10) were included more often in a recognition-based set and 7 (3 significantly at p<0.10) in a
recall-based set. For coffee, these shares, or inclusion probabilities per brand, differed significantly in 12 cases out of 16 possible. For margarine this figure was 7 out of 12, and for toilette tissue 9 out of 11 inclusion probabilities differed significantly. Clearly, the two methods give differences also in this respect.

Table 2. Differences in inclusion probabilities for individual brands between recognition and recall (H2)

<table>
<thead>
<tr>
<th></th>
<th>Recognition $p &lt; 0.05$</th>
<th>Recognition $p &lt; 0.10$</th>
<th>Recognition Total</th>
<th>Recall $p &lt; 0.05$</th>
<th>Recall $p &lt; 0.10$</th>
<th>Recall Total</th>
<th>Total no. of brands in cat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Margarine</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Toilette tissue</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Sum</td>
<td>23</td>
<td>25</td>
<td>32</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>39</td>
</tr>
</tbody>
</table>

Further, it should be noted that contrary to what has been shown in studies on retrieval (e.g., Nedungadi 1990), the inclusion probabilities are higher for recall for a few brands. Two brands in the coffee category have a higher inclusion probability when recalled than when recognized (both significant at the 0.10 level). The same is found for four brands in the margarine category (one significant at the 0.10 level) and one not significant brand of toilette tissue. These brands are large brands with high share-of-voice. In the coffee category, the two brands with relatively larger shares in recall than in recognition are number one and number three in market share and the four brands that have larger shares in recall for margarine all belong to the first four in terms of market share. As postulated by Posavac et al.
large brands can get higher scores in recall than in recognition. The second hypothesis is thus supported.

4.3. Cognitive effort

Hypothesis 3 concerns to what extent the degree of difficulty to construct the consideration set differs between recall and recognition. In Table 3 the average scores on how difficult it was to construct the consideration set for the respective groups and products is reported. A test of the differences in perceived cognitive effort between recall and recognition reveals that the cognitive effort is perceived to be significantly higher for recall than for recognition, which confirms hypothesis 3.

<table>
<thead>
<tr>
<th>Product Group</th>
<th>Recall</th>
<th>Recognition</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>27</td>
<td>28</td>
<td>0.01</td>
</tr>
<tr>
<td>Magazine</td>
<td>28</td>
<td>29</td>
<td>0.01</td>
</tr>
<tr>
<td>Toilet tissue</td>
<td>24</td>
<td>27</td>
<td>0.01</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>85</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Table 3. Cognitive effort for recall and recognition for the three product groups (H3)

4.4. Evaluation of brands

The fourth hypothesis proposed that the evaluation of the products among those who were subject to a recognition test would be higher than among those who were subject to a recall measure. The average evaluation for each brand was compared and tested for significance for those cases where more than five respondents had given an
evaluation. For coffee ten of the brands had five or more evaluations. For every brand the evaluation was higher in the recognition group. Five of these comparisons were significant (p<=0.05). In the margarine group, eight brands had five or more evaluations and of these six evaluations were higher for recognition while two were higher for unaided recall. Of the six in the recognition group, two were significantly higher. For toilette tissue recall and recognition did not show a systematic difference and there were no significant differences.

Summing the evaluations within the three product groups, we find that for coffee and margarine, average evaluation of considered brands was significantly higher if using a recognition-based measure (coffee: M=8.65 vs. 8.32, p=0.00; margarine: M=8.95 vs. 8.54, p=0.00). For toilet tissue, the results point in the other direction. H4a is partly supported for the two food related products, but not for the non-food product. The difference could possibly be explained by the fact that very few brands were mentioned in the recall situation for toilette tissue.

Regarding H4b, higher perceived difficulty of evaluating the brands in the consideration set leads to lower evaluation of the brands (all correlations are significant at the 0.05 level—Table 4). Hypothesis 4b is thus substantiated. A univariate analysis with evaluation of the brands as dependent variable and group membership and task difficulty as independent variables substantiates these results.
Table 4. Relationships between cognitive effort and evaluations of included brands (H4b)

<table>
<thead>
<tr>
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<th>Correlation coefficients</th>
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<tr>
<td></td>
<td>Recall</td>
</tr>
<tr>
<td>Coffee</td>
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</tr>
<tr>
<td>Margarine</td>
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4.5. Involvement
In the fifth hypothesis, it was stated that involvement should be negatively related to consideration set size, but only with the recognition-based measure, not with the memory-based measure. The involvement index has a weak, but significant negative correlation with the recognition-based measure for coffee (r=0.26, p=0.01) and toilet tissue (r=-0.25, p=0.01), but not for margarine. For the memory-based measure, there was no significant correlation with involvement. These results substantiate hypothesis five.

4.6. Loyalty and price sensitivity
Our sixth hypothesis stated that a recognition-based measure would bring on lower loyalty and higher price sensitivity compared to the memory-based measure. For coffee, the respondents who were subject to the recognition-based measure were significantly more price sensitive (M=4.67 vs. 4.30, p=0.07) and less loyal (M=6.75 vs. 7.17, p=0.05) than those who received the memory-based measure. Since the distribution of the two alternative consideration set
measures across the sample was random, there is no other reason for them to differ. Thus, the different responses are likely to be caused by the measures per se. For the other two categories, there were no differences or non-significant differences in the same direction. H6 is thus partially supported.

5. Discussion
Our results from comparing recognition-based and recall-based consideration set measures makes us want to emphasize a claim by Lynch and Srull (1982) that marketing theory has to learn more from memory-based situations. Regarding theoretical implications one finding was that a brand's inclusion probability was greater with the recognition-based measure, but not for all brands. Some, large, brands had a higher inclusion probability in recall-based consideration sets. This is an extension of previous findings. For instance, the results from this study extends the Nedungadi (1990) work in that he claimed that accessibility from memory was tied to preference, why the most preferred alternatives never had to worry about not being included in the consideration set. Our results indicate that this is not the case. If Nedungadi's reasoning were true, the most preferred brands would be included in the consideration set independent of measure, which was not the case in this study. Rather, the recall-based consideration set seemed to be a construction of the most preferred of the brands that came to mind.

Further, Rossiter and Percy's (1993) five communication effects show that after brand awareness, the next step is brand attitude. We
believe that the results discussed in the previous paragraph, indicates that this is not necessarily so. It may be that the step after brand awareness is to increase the salience even more. A brand may be included in a recall-based consideration set if it is recalled and sufficiently liked. If it, on the other hand, is a liked brand that does not get recalled, it cannot be included. The part-category cueing experiments by Alba and Chattopadhyay (1985a) indicate that if the brand is salient enough it will interfere with the recalling of other brands. When the consumer is about to pick one of the ten or twenty items s/he is about to purchase on a trip to a grocery store, being recalled first and then interfere with the recall of other brands may be exactly what it takes to be considered and chosen.

In addition to the theoretical implications, several important practical implications can be derived from our results. One is that, still based on the results described above, for a product there seems to be two ways to gain entrance into a consideration set. One is to be preferred, and the other is to be recalled. Which of these ways is dominant depends on whether the consumer mainly uses memory or external stimuli at the time of decision. According to Lynch and Srull (1982) memory based or mixed judgments (such as in a store) are prevalent. For example, Hoyer (1984) found that 95% of the consumers who bought detergents did not compare any brands at all before picking their chosen brand from the store shelf. So, it seems to be a strategic decision for the product manager if s/he sees it as the number-one concern to increase the brand’s preferences or ability to be recalled. To be able to make this decision s/he would have to know the target
group's; expertise (Alba and Hutchinson, 1987), choice rules (Bettman et al., 1998), degree of planning (Kollat and Willet, 1967), as well as temporary aspects (Park et al., 1989), and the most common decision context (Lynch and Srull, 1982).

Furthermore, the strategic decision made by the product manager will influence how s/he should go about with the rest of the marketing expenditures. For instance, s/he should let this decision influence the type of stores where the brand is to be distributed. If the product manager decides that s/he wants her/his brand to enter the consideration set mainly due to preference, a store that is visited by customers using external stimuli for their choices should be chosen. The use of external stimuli increases with less time pressure and less familiarity (Park et al., 1989). If the product manager wants the brand to gain entrance to the consideration set mainly through being easily retrieved, the brand should emphasize outlets with fewer possibilities for comparison.

The marketer’s choice of target group should also be influenced. In this case, the implications of the findings from this study are quite unintuitive, why we find them especially interesting. Customers that use external stimuli in their decision processes have been found to be deal prone customers and variety seekers. It has also been found that consumers that do unplanned (recognition-based) purchases have strong preferences for the brands they buy (Kollat and Willet, 1967). On the other hand, customers that are more loyal, tend to rely more on memory (see hypothesis two). This means that if the brand
manager focuses on relationship marketing and loyalty, s/he should not see preference as the number-one concern but rather how easily his/her brand is retrieved from memory.

Another practical implication regards the finding that using the recognition-based measure led to higher price sensitivity and a lower degree of loyalty. If this type of behavior were activated from substitutable brands on display on the store shelf as well, it would be in the interest of producers to display their brands together with complements rather than with competitors. Especially if the marketer is charging a premium price, there is the risk that the consumers’ increased price sensitivity could turn them away from the brand.

Finally, this study clearly shows that the results are indeed affected by the choice of method.

6. Limitations and future research
While this study tests some earlier experimental findings regarding recall versus recognition in consideration set composition in a real world setting, it could be seen as a limitation that we do not know when recall or recognition is used. Future research could take it even further and study when those differences we have found may occur. When a consumer is in a store, or on the web, or writing a purchase-list, how is this done? Hoyer (1984) argues that most people use memory while picking a brand from a store-shelf. How about when someone is making a list of brands to purchase, is s/he then standing by the fridge with the fridge door open? If this is so,
and Hoyer's (1984) results can be generalized, perhaps the situation is the opposite of the intuitive, perhaps the decision made in the store is more recall-based, while the shopping-list decision is recognition based. Obviously the findings of antecedents and consequences of recall- vs. recognition-based measures needs to be extended with studies on when the two are at play.

Future research should look into possible explanations to why some brands are considered more often when recalled and others when recognized. Wells (2000) found that ads were more easily recalled if the message was meaningful. Our study revealed that larger brands tend to have an advantage when recall is used. This is an extension of earlier research (e.g. Nedungadi et al., 2001), which has assumed that weak brands lose in recall situations, while strong brands are not affected. What this study shows is that also for strong brands there is an effect, but in the opposite direction, they gain in a recall situation. Olshavsky (1994), reasons that in a recall situation, the construction of the consideration set is a bottom-up process. Memory research on bottom-up processes, have shown that memory is reconstructive, and that people tend to use existing schemas to fill in voids (Loftus et al., 1978). Perhaps consumers, when trying to answer what brands they would consider buying, answer the brands that are most easily accessed from their brand schemas. This would be the explanation we argue for here, based on findings by Posavac et al. (2001). Yet, we feel that this could be explored further. For instance, would the effects be the same for large and small brands? What about if brands are differently typical for a specific product category? Or when the
decision is situation-specific, rather than product specific?

This study covers self-reported measures for consideration sets. As stated in the introduction, a third previously used measure on consideration sets is based on scanner data. It would be interesting to compare recognition, recall and scanner data. Results of such a study would by no means provide a final answer. Scanner data does not reveal what brands have been considered and further it would probably not cover all purchases in a given product category due to the wide variety of outlets for most brands. Yet it could give further insight into response biases in self-report measures. Is the recognition measure biased and blown-up as a result of the ease to compare, or is the recall measure biased and simply a product of a reconstructed memory? Analysis of scanner data could probably yield insight in these matters.
References


Article 3 – Intentions are Plural: Towards a Multidimensional View of Intentions

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ABSTRACT

Intentions are often included in consumer behavior research, but researchers have paid little attention to a discussion in psychology and philosophy indicating that different intention constructs may exist. The findings in this study suggest that researchers should indeed pay close attention to how intentions are conceptualized and operationalized. More specifically, our analysis shows that three proposed intentions constructs (intentions-as-expectations, intentions-as-plans, and intentions-as-wants) produce a good fit with a three-factor conceptualization. Our analysis also shows that global evaluation variables (satisfaction, attitude, and delight) are not associated with the three intentions constructs with the same strength.

INTRODUCTION

One frequently employed variable in consumer research is labeled intentions. Typically, it is depicted as a final consequence in researchers’ models, but it may also be used as an intermediate
variable in attempts to explain behavior. Please notice the use of the
terminology here; it is mainly as a variable (i.e., a method-related
entity) that intentions appear in the consumer literature. The
presence of a variable is predicated on the existence of a theoretical
construct, and therefore one would expect that there are also
intentions constructs in existing literature. However, this is rarely the
case: very few consumer researchers have included a conceptual
discussion of intentions in their papers. Not even a one-sentence
definition is offered in the typical study. The lack of information on
what intentions are becomes particularly striking in the light of all
conceptual efforts devoted to antecedents to intentions (e.g.,
attitude and satisfaction).

With few exceptions, the situation is the same in fields such as
organization theory and (perhaps more surprisingly) psychology. Yet a
handful of scholars in psychology (e.g., Sheppard, Hartwick, and
Warshaw 1988; Warshaw and Davis 1985) and philosophy (e.g., Audi
1973; Kenny 1966) suggest that several different intentions constructs
may exist. And some empirical research show that measures of what
can be conceived of as different intentions constructs are not always
strongly correlated with each other. These measures also produce
different strength in associations with other variables (Fishbein and
Stasson 1990; Norman and Smith 1995; Pickering 1984; Sheppard et
al 1988; Söderlund 2002; Söderlund and Öhman 2003; Söderlund and
Öhman 2005; Warshaw and Davis 1985). Studies of this type have yet
to see wider diffusion, but they do suggest that the incautious
selection of one intention variable over another may produce
different results regarding intentions’ role as antecedents and consequences in the nomological net.

The present paper, then, is based on the assumption that consumer behavior researchers need to pay more attention to intentions. The specific purpose of the paper is to examine (1) if intentions are plural in the sense that different intention constructs exist, and (2) how the associations between evaluative constructs (such as satisfaction and attitude) and intentions are affected when intentions are operationalized according to different theoretical constructs. With respect to purpose (2), it is clear that consumer researchers often view intention as a proxy for behavior—which may suggest that the really interesting link to explore is between intentions and behavior. We do not question that the intention-behavior link is important, but we do believe that this link should not be allowed to overshadow an interest in intentions per se. To form intentions, we argue, is to establish connections between oneself and the future before the future takes place, and this is a unique human capability. Without this capability, life would be very different and something most of us would not like to experience. In fact, we believe that the use of intentions to make connections with the future is so unique that it deserves something called an intentions theory, and such a theory needs to take account of both antecedents and consequences. Yet the sad fact is that this capability has been reduced to a mere variable status (i.e., a method-related entity) in the majority of all studies of consumer behavior. It is high time, however, that the variable is supplied with theoretical constructs, and in this paper we focus on
antecedents and how they affect different types of intentions.

THEORETICAL FRAMEWORK

Intentions as propositions about future behavior

According to the tripartite intention view that we use as a framework in this paper (cf. Söderlund and Öhman 2003), an intention materializes when an individual makes a proposition that connects himself/herself with a future behavioral act. Generally, propositions of this type has the form “I—connection—future act,” and they should be conceived of as windows on the future that help people perform tasks efficiently. Consequently, we expect that intentions are formulated continuously with regard to many different acts. This is reflected in the marketing literature; propositions about the future explicitly labeled intentions by marketing scholars cover several acts in the marketplace. Search for product information, purchasing a product for the first time, repurchases, word-of-mouth, complaints, and contributing money are some examples. As already indicated, however, consumer researchers (and many scholars in other fields) do not distinguish between different types of intentions in terms of the connection between the individual and his/her behavior. This connective aspect is in the centre of our interest in this paper.
A tripartite view of intentions

We argue that three different intentions constructs can be distinguished, given the use of intentions in existing research: intentions-as-expectations, intentions-as-plans, and intentions-as-wants. The main reason why we refer to the three types of intentions as three different intention constructs, and not merely three different ways of operationalizing intent in some general sense, is that they appear to tap into distinct types of orientations towards the future.

One frequently used intention construct refers to the individual’s assessment of the probability that he or she will perform a particular behavior in the future. Typically, this is measured with questionnaire items such as “The likelihood that I would do A is...,” “The probability that I will do B is...,” “Rate the probability that you will do C,” and “How likely are you to do D?”. Consequently, behavioral expectations are sometimes labeled self-predictions (Fishbein and Stasson 1990). We refer to intention of this type as intentions-as-expectations (IE). In consumer-related research, IE seems to be the most popular of the three constructs covered by the tripartite view. The core cognitive activity for this construct, we argue, has to do with prediction in terms of the estimation of probabilities of an outcome. In our view, then, intentions-as-expectations are outcome-oriented. From a pure conceptual point of view, such propositions may not contain any assessments of why the act needs to be carried out. Moreover, they do not necessarily signal anything about what stage the individual is in when it comes to how prepared he or she is to carry out the act.
Another intention construct is closely related to the dictionary notion of intention, and it refers to the individual’s plan to carry out a particular behavior in the future. It has been argued that intentions in this sense capture motivational factors that influence behavior; “they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior” (Ajzen 1991, 181). Similarly, Bandura (1986) views intentions as “the determination to perform certain activities or to bring about a certain future state of affairs.” Moreover, intentions in this sense involve choosing or deciding to carry out the act (Conner et al 1999; Malle and Knobe 1997). In typical applications, measurement items are “I plan to...,” “I intend to...,” “Do you intend to...,” “I will choose...,” “I am going to choose...,” and “I will select....” Here, we refer to intention of this type as intentions-as-plans (IP). We argue that they tap into a preparedness-orientation, because they involve effort, determination, and choice. But intentions-as-plans do not necessarily comprise an assessments of outcomes—or assessments of why an outcome is desired.

An additional intention construct is a conceptualization in terms of wants. It has been referred to as an intention construct by Fishbein and Stasson (1990) and Norman and Smith (1995). This construct is found in several formal models of intentionality and in the folk concept of intentionality (Malle and Knobe 1997). Measures of this type of connection with the future usually consist of Likert-type statements such as “I want to...” Measures in terms of “I am willing...”
to...” are also used. In the present paper, we label them *intentions-as-wants* (IW). It can be noted that in relation to IE and IP, IW is the least frequently used intention construct in marketing-related research. Nevertheless, and given that wants serve to connect the individual with his/her future acts, we refer to them as an intentions construct in this paper. We argue that intentions-as-wants are problem-oriented in the sense that they involve perceptions of a gap between a current and a desire future state of mind. Yet these perceptions may not involve any probability estimates or assessments of action readiness. For example, impulse purchases can be seen as driven by intentions-as-wants, but for this particular act we expect that intentions-as-expectations and intentions-as-plans play only a minor role. Another situation in which we assume that intentions-as-wants dominate in the individual’s connection with the future is when s/he is engaged in wishful thinking and daydreaming about an act that may never materialize (e.g., “I really, really want to live in Buckingham Palace”). Thus, in relation to some authors who suggest that wants are an antecedent to intentions in a planning sense (cf. Bagozzi and Edwards 1988), we assume that intentions-as-wants may exist independently of other types of intentions.

Thus, a main premise in this paper is that the three types of orientations co-exist in every individual, but also that they are accessed to a different extent with regard to one specific act. From a conceptual point of view, then, statements such as “It is very likely that I will have to teach in an additional course, but I have not
prepared for my participation, and I certainly do not want to teach in this course” and “I really want a nice Mercedes, but I do not expect that I will ever own one” involve no contradictions. Taken together, existing evidence suggests that the three intention types can be conceived as three different constructs, and our aim in the present paper is to examine the issue in empirical terms.

This leads us to the following hypothesis:

\( H1: \) Intentions-as-expectations, intentions-as-plans, and intentions-as-wants represent three different theoretical constructs

**Intenons: a proper label?**

Given the three proposed intentions constructs and our argument that they appear to tap into distinct types of orientations towards the future, one may question the use of intentions as a general label. We believe that another label may indeed be more informative (e.g., “propositions about future acts” or “prospective act-orientations”), but we use the label intentions here in order to make contact with previous research. Before an alternative label is to be established, however, we believe that it is necessary to examine the relationship between a proposition explicitly phrased in terms of intention (e.g., “I intend to buy a Mercedes”) and propositions phrased in terms of intentions-as-expectations, intentions-as-plans, and intentions-as-wants in the mind of the consumer. Very little, however, is known about the extent to which people actually refer to their own cognitive activities in terms of intentions, because empirical studies
of this issue are in short supply. Yet this issue deserves attention, and we use the label intentions-as-intent to capture propositions in which the word intention is explicitly used to establish connections with the future. Given that the dictionary notion of intention (in which “plan” is usually stressed) is more closely related to intentions-as-plans as opposed to intentions-as-expectations and intentions-as-wants, the following is hypothesized:

**H2:** From the consumer’s point of view, intentions-as-intent are more closely related to intentions-as-plans compared to intentions-as-expectations and intentions-as-wants

**The three types of intentions and the nomological net**

Given that the three types of intentions represent different intentions constructs, we expect that they are affected by—and affect—other variables in their nomological net with different strength. Previous studies (e.g., Sheppard et al 1988) indicate that this is indeed the case, in the sense that self-prediction (intentions-as-expectations in our terminology) appear to predict behavior better than do intentions with a motivational component (intentions-as-plans in our terminology). Considerably less attention, however, has been devoted to the relationship between different intentions constructs and their antecedents, and this is the focus in the present paper.

Many different antecedents appear as the immediate cause of intentions in consumer behavior models, but the typical antecedent refers to a global evaluation such as satisfaction and attitude. One
reason why we expect evaluation–intention links with different strength when different intention constructs are employed is that (a) evaluation constructs and (b) the three intentions constructs occupy different positions on a sense-of-ownership dimension (cf. Söderlund and Öhman 2003). It is assumed that an evaluative judgment is not only own (i.e., subjective) but also owned (i.e., perceived to be possessed). In other words, my attitude or my satisfaction can be mine in the same sense that my car or my clothes are mine. In fact, we expect that an evaluative judgment is almost invariable perceived to be mine to a larger extent than intentions (because intentions reference acts that are yet to take place, while an evaluative judgment is taking place when it does materialize). However, intentions can still be viewed in terms of sense of ownership, but we expect that the three types are subject to variation in this dimension. More specifically, given the three proposed intention constructs, we assume that intentions-as-wants are subject to the highest level of perceived ownership, because to want something is subject to few external restrictions. Indeed, Csikszentmihalyi and Graef (1980) indicate that wanting to do something is an expression of being free. To estimate probabilities and to assess action preparedness, however, are activities that require considerably more attention to external factors (cf. Warshaw and Davis 1985). Our assumption is also based on a view of sense-of-ownership of an object as determined by (1) perceived control of an object, (2) intimate knowledge of an object, and (3) self-investment in the object (Pierce, Rubenfeld, and Morgan 2001), and we assume that intentions-as-wants are characterized by higher levels of each of these three determinants
compared to the two other intention constructs.

The following, then, is hypothesized:

\( H3: \) Global evaluative judgments explain more variance in intentions-as-wants compared to the explained variance in intentions-as-expectations and intentions-as-plans

**METHOD**

**Research design and sample**

We selected one specific service consumption act, having dinner at one particular restaurant, as the source of global evaluative judgments and intentions responses. The data were collected with a questionnaire. Each respondent was instructed to select one particular restaurant that he or she had been visiting for dinner during the past six months, and s/he was asked to answer the subsequent questions with this particular restaurant in mind. We included an open-ended item in the beginning of the questionnaire to capture the name of the selected restaurant, and our examination of the names revealed that few respondents selected the same restaurant as any other respondent. Our approach, then, encouraged stimulus heterogeneity. The respondents (\( N=103 \)) were participants in seminars on customer satisfaction. Thus, we used a convenience sampling procedure.
We distributed the questionnaires to the participants at the beginning of the seminar, we supervised the completion task, and we controlled the environment in the sense that no talking amongst participants was permitted.

**Measures**

We included measures of the following evaluative constructs in this study: customer satisfaction with the restaurant, attitude to revisiting the restaurant, and delight. The following question was asked to measure *customer satisfaction*: “Think about your accumulated experience during the past six months of the selected restaurant. How would you summarize your impressions of the restaurant?” It was followed by three satisfaction items used in several national satisfaction barometers (cf. Johnson et al, 2001). These were the items: “How satisfied or dissatisfied are you with the restaurant?” (1=very dissatisfied, 10=very satisfied), “To what extent does it meet your expectations?” (1=not at all, 10=totally), and “Imagine a restaurant that is perfect in every respect. How near or far from this ideal do you find the selected restaurant?” (1=very far from, 10=can not get any closer). Cronbach’ s alpha for this scale was .81.

*Attitude*, our second evaluative construct, was operationalized in terms of the attitude to revisiting the restaurant, and it was captured with a five-item scale with 10 points and with adjective pairs common in marketing research. The question was worded as follows: “What is your view of visiting the restaurant again during the coming six
months?” These adjective pairs were used to capture the responses: bad–good, dislike it–like it, unpleasant–pleasant, uninteresting–interesting, and negative impression–positive impression. Alpha for this scale was .91.

Furthermore, some authors have suggested that “satisfaction is not enough” (cf. Oliver, Rust, and Varki 1997) and thus that the firm needs to make a stronger impact on the customer than merely satisfying him/her. After all, the Latin root of the word satisfaction (satis) means enough—and a perception that a supplier has produced enough is presumably connected to a state of mind with a relatively low level of arousal and excitement. Therefore, 

*delight* has been launched as an alternative construct that is (a) subject to a relatively less skewed distribution than satisfaction and (b) able to enhance consequences such as repatronage behavior to a larger extent than satisfaction. We included the following three-item measure of delight in our study: “The restaurant makes me delighted,” “The restaurant makes me thrilled,” and “The restaurant makes me excited.” Each item was scored on a 10-point scale (1=do not agree at all, 10=agree completely). Alpha was .84.

The intentions items in the questionnaire were introduced to the respondent with the following question: “Below are some statements about your future relationship with the restaurant during the coming six months. Please indicate for each statement how it describes your relationship with the restaurant.” All responses were scored on a 10-point scale. The following items were designed to measure
intentions-as-expectations: “I will have dinner at the restaurant during the coming six months” (1=very unlikely, 10=very likely), “The probability that I will have dinner at the restaurant during the coming six months is...” (1=low, 10=high), “I am sure I will have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely), and “It is likely that I am going to have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely). The internal consistency of this scale, in terms of Cronbach’s alpha, was .94. Similar items, with an emphasis on probability/likelihood, have been used by Boulding et al (1993) and Zeithaml, Berry, and Parasuraman (1996). For intentions-as-plans, we used “I plan to have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely), “I have decided to have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely), and “My purpose is to have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely). Alpha was .94. Intentions-as-wants were measured with “I want to have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely), “My will to have dinner at the restaurant during the coming six months is...” (1=weak, 10=strong), and “I wish to have dinner at the restaurant during the coming six months” (1=do not agree at all, 10=agree completely). For this scale, alpha was .93. Intention items with a specific want-content have been used by Fishbein and Stasson (1990) and Norman and Smith (1995). We also included a single-item measure of intent phrased explicitly in terms of intent, namely “I intend to have dinner at the restaurant during the
coming six months” (1=do not agree at all, 10=agree completely). This variable, intentions-as-intent, will be used as a point of reference to obtain evidence of what it means to have an intention for a consumer (cf. hypothesis 2).

In addition, we included a pairwise comparison task in the final part of the questionnaire. In this part, one intentions statement from each of the multi-item scales was used again (“It is likely that I am going to have dinner at the restaurant during the coming six months,” “I plan to have dinner at the restaurant during the coming six months,” and “I want to have dinner at the restaurant during the coming six months”), they were presented in a pairwise way, and we asked the respondent to underline the intentions statement in each pair that best captured his/her view of the future relationship with the restaurant. We used this pairwise comparison task to generate scores in the 0-2 range (thus reflecting the number of “wins”) for each of the three types of intentions. These scores, we argue, provide a complement to the scores derived from the rating scales (i.e., the multiple-item measures of intentions described above), and we used these scores as alternative intentions indicators in our assessments of the evaluation-intentions links.

**ANALYSIS AND RESULTS**

In order to address hypothesis 1, that is, if the three intentions types represent three different constructs, confirmatory factor analysis was performed with AMOS V. The proposed model (i.e., a three-factor
model) resulted in a good fit with the data ($\chi^2=93.12$, $df=32$, $p < .01$, CFI=.946, NFI=.921). An alternative one-factor model was also examined (i.e., the eleven indicators for the three proposed constructs were modeled as indicators of one single construct), but this model produced a considerably lower level of fit ($\chi^2=437.92$, $df=35$, $p < .01$, CFI=.643, NFI=.63). Moreover, the proposed three-factor model was significantly better than the one-factor model (delta $\chi^2=344.8$, delta $df=3$, $p < .01$). This way of assessing the dimensionality of a construct has been used by, for example, Russell, Norman, and Heckler (2004). Our results, then, provide support for hypothesis 1; the three intentions types appear to represent three different theoretical constructs.

Hypothesis 2 was examined with a regression analysis in which intentions-as-intent (measured with the item “I intend to have dinner at the restaurant during the coming six months”) was the dependent variable and IE, IP, and IW served as the independent variables. The result indicated that intentions-as-expectations did not contribute to the variation in intentions-as-intent ($b=-.003, p=.96$). However, intentions-as-plans ($b=0.65, p < .01$) and intentions-as-wants ($b=0.35, p < .01$) had a significant impact on intentions-as-intent. Overall, the explained variance was quite high: $R^2=.81$, $F (3, 97)=146.25$, $p < .01$. The outcome thus suggests that the employment of intention-as-plans items seems to best capture intentions phrased explicitly in terms of intent. Hypothesis 2, then, was supported. The outcome also indicates that intention-as-intent items may be included in an intentions-as-plans scale.
Turning to hypotheses 3, we first computed the zero-order correlation between each evaluative judgment variable and the three intentions variables derived from the multi-item rating scales. In total, then, nine correlation coefficients were computed. The outcome is presented in table 1.

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<tr>
<td>Customer satisfaction</td>
<td>.297***</td>
<td>.234**</td>
<td>.651***</td>
</tr>
<tr>
<td>Attitude to revisiting</td>
<td>.451***</td>
<td>.414***</td>
<td>.648***</td>
</tr>
<tr>
<td>Delight</td>
<td>.379*</td>
<td>.263***</td>
<td>.541***</td>
</tr>
</tbody>
</table>

*** p < .01, ** p < .05, * p < .10

It can be contended from table 1, and for each evaluation variable, that the evaluation–intention correlation was strongest when the intentions-as-wants variable was employed. Moreover, a set of tests of the strength of correlations (cf. Kleinbaum et al 1998) revealed that the three correlations between intentions-as-wants and the three evaluation variables (i.e., .651, .648, and .541) were significantly stronger than were the correlations between (a) intentions-as-expectations and the three evaluation variables and (b) intentions-as-plans and the three evaluation variables (p < .01 for each comparison). The evaluation-intentions associations involving intentions-as-expectations and intentions-as-plans, however, were not significantly different from each other (i.e., .297 vs. .237, .451 vs. .414, and .179 vs. .263; p > .01 in each case). In a second step, the same correlation analyses were performed, but this time with the
intentions data derived from the pairwise comparison task. The outcome is presented in table 2.

Table 2 shows that the same pattern was reproduced with this alternative assessment of intentions: intentions-as-wants were subject to stronger positive associations with the evaluative variables than were the other intention variables. This, then, means that hypothesis 3 cannot be rejected.

DISCUSSION

This study suggests that intentions are plural, given that a three-factor conceptualization captured the proposed tripartite view of intentions better than did a one-factor model. In addition, and as a further argument to support the distinctiveness of the three intentions constructs, we found that they were not associated to the same extent with theoretical antecedents in terms of global evaluation variables. In this study, intentions-as-wants stand out as a particularly distinct construct, and we believe that one main reason is that such intentions correspond better with evaluation variables in terms of an perceived ownership dimension.
One main implication is that the investigator who is examining the link between evaluative constructs and intentions should select intentions measures with care, because the link’s strength appears to be dependent on how intentions are measured. And the link’s strength, in turn, has important implications for decision making. For example, a weak correlation between a satisfaction measure and an intention indicator may be interpreted as a weak causal link. The logical decision in this case, given that customer loyalty is an important objective (and given that intention is equated with loyalty), would be to abandon activities designed to enhance customer satisfaction. This decision, however, may be premature given that other intentions measures produce a stronger association.

In fact, in order to avoid dependency on measures of one single intentions construct given the present state of knowledge about intentions, we believe that a multi-intention construct approach is viable. The main advantage, particularly for marketers who are interested in customer loyalty, is that it offers a more detailed picture of the customer’s view of his/her future. That is to say, differences in levels between different intentions in the mind of a customer (or in customer segments) may provide important information. Some customers, for example, may have strong wants but weak behavioral expectations, whereas other customers have strong expectations but weak wants. And segments defined in those terms are likely to call for different activities in order to create stronger intentions. In addition, given our assumption that different intentions constructs may co-exist in every individual, it may be fruitful to allow for several
intentions constructs in attempts to predict behavior.

Some limitations in our study, however, should be observed. First, we examined intentions only in one particular context: a dinner-at-a-restaurant context. This context is likely to be highly involving for many customers. Yet many decisions made by customers are characterized by a low level of involvement, and future research needs to address if the patterns obtained in this study would repeat themselves in such settings. Second, our focus was on one particular future act: repatronage behavior. Many other acts exist in the marketplace, and they are likely to be subject to intentions, too. For example, customers are in the position of forming intentions about such acts as collecting information about a product, trying a product for the first time, word-of-mouth, and complaining. Intentions vis-à-vis such acts need to be assessed before the final word is said about the existence of several distinct intentions constructs. Third, and perhaps more important, other types of intentions than those proposed in this study may exist. Given that an intention is a proposition that an individual makes about his/her own future acts, it is possible, for example, to regard such constructs as desires and needs in terms of intentions. Finally, future research is also needed to assess how various intentions constructs are associated with overt behavior in the marketplace. The issue was not addressed in our paper (but it is dealt with in Söderlund and Öhman 2005).
REFERENCES


Article 4 – Assessing Behavior Before it Becomes Behavior – An examination of the role of intentions as a link between satisfaction and repatronizing behavior


Abstract

**Purpose** - Intentions are often included in service research, but researchers have paid little attention to a discussion in psychology in which different intention constructs are distinguished. This study is based on the belief that different intention constructs capture different aspects of the customer's assessments of his or her future repatronizing behavior - and that intentions measures based on different intention constructs are not equally correlated with firstly, the customer's global evaluation of the supplier, such as satisfaction, and secondly, his or her overt repatronizing behavior. The specific purpose is to examine if such variation is at hand in with regards to two specific intention constructs: intentions-as-expectations and intentions-as-wants.

**Design/methodology/approach** - A first questionnaire was used to collect data on satisfaction and intentions in a restaurant setting, and a second questionnaire - distributed to the respondents one month
after the first questionnaire - captured behavioral data. These data were used to assess associations between the main variables (satisfaction, intentions, and behavior).

**Findings** - The analysis shows that the two intention constructs produced different strength in the association with customer satisfaction and with repatronizing behavior. In addition, the findings suggest that the two constructs are characterized by different levels of assessment volition, and this also serve as our main explanation of the results.

**Originality/value** - The findings imply that service researchers should pay careful attention to how intentions are conceptualized and operationalized, because an incautious selection of one intention construct over another may affect the role of intentions as mediators of the link between satisfaction and behavior.

**Introduction**

Intentions serve as main dependent variables in much service research (Boulding et al, 1993; Zeithaml et al, 1996). One would expert, then, that intention is the subject of careful conceptualization. But this is seldom the case. Typically, researchers who deal with intentions do not define the construct, and they often unknowingly lump different types of intentions together under the same heading (Sheppard et al., 1988; Warshaw and Davis, 1985a, b). Yet different types of intention variables - reflecting different
theoretical constructs - are not always strongly correlated. And they are not equally strongly correlated with other variables (Fishbein and Stasson, 1990; Netemeyer and Burton, 1990; Norman and Smith, 1995; Sheppard et al, 1988; Warshaw and Davis, 1985a). Given that such differences exist in a service context, and given an incautious use of intention variables, research on causal relationships in which intentions appear becomes problematic. More specifically, the selection of one particular intention variable over another may produce a different view of the role of intentions.

In this study, we examine intentions formulated in terms of repatronizing behavior vis-à-vis a service supplier. The study is based on the belief that different intention constructs capture different aspects of the customer's assessments of his or her future repatronizing behavior, and that different constructs are not equally correlated with

(1) the customer's global evaluation of the supplier, such as satisfaction; and

(2) the customer's repatronizing behavior.

Our specific purpose is to examine if such variation is at hand in a service context with regard to two specific intention constructs from the tripartite model of intention suggested by Söderlund (2002, 2003) and Söderlund and Öhman (2003): intentions-as-expectations (IE) and intentions-as-wants (IW). In contrast to those studies, however, we
include behavioral data and make an explicit attempt, in empirical terms, to assess why different intention constructs produce different levels of strength in their associations with satisfaction and repatronizing behavior.

Theoretical framework

Overview of the framework

We begin by examining the perhaps most well-established intention construct in existing literature: intentions-as-plans. Given that an intention construct of this type is a proposition that the individual makes about himself or herself in relation to a future act in which he or she is the acting subject (e.g. "I plan to buy a new car during the next year"), however, we argue that intentions-as-plans is one among several propositions that the individual makes about a future act. In the following step, therefore, we introduce two additional propositions of this type: behavioral expectations and wants. These two constructs are often (somewhat confusingly) referred to as intentions in the literature, and in order to make contact with existing literature we label them IE and IW. We assume that both constructs serve the same basic role as intentions-as-plans: they mediate the association between an overall evaluation variable (such as satisfaction) and behavior. Next, we argue that the three intention constructs occupy different positions on an assessment volition continuum, and we also argue that IE and IW represent two extreme positions on this continuum. These extreme positions call for a closer
examination of IE and IW, and we do so by arguing that:

(1) satisfaction, the main evaluation variable in focus here, is likely to affect IE and IW with unequal strength; and

(2) intentions-as-expectations and IW at one particular point in time are likely to affect overt repatronizing behavior at a subsequent point in time with unequal strength.

Intentions-as-plans

Attitude theories, particularly the theory of reasoned action (Ajzen and Fishbein, 1970, 1973,1977) and the theory of planned behavior (Ajzen and Madden, 1986; Ajzen, 1991), can be conceived of as one of the original streams of research dealing with intentions. Usually, however, intention has one particular meaning in such attitude theories - intentions capture motivational factors that influence behavior. That is to say, "they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior" (Ajzen, 1991, p. 181). Intentions in this sense, then, comprise a commitment to behavior (Warshaw and Davis, 1985a). Similarly, Bandura (1986) views intentions as "the determination to perform certain activities or to bring about a certain future state of affairs", while Malle and Knobe (1997) capture the commitment to behavior aspect when they stress that intentions involve choosing or deciding to carry out an act. In empirical studies, typical measurement items are "I am planning to... ", "I intend to... ",
"I intend to choose", "Do you intend to... ", "I will choose... ", "I am going to choose... ", and "I will select..." Here, we refer to intentions of this type as intentions-as-plans (IP) because the act of planning appears to capture the commitment to behavior aspect (Howard, 1989, p. 35 and Warshaw and Davis, 1985a who explicitly include a planning component in their intention definitions). Mittal et al. (1998) and Taylor and Baker (1994) are examples of researchers interested in the effects of satisfaction on intentions in this planning-related sense. Although IP appear to be closely related to the standard dictionary meaning of intent (in which "plan" is stressed), it can be noted that IP represent a potentially heterogeneous group of intentions - because an individual may not view his or her propositions about intending, choosing, selecting, and planning as identical. Clear conceptual distinctions in this area, however, are in short supply. Therefore, we subsume the planning-related propositions under the same general label (i.e. intentions-as-plans) in the present paper.

Intentions in terms of other propositions about the future

Given that intentions-as-plans are propositions that the individual makes about himself or herself in relation to future behavior, it becomes clear that an individual can connect himself or herself with future behavior in many other ways than those that have an explicit content of planning. In fact, we believe that the individual continuously make many different propositions about the future and with regard to many different acts; they represent a window of the future. We are thus assuming that most people are concerned with
their future - after all, we have to spend the rest of our lives there. Propositions about the future made in the present, then, render life manageable.

A proposition of this type has the form "I - connection - future act", and it is usually conceived of as evaluation-free (this distinguishes an intention from, for example, an attitude). Such propositions can be seen as basic units in a network of propositions that emerge when individuals engage in future-oriented cognitive activities such as wishes, mental simulation, planning, imagination, goal setting, and ruminations. The conceptual boundaries between these cognitive activities are far from clear, and a comprehensive typology of various propositions about the future is yet to be developed. The lack of knowledge in this area is also illustrated by the lack of an accepted verb ("intentionalizing"?) for the activity of forming intentions. Nevertheless, in an attempt to offer building blocks for a more complete framework than the traditional view of intentions-as-plans, we now turn to two additional ways of framing the individual's propositions of about his or her future acts.

Intentions-as-expectations.

One frequently used intention construct is behavioral expectations. It refers to the individual's assessment of the subjective probability that he or she will perform a particular behavior in the future. Typically, this is measured with questionnaire items such as "The likelihood that I would do A is... ", "The probability that I will do B is... ", "Rate the
probability that you will do C", and "How likely are you to do D?"; the respondent is thus asked to estimate the probability that her or she will perform the act (Gruber, 1970; Juster, 1966). This is perhaps the reason why behavioral expectations are sometimes labeled self-predictions (Courneya and McAuley, 1993; Fishbein and Stasson, 1990, Gollwitzer, 1993; Warshaw and Davis, 1985b). We refer to intention of this type as IE. In satisfaction-related research, IE seems to be the most popular of the intention constructs discussed in this paper. It appears, for example, in Cronin et al. (2000), Danaher and Haddrell (1996), Gotlieb et al. (1994), LaBarbera and Mazursky (1983), Mittal et al. (1999), Patterson et al (1997), and Patterson and Spreng (1997). Incidentally, Reichheld (2003) suggests that an intentions-as-expectation item could replace all other questions used in marketing research with the objective of predicting the firm's growth from data at the individual customer level.

Intentions-as-wants.

An additional intention construct is a conceptualization in terms of wants. It has been used by Fishbein and Stasson (1990) and Norman and Smith (1995). This construct is found in several formal models of intentionality and in the "folk concept" of intentionality (Malle and Knobe, 1997). Wants also appear in Heider (1958) who stresses that intention is often taken as the equivalent of wish or wanting. Moreover, wants closely resembles Gollwitzer (1993) notion of goal intentions that specify a desired end state. Measures of this type of connection with the future usually take the form of Likert-type
statements such as "I want to..." In the present paper, we label them IW. It can be noted that in relation to IE and IP, IW is the least frequently used intention construct in marketing-related research. Nevertheless, given that wants serve to connect the individual with his or her future acts, we refer to them as an intention construct in this paper.

Intention constructs and assessment volition

In this section, we argue that one way to classify different intention constructs is provided by the notion of assessment volition. It is defined as the individual's perception of the extent to which he or she needs to pay attention to factors beyond herself or himself in order to form an assessment. In relation to authors who have dealt with:

(1) the extent to which the individual is free in terms of behavior (Howard and Conway, 1986; Sappington, 1990); and

(2) the individual's subjective experience of acting voluntarily (Ajzen and Madden, 1986; Csikszentmihalyi and Graef, 1980), we are thus concerned with the individual's subjective experience of freedom in cognitive activities (here forming propositions about future acts).
Given this assessment volition dimension as a classification basis for intention constructs, we also assume that the three constructs presented above are located at different points on an assessment volition continuum.

Consider, first, IE. We assume that the individual who is forming them (e.g. "To what extent am I likely to come back to Conrad hotel in Dublin for another holiday?") needs to take into account a variety of factors beyond himself or herself (Sheppard et al., 1988). For example, in a holiday context, and if the individual is considering spending the holiday with the family, the individual must assess the likelihood that family members want to go back to the same hotel. This individual must also estimate the probability of obtaining a room at the hotel given that many other people, who the individual does not know, and whose plans are even less known, desire to stay at the same hotel. In fact, this type of self-prediction is based on the cognitive appraisal of all volitional and non-volitional behavioral determinants of which the individual is aware: beliefs, attitudes, social norms, present intentions, habits, abilities, and situational factors, as well as anticipated changes in these determinants (Warshaw and Davis, 1985b). Therefore, and when IE materialize, we assume that they are characterized by a relatively low sense of assessment volition.

Turning to intentions-as-plans (e.g. "To what extent do I plan to come back to Conrad hotel in Dublin for another holiday?"), the judgment task becomes slightly different. In forming such judgments focus is transferred to factors that affect the individual's conscious choice.
Some of the factors from the IE task, including external factors, such as other persons' intentions, are likely to remain in the assessment. But we expect that several external factors are eliminated - and that more room is allowed for self-related factors (Warshaw and Davis, 1985a for a similar argument). For example, when I assess the extent to which I plan to do X, I am likely to look relatively less closely at my non-cognitive habits and the uncontrollable parts of my environment - and more at "myself and my own motivation. This view is consistent with Ajzen (1991, p. 181) notion of intentions when he claims that they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behavior. Moreover, it is not difficult to change one's plans. In fact, planning can easily - at will - take different routes without much effort. Therefore, we expect a relatively closer connection with the individual's volition and thus a higher level of perceived assessment volition in the IP case compared to the IE case.

Finally, we assume that IW (e.g. "To what extent do I want to come back to Conrad hotel in Dublin for another holiday?") are characterized by a relatively high level of assessment volition, because to want something is subject to very few external restrictions. A similar view is at hand in Csikszentmihalyi and Graef (1980) who assume that wanting to do something is an expression of "being free".

Hence, we view IE, intentions-as-plans, and IW as three different ways for the individual to connect himself or herself with a future
behavioral act, and we assume that IE are characterized by a relatively low level of assessment volition, and that IW are characterized by a relatively high level of assessment volition. And it is the intention constructs' different positions on this dimension, we believe, that explain why they are likely to be associated with global evaluations (such as satisfaction) and behavior with unequal strength. Given the extreme positions of IE and IW, and given that IP appears to be a less homogeneous construct than IE and IW, we focus on these two latter constructs in the following theoretical sections (and in the subsequent empirical analysis). Let us first consider what their assessment volition positions mean for satisfaction's association with intentions. In the second step, we discuss what the positions mean for the link between intentions and repatronizing behavior.

Satisfaction and its effects on intentions

Only a handful of studies have examined the potential for differences in evaluation - intention associations' strength given different intention constructs, but the studies that indeed deal with this topic indicate that differences exist; attitudes are more strongly associated with wants than with behavioral expectations (Fishbein and Stasson, 1990; Norman and Smith, 1995). Given that satisfaction is one specific type of evaluation, this pattern suggests that the association between satisfaction and assessments of future repatronizing behavior is stronger for IW than for IE. Empirical results along those lines also appear in Soderlund (2002) and Soderlund and Ohman (2003). Why, then, do such differences exist?
One main premise here is that satisfaction, IW, and IE represent assessments that are subject to variation with regard to the extent to which the individual needs to pay attention to factors beyond herself or himself in order to form the assessment. A second premise is that the further away two constructs are from each other on this assessment continuum, the lower is their level of conceptual correspondence. And conceptual correspondence affects the level of association between constructs; as correspondence between two constructs is decreasing, we expect that the level of association is attenuated (Fishbein and Middlestadt, 1995). Given these premises, let us now take a closer look at satisfaction and its ability to affect IE and IW.

Concerning satisfaction per se, we make two assumptions. First, satisfaction refers to a state of mind among customers who have personal experience of an object. That is to say, in order to arrive at a satisfaction assessment, the customer must have consumed the product in question. This means that the satisfaction assessment is likely to occupy a special place in the customer's mind compared to attitudes toward products that the customer has heard about through such channels as word-of-mouth, advertising, and newspaper articles, but not yet consumed. This assumption is consistent with the view that the customer's personal experience represents a particularly salient base for judgments (Hoch and Deighton, 1989). Second, satisfaction has an emotional content. Indeed, some authors argue that satisfaction is one among several
emotions (Bagozzi et al., 1999). As such, it is characterized by partiality; it expresses a personal perspective (Ben-Ze'ev, 2000). Another characteristic of an emotion is its tendency to be associated with physiological reactions (Ben-Ze'ev, 2000). This makes an emotion qualitatively different from, say, the judgment that one brand has higher quality than another and the belief that one particular car is blue and not yellow, in the sense that the emotional state is likely to have a higher level of self-association. Therefore, we expect that an emotional state such as satisfaction is subject to a relatively high level of assessment volition.

Thus, given that the strength of the association between on the one hand satisfaction and on the other hand the assessment of future repatronizing behavior is affected by the correspondence between the two constructs, that satisfaction is an entity with a relatively high level of assessment volition, and that IW contain a higher level of assessment volition than IE, we assume that the satisfaction - IW association is stronger than the satisfaction - IE association.

Intentions and the link to repatronizing behavior

Turning to our second assumption - that IE and IW are associated with repatronizing behavior with unequal strength - our point of departure consists of previous research showing that IE outperform intentions-as-plans as behavioral predictors (Sheppard et al, 1988; Warshaw and Davis, 1985a). However, we have not found any existing empirical study explicitly comparing the two constructs in focus here.
(i.e. IE and IW) and their relative impact on overt repatronizing behavior. Yet it has been argued that the main reason why IE perform better than intentions-as-plans in predicting behavior is that behavior is often affected by uncontrollable factors that behavioral expectations take account for better than the individual's plans (Sheppard et al., 1988; Warshaw and Davis, 1985b). With our terminology, then, we would say that the reason is that IE comprise a lower level of assessment volition than intentions-as-plans. Therefore, and given that IW are subject to an even higher level of assessment volition than intentions-as-plans (again, to merely want something does not need to be subject to many external restrictions), we expect that IE perform better than IW in predicting overt future repatronizing behavior.

Summary of the main assumptions

In sum, we have assumed that:

(1) the satisfaction - IW association is stronger than the satisfaction - IE association;

(2) the IE - repatronizing behavior association is stronger than the IW repatronizing behavior association; and
(3) the main reason is that IW and IE are subject to different levels of assessment volition.

It is now time to examine these three assumptions in empirical terms.

Research method

Research design and sample

We selected one specific service consumption act, having lunch at one particular restaurant, as the source of satisfaction and intentions responses. The data were collected with a questionnaire. Each respondent was instructed to select one particular lunch restaurant that he or she had been visiting during the past month, and he or she was asked to answer the subsequent satisfaction and intention questions with this particular restaurant in mind. We included an open-ended item in the beginning of the questionnaire to capture the name of the selected restaurant, and our examination of the names revealed that few respondents selected the same restaurant as any other respondent. The respondents (N = 114) were participants in seminars on customer satisfaction, and the measures are presented below.

Measures

Time correspondence between measurements is an important issue in assessments of links between evaluations, intentions, and
behavior, in the sense that a common time frame is needed for each of the three variables. Otherwise correlations are easily attenuated (Fishbein and Middlestadt, 1995). Moreover, time is important from a memory point of view; factors such as forgetting and telescoping can affect the recall of events. Time is also likely to be an issue when intentions are assessed, because there are limits to how far into the future people are able to look when it comes to their consumption activities. In order to handle these time-related aspects, we decided to apply a time frame of one month to our measurements.

We measured customer satisfaction in two ways, because two satisfaction constructs are used frequently in existing literature (So'derlund and Öhman, 2003). First, we asked the following question: "Think about your accumulated experience during the past month of the selected restaurant. How would you summarize your impressions of the restaurant?" It was followed by three satisfaction items used in several national satisfaction barometers (Johnson et al., 2001): "How satisfied or dissatisfied are you with the restaurant?" (1 = Very dissatisfied, 10 = Very satisfied), "To what extent does it meet your expectations?" (1 = Not at all, 10 = Totally), and "Imagine a lunch restaurant that is perfect in every respect. How near or far from this ideal do you find the selected lunch restaurant?" (1 = Very far from, 10 - Cannot get any closer). Cronbach’s α for this scale was 0.76, which is above the limit for what many researchers consider an acceptable level of reliability (Malhotra and Birks, 2003, who refer to a levels below 0.6 as unsatisfactory). It should be noted that this object-oriented way of assessing satisfaction is different from the
act-oriented way of capturing attitudes that is called for by many attitude theorists who are interested in predicting intentions with regard to an act. Therefore, as a second (and act-oriented) measure of satisfaction, we asked the respondents the following question: "How would you summarize your view of your decision(s) to have lunch at the selected restaurant during the past month?". The question was followed by three items: "I am happy about my decision(s) to go there", "I believe I did the right thing when I selected it", and "Overall, I am satisfied with the decision(s) to go there" (1 = Do not agree at all, 10 = Agree totally). Similar satisfaction measures have been used by, for example, Butcher et al. (2001) and Cronin et al. (2000). In our case, Cronbach's $\alpha$ was 0.95.

In order to put the satisfaction-intention link into context, and given that satisfaction is one particular type of evaluation, we included a traditional attitude measure to capture the respondent's overall evaluation of the selected lunch restaurant. We used a 5-item scale with 10 points and with adjective pairs common in marketing research (Homer, 1990; Phillips, 2000). The question was worded as follows: "Which are your impressions of the restaurant, given your experience of it during the past month?" We employed these adjective pairs to capture the responses: bad - good, dislike it - like it, unpleasant - pleasant, uninteresting - interesting, and negative impression - positive impression. Cronbach's $\alpha$ for this scale was 0.92.
Turning to the intention measures, we used single-item measures. The reason is that we wanted the respondents to do two things:

(1) in a first step, we wanted them to express their level of intention with regards to the selected restaurant (i.e. the typical assessment of intentions in questionnaire-based research); and

(2) in a second step, and in a subsequent part of the questionnaire, we wanted them to examine their intentions in terms of assessment volition.

And we believed that the design of the items for the latter task (cf. below) required single-item measures in order not to be too exhaustive from a cognitive point of view. To make sure that identical items were used for both tasks, then, single-item measures were employed for IE and IW. Given this, we used the following item as a measurement of IE (IE): "I will have lunch at the restaurant during the coming month" (1 = Very unlikely, 10 = Very likely). Similar items, with an emphasis on probability, have been used by Boulding et al. (1993), Gotlieb et al. (1994), LaBarbera and Mazursky (1983), Patterson et al. (1997), and Zeithaml et al. (1996). And we measured IW with this item: "I want to have lunch at the restaurant during the coming month" (1 = Do not agree at all, 10 = Agree completely). Intention items with a specific "want-content" have been used by Fishbein and Stasson (1990) and Norman and Smith (1995). In our case, the zero-order correlation between IE and IW was 0.46 (p < 0.01), which indicates that we are dealing with two separate constructs (yet they
share some amount of variance). Moreover, a paired t test of the mean levels of IE and IW revealed that IE reached a significantly ($p = 0.036$) higher level ($M = 7.24$) than did IW ($M = 6.60$).

Data on overt repatronizing behavior were collected one month after our distribution of the questionnaire. We contacted the respondents and asked them to recall the specific restaurant they selected one month ago, and we used the following item to measure repatronizing behavior: "How many times have you eaten lunch at the selected restaurant during the past month?" An open-ended response format was provided for this item. A number of respondents, however, did not reply so these data come from a subsample of the original group of respondents ($n = 54$).

Finally, to examine if the level of assessment volition was subject to variation between IE and IW, we used a variant of a systematic paired comparison method (Dillon et al, 1993) which included a set of statements about the respondents's assessment of his or her IE and IW. This (final) part of the questionnaire was presented as a matrix (Table II) in which the intentions assessments were given in the columns, the statements appeared in the rows, and the cells contained the response spaces. And we asked the respondents to mark one of the assessments for each statement. The assessments in the columns were identical to what the respondents had already been confronted with to: "I will have lunch at the restaurant during the coming month (Very unlikely - Very likely)" and "I want to have lunch at the restaurant during the coming month (Do not agree at all -
Agree completely). Two statements were designed to capture the level of assessment volition in terms of the respondents' perceptions of the assessment task: "Which of these assessments do you perceive as the least dependent on the view of other people?" and "For which of these assessments do you need to take the least amount of account for what other people think?" Thus, we assumed that the respondents were able to assess their perceived level of volition. This is basically the same assumption as when researchers are using Likert-type measures to capture self-determination and perceived behavioral control with respect to behavior. The main difference, however, is that we are interested in cognitive activities (assessments of future behavior) rather than behavior.

As indicated in the theoretical section, the level of assessment volition is one among several potential dimensions in which various intentions can be classified. Other dimensions, however, exist - and they may also explain why different intentional constructs are unequally associated with other variables. For example, Bagozzi and Yi (1989), who examined only one specific type of intention, suggest that the degree of intention formation affects the association between: (a) attitude and intention; and (b) intention and behavior, in the sense that the higher the degree of intention formation, the stronger we would expect the (a) and (b) associations. Exactly what Bagozzi and Yi (1989) mean by "degree of formation", however, is not clear, but they suggest that the degree of conviction ("How confident are you about your intentions?") goes hand in hand with degree of formation. In order to examine this explanation in our case, in which
we make no specific a priori assumption about the potential for differences in degree of formation with respect to behavioral expectations and wants, we included the following statement in the response matrix: "Which of these assessments do you feel most confident about?". In addition, and because accessibility appears to be a general determinant of the strength of the attitude - behavioral association (Eagly and Chaiken, 1993), we included the following statements in order to take account for the possibility of different levels of accessibility in behavioral expectations and wants: "Which assessment required the least amount of time?" and "On which assessment did you spend the least amount of thinking effort?" (here, a fast and effortless response is indicative of a high-accessibility construct; (Fazio and Williams, 1986)). Hence, with respect to this response matrix, we assumed that the frequency of mentioning IE or IW for each of the statements would indicate the extent to which the two constructs differ in terms of assessment volition (and in terms of two other dimensions that provide rival explanations of why the intention constructs mediate the effects of attitudes on behavior differently).

Analysis and results

Our first assumption was that the satisfaction - IW association is stronger than the satisfaction - intention-as-expectations association, and we assessed it with correlation analysis. Please recall that we collected data in terms of two satisfaction measures and one traditional attitude measure; this means that it was possible to
examine the evaluation - intention link with three global evaluation variables and two intention variables (IE and IW). In total, then, we performed six bivariate correlation analyses. The outcome is presented in Table I.

Table I shows (as predicted, and for both satisfaction variables) that the satisfaction - intention correlations are stronger for IW as opposed to IE. This pattern is consistent with Söderlund (2002, 2003) and Söderlund and Öhman (2003). Table I also shows that a similar pattern was obtained for the traditional attitudinal variable. In the next step, we used a test for differences between correlation coefficients from Kleinbum et al. (1998, p. 100) to determine if the differences in Table I are significant. For each of the three evaluative judgments (i.e. object-oriented satisfaction, act-oriented satisfaction, and attitude), this test indicated that the relatively larger correlation coefficient produced by IW was significantly larger than the correlation coefficient produced by IE (p < 0.01 for each evaluation variable).

Our second assumption - that the IE - repatronizing behavior association is stronger than the IW - repatronizing behavior association - was examined with regression analysis, not separate bivariate analyses, because we wanted to take account for as much information as possible. We used IE and IW served as independent variables, and repatronizing behavior was employed as the dependent variable. This analysis showed that IE were significantly associated with repatronizing behavior (b = 0.36, t = 2.41, p = 0.02),
and that IW were not significantly associated with repatronizing behavior (b = 0.04, t = 0.26, p = 0.80). Overall R^2 was 0.11 (p = 0.02). Thus, as expected, IE did a better job in predicting repatronizing behavior than IW.

Table I.
Zero-order correlations between attitudinal and intentional variables

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction (object-oriented)</th>
<th>Satisfaction (act-oriented)</th>
<th>Attitude (object-oriented)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE</td>
<td>0.155*</td>
<td>0.220**</td>
<td>0.161*</td>
</tr>
<tr>
<td>IW</td>
<td>0.457***</td>
<td>0.478***</td>
<td>0.603***</td>
</tr>
</tbody>
</table>

Notes: *p < 0.10, **p < 0.05, ***p < 0.01

The relatively low level of explained variance in repatronizing behavior in the present case may be seen in the light of the nature of services. Lovelock and Gummesson (2004) have recently questioned the validity of the traditional distinction between services and goods (in terms of intangibility, heterogeneity, inseparability, and perishability), and as an alternative, to better capture the unique nature of services, they suggest a focus on the absence of transfer of ownership. This shift in focus, according to Lovelock and Gummesson (2004), highlights that the core of services involves a form of temporary access. Given this view, we believe that a relatively weak intention-behavior link is precisely what we should expect. That is to say, compared to a good, that one owns and thus controls, the
consumption of services will be subject to more external restrictions - and these restrictions will make it more difficult for intentions to materialize in the form of behavior. A similar argument could be provided in terms of inseparability; the service customer needs to interact with a service provider if a service is to come into existence, but access to this interaction cannot always be controlled in the same way as the access to a good that the customer owns. In any case, and given that a relatively modest level of explained variance in behavior is a general pattern in service settings, one implication is that researchers should refrain from suggesting in titles, abstracts, and in texts that they are dealing with behavioral data when they in fact are dealing with intention data (Zeithaml et al, 1996).

Continuing with our third assumption, we suggested that volitional content in the assessments is likely to explain the differences in association strength, therefore, we expected that the level of assessment volition is lower in IE than in IW. The outcome of the response matrix designed to capture differences in relative response frequencies between IE and IW is presented in Table II.

We used chi-square tests to examine if the observed frequencies in Table II deviated from the expected frequencies given no difference between the assessments (i.e. 50 percent of the responses were expected for each assessment). The tests revealed that the observed frequencies were significantly different from the expected frequencies for the two statements designed to capture assessment volition ($\chi^2 = 13.54, p < 0.01$ for "Which of these assessments..."
do you perceive as the least dependent on the view of other people?" and $\chi^2 = 20.45, p < 0.01$ for the statement "For which of these assessments do you need to take the least amount of account for what other people think?"). There were no significant differences between IE and IW for the other statements (i.e. the statements designed to assess the degree of formation and accessibility explanations). The outcome, then, suggests that assessments of IW are loaded with a relatively higher level of volition than are the assessments of IE.

<table>
<thead>
<tr>
<th>Statement to respond to:</th>
<th>Assessment of future repatronizing behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expectations (percent)</td>
</tr>
<tr>
<td>&quot;Which of these assessments do you perceive as the least dependent on the view of other people?&quot;</td>
<td>32</td>
</tr>
<tr>
<td>&quot;For which of these assessments do you need to take the least amount of account for what other people think?&quot;</td>
<td>27</td>
</tr>
<tr>
<td>&quot;Which of these assessments do you feel most confident about?&quot;</td>
<td>48</td>
</tr>
<tr>
<td>&quot;Which assessment required the least amount of time?&quot;</td>
<td>52</td>
</tr>
<tr>
<td>&quot;On which assessment did you spend the least amount of thinking effort?&quot;</td>
<td>47</td>
</tr>
</tbody>
</table>

Table II.
The assessment task statements (relative frequencies)
Discussion

Main findings and implications

The main findings in this study are that different intention constructs in a service context are capable of producing different strength in

(1) the association with global evaluations; and

(2) the association with repatronizing behavior. These findings, we believe, have several implications.

First, service researchers should be concerned with the particular intention constructs (and operationalizations) they use: the selection of one particular intention indicator over another may generate different conclusions about the role of satisfaction as a determinant of intentions. Given that behavioral data are relatively seldom collected by researchers interested in customer perceptions of a supplier (i.e. intentions are often used as a proxy for behavior), different conclusions about the global evaluation - intention link are also likely to affect conclusions about customer behavior. Thus, we believe that the prevailing happy-go-lucky approach to intentions in much empirical research needs to be questioned, because it may obscure important links in the nomological net of intentions.
second, given that IE outperformed IW as predictors of repatronizing behavior, it would be tempting to suggest that that IE constructs should be used in future assessments of customers' intentions. After all, it can be argued, it is the customer's behavior that produces profitability. However, we believe that service marketers must ask themselves this question: which repatronizing behavior is really the most desirable in the long run? Is it repatronizing behavior that results from the myriad of external factors that are captured by IE? Or is it behavior that results from the customer's self-determined wants to repatronize? If service marketers want strongly committed customers over time, intentions associated with wants may provide a more viable approach. This suggestion is based on the assumption that behavior predicated on a perception of "up-to-me-ness" is more motivating and committing in the long run than behavior that stems from external factors (Kiesler, 1971). From a practical perspective, given that firms formulate marketing goals in terms of intention levels, and given that such non-financial measures provide firms with a basis for performance assessments (Reichheld, 2003), we believe that an approach based on IW is likely to produce a more challenging internal climate for the service supplier. That is to say, from the individual employee's point of view, it seems as if a supplier striving for a high level of IW compared to a supplier striving for a high level of IE would provide a more interesting work environment.

Third, given that the two intention constructs in focus in this study produced different associations with satisfaction and behavior, and given that the two constructs represent only a sample of a potentially
large population of different propositions about future activities, we believe that several intention constructs should be used within the same study. One advantage is that a more detailed picture of the customer's view of his or her future is offered. That is to say, differences in levels between different intentions in the mind of a customer (or in customer segments) may provide important information. What we are suggesting, then, is basically that we believe that intention is a legitimate topic per se for academic research - regardless of the impact of intention on behavior. The main reason is that intention serves as a unique human construct, in the sense that it allows us to make contact with a future that is yet to materialize. Indeed, the capability of forming intentions is an activity that distinguishes humans from, say, squirrels and snakes. Yet this capability, we believe, is overshadowed by the sometimes often very pragmatic concerns with behavior. Therefore, we find it somewhat strange that academic papers and textbooks seldom contain the words "intention theory".

Limitations and suggestions for future research

One obvious limitation in this study is that we examined only two intention constructs in empirical terms. The third construct in our framework, intentions-as-plans, was used to make contact with previous research, but it was kept out of the empirical analysis because of uncertainty regarding its conceptual content. That is to say, it is not clear if that such activities as planning, choosing, selecting, and deciding represent a homogenous set of
"intentionalizing". This issue needs to be examined further in future research. Moreover, IE, intentions-as-plans, and IW may be conceived of as limited sample from a potentially huge population of intention constructs. That is to say, we believe that there may exist many additional ways for making contact with the future than those covered in this study. For example, some firms (and researchers) use intention items formulated in terms of "Would you consider... ", and such items may reflect an underlying intention construct with less commitment to behavior than intentions-as-plans. Incidentally, Warshaw (1980, p. 154) disapproves of this particular practice when he argues that "just because an option is seriously considered does not mean one intends to adopt that option." Similarly, Andrews et al. (2004) use intention items phrased in terms of "Do you think you will..." Yet to consider a future behavior is indeed a proposition that one makes about future behavior. Other examples of potential intention constructs are propositions in terms of wishes, desires, and lust. One particularly important concept from a marketing point view is needs - and the customer's articulation of needs could be recast as propositions about future behavior, too. Clearly, then, there is room for a considerable amount of future research before the final word is said about the ways in which the customer comes to terms with his or her future (and how such ways are related to each other and to antecedents and consequences).

Another limitation is our focus on intentions related to one particular act, namely repatronizing behavior. Yet many other behaviors exist in the marketplace, and they are likely to be subject to intentions.
Indeed, many different behaviors have been examined in terms of intentions; examples are search for product information, purchasing a product for the first time, word-of-mouth, complaints, and contributing money. As already indicated, however, service researchers (and many scholars in other fields) do not distinguish between different types of intentions in terms of the connection between the individual and his or her future behavior. This connective aspect has been emphasized in this paper, but more research is called for with respect to intention constructs that refer to different behaviors. It can be noted that it is not uncommon that researchers do include intentions referencing different types of behavior in empirical studies, but the standard practice is to design multi-item scales in which distinct types of behaviors are lumped together. Word-of-mouth intentions, for example, are often used together with repatronizing intentions to form an "intention" scale (Bolton et al, 2000). Typically, this results in high internal consistency among the scale items (in terms of an impressive Cronbach's $\alpha$). We object to the practice of doing so, because it will not advance our understanding of discrete types of intentions and behavior. Presumably, this multiple-item approach stems from influential scholars (Churchill, 1979), editors, and reviewers who explicitly encourage empirical research with multiple-item measures. Yet it must be kept in mind that a multi-item measure is not only supposed to be characterized by high internal consistency; it should also be unidimensional. Unfortunately, however, a high level of $\alpha$ is not an indicator of unidimensionality (Gerbing and Anderson, 1988). And from a conceptual point of view, its does not appear that a
customer's conversation with his friends is automatically mirrored by this customer's repatronizing behavior vis-à-vis one particular service supplier. This aspect is heretofore basically unexplored in many studies of the effects of satisfaction. Future research, then, should allow for a disaggregated examination of various behaviors that are subject to intentions.

Future studies of intentions that mirror different types of behavior (e.g. purchases and word-of-mouth behavior) and intentions that reflect different connections between the customer and a future act (e.g. IE and IP), however, should be able to assess both reliability and unidimensionality in the measures of intentions. These issues were not adequately addressed in the present study. The best solution is probably to use structural equation modeling with multi-item measures carefully selected to match several underlying intention constructs. We have begun to explore this option, and we can conclude at this point that multi-item measures of several intention constructs (in terms of different connective aspects) fit better with measurement models comprising several factors compared to one-factor measurement models. Such research would clearly provide stronger arguments for our main premise (that is, different intention constructs exist).

Finally, as noted in our methodology section, limits are likely to exist for how far into the future people are able to look when it comes to their consumption activities. And in our case, we used a one month time frame for the measures of IE and IW. Yet the enforcement of
such time frames may reduce the potential for a variation in strength in intentions' associations with other variables which may occur when different time frames are allowed. Indeed, it is possible that different intention constructs are formed with different time frames in mind. For example, I may expect that it is highly likely that I will have dinner at one particular restaurant sometime in the end of a one month-period, but I do not really want this to happen - because what I desperately want is to go there very soon. If this is the case, the result may be high scores for IE but low scores for IW, despite the fact that IW exist at a higher level. Hence, the issue of time frames, both in terms of the specific content of measurement items and in conceptual terms, needs to be explored further in future research.
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Article 5 - Dreaming versus Scheming - Implications of Different Operationalizations of Intention on Process- and End-State-Oriented Mental Simulation.

Key words: Intentions, Mental Simulation, Methodology, Context Effects, Consumer Behaviour.

Abstract

This experimental study applies a tripartite view of intentions and examines the differences between different operationalizations of intentions, more specifically it examines how intentions-as-wants, intentions-as-plans and intentions-as-expectations differ in terms of end-state- and process-orientation from a mental simulation perspective. Intentions-as-wants is found to be the most end-state-oriented intention construct, while intentions-as-plans is found to be the most process-oriented. Also, the three different constructs are found to behave differently when it comes to sensitivity to end-state- and process-oriented contextual cues. The findings contribute to research on intentions, intention-behaviour links and motivation-intention links, as well as research on mental simulation and have implications on both methodology and theory for marketing and consumer researchers.
Introduction

The power of a wording is irrefutable. Similar words or even words that are synonyms in certain contexts can bring about different connotations, different associations and carry different meanings in other situations. Similarly, the same word can also carry different meaning in different contexts.

-Do you want a Ferrari?
-Of course!
-Are you sure? I mean, think of all the things you would have to give up to obtain one and think of all the other things you could do with the money instead, and when would you even drive the damn thing? I mean, seriously, you are a father of three, you have a wife and an ex-wife, a house that needs renovations and you work your behind off.
-Well...
-So, do you really want a Ferrari?
-Well, I guess I don’t want a Ferrari after all.

This, authentic conversation between two people illustrates the perils of using ill formulated intention measurements for measuring purchase intention and more specifically, the ambiguity of one such measure, i.e. intentions-as-wants.

Purchase intentions are one of the most often included variables in
marketing research (Bolding et al., 1993; Söderlund and Öhman, 2005a; Zeithaml et al., 1996). Yet market researchers have paid little attention to a discussion in psychology (e.g. Anderson, 1983; Courneya and McAuley, 1993; Netemeyer and Burton, 1990; Netemeyer et al., 1991; Rhodes et al., 2006; Sutton, 1998; Terry and O’Leary, 1995; Warshaw and Davis, 1985) that different intention constructs can be distinguished and that different constructs behave in different ways with regards to several possibly related constructs such as general evaluation (e.g. customer satisfaction) and, perhaps most importantly, they perform differently when it comes to predicting behaviour. This study is based on this discussion in the sense that the point of departure is that different intention constructs capture different facets of a person’s assessment of his or her future purchasing behaviour, and this study focuses on the ambiguity of three different intention constructs frequently used in marketing literature (Söderlund and Öhman, 2005a).

The purpose of this study is to add a piece of the puzzle that helps explain why three commonly used operationalizations of intention perform differently. This is done by testing the influence of the operationalization of intentions, on the way we think about our future. More specifically, this study examines how intentions-as-wants, intentions-as-plans and intentions-as-expectations differ in terms of the influence of the each operationalization has on end-state- and process-orientation from a mental simulation perspective and also how sensitive the three different operationalizations are to contextual influence in the form.
of direct encouragement to consider end state- or process-oriented matters.

Theoretical Framework

In this study, a tripartite view of intentions suggested by Söderlund (2002, 2003) and Söderlund and Öhman (2003, 2005a, 2005b), is used. This view implies that when a person makes a proposition that connects himself/herself with a future behavioural act, an intention is formed. Generally, propositions of this type are structured along the lines of “I-connection-future act”, and should be interpreted as mental representations of the future, helping a person to perform various tasks efficiently. Hence, intentions are formulated continuously with regards to many different future acts related to consumer behaviour; purchases; re-patronizing behaviour; word of mouth and complaints are some examples. As already indicated, however, marketing and consumer researchers as well as many scholars in other fields do not distinguish between different types of intentions in terms of the connection between the individual and his/her future behaviour. More specifically, (1) intentions-as-wants, (2) intention-as-plans, and (3) intentions-as-expectations seem to tap into different facets regarding a consumer’s connection to his/her own future.

In marketing and consumer research, the intention construct called intentions-as-expectations seems to be the most popular (Söderlund and Öhman, 2005b). Typically, this is measured with items such as
“the probability that I would buy X is...”, “the likelihood I would re-patronize Y is...”, “Rate the probability you would recommend Z” and “How likely is it that you would file a complaint with W?”. This type of intention construct is also sometimes labeled “self predictions” (Fishbein and Stasson, 1990). Söderlund and Öhman (2005b) argue that the core cognitive activity for this construct has to do with estimating probabilities for an outcome. They also argue that, from a purely conceptual point of view, intentions-as-expectations do not have to contain any assessment of why the act needs to be carried out. Moreover, intentions-as-expectations do not necessarily signal anything about what stage the individual is in when it comes to how prepared he or she is to carry out the act.

Another intention construct, very closely related to the dictionary notion of intentions, is intentions-as-plans. It refers to the individual’s plan to carry out a certain behaviour in the future. Ajzen (1991) and Bandura (1986) both argue that this construct captures motivational factors that influence behaviour. Ajzen (1991) argues that “they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behaviour”. Bandura (1986) stresses similar traits with this type of intention and sees the construct as “the determination to perform certain activities or to bring about a certain future state of affairs”. Also, intentions of this type typically contain an explicit volitional component in the sense that a person chooses or decides to do something in the future. A typical measure of this construct is “I plan to purchase X” or “I intend to re-patronize Y”. This type of intentions taps into a
preparedness-orientation, because they involve effort, determination and choice. But, on the other hand, intentions-as-plans do not necessarily comprise an assessment of an end state or an outcome, nor do they necessarily comprise any assessment of why an outcome is desired.

A third intention construct is a conceptualization in terms of wants. One might question the choice to label a “want” as an intention from a conceptual point of view but this is in-fact found to be the case in several formal models of intentions (e.g. Fishbein and Stasson, 1990; Norman and Smith, 1995), as well as in the folk concept of intentionality (Malle and Knobe, 1997). This type of intention is usually measured using Likert-type items such as “I want to buy X”, “I wish to return to Y” or “I am willing to recommend Z”. Of the three intention constructs presented in this study, intention-as-wants is the least used conceptualization of intentions in marketing and consumer behaviour. Nevertheless, it does appear in scholarly texts and it is not uncommon to find want-type constructs in commercial market research. It has been argued that intentions-as-wants involve a gap between a current and a desired future state (Söderlund and Öhman 2005b). However, these intentions do not necessarily contain any probability assessments, or any thoughts on how to reach the desired end state. (Söderlund and Öhman, 2005b; Bagozzi and Edwards, 1988).
Process- versus End-State-Orientation

If we conclude the above notions of different conceptualizations of intentions we find that there seem to be an inherent orientation towards process and preparedness with intentions-as-plans, an inherent orientation towards end-state and outcomes with intentions-as-wants and no clear orientation towards neither process or preparedness nor on end-state or outcome with intentions-as-expectations. The reason for specifically noting this is that there is a, since long, ongoing discussion in social psychology regarding the implications of end-state versus process orientation in cognitive and motivational processes (e.g. Carrol, 1978; Hayes-Roth and Hayes-Roth, 1979; Gregory, Cialdini and Carpenter, 1982; Gollwitzer, 1993; Taylor and Pham, 1996; Pham and Taylor, 1999; Sanna, 2000; Sanna and Meier, 2000; Taylor, Pham, Rivkin and Armour, 1998).

Some parts of this discussion has been applied in a marketing context as well; Escalas and Luce (2003, 2004), for example, studied the implications on end-state vs. process-orientation for advertising effectiveness. N.B. Escalas and Luce (2003, 2004), explicitly label their intention measure “behavioural intention”, implying that it would fall under the intention-as-plans-category of the tripartite view of intentions suggested by Söderlund and Öhman (2003). However, the two items supposed to measure behavioural intention, in their study, are both formulated as intentions-as-expectations.
Mental Simulations

Simulations are related to stories and narratives (Fiske, 1993), in the sense that they are mainly episodic in nature (Escalas and Luce, 2004). Simulations serve the purpose of linking action to outcomes in a causal fashion (Pennington and Hastie, 1986; Bruner, 1990; Stein and Albro, 1997; Escalas and Luce, 2003, 2004), among other things. Process-oriented simulations typically takes the present state as its starting point and simulate the path to a desired outcome, forging action-outcome links. The action-outcome links are the embryo of a plan in the sense that they form a personal theory on causal relationships leading up to a desired end-state. They produce a step-by-step casual chain of events which is necessary to form any plan with a reasonable degree of detail. Hence, one may argue that simulating an event with an orientation towards process would encourage plan formation (Escalas and Luce, 2004).

On the other hand, end-state simulations are oriented towards the outcome. They typically use the desired outcome as their starting point and simulate further from there. This means that end-state oriented simulations will provide a more vivid view of the positive benefits and results of being in the end-state. Intentions-as-wants was described above as “involving a gap between a current and a desired future state (Söderlund and Öhman 2005b).

In fact, it has been shown that process-oriented mental simulations indeed lead to more preparative thoughts and a stronger link to
subsequent behaviour compared to end-state oriented mental simulations (Taylor and Pham 1996, Pham and Taylor 1998) It has also been shown that end-state oriented simulations can lead to a higher degree of motivation, but at the same time a weaker link between mental simulations and subsequent behaviour, compared to process-oriented mental simulations (Ibid). Similarly, it has been shown that intentions-as-wants has a stronger link to satisfaction and estimated future satisfaction compared to intentions-as-plans (Söderlund, 1998; 2002, Söderlund and Öhman 2003, 2005b) and it has also been shown that intentions-as-plans has a stronger link to re-patronizing behaviour compared to intentions-as-wants (Söderlund and Öhman 2003, 2005a).

**Hypothesis Development**

Following the reasoning about process-thoughts as instigators of planning above, we hypothesize that the reverse should also be true: It is likely that a person, who is asked to assess his/her own “plan”, would be encouraged to engage in process-based simulation.

H1: People asked to assess their intentions-as-plans will be more oriented on the process of getting to the end state, compared to people asked to assess their intentions-as-expectations or intentions-as-wants.
Furthermore, we argue that intentions-as-wants has a clear orientation towards the end-state, rather than towards the process. Consequently, asking a person to assess their intentions-as-wants, will result in him or her being more oriented towards the end-state compared to people asked to assess their intentions-as-plans or intentions-as-expectations.

H2: People asked to assess their intentions-as-wants will be more oriented towards the end-state compared to people asked to assess their intentions-as-plans or intentions-as-expectations.

Following the reasoning regarding Intentions-as-expectations above, where it was argued that intentions-as-expectations has no clear inherent orientation. Neither on process or preparedness nor on end-state or outcome therefore we would expect that intentions-as-expectations produce less process-oriented-thoughts than intentions-as-plans but more process-oriented-thoughts compared to intentions-as-wants. Also, the reverse should be true regarding end-state-oriented thoughts, meaning that intentions-as-expectations produce more end-state-oriented thoughts compared to intentions-as-wants but less compared to intentions-as-plans.
H3a People asked to assess their intentions-as-expectations will have less focus on process-oriented thoughts than people asked to assess their intentions-as-plans, but more than people asked to assess their intentions-as-wants.

H3b People asked to assess their intentions-as-expectations will have more focus on end-state-oriented thoughts than people asked to assess their intentions-as-plans, but less than people asked to assess their intentions-as-wants.

One could argue that the formulation of H3a and H3b makes H1 and H2 redundant. Since H1 and H2 are necessary, but not sufficient conditions for H3a and H3b. However, we argue that the conditions for supporting H3a and H3b are so much stricter, that we see reason to still separate H1 and H2 from H3a and H3b.

The effects of priming of end-state or process-oriented thinking on subsequent thought processes leading up to the formulation or assessment of different intention-constructs was also discussed previously. It was argued that people, who are explicitly encouraged to consider the process of getting to an end-goal, will take process-thoughts into account when they make their assessment of their connection to a future act. However, we argue that it will have a not have any effect on people who are asked to assess their intentions-as-plans but at the same time it will have an effect on people who are asked to assess their intentions-as-wants or intentions-as-expectations. This is because the priming provided by
asking for an intention-as-plan already gets people to think about end-state and further priming should have no effect.

H4: People asked to assess their intentions-as-wants or intentions-as-expectations are susceptible to encouragement to envision the process to reach the end-state.

Analogue to the reasoning, leading up to H4, we argue that people who are explicitly encouraged to consider the end-state will take end-state-thoughts into account when they make their assessment of their connection to a future act. However, we argue that it will have a not have any effect on people who are asked to assess their intentions-as-wants but at the same time it will have an effect on people who are asked to assess their intentions-as-plans or intentions-as-expectations. This is because the priming provided by asking for an intention-as-want already gets people to think about end-state and further priming should have no effect.

H5: People asked to assess their intentions-as-plans or intentions-as-expectations are susceptible to encouragement to envision the end-state.

Method

In this study the orientation-of-simulation is manipulated in two ways, either by (1) direct encouragement to envision either the process of getting to the end-state, or the end-state itself and it’s
consequences or (2) indirectly by asking for assessment of different types of intentions. Subsequently, the effect of the (a) direct and (b) indirect manipulation of orientation-of-simulation on process, and end-state thought generation is examined.

One hundred and twenty business students participated in the study. All of the participating students currently have a free subscription of a business magazine, facilitated and paid for by their student union. The empirical question used in this study was whether they want, plan or expect to subscribe to that same business magazine once they finished their degree and started working. Once they leave the educational program, however, they will have to pay for the subscription themselves or get their future employer to pay for it.

**Design and Procedure**

This study was conducted using a 2x3 experimental design. Participants were encouraged to think about either (1) the endstate itself or (2) the process to reach the endstate. After that, the participants are asked to answer a dichotomous intention question. Three different types of intention questions are used and each participant is asked to form only one of three different types of intention questions: (1) Intention-as-want, (2) intention-as-plan, or (3) intention-as-expectation.

Participants were randomly assigned to one of 6 treatment groups and were given a short questionnaire, which had 3 parts. The first
part had three different versions. First version instructed the participant to focus on either process or end-state regarding subscription of a business magazine. This was done by telling the participants that they would, at a later stage, have to thoroughly answer questions and give an account of their emotions and thoughts on different discussion points/subjects. The discussion points/subjects used for priming process thoughts were: (1) Information search, (2) Evaluation of alternatives, (3) Actual purchase process, how would you go about it? and finally (4) Payment. The discussion points/subjects for priming end-state thoughts were: (5) Owning (6) Reading, (7) Immediate consequences, (8) Long term consequences. The manipulation was simply communicating to the group of respondents that they should read the instructions and take five minutes to think about the four discussion points/subjects, related to the subscription of the magazine, on their list in front of them (either point 1-4, for the process oriented priming or point 5-8 for the end-state oriented priming).

The second part had three versions and consisted of one of the following three questions: “Do you want to subscribe to...”, “Do you plan on subscribing to...”, or “Do you expect that you will be subscribing to...”. Finally, the last part was identical for all six groups and contained a request to motivate their answer on the intention to subscribe question with at least 100 words.
Measures

The motivations were later analyzed and categorized into two different classes: process thoughts, and end-state thoughts. The 100-word limit was not applied strictly; motivations of less than 100 words were also included. The shortest motivation included in the analysis was 59 words.

An independent reviewer was presented with two subsamples of the motivations. One unprocessed sample where the independent reviewer’s task was to sort out distinct thoughts and subsequently classify them into one of three categories: endstate, process or neither, and one sample where motivations had already been divided into a number of thoughts and the task was only to classify them. The degree of inter-rater reliability was 82% when the motivations were unstructured and 100% when it was structured. Thus the reliability of the categorization of thoughts is concluded to be very good and the reliability of the total count of distinct thought is concluded to be satisfactory. (Kassarjian, 1977)

This categorization was later summarized and used as two dependent variables. More specifically, the number of thoughts, by an individual, in each category was summed up respectively and used to operationalize the orientation an individual exhibited to each of the two categories.

An example of a process oriented thought is: “I suspect it will be easy
to select what magazine I need just by looking at my co-workers” and an example of an end-state oriented thought from the same individual is: “I think it (subscribing to the magazine) will help me develop the same frame of reference as my co-workers have” and two subsequent end-state thoughts from the same individual “(Having the same frame of reference as co-workers)... will also help me fit in”, and “and that will probably not be bad for my chances for promotions (ended with a big smiley)”. It is a causal chain of events, simulated by this participant, selecting the right subscription, leads to adapting socially, which leads to promotion. Not all participants’ simulations looked like this, however. Some had parallel simulations; they simulated separate future realities. One such example is from a respondent who said, “I might be working in London and I’m not sure they will ship the paper version of the magazine.” And a parallel simulation: “If I stay here my future employer will probably have reference copies at the office, but if its hard to get my hands on a copy, I guess I might subscribe because working here without being updated on what [the magazine] says, is impossible”. However, summing up the number of total thoughts related to the process and the number of thoughts related to the end-state will provide a measure of the degree of orientation towards each category of thoughts.
**Results**

**Manipulation checks**

The manipulations worked as intended. On an overall level, encouraging participants to think about the process to reach the end-state led to more process-thoughts (mean = 2.1) compared to when participants were encouraged to think about the end-state itself (Mean = 1.35) (Difference=.75 (p< .001)). Encouraging participants to think about the end-state led to more end-state thoughts (Mean = 2.4) compared to when participants were encouraged to think about the process to reach the end-state (Mean = 1.85) (Difference=.55 (p=.012)). The total number of categorized thoughts however was not significantly affected by the manipulation. The difference between the groups (process priming = 3.95 vs. end-state priming = 3.75) in terms of total number of thoughts was .20 (p=.361), in favor of the group who was encouraged to think about process.

**Tests of Hypotheses**

Two separate one-way ANOVAs were used to test hypotheses 1 through 3b. With respect to the theoretical structure assumed, all results, except for one are significant and point in the expected direction. The results, shown in table 1, provide support for H1, H2 and H3a.
Table 1

<table>
<thead>
<tr>
<th>Intention Types</th>
<th>Dependent Variable</th>
<th>i</th>
<th>j</th>
<th>Mean difference (i-j)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process Thoughts</strong></td>
<td></td>
<td>Want (0.88)</td>
<td>Plan (2.60)</td>
<td>-1.73</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expect (1.70)</td>
<td></td>
<td>-0.83</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plan (2.60)</td>
<td>Want (0.88)</td>
<td>1.73</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expect (1.70)</td>
<td></td>
<td>0.90</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expect (1.70)</td>
<td>Plan (2.60)</td>
<td>-0.90</td>
<td>&lt;.001</td>
</tr>
<tr>
<td><strong>End-State Thoughts</strong></td>
<td></td>
<td>Want (3.1)</td>
<td>Plan (1.50)</td>
<td>1.60</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expect (1.78)</td>
<td></td>
<td>1.33</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plan (1.50)</td>
<td>Want (3.1)</td>
<td>-1.60</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expect (1.78)</td>
<td></td>
<td>-0.28</td>
<td>.464</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expect (1.78)</td>
<td>Plan (1.50)</td>
<td>0.28</td>
<td>.464</td>
</tr>
</tbody>
</table>

H1 is tested, and found to be supported, by comparing the number of process-oriented thoughts generated by participants asked to assess their intentions-as-plans (mean = 2.60) to the number of process-oriented thoughts generated by participants asked to assess their intentions-as-wants (mean = .88), (mean difference = 1.73; p < .001) or intentions-as-expectations (mean = 1.70), (mean difference = .90; p < .001).
H2 is tested, and found to be supported, by comparing the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-wants (mean = 3.10) to the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-plans (mean = 1.50), (mean difference: 1.60; p < .001) or intentions-as-expectations (mean = 1.78), (mean difference: 1.33; p < .001).

H3a is tested, and found to be supported, by comparing the number of process-oriented thoughts generated by participants asked to assess their intentions-as-expectations (mean = 1.70) to the number of process-oriented thoughts generated by participants asked to assess their intentions-as-wants (mean = .88), (mean difference: .83; p < .001) and again using the results generated to answer H1, i.e. comparing the number of process-oriented thoughts generated by participants asked to assess their intentions-as-expectations (mean = 1.70) to the number of process-oriented thoughts generated by participants asked to assess their intentions-as-plans (mean = 2.60), (mean difference: -.90; p < .001).
H3b is tested in a similar fashion by comparing the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-expectations (mean = 1.78) to the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-wants (mean = 3.10) (mean difference: -1.33; p < .001) and to the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-plans (mean = 1.50), (mean difference: .28; p < .431).

Thus, H3b is not supported. Although the directions are as hypothesized, the results are not conclusive in the sense that only the difference between intentions-as-wants and intentions-as-expectations is significant (p<.001) while the difference between intentions-as-plans and intentions-as-expectations is not significant (p=.431).
Table 2:

<table>
<thead>
<tr>
<th>Intention Type</th>
<th>Thoughts</th>
<th>Priming</th>
<th>n</th>
<th>mean</th>
<th>std.dev</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Want</td>
<td>Process-Thoughts</td>
<td>Process Priming</td>
<td>20</td>
<td>1.4</td>
<td>0.75</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>End-state-Thoughts</td>
<td>End-state Priming</td>
<td>20</td>
<td>0.35</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process-Thoughts</td>
<td>Process Priming</td>
<td>20</td>
<td>2.9</td>
<td>1.17</td>
<td>.336</td>
</tr>
<tr>
<td></td>
<td>End-state-Thoughts</td>
<td>End-state Priming</td>
<td>20</td>
<td>3.3</td>
<td>1.42</td>
<td></td>
</tr>
<tr>
<td>Plan</td>
<td>Process-Thoughts</td>
<td>Process Priming</td>
<td>20</td>
<td>2.9</td>
<td>0.97</td>
<td>.079</td>
</tr>
<tr>
<td></td>
<td>End-state-Thoughts</td>
<td>End-state Priming</td>
<td>20</td>
<td>2.3</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process-Thoughts</td>
<td>Process Priming</td>
<td>20</td>
<td>1.25</td>
<td>0.64</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>End-state-Thoughts</td>
<td>End-state Priming</td>
<td>20</td>
<td>1.75</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>Expect</td>
<td>Process-Thoughts</td>
<td>Process Priming</td>
<td>20</td>
<td>2</td>
<td>0.65</td>
<td>.007</td>
</tr>
<tr>
<td></td>
<td>End-state-Thoughts</td>
<td>End-state Priming</td>
<td>20</td>
<td>1.4</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process-Thoughts</td>
<td>Process Priming</td>
<td>20</td>
<td>1.4</td>
<td>0.88</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>End-state-Thoughts</td>
<td>End-state Priming</td>
<td>20</td>
<td>2.15</td>
<td>0.67</td>
<td></td>
</tr>
</tbody>
</table>

H4 and H5 were tested using a one-way ANOVA and examining combinations of several sheffe type post-hoc tests shown in table 2.

H4 was tested, and found to be supported, by comparing the number of process-oriented thoughts generated by participants asked to assess their intentions-as-wants in the condition where process-oriented thinking was encouraged, to the number of process-oriented thoughts generated in the condition when end-state-oriented thinking was encouraged (Mean 1.4 compared to .35, p < .001). Furthermore, by comparing the number of process-oriented thoughts generated by participants asked to assess their intentions-as-expectations in the condition where
process-oriented thinking was encouraged to the number of process-oriented thoughts generated in the condition when end-state-oriented thinking was encouraged (Mean 2 compared to 1.4, p=.007).

H5 was tested, and found to be supported, by comparing the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-plans in the condition where end-state-oriented thinking was encouraged, to the number of end-state-oriented thoughts generated in the condition when process-oriented thinking was encouraged (Mean 1.75 compared to 1.25, p=.025). Furthermore, by comparing the number of end-state-oriented thoughts generated by participants asked to assess their intentions-as-expectations in the condition where end-state-oriented thinking was encouraged, to the number of end-state-oriented thoughts generated in the condition when process-oriented thinking was encouraged (Mean 2.15 compared to 1.4, p=.004).

Limitations of the results

It is possible that the total number of thoughts was affected by the imposed limit of at least 100 words. It is possible that the limit not only affects the number of thoughts positively but also works in the opposite direction, thus limiting the variation in the total number of thoughts.
Conclusions, Discussion and Implications

Even though the results are not conclusive when it comes to all formulated hypotheses, it is still clear that intentions in various conceptualizations are related to mental simulation in the sense that they convey different meaning in terms of focus on end-state-oriented and process-oriented thinking differently. Intentions-as-plans are the most process-oriented intention construct and intentions-as-wants is the most end-state-oriented intention construct, while intentions-as-expectations are more difficult to categorize. It seems that intentions-as-expectations are more sensitive to the context in general, meaning that it seems as if intentions-as-expectations are sensitive to both to end-state- and process-oriented contextual cues, which was not the case with intentions-as-wants and intentions-as-plans which were only sensitive to one of the contextual categories, process context for intentions-as-wants and end-state context for intentions-as-plans.

Intentions-as-wants and intentions-as-plans are also sensitive to contextual cues and priming but in a non-symmetrical way. The intentions-as-wants construct is sensitive to contextual cues of a process-oriented nature but seemingly not sensitive to cues of an end-state oriented nature. Reversely, The intentions-as-plans construct is seemingly not sensitive to contextual cues of a process-oriented nature but is indeed sensitive to cues of an end-state-oriented nature.
It has previously been shown (e.g. Söderlund 2001; Söderlund and Öhman 2005a; 2005b) that the three different operationalizations perform differently in terms of attitude-intention, intention-behaviour and motivation-intention links. The results show that the different operationalizations produce different orientation in terms of mental simulations and as was previously argued, that in turn is likely to affect the chance for acting on a given simulation. We showed that intentions-as-wants inherently produce more thoughts on the actual end-state and less on the process of getting to the end-state and vice versa for intentions-as-plans. Given that process-oriented mental simulation yields a higher chance of translating into action compared to end-state oriented mental simulation (e.g. Sanna and Meier, 2000), this could account for some results found in some previous research (e.g. Söderlund and Öhman 2003, 2005a) indicating that Intentions-as-wants perform worse in terms of predicting actual behaviour, compared to intentions-as-plans and intentions-as-expectations.

The implications for researchers and practitioners are that attention should be paid when selecting a way of conceptualizing and operationalizing intentions in market- and consumer-research. The different inherent focus, in terms of end-state- and process-oriented thinking, tied to different intention constructs can lead to misinterpretations or even pure misconceptions, as was the case with the conversation portrayed in the introduction of this study, if one is not careful.
References:


Article 6 - Buying or Lying - The role of social pressure and temporal disjunction of intention assessment and behavior on the predictive ability of “good intentions”

Abstract

This study addresses two possible explanations to why it is particularly difficult to predict socially desirable purchasing behavior. We examine a common phenomenon of overestimating “good intentions” and it is shown that good intentions are less reliable and more sensitive to framing in terms of time as well as more sensitive to social pressure compared to regular intentions. More specifically, we look at the intention to purchase eco-friendly products. A quasi-experiment is conducted, where social pressure and temporal disjunction is manipulated and examined in the context of regular, as well as “good” intentions.

Introduction

Some time ago, a participant of a seminar on prediction for market researchers approached me. This person just had a confusing experience of market research concerning his’ customers’ buying habits with regards to ecological products. He had done a survey on what his customers thought about his assortment. One question
Prediction of future consumer purchases and understanding of consumer shopping behavior is a central theme in retailing, tying directly into several problems a retailer faces every day such as, for example; sales planning (Arnold et al, 2009) sourcing (Grewal and Levy, 2007), stock keeping (ibid.), staffing (Michael and Kim, 2005), logistics (Horvath et al 2005), assortment planning (Grewal et al, 1999; Morales et al, 2005), customer experience management (Puccinelli et al 2009) promotion (Hardesty and Bearden, 2003) and pricing (e.g. Hardesty et al, 2007; Kukar-Kinney et al, 2007; Mägi and Julander, 2005). It is a difficult task under normal circumstances and there are several aspects that could possibly make it even harder to do with a reasonable degree of accuracy. One such aspect is when we try to predict socially desirable acts, which are typically grossly overestimated (Sherman, 1980). This study addresses two possible explanations to why it is particularly difficult to predict socially desirable purchasing behavior. We examine the role of social pressure and temporal framing on the predictive ability of socially desirable behavior. Social pressure has been used in several previous studies of socially desirable behavior (e.g. Fitzsimons and Morwitz, 1996; Harbaugh, 1996, 1998; Knack, 1992; Sherman, 1980) but this study
seeks to expand the understanding and enhance the ability to more accurately predict this type of behavior by adding theories on temporal framing, especially in regards to mental simulation tied to temporal framing.

**Theoretical Framework**

Few dispute the fact that an intention does not always lead to a behavior in accordance with that intention. This is especially true in a retailing context. The evaluation-behavior and intention-behavior discrepancies in a retailing setting are typically attributed to two main factors. Firstly, it can be questioned whether any extensive decision making, evaluation or planning occur prior to the typical consumer purchase. Instead, the decision process is better described in terms of habituation, heuristics and rules of thumb. This is especially true if the product is purchased frequently or in stable and re-occurring situations. (e.g. Kollat and Willet, 1967; Olshavsky and Granbois, 1979; Einhorn and Hogarth, 1981; Hoyer, 1984, 1986; Nordfält, 2009). Secondly, it has been shown that a substantial part of the purchase decisions for fast moving consumer goods are made at the point of purchase and that a large part of those are unplanned, or at least partially unplanned (Kollat and Willet, 1967; Cobb and Hoyer, 1986; Nordfält, 2009). Few predictions are based on data collected at the point of purchase and that in itself could be part of the explanation for the questionable predictive qualities of intentions in a retail setting in the sense that the estimate suffers from a temporal disjunction between evaluation or intention formation and
subsequent behavior. In light of the fact that as much as 67% of retailing purchases are unplanned or partially unplanned (Kollat and Willet, 1967) and according to Hoyer (1986), Williams and Dardis (1972) and Stern (1962), the numbers have been rising ever since the 1940:s, one could argue that this is a serious and possibly accelerating problem.

Thus, the predictive ability of a question regarding purchasing plans, or hypothetical purchasing plans in a retail setting, as in this case, can be argued to be particularly questionable.

However, in the case presented by the, afore mentioned, participant of the seminar on prediction for market researchers, theories on impulse purchases, or unplanned purchases do not offer a full explanation to the phenomenon he described. It was the prediction of purchases of ecological products that were especially off the mark in this case. Other predictions regarding “regular” products were, in his own words: “far from perfect but not nearly as bad as the intention to buy ecological products”.

The suspicion arose that the type of intention that his customers had given expression to, could be analogue to intentions of performing such behaviors as eating healthier, quit smoking, start working out, spending more time with the kids etc. In other words, so called “good intentions”. “Good” intentions, sprung from, or related to feelings of duty, virtue, moral fiber and similar concepts have been a focus of interest for a long time in several previous studies on areas as
disparate as self predictions (Sherman, 1980; Fitzsimons and Morwitz, 1996), price formation (Smith, 1790), voting (e.g. Harbaugh 1996; Knack, 1992, 2001) charity giving (Harbaugh 1998) taxation (Kaplow and Shavell, 2007), and societal welfare enhancement (Sedgwick, 1907) but also to a whole world of moral-philosophers over several centuries and the conclusion has been that they have questionable predictive value. The causes for this has been derived as, for example; lack of habituation and training to withstand the lures of one’s emotions, feelings and desires, also called “akrasia” by Aristotle, or lack of generosity and benevolence (Hume, 1739, 1751), lack of sense of duty or lack of virtue (Kant 1797), lack of willpower (Dewey, 1922) or inability to shift between mental representations of goals (Mischel and More, 1973). The common denominator of the above scholars is that they describe a desirable end-state and an un-desirable process of getting to the end state.

The nature of decisions involving morals, virtue or other similar concepts, makes decisions especially sensitive to certain aspects that are typically less influential in regular decision-making. Two such aspects are believed to be social pressure and temporal disjunctions between costs and rewards.
Social Pressure

All behavior, which could be said to adhere to some kind of social norm, can be subject to social pressure. Acting in compliance with a social norm, if there is social pressure, provides a form of extrinsic motivation in itself. The fact that there is a widespread over-reporting of purchase intentions of eco-friendly products in surveys (Sherman, 1980), suggest that there are extrinsic motives at play.

This accords to an extensive literature in social psychology, which shows that behavior varies depending on whether people perceive their actions to be monitored or public (Cialdini and Trost, 1998; Lerner and Tetlock, 1999; Cialdini and Goldstein, 2004.)

Furthermore, the accentuated effects of social pressure on socially desirable acts have been researched in several contexts. Harbaugh (1996, 1998) and Knack (1992, 2001) and Gerber, Green and Larimer (2008) have studied voter turnout and they found that social pressure, in the form of monitoring, plays an important part in explaining why people vote. Pallak, Cook and Sullivan (1980) studied environmentally friendly behavior in the form of energy conservation and found that information and a plea from the researcher to conserve energy did not suffice in getting consumers to save any significant amounts of energy. However, when consumers faced the possibility of getting their names publicized together with their energy consumption, consumers managed to save 422 cubic feet of natural gas per month, per person. Pallak, Cook and Sullivan (1980)
did not study social pressure explicitly; rather their study was
designed to explore the role of commitment in persistent behavioral
change. However their study offers some evidence that
environmental behavior, at least in its early stages, before it becomes
a habit or an internalized behavior, is sensitive to social pressure.

Similarly to eco-friendly behavior, voting behavior is typically
perceived as a civic duty (e.g. Blais, 2000), furthermore voting
behavior and eco-friendly behavior share the trait that the individual
has very little to gain from it in the immediate sense, or as Hegel
(1821) expressed it, “the casting of a single vote is of no significance
where there is a multitude of electors“. The effect of one individual
consumer’s or voter’s behavior, drowned in the effect of the behavior of
an entire world of consumers or voters. It is therefore possible that
the causes for voting and behaving in an environmentally responsible
way could show some kinship.

Hence, we argue that monitoring would have an effect on intention
behavior consistency in general (H1a) and for socially desirable
behavior in particular (H2b).

H1a: If a person believes he/she is observed, it will affect the
intention-behavior link positively.

H1b: If a person believes he/she is observed, it will have a greater
positive effect on intention-behavior link if the intention is “good”.

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Temporal Disjunction

In general, people experience a decrease in confidence as they approach the “moment of truth” (Nisan, 1972, 1973; Gilovich, Kerr and Medvedec 1993; Sheperd, Oulette and Fernandez, 1996; Sanna, 2000; Sanna and Meier, 2000) in matters as different as future salaries, test results, and memory tasks. Sanna and Meier (2000) argue that this is due to the fact that, as an event get closer, it is likely that people have more preparative thoughts, i.e., they start considering what it would take to reach an end state as opposed to occupying themselves with thoughts on whether they would like the end state or not. Taylor and Pham (1996) and Pham and Taylor (1999) describe the two different ways to think about ones own future. Firstly, process simulation (envisioning the path to the goal) that typically takes place to a higher degree when the action simulated is close than when it is in the far future. Secondly, goal simulation (envisioning the end state) that typically takes place to a higher degree when the action simulated is in the far future compared to when it is close. Taylor and Pham (1996) also show that process simulation is a more efficient instigator of planning and subsequent actual behavior in accordance to reaching a specific goal, compared to goal simulation. Goal simulation produce something Taylor and Pham (1996) call “free-floating motivation” or “hype”. The free-floating motivation or hype produces well being and positive emotions but very little in terms of mental representation of action. The lack of thought devoted to what reaching the end goal would entail, not only reduce the chance of translating the free-floating
motivation into action, it also makes the reward itself more salient in comparison with the “costs” of obtaining the reward.

The motives for behaving in an eco-friendly manner is at least to some extent, intrinsic, in the sense that one is rewarded instantaneously by feelings of “doing good”, being moral, and perhaps avoiding feelings of guilt and in the longer run, there is typically a murky notion of “a better world”, a legacy for our children or something similar.

The notion that consumers receive mental utility when behaving in an environmentally responsible way is not necessarily contesting the notion that there is an extrinsic motivation for that type of behavior. The mental utility could come from either adhering to something he or she sees as their duty or it could come from the fact that other people watch them adhere to that same duty.

Performing behaviors such as eating healthier, quit smoking, working out etc are all accompanied with immediate trade-offs or costs but at the same time most of the reward is in the future. There is an immediate reward in the sense that one might feel good about one self for doing what it takes to feel even better in the future. The same applies to some extent to buying eco-friendly products or fair trade type products.
The reward is twofold, one immediate and very personal reward, which comes from positive feelings about the self for “doing the right thing” and a second reward, partly disconnected to the self and also not immediate at all, such as for example “a better world.”

If asked now, both reward and costs are in the future. When that is the case, Sanna and Meier (2000) argue that it will lead to a relative underestimation of costs in comparison with rewards since rewards are less sensitive to temporal framing compared to cost or laborious procedures.

If asked at the time of purchase, or in very close proximity to the time of purchase, a large part of the reward is still in the future but the costs are immediate and preparative thoughts are more salient. This is further accentuated in regards to eco-friendly behavior since the cost for behaving in an eco-friendly manner typically is associated with some type of trade off, for example a higher price.

Hence, we argue that time between assessment and execution has a deteriorating effect on predictive quality of the assessment in general (H2a) and for socially desirable behavior in particular (H2b).

H2a: The time between intention formulation and subsequent behavior will affect the intention-behavior link negatively.
H2b: The time between intention formulation and subsequent behavior will have a greater negative effect on the intention-behavior link if the intention is “good”.

Method

Design

A 2x2x2 (overt/covert monitoring x short/long time before purchase x “good”/regular intention) quasi-experimental design was used. Respondents were either (1) overtly or (2) covertly monitored by the researcher and they were asked either (1) directly before, or (2) approximately two hours before the purchase of a cup of coffee. The intentions to buy either (1) ecological or (2) regular coffee was not manipulated however. Instead, the experiment, rested on a pre-test where 51% (n=70) of participants stated they would buy ecological coffee, if it was made available to them in the cafeteria at a 10% price premium. It was therefore concluded that a random sample would give the variation in intention, needed to examine the effects of the other two variables without having to control or manipulate intentionality explicitly. It would be near impossible to explicitly manipulate intentionality without introducing confounding factors and it was thus, judged that this procedure, i.e., relying on natural variation in intentions, would be the most appropriate.
**Procedure**

The study was conducted on a golf course. The layout of the course allowed for a design where respondents visited the same café at several different points in time. The course has 18 holes and a player who wants to play the entire course will visit a specific location, with a café, three different times within approximately two-hour intervals. They will visit the location with the café once before they start playing the course, once again, approximately two hours later, when they take an obligatory 7-8 minute break between the 9th and 10th holes and then again, approximately another two hours after that, when they have finished the 18th hole. The players typically played together in groups of four.

All players were approached at the beginning of their round and asked whether they would purchase a coffee in the obligatory break between the 9th and 10th hole. Those that said they planned on taking a coffee break were asked a set of follow-up questions.

Approximately half of the respondents were asked the set of follow-up questions shortly before they started playing on the 1st hole, approximately two hours before purchase occurs and the second half of the respondents were asked approximately two hours later, shortly before making a purchase from the café.
In total, 552 players were approached over an eleven-day period, 100 of them declined to participate in the study, another 204 had no intention of buying coffee and were thus excluded, another 9 persons were excluded because of personal ties to either the researcher or the cashier of the café, the remaining 239 agreed to participate in the study.

The set of follow-up questions for the respondents who said they would purchase coffee was directed at several different areas of behavioral motivation, expectations and desires concerning mainly their golf game. However, they were also informed that there were two different types of coffee, one regular type and one eco-friendly, both of the same brand and blend. They were also informed that the cost of the regular type was € 1.1 while the cost of the eco-friendly coffee was € 1.35. They were also asked which of the two types they were going to buy. More specifically, they were asked: “which one, if any, do you think you are you going to buy?” Their answers were noted and the researcher wrote down a short description of the respondent in terms of gender, approximate age, color of hair, brand and color of golf bag and brand of golf clubs. This was done to be able to match answers from the same respondent given at different points in time.

Overall, this system worked satisfactory with a confident identification of respondents in 202 out of 239 cases. It is not clear whether the 27 respondents that were not identified in the second round of questions were simply not recognized as participants or if
they just did not finish their round for some reason. 19 out of the 27 missing respondents were asked on the same morning, around noon of that day, heavy rains interrupted the game for approximately 15 minutes, it is possible that some of those 19 aborted their round due to the weather. It is also possible that the researcher failed to recognize a respondent from the first round but if there was any doubt, the instruction was to not pursue the interview in the second round. This is the main reason for the smaller number of respondents in the four cells containing respondents who were asked at the beginning of the round, compared to the four cells asked directly before an actual purchase. (87 and 115 answers respectively)

At the point of purchase, approximately half of the respondents’ choices were overtly monitored by the researcher, standing right next to the coffee dispenser with a writing pad and pen, intently watching the respondent, ready to mark the choices and the other half was covertly monitored by the cashier of the café, from her regular position approximately 3 meters from the coffee dispenser and with the researcher standing approximately 15 meters away, pretending to take a break and partly obscured by a small building. The cashier was instructed to write down her observations after the respondents had left.

**Measures**

The intention to purchase was measured with a dichotomous intention question, intention to buy ecological coffee or intentions to
buy regular coffee. The ones with no intention of buying coffee at all, were screened, for the purposes of this study, at an early stage. Those participants, intending to buy eco-friendly coffee, were categorized as having “good” intentions and those participants who stated that they would purchase regular coffee were coded as having “regular” intentions.

Actual behavior was operationalized by observing if the participant purchased any coffee, and if they did, what type of coffee they purchased. Intention-behavior consistency was then comprised, using the intention measure and checking that against actual behavior. If the participant acted in absolute accordance with their intention, they were registered as being “true” with regards to the consistency of their stated intention and their subsequent behavior, and if they did not act in accordance with their stated intention, either by purchasing the wrong type of coffee or by not purchasing coffee at all, they were registered as being “false” with regards to the consistency of their stated intention and their subsequent behavior. Thus, participants not acting in strict accordance with their intention were coded as “false” regardless of the reason for the intention-behavior discrepancy.
Results

A two-way ANOVA was performed with intention-behavior consistency as a dependent variable and intention ("good" versus "regular"), temporal disjunction (long versus short) and monitoring (monitored versus un-monitored) as factors.

Table 1

<table>
<thead>
<tr>
<th>Corrected Model</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>11,06</td>
<td>0,000</td>
</tr>
</tbody>
</table>

R Squared = .285 (Adjusted R Squared = .259)

Dependent Variable: Intention Behavior Consistency

<table>
<thead>
<tr>
<th>Factors</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention Type (IT)</td>
<td>36,532</td>
<td>0,000</td>
</tr>
<tr>
<td>Monitoring (M)</td>
<td>12,142</td>
<td>0,001</td>
</tr>
<tr>
<td>Temporal Disjunction (TD)</td>
<td>8,744</td>
<td>0,003</td>
</tr>
<tr>
<td>ITxM</td>
<td>8,295</td>
<td>0,004</td>
</tr>
<tr>
<td>ITxCD</td>
<td>4,535</td>
<td>0,034</td>
</tr>
<tr>
<td>MxCD</td>
<td>0,857</td>
<td>0,356</td>
</tr>
<tr>
<td>ITxxMxCD</td>
<td>0,256</td>
<td>0,614</td>
</tr>
</tbody>
</table>

The results of the two–way ANOVA are shown in table 1. As evident in the table, The overall results were significant (F(3,199)=11.06 and
adjusted R square was .26). All main effects were significant; Intention Type, \( (F(1,201)=36.53, p<.001, \) Partial Eta Square=.16); Temporal Disjunction \( (F(1,201)=8.74, p=.003, \) Partial Eta Square=.04); and Monitoring \( (F(1,201)=12.74, p=.001, \) Partial Eta Square=.06).

Furthermore, as hypothesized, two of the two-way interaction effects were also significant: Intention Type x Temporal Disjunction \( (F(1,201)=4.53, p=.034, \) Partial Eta Square=.02), displayed in figure 1 and Intention Type x Monitoring, \( (F(1,201)=8.29, p=.004, \) Partial Eta Square=.04), displayed in figure 2. However, the remaining two-way interaction effect and the three way interaction effect were not significant: Monitoring x Temporal Disjunction \( (F(1,201)=.434, p=.511, \) Partial Eta Square=.004) and Intention Type x Monitoring x Temporal Disjunction \( (F(1,201)=.909, p=.342, \) Partial Eta Square=.001).

Conclusions
All hypotheses receive conclusive support. As can be seen in table 1, all hypothesized results are significant. Furthermore, as can be seen from table 2, they are also in the hypothesized direction.
Hypothesis 1a (Overt monitoring will affect intention-behavior link positively.) is also supported. The results show a significant main effect for monitoring. Furthermore, by looking at the significant interaction effect between monitoring and intention type, we can conclude that H1b (Overt monitoring will have a greater positive effect on intention-behavior link if the intention is “good”) is also supported.
When taking a closer look at the hypotheses concerning the effect of temporal disjunction we can conclude that Hypothesis 2a (The time between intention formulation and subsequent behavior will affect intention-behavior link negatively) is supported by looking at the significant main effect for temporal disjunction. Furthermore, Hypothesis 2b is also supported since the interaction effect for intention and temporal disjunction is significant.
Discussion

The results from this quasi-experiment shed some light on why researchers and practitioners sometimes find large discrepancies between what consumers say they will do and what they actually do in the end. It is shown that good intentions are less reliable and more sensitive to framing in terms of time as well as more sensitive to social pressure compared to regular intentions.
The study extends to the literature on purchase predictions in general in the sense that it provides some insight into the causes for discrepancies between stated and actual future behavior. Especially when it comes to predictions of socially desirable behavior such as buying eco-friendly products or other products with a corporate social responsibility profile and social pressure plays an important part in this.

We also contribute to the literature on temporal framing and mental simulation in the sense that we show that socially desirable behavior is more sensitive to effects of temporal disjunction between assessment and subsequent action, compared to regular type behavior.

Furthermore, one could argue that there are several other occasions besides purchases of socially desirable products that share traits with the studied behavior. It is plausible that other “good intentions” such as the ones mentioned in the introduction of this study, such as intention to start eating healthier, quit smoking, start working out, spending more time with the kids etc. would show similar sensitivity to temporal disjunction and social pressure.

Furthermore, the study extends to the theory on mental simulations, for example to the work of Sanna and Meier (2000) in the sense that it does not limit the implications of temporal disjunction to mere simulation, but shows that the effects translates into action as well.
Managerial Implications

There are some obvious managerial implications from this study such as applying caution to the interpretation of surveys of socially desirable acts such as purchasing eco-friendly products both in terms of forced or extrinsically motivated compliance with social norms as well as in terms of the temporal framing of the survey.

Secondly, one could argue that increasing the social pressure or the feeling of being monitored could positively affect the degree of corporate social responsibility type intentions among consumers that actually translates into consumer action. This could be done by making consumers who chose eco-friendly product visible, for example, by giving them special bags to carry their eco-friendly products in or by giving packaging of eco-friendly products a differentiated design, making them visible to other customers when carrying them in the shopping basket or cart.

Thirdly, if one seeks to predict this type of socially desirable behavior, one should be attentive to the degree of monitoring that can be expected in the actual purchase situation, as well as to the temporal disjunction between intention formation and subsequent behavior. One could also actively seek to minimize the temporal disjunction by asking for this type of intentions in close proximity to the purchase. For example, inside or at least close to the point of purchase directly before a purchase decision can be expected to be made.
Fourthly, given that good intentions deteriorate with time, one could try to activate the planning process as close to the purchase as possible. Traditional types of communication such as print and TV advertising are typically received by consumers at a point in time when they are not in the position to facilitate a purchase. That means that quite often, traditional marketing messages are subject to this deterioration and it could be fruitful to consider using other types of communication to a higher degree, especially when it comes to eco-friendly, or fair-trade type products. For example, instead of communicating through traditional mass-media channels, one could try to communicate through vessels which allows for communication in closer proximity to the actual purchase, such as in-store communications, through packaging, digital signage etc.
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