The Compromise Effect: A Literature Review

Bachelors Thesis

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Abstract

The Compromise Effect describes the phenomenon in which an option gains market share when it becomes a middle alternative in a choice set. Thus validating the assumption that, contrary to previous believes, the context in which a choice is made does indeed have an impact on consumer choice. A key factor dictating the potency of the Compromise Effect in any given circumstance is often that of uncertainty, specifically uncertainty regarding the eventual value derived from a chosen option. Uncertainty in choice is fueled by the fact that losses on one attribute are perceived to loom larger than equivalent gains on another. Such ambiguity serves to increase the complexity of decision making processes and interacts with various other influence factors. Accordingly more elaborate thought processes often give rise to increased compromise option selection. This holds in group decision making and can therefore be applied in a B2B context in which numerous actors influence the eventual outcome of a choice process.

1. Introduction

A comprehensive understanding of the rationale dictating consumer purchasing decisions is arguably the core component of any marketing strategy. Consideration of the factors influencing consumers, what makes them act in the way they do and the reasons behind the selection of certain products and their disregard of others is crucial to our understanding of what consumers will ultimately demand from a product. A marketing campaign that dismisses the importance of such investigation is unlikely to yield significant success.

Extensive research was conducted in this area, generating sustained improvements in regards to our understanding of consumer choice. Theories were conceived, developed, challenged and amended. The assumption that new products take from others in proportion of their original share, incorporated in various choice models (e.g. Luce 1959), was invalidated and new assumptions soon replaced it. One of the most popular of these new theories, Kahneman and Tversky's (1972) Similarity Hypothesis, proposed that a new product will take disproportionally more share from options similar to it than from dissimilar ones. Choice was thus determined to be independent of context. In 1982 however, Hubert, Payne and Puto were among the first to challenge this assumption, developing a new understanding of consumer choice processes that remain valid to this day. This is of particular importance as such findings provide a solid foundation on which to develop the theory of the Compromise Effect, the subject of this thesis. Their paper discussed the influence of asymmetrical dominated alternatives (an alternative which is dominated by one item in the choice set but not by another) on the choice probability for different options. It was found that the introduction of an asymmetrically dominated alternative violates the assumption of similarity as "adding such an alternative to a choice set can increase the probability of choosing the item that dominates it" (Hubert, Puto and Payne 1982, p. 90).

Further research on context effects in choice was then conducted. Simonson (1989) was the first to mention the Compromise Effect, observing that a middle option in a choice set gains share relative to the adjacent brands when it becomes a compromise alternative. Subsequent studies proved the robustness of the Compromise Effect (Simonson and Tversky 1992; Wernerfelt 1995) and investigated the impact of different influence factors (Chernev 2004; Dhar, Nowlis and Sherman 2000; Chuang et al. 2013; Müller, Vogt and Kroll 2012).

The purpose of this paper is to provide the reader with an understanding of the Compromise Effect, the factors that influence it and the extent of its relevance and application in a B2B context. The structure is as follows: The main portion is divided into three sub-sections. The first section will provide the reader with a basic understanding of the principle of extremeness aversion and two of its forms; namely polarization and compromise. Subsequently, various influence factors on the Compromise Effect will be examined. These factors are particularly important in developing a more extensive understanding of how different consumers make their purchasing decisions. Successive sections will then explore the extension of the Compromise Effect in a B2B context: group decision making processes and corporate strategy will be examined. The thesis will conclude with a discussion of the aforementioned issues and the implications for marketing management decisions.

2. Context Effects in Choice

Marketing strategies of the past relied heavily on the assumption that consumers seek value maximization, thus consumers were said to choose the product or service that offers them the highest subjective value. The underlying implication of this Value Maximization Strategy (Luce 1959) being that consumer selection of a certain alternative is independent of context. Thus the

choice is based purely on value derived, irrespective of the set of alternatives that frame such a consideration (Tversky and Simonson 1992, p. 281). Past and current research (Simonson 1989, Tversky and Simonson 1992, Chernev 2004) however indicates that consumer choice is, contrary to the aforementioned theory, dependent on context. The following section will discuss the incidence of Extremeness Aversion (e g. Tversky and Simonson 1992), more specifically polarization and Compromise Effects in choice.

Extremeness Aversion is based on the Prospect Theory (Tversky and Kahnemann 1979), which asserts, "outcomes that are below the reference point (losses) are weighted more heavily than outcomes that are above the reference point (gains)" (Simonson and Tversky 1992, p. 282) ("Insert Figure 1 about here"). It "[...] extends the basic principle of loss aversion to advantages and disadvantages of options in the choice set, provided that options are evaluated with respect to attributes with diminishing marginal values and perceived losses loom larger than corresponding gains" (Müller, Vogt, Kroll, 2012, p. 108). If the middle option in a given choice set acts as the reference point for customers, the selection of an extreme alternative appears to be more difficult to justify, possibly a result of the fact that losses will weigh heavier on the minds of consumers than gains. "Extremeness aversion reflects that intermediate options tend to be favored because disadvantages loom larger than advantages and intermediate options have relatively smaller disadvantages than extreme options" (Bettman 1998, p. 207). Research has also revealed various other factors that influence extremeness aversion. The most important factors will be discussed in Section 3.

2.1 Polarization

When making purchase decisions consumers must first evaluate the attributes of the available alternatives in order to come to a conclusion. An increase in the presence of one attribute is

associated with the decline of another. Intuitively one may assume that these losses are innately disadvantageous or at the very minimum bear negative connotations. Although such assumptions may, in particular cases, prove valid, one must be cautious in universally applying such expectations as it is often the case that "the difference in the evaluation of advantages and disadvantages [...] may depend on the attributes in question; it can be large for one attribute and negligible for another" (Simonson and Tversky 1992, p. 291). Hence, "polarization occurs when only one of the inequalities holds. It is expected if disadvantages loom larger than advantages on one dimension but not on the other" (Simonson and Tversky 1992, p.289). This implies that polarization describes a state in which consumers harbor an extremeness aversion for some factors but not for others.

This effect was demonstrated when consumers were presented with different choice sets containing products that were differentiated according to two attributes; namely quality and price. It was found that customers, when facing the trade-off, showed extremeness aversion for quality but not for price. It has been further suggested that such findings may be extrapolated to include other attributes evaluated by the decision maker (Sheng, Parker and Nakamoto 2005, p. 592). In reference to the results concerning price and quality, such outcomes would indicate that customers generally favor quality or performance over price (Simonson and Tversky 1992, p. 291).

2.2 Compromise

"An asymmetrically dominated alternative is dominated by one item in the set but not by another. Adding such an alternative to a choice set can increase the probability of choosing the item that dominates it" (Huber, Payne and Puto 1982, p. 90). Huber, Payne and Puto (1982) found that adding an asymmetrically dominated alternative to a choice set increases the

likelihood of choosing the option that dominates the new alternative. This aptly named 'attraction effect' served to reveal the apparent inaccuracy of many preceding consumer choice models and theories, whose underlying hypotheses were inconsistent with regards to the empirical evidence obtained. The assumption of regularity in choice, which claimed that the addition of a new alternative is associated with a decline in share for all existing brands (Pleskac 2012), is one such example among a myriad of disproven theories. A further victim of Huber, Payne and Puto's findings was the commonly employed Similarity Hypothesis (Tversky 1972) which states "that a new product takes disproportionately more share from those similar to it than from dissimilar items."

It was whilst developing upon such research that Simonson (1989) first mentioned the Compromise Effect and distinguished it from the aforementioned Attraction Effect. The Compromise Effect suggests that the addition of an alternative that is inferior relative to one of the core brands in a binary choice set (A,B) adds two justifications for selecting the relatively superior alternative (B). The first is based on the relative superiority relationship, and tends to favor the superior alternative (Simonson 1989, p. 161). If consumers are uncertain about how to evaluate the different attributes of options, a middle option offers a compromise between the available alternatives, thus indicating an attractive alternative to the two extreme options. The second reason is based on the fact that, following the addition of the relatively inferior alternative (C) to a choice set (ABC), the superior brand (B) can be seen as a compromise choice in terms of its attribute values between the existing competitor (A) and the additional inferior alternative (Simonson 1989, p. 161) ("Insert Figure 2 about here"). As such "a compromise choice can reduce the conflict associated with giving up one attribute for another and can be justified by arguing that it combines both attributes" (Sheng, Parker, Nakamoto 2005, p.592). Moreover, "the

addition of a dominated adjacent option will push the dominant option to a higher level in the perceptual space, thus making it more attractive (Pan, Lehmann 1993, p.84).

As previously discussed, consumers are adverse against loss and thus strive to maximize gains: "In decision-making in the presence of the Compromise Effect, consumers make a decision to maximize the expected gain, which is the same as minimizing the expected loss" (Chuang et al. 2013, p. 663). A driving force behind the selection of the compromise option is consumer uncertainty regarding how to evaluate the attributes of options available. Uncertainty in purchasing decisions is a psychological state of mind that occurs due to a lack of information about what option will provide the greatest value in the end (Duncan 1972). The hypothesis that "the higher an individual's decision uncertainty, the more likely he or she will choose the compromise option in the choice set" (Sheng, Parker and Nakamoto 2005, p. 597) was found to be correct and statistically robust (Sheng, Parker and Nakamoto 2005, p. 600).

A bi-product of these aforementioned rationales is that brands that become synonymous with the compromise option in a given choice set experience an increase in market share relative to other options ("Insert Table 1 about here"). The results of the study conducted by Simonson (1989) shown in Table 1 illustrate this fact. In this study, business administration students were asked to select between calculators which differed on two attributes: battery life and corrosion probability. As can be seen in Table 1 both options significantly (statistically significant at the 0.05 level) gained market share when they became a middle or compromise option in the choice set (increase by 26% in both cases). The specific influence of the presence of unavailable alternatives shown in Table 1 will be discussed in Section 3.3. Further studies reinforced these assumptions: "Empirical studies have demonstrated that Compromise Effects are not exceptional, but both common and robust" (Sheng, Parker, Nakamoto 2005, p. 592).

Research focused on gaining a better understanding of the Compromise Effect and its influence factors, as these appear to be important for developing reliable and robust consumer decision models which produce more consistent predictions on consumer choice in context. Subsequent sections will explore factors that influence the Compromise Effect, thus serving as an effective platform from which to explore the influence of such factors on consumer choice.

3. Factors Influencing the Compromise Effect

Research indicates the presence of a number of different factors influencing the Compromise Effect. Such factors can be categorized into two groupings; namely extrinsic and intrinsic. The extrinsic classification concerns factors in which the consumer can exert little or no control, including elements such the scale equivalence of options or the unavailability of options. Intrinsic elements, on the other hand, are factors over which the consumer may exercise some degree of influence, including both the degree of price consciousness of consumers and the level of self-confidence. As discussed, the role of uncertainty, an inherently intrinsic factor, in consumer decision-making is central to the discussion regarding influences over the Compromise Effect. The consequence of the presence of uncertainty increases the likelihood that "he or she will select the compromise option as a vehicle to minimize the expected loss of a decision" (Sheng, Parker, Nakamoto 2005, p. 596). As this example demonstrates, psychological factors play a major role in consumer decision-making (Duncan 1972). The following section will illustrate how different influences vary the scope of influence of the Compromise Effect, thus demonstrating its sensitivity to external and internal factors.

3.1. Influence of Need for Justification

Extensive research was conducted on the question of whether consumers tend to choose more compromise options when required to justify their choice to both themselves and others. It has been suggested that when pressured for justification, consumers will attempt to anticipate potential regret and are therefore likely to select the option that is easiest to justify as opposed to the 'best' choice (Bell 1982).

With respect to the Compromise Effect, "the assumption is that decision makers choose alternatives that are perceived as most justifiable to those others who will evaluate their choices [...]" (Simonson 1989, p. 159). Arguably a further implication of this is that consumers make choices that differ to choices made under conditions in which they are not probed for justification: "When consumers expect to explain decisions they are about to make, the focus of their decision process shifts from the choice of good options to the choice of good reasons" (Simonson and Nowlis 2000, p. 49). However, after testing this hypothesis, it was found that "the results [...] do not support the prediction that the Compromise Effect will be stronger in the high condition", where the high condition represents the need to justify the choice (Simonson 1989 p. 167). It was further suggested that "a choice of a compromise alternative will be perceived as easier to justify and less likely to be criticized" (Simonson 1989 p. 162). In the relevant study, 100 college students of a psychology course were asked to predict how the choice of a certain option would be evaluated by others and how difficult it would be to justify this choice (Simonson 1989 p. 167). The result of this study showed that the majority of students assumed that it was more likely that they would be criticized for not choosing the compromise alternative than vice versa. It was argued that the middle option shows that "the decision maker has considered both attributes" (Simonson 1989 p. 168). These findings provide a valuable insight

into the rationale driving the apparent consumer preference towards the middle option. They illustrate that “the option that is selected will depend on the extent to which the consumer's goals are [...] maximizing the ease of justifying the decision” (Bettman, Luce and Payne 1998, p. 188). As such, it can be inferred that a leading justification for the selection of the middle option in a trinary choice set, lies with the fact that its attributes can be viewed as a compromise or combination of the attributes of the two extreme options (Simonson 1989 p. 168).

Another impact of the anticipated need to justify ones choice to others is that the choice processes become more complex and thus take longer to complete: The “selection of dominating and compromise alternatives would be associated with more difficult and elaborate decision processes” (Simonson 1989 p. 168). This hypothesis was tested with the help of ‘think-aloud protocols’. It was shown that “choice protocols leading to selection of a compromise alternative were significantly longer than those leading to selection of a non-compromise alternative” (Simonson 1989 p. 170).

A similar study tested the impact of justification on consumers with different mindsets (Mourali, Böckenholt and Laroche 2007). Consumers were differentiated by two distinct qualities; being identified as either promotion-focused or prevention focused. “Prevention self-regulation is mainly focused on preventing mistakes and avoiding losses”, whereas “promotion self-regulation is generally focused on achieving gains and capturing opportunities” (Mourali, Böckenholt and Laroche, 2007 p. 235). It was proposed that “justification will increase preference for compromise options under prevention focus but decrease it under promotion focus” (Mourali, Böckenholt and Laroche 2007, p. 236). It was found that “the share of the compromise [...] increased by 15.8% under prevention focus, but it was reduced by 14.0% under promotion focus” (Mourali, Böckenholt and Laroche 2007, p. 239). Such findings imply that

consumers with an inclination towards loss prevention are significantly more likely to select a compromise option when justification for their selection is demanded.

Simonson and Nowlis (2000) tested "the effect of explanations and need for uniqueness on preferences for compromise options" (Simonson and Nowlis 2000, p. 55). They hypothesized that "consumers who need to provide reasons and have high need for uniqueness are less likely to select compromise options and show the Compromise Effect" (Simonson and Nowlis 2000, p. 55). Tests to prove this hypothesis were conducted in a series of different phases. In the first phase, subjects were informed that reasons for their choice must be provided. Once justification extraction was complete, subjects with a predilection for uniqueness were asked to choose an option. The last phase again involved probing said subjects for selection justification. The results showed that "respondents who provided reasons for their decisions and those with high NFU were less likely to exhibit the compromise effect, but the predicted interaction between the two factors did not occur" (Simonson, Nowlis 2000, p. 57).

To summarize, the requirement of justification does not, itself, increase the Compromise Effect (Simonson 1989), but its cooperation with other factors can still yield significant influence.

3.2 Influence of Self Confidence

As discussed, a primary impetus driving the selection of the compromise option is uncertainty surrounding the eventual value derived from the choices available. The Compromise Effect becomes more substantial when consumers face decisions of high importance or decisions after which return to status quo is difficult or impossible. The combination of internal and external factors that combine to establish the presence of uncertainty means that, by definition, its roots cannot be confined to one particular source. It is possible, however, to identify the primary actors

in its conception, one such example being the existence, or lack there of, self-confidence. Many studies have investigated the impact of self-confidence on purchasing behavior and it can therefore be assumed that "[...] self-confidence may influence the Compromise Effect" (Chuang et al. 2007, p. 661).

Self-confidence is defined as "positive or negative attitude toward a particular object, namely, the self" (Rosenberg 1965, p. 30). Chuang et al. (2013) tested the hypothesis that "the Compromise Effect is weaker among consumers with high general self-confidence than among those with low general self-confidence" and "sought to unravel the relationships between the extent of self-confidence, the degree of uncertainty, and risk preference and their impact on the Compromise Effect" (Chuang et al. 2013, p. 664). They employed the general self-confidence scale established by Day and Hamblin (1964) to measure the level of self-confidence of subjects. Participants had to answer ten questions that were rated on a seven-point Likert scale and were subsequently – in accordance with their answers – classified as subjects with high self-confidence and subjects with low self-confidence. Two hundred and twelve university students took part in the study. They were asked to choose laptop computers from binary and trinary choice sets. In the trinary choice set (ABC), option (B) represented a compromise option between the extreme options (A) and (C). It was found that "among individuals with low self-confidence, the choice shares of the compromise options [...] increased [...]. In contrast, among individuals with high self-confidence, the relative share of the compromise option decreased" (Chuang et al. 2013, p. 666). Chuang et al. (2013, p. 667) further conducted a mediator analysis "to analyze whether the effects of uncertainty mediate the identified decrease in the Compromise Effect due to greater self-confidence". It was found that self-confidence is indeed a major

component of the decision making process, yielding significant influence over whether or not the compromise option is selected.

These findings illustrate that uncertainty is a crucial element in the relationship between self-confidence and the Compromise Effect. Individuals with lower self-confidence were more likely to display uncertainty in the decision making process and were, therefore, more likely to choose the compromise option in a trinary choice set (Chuang et al. 2013).

3.3 Influence of Unavailable Alternatives

"A 'phantom alternative' is an option that looks real but for some reason is unavailable at the time a decision is made" (Farquhar, Pratkanis 1993, p. 1214). An option is unavailable to a consumer if there is a constraint in obtaining that option. This constraint can be internal and/or external in nature: "The constraint might be internal to the decision maker, such as a self-imposed budget limitation, an ethical principle prohibiting certain actions, or the elimination of an option in an earlier phase of the decision process. The constraint might also originate from a source external to the decision maker, such as a time restriction, a legal requirement, technological infeasibility, or natural scarcity" (Farquhar & Pratkanis 1993, p. 1215).

As previously discussed, theories surrounding consumer choice were initially founded on the assumption that consumer choice is independent of the context in which it finds itself. It was thus assumed that unavailable options ('phantom alternatives') have no influence on consumer choice and should therefore be eliminated from problem sets. Various studies, however, later proved the influence of context on choice and raised the question as to the impact of the known but unavailable options on the consumer decision-making process.

Simonson (1989) investigated the influence of known but unavailable options on the Compromise Effect. Unavailable alternatives were found to have particular importance in

regards to research on the Compromise Effect as "it avoids any confounding with the substitution effect, since one cannot switch to or from an unavailable alternative" (Simonson 1989, p. 165). The calculator battery example mentioned in Section 2.1 (see Table 1) contained two unavailable options. The basic choice sets consisting of brands (B) and (C) were extended by either the unavailable option (A), representing an option with an extremely low expected lifetime and corrosion probability or option (B), characterized by an extremely high lifetime and corrosion probability. The trinary choice sets (ABC) and (BCD) were then presented to individuals for selection. As mentioned, a significant Compromise Effect was observed, consequently the middle options (B) or (C) respectively gained market share after consumers became aware of the new, extreme alternative, even though they were not able to choose it: "The calculator battery choice sets illustrate that the effect still holds if an unavailable alternative is used to determine which alternative has the status of a compromise" (Simonson 1989, p. 167).

This result is likely to be due to the fact that, even though a specific option is unavailable for choice, it still provides the decision maker with useful information: "Likewise, reading the entire menu at a restaurant (even though the unavailability of several items is posted and one might never select particular foods) can provide information on the quality of food and help in making a selection" (Farquhar & Pratkanis 1993, p. 1215). This analogy can thus be extended to the calculator battery example. The extreme options, despite being unavailable, provide information deemed useful to uncertain individuals, particularly those seeking loss minimization. As with the case of extreme available options, unavailable extreme alternatives appear to act as a tie-breaker for uncertain consumers. The Compromise Effect was found to be robust and significant in trinary choice with unavailable options.

3.4 Influence of Price Consciousness

In many studies of consumer choice in context individuals are treated as a homogeneous group with similar mindsets and attitudes. This approach appears to be valid for proving the general existence of a phenomenon like the Compromise Effect (Simonson 1989). In order to further understand and test the significance of this effect among specific groups of consumers, however, individuals with different attitudes regarding specific attributes must be distinguished.

When discussing the influence of price consciousness on the Compromise Effect, consumers must, therefore, be separated into two distinct categories corresponding to their personal preferences; namely quality-conscious individuals and price-conscious individuals. The hypothesis that the presence of the Compromise Effect decreases among price-conscious individuals and increases among quality-conscious individuals can then be investigated. It has been suggested that, "compared to choices of deal-prone consumers, the Compromise Effect is stronger among quality-conscious subjects" (Müller, Vogt, Kroll 2012, p. 109). The hypothesis was tested by offering choice sets consisting of familiar products (hair care and toothpaste) to 233 female students. The basic binary choice set consisted of a lower quality/price option and a middle quality/price option. This set was presented to half of the participants. The basic choice sets were subsequently extended by a high quality/price option and presented to the other half of participants. Individuals were asked which brand, if any, they would choose (Müller, Vogt and Kroll 2012, p. 111). In order to determine the degree of price consciousness "subjects had to indicate in a self-assessing direct measurement on a nominal scale whether their point-of-sale purchases in the categories under test are generally quality driven or price driven" (Müller, Vogt, Kroll 2012, p. 111). Subjects were also given a no-choice option in order to cultivate conditions consistent with real-world settings (Dhar and Simonson 2003).

It was found that there is a "larger absolute gain in choice share of the compromise brand as well as the fact that the Compromise Effect turns out to be significant only for quality-conscious subjects in the test categories [...]. For instance, as for the toothpaste category the compromise brand's share among price-sensitive consumers increases by 3% from 15% to 18%, whereas it gains a 17% increase in share from 33% to 50% among quality conscious subjects" (Müller, Vogt, Kroll 2012, p. 112) ("Insert Table 2 about here").

These findings enabled researchers to conclude that quality-conscious consumers are more concerned with finding the best alternatives in respect to quality, whereas price-conscious individuals primarily look for basic versions of products available at the lowest cost. "This finding suggests a greater loss aversion for the quality attribute than for price, hence facilitating the Compromise Effect among quality-seeking subjects in accordance with other studies in the field" (Müller, Vogt, Kroll 2012, p. 114). This then provides a clarification as to why the Compromise Effect appears to be insignificant among price-conscious individuals on the one hand, and highly significant and robust among quality-conscious individuals on the other.

3.5 Impact of Scale Equivalence

The discussion thus far has assumed that the middle option (B) in a choice set (ABC) is seen as the compromise, the least extreme alternative in the choice set. Thus this section provides an adequate juncture at which to raise the question of the impact of an "all-average" option, that is, an option with same values on both attributes (scale equivalence), on the Compromise Effect.

Of particular interest to researchers' was whether such an option might be seen as the compromise alternative rather than the middle option. Chernev (2004 p. 251) hypothesized that "the middle option is more likely to be perceived as the compromise in sets without a balanced alternative than in sets with an adjacent (non-middle) balanced alternative" and that "the middle

option is more likely to be perceived as the compromise when this option is balanced than when none of the options is balanced". Such statements suggest that an adjacent, scale equivalent option in a trinary choice might then be seen as the compromise option instead of the middle alternative.

To test this hypothesis Chernev (2004) presented different choice sets to three hundred and sixty students. Choice sets differed with respect to the presence and the position of a scale equivalent alternative, consequently "sets without a balanced alternative (B'C'D' and C'D'E'), sets with an adjacent balanced alternative (BCD and DEF), and a set in which the balanced alternative was the middle option (CDE)" (Chernev 2004, p. 253) were presented to participants ("Insert figure 3 about here"). The results, presented in Table 3 illustrate that when the balanced option D was presented as an alternative, it consistently garnered the highest selection percentages (between 57.1% and 60.4%) ("Insert Table 3 about here"). This remained the case even when it represented an adjacent alternative as opposed to a middle option. The share of the middle option was only 21.1% on average in the presence of an adjacent scale equivalent alternative, compared to 44.4% if no balanced option was present. It was therefore concluded that the scale equivalent option is seen as a compromise rather than the middle option: "The presence of an adjacent balanced alternative, however, had a significant impact on the direction and the strength of the Compromise Effect. In particular, adding an adjacent balanced alternative to a binary set [...] resulted in a significant decrease in the relative share of the middle option" (Chernev 2004, p. 254).

Further research was then conducted regarding the question as to whether scale equivalence impacts the influence of justification requirements. It was hypothesized that "attribute balance moderates the effect of the need for justification on extremeness aversion. In

particular, the need for justification will have a greater impact on the relative share of the middle option when no balanced alternative is present than in the presence of an adjacent balanced alternative" (Chernev 2005, p. 216). To investigate this proposition, participants chose their preferred option from a choice set similar to the one described above. In variation to the aforementioned experiment, respondents subject to justification conditions were informed that reasoning behind their selection would be required once a choice was made (Chernev 2005, p. 216). In addition, participants were asked to indicate which option was easiest to justify. It was found that only 8.4% of participants in the high condition (need for justification) chose the adjacent non-balanced alternative if a scale equivalent option was present whereas 19.4% selected this option in the low condition (Chernev 2005, p. 218) ("Insert Table 4 about here"). Thus reinforcing the assumption that consumers tend to select "safer" compromise options (either the middle option or the scale equivalent option) if they expect that justification for their selection will be later required.

In summary, it is evident that the middle option in a trinary choice set is not automatically seen as the compromise option. Scale equivalence of options appears to be a compelling reason behind the selection of a particular choice.

3.6 Impact of Time Pressure

It was earlier noted that decisions that result in the selection of the compromise option are more elaborate and take significantly longer than decisions that lead to the choice of adjacent alternatives (Simonson 1989). The presence of higher uncertainty and lower self-confidence among compromise option selectors (Chuang et al. 2013), are arguably leading sources of such complex decision making processes. The ensuing section will discuss the impact of time pressure on the Compromise Effect.

It has been suggested by researchers that the presence of the Compromise Effect is reduced when time pressure is added as a necessary condition (Dhar, Nowlis, Sherman 2000, p. 190). This hypothesis was tested among 250 undergraduate students. Participants had to choose from trinary and binary choice sets in either the absence or presence of time pressure conditions. In time restricted environments participants were given 15 seconds to make a choice, otherwise subjects had an unlimited amount of time to come to a decision. After finalizing their choice, participants were asked to state on a scale ranging from 1 (low pressure) to 9 (high pressure) how much time pressure they felt when making the decision (Dhar, Nowlis, Sherman 2000, p. 191).

As would be expected, in the low conditions (no time constraint) a significant Compromise Effect (magnitude 0.1) was observed. In contrast to this, the high condition category exhibited a significant reduction (15%) in the share of the compromise option (the magnitude of the Compromise Effect was therefore reduced by 25%): "Time pressure decreases the Compromise Effect, as the relative attractiveness of the option with intermediate values is diminished. The results are consistent with an account that consumers who attempt to determine the best choice by focusing on compensatory comparisons among the alternatives are more likely to select the compromise option" (Dhar, Nowlis, Sherman 2000, p. 192). This conclusion implies that consumers under time pressure feel unable to thoroughly evaluate the options attributes. A potential consequence of this lack of considered evaluation is that subjects are inclined to pursue attributes that they perceive as more important. This does not imply that other attributes are not considered, but it can be inferred that more 'important' attributes will be held in precedence to those of less important- thus the consumer is likely to choose the option with the highest value on this attribute.

Such assumptions are consistent with the empirical results shown in Table 5. It can be observed that the share of the high performance alternative increases significantly in the high condition. Such evidence complements the aforementioned findings by Sheng, Parker and Nakamoto (2005) again confirming the hypothesis that consumer show greater loss aversion for quality than for price. A further implication of these results is the invalidation of the hypothesis that "the selection of a compromise option can be viewed as an attempt at using an effort minimizing heuristic [...]" (Dahr, Nowlis and Sherman 2000, p. 191). As previous discussed, "if the choice of the middle option in a three-option choice set was due to a desire to simplify or minimize effort, this would suggest that time pressure should increase the size of the Compromise Effect" (Dhar, Nowlis and Sherman 2000, p. 192). The shift towards the adjacent alternatives and away from the compromise option, however, indicates "the bias in favor of specific options arises not because participants are simplifying (i.e., making too few comparisons), but rather because they are making too many comparisons" (Dhar, Nowlis and Sherman 2000, p. 192). Compromise choices therefore appear to be more elaborate.

4. Extending the Compromise Effect

Thus far the Compromise Effect has only been discussed in relation to individual consumers. The scope of discussion will now be extended to more complex decision processes. In particular it will be explored (1) whether the Compromise Effect can be observed in group decision-making (B2B) and (2) whether it is significant in managerial decision making.

These questions are of particular interest by reason of the nature of the group decision-making processes itself; decisions involving groups tend to be vulnerable to more influence

factors than those of individual based consumer choice decision. Thus complexity arises as "there are several parties with potentially different functional and business objectives involved in a decision process, the treatment of preference and integration of utility partworths becomes more difficult" (Dhar, Menon, Maach 2004, p. 259). The various actors involved in an organizational decision making process, for example, may pursue different or even conflicting goals. Thus the consideration of competing objectives inevitably complicates the decision making process. The subsequent section will discuss the significance of the Compromise Effect in such circumstances.

4.1 Compromise Effect in B2B

A purchase decision within an organization has to pass many stages and satisfy the needs of multiple stakeholders. It is intuitively plausible that it might be difficult or even impossible to satisfy all participants equally. Hence, "the Compromise Effect may be amplified in such situations because (1) consensus is more difficult to reach in a group setting, especially with different criteria, and (2) the relationships between self and other criteria increase uncertainty[...]" (Dhar, Menon, Maach 2004, p. 260). A further element of group decision making that demands consideration is the expectation that, "compared with individual choice, multi person purchase decision is likely to increase the perception of being evaluated (i.e., by the group)" (Kivetz, Netzer, Srinivasan 2004, p. 263). This may arguably reinforce group susceptibility to the Compromise Effect.

Glazer and Simonson (1995) tested whether a difference in the significance of the Compromise Effect between individuals and groups could indeed be observed. They asked 132 individuals and 133 groups (consisting of four or five members) of MBA students to select a strategy for a certain company from binary and trinary choice sets and to provide reasons for

their respective decisions. It was found that the share of the middle option decreased on average by 12% for groups and by 11% on average for individuals when the binary choice set was extended. This is not statistically significant and therefore "no systematic difference between groups and individuals in their susceptibility of the Compromise Effect" can be observed (Glazer and Simonson 1995, p. 13). Moreover, it was revealed that groups provided significantly more reasons to support their choice. This implies that any particular factor, including that of the Compromise Effect, will play a smaller role in group decision-making environments. The fact that none of the participants referred to the middle option as a compromise choice only served to bolster such a hypothesis (Glazer and Simonson 1995, p. 14). "This is in sharp contrast to consumer choice problems in which consumers often refer to the compromise position of a middle option [...]" (Glazer and Simonson 1995, p.14).

4.2 Compromise Effect in Strategic Decision Making

Observers will have noted, in recent decades, a tangible shift from traditional, product-centric marketing techniques to more solution-based strategies; a transition predominantly induced by the rise of the Internet (e.g. on demand solutions, Software-as-a-Service). Previously, marketing strategies could rely on the knowledge that customer preferences were relatively well known and thus, predictable (Dhar, Menon, Maach 2004, p.259). In today's rapidly changing business environment such over-dependence on expectation would be unwise. Companies must instead adapt their business strategy to suit the new conditions in which they find themselves. The increased complexity of managerial decision making processes makes the existence of the Compromise Effect in such conditions of particular interest to researchers. "Managers [...] are expected to think strategically: decide on the overall plan prior to making 'local' decisions,

examine the fit of considered options with the organization's goals and try to understand [...] how various factors influence the outcome of the decision" (Glazer and Simonson 1995, p. 4).

It was hypothesized that managers would not exhibit the Compromise Effect when making strategic decisions. This assumption was tested in the same experimental conditions explained in Section 5.1. Participants were asked to select a strategy for a luggage and salad dressing producer from a binary (AB) and trinary set (ABC) of strategies in which the middle option was designed as a compromise. It was found that the share of the compromise strategy (B) decreased in the trinary choice set in the luggage problem by 16% and in the salad dressing problem by 6% for individual decision makers (Glazer and Simonson 1995, p. 13). Hence, no Compromise Effect was found to have occurred. To investigate the outcome further, participants were then asked to evaluate managers that would choose the compromise option. It was shown that in the binary choice set (in the luggage problem) 57% stated option B would provide the company with a competitive advantage, whereas only 19% choose the compromise option B in the trinary choice set (Glazer and Simonson 1995, p. 16). Rationale dictates that, contrary to the realms of consumer decision-making, the selection of an extreme option in the case of managerial decision making signify a means through which a competitive advantage may be gained.

5. Discussion

Ultimately, the Compromise Effect dictates that an option will gain share when it becomes a middle alternative. Although ostensibly simple in nature, this finding signified a divergence from prevalent theories of the time, verifying the influence of context on consumer choice. As was

discussed, various studies proved the Compromise Effect to be significant and robust, justifying both its relevance in the discussion of consumer choice theory and validating its integration into consumer choice models (see Rooderkerk, Van Heerde and Bijmolt 2011). Subsequent sections then considered factors capable of exerting significant influence over the Compromise Effect; namely, justification, self-confidence, the unavailability of options, price consciousness, scale equivalence and time pressure.

The impact of demand for justification was, independent of other factors, found to be insignificant. It must, however, be acknowledged that this factor will often interact with additional factors (e.g. promotion or prevention focus within customers) in such way that ultimately allows it to yield influence on the Compromise Effect. Thus the power of this factor resides in its ability to work in tandem with more significant components.

Subsequent sections then examined the role of self-confidence in moderating the presence of the Compromise Effect and individuals with high self-confidence were found to be far less likely to choose a compromise option. In this context, uncertainty was again a key participant, a fundamental bi-product of its presence being lower self-confidence in decision making processes. This finding harbors important implications for the development of suitable marketing strategies. The degree of uncertainty is likely to be far lower for search goods than it is for credence goods as features and characteristics can be thoroughly evaluated before purchasing the good. It therefore becomes obvious that the Compromise Effect might be more significant for goods whose utility impact cannot be assessed accurately. Further research is needed to accurately test this suggestion and measure the significance of the Compromise Effect when choosing between different credence goods. This is also relevant in assessing the significance of the Compromise Effect for services.

It was further found that the unavailability of one option in a trinary choice set did not diminish the significance of the Compromise Effect. Even an unavailable option has the potential to equip the consumer with important information about the context in which his choice is made. Employing such knowledge in a marketing framework suggests that managers must ensure the process of strategy formulation considers all products known to the consumer, not just those that are currently available.

An examination of the influence of price consciousness then revealed a distinction between quality and price-conscious consumers. The findings indicated that the Compromise Effect is considerably more significant among quality-conscious consumers. Such results serve to highlight the decisive role of target group evaluation in brand management, with particular regards to the development of a positioning strategy for a brand. The findings discussed in Section 3.4 imply that a target group comprised of highly quality-conscious consumers will respond better to compromise options.

Further research revealed that scale equivalent options might be seen as the compromise rather than the middle alternative. Such results suggest that, if characterized by a balance in both attributes, even adjacent/extreme options can gain share in a trinary choice set. The implications being that, even when positioning their brand in an adjacent location, marketing decision makers may still exploit the Compromise Effect to gain additional custom.

Finally, the impact of time pressure was examined. It was shown that consumers, bounded by time constraints tend to choose less compromise options and instead favor more extreme options. This illustrates that the Compromise Effect, contrary to prior assumptions, is not a measure to minimize cognitive effort but instead occurs when decision makers thoroughly evaluate all attributes.

To summarize, it is clear that the Compromise Effect is most significant among individuals who exhibit high level of uncertainty, show lower self-confidence and are quality-conscious. Its presence is further reinforced if consumers are not facing time constraints in the decision making process.

Subsequently, the Compromise Effect was extended in a B2B context and its role in managerial decision making was examined. In this case, no difference in the significance of the Compromise Effect between individual consumers and groups could be identified. Groups did, however, provide more reasons to justify their choice. In regard to choosing a corporate strategy it was demonstrated that decision makers are less likely to choose the compromise option. It could be argued that a strategy which represents a compromise between two clear directions (provided by the extreme alternatives) might be perceived as an alternative which confers the benefit of neither and is as such unable to generate 'extreme' success. Further research is needed to understand this phenomenon and to further investigate the significance of the Compromise Effect in B2B context.

In summary, this thesis has provided the reader a broad understanding of the Compromise Effect and its major influence factors. It also offered first insights into its extension into a B2B context. Such applications are necessary for a comprehensive understanding of consumer choice and provide grounding for making major marketing decisions.

Tables

Calculator battery	Figure B	Expected life	Probability of corrosion
Brand A (unavailable)		10 hours	0%
Brand B		12 hours	2%
Brand C		14 hours	4%
Brand D (unavailable)		16 hours	6%

Product category	Share when not compromise	Share when compromise
Calculator battery		
12 hrs/2%	40%	66%[c]
14 hrs/4%	34%	60%[c]

[c] The increase in share when the brand becomes a compromise is statistically significant at the 0.05 level.

Table 1: Increased Choice Probability for Compromise Options

Source: Simonson 1989, p. 164 & 166

Table 2. Overall and Segmental Analysis of Compromise Effects in Study One ($n = 233$).

		Overall Sample		Price-Conscious Subjects		Quality-Conscious Subjects	
		CS2 ($n = 118$)	CS3 ($n = 115$)	CS2 ($n = 59$)	CS3 ($n = 49$)	CS2 ($n = 59$)	CS3 ($n = 66$)
	L	75.2	62.1	84.9	81.4	66.6	46.7
Toothpaste	M	24.8	36.4	15.1	18.2	33.4	49.7
	H	—	1.5	—	0.4	0.0	3.6
		$\chi^2 = 32.9^*$		$\chi^2 = 1.72$		$\chi^2 = 33.98^*$	

Note: Level of significance: $^*p < 0.01$.

Table 2: Significance of Compromise Effect among Price-Conscious and Quality-Conscious Subjects

Source: Müller, Vogt and Kroll 2012, p. 111

CHOICE SHARES OF DECISION ALTERNATIVES AS A FUNCTION OF ATTRIBUTE BALANCE (EXPERIMENT 1)

Balanced option	Sets	*N*	P(*x*; *y*, *z*) (%)	P(*y*; *x*, *z*) (%)	P(*z*; *x*, *y*) (%)
Adjacent	BC**D**	144	22.9	16.7	**60.4**
Middle	C**D**E	126	20.6	**58.7**	20.6
Adjacent	**D**EF	126	**57.1**	26.2	16.7
Not present	B′C′D′	144	20.8	43.8	35.4
Not present	C′D′E′	144	34.0	45.1	20.8

Table 3: Influence of Scale Equivalence on Choice Share

Source: Chernev 2004, p. 253

Study 1: Effect of Time Pressure on Choice of a Compromise Option

		Unlimited Time		*Time Pressure*	
Product Category	*Options in the Set (Performance and Price)*	*Set 1*	*Set 2*	*Set 1*	*Set 2*
Binoculars	High		44		61
	Middle	71	46	83	25
	Low	29	11	17	16
Computers	High		49		56
	Middle	58	38	66	26
	Low	42	13	34	18
Tires	High		49		57
	Middle	79	41	81	29
	Low	21	10	19	14
Totals	High		47		58
	Middle	69	42	77	26
	Low	31	11	23	16

Note. Share of respondents ($N = 250$) choosing each option is shown in percentages.

Table 4: Influence of Time Pressure on Choice Share of Compromise Options

Source: Dhar, Nowlis, Sherman 2000, p. 192

Figures

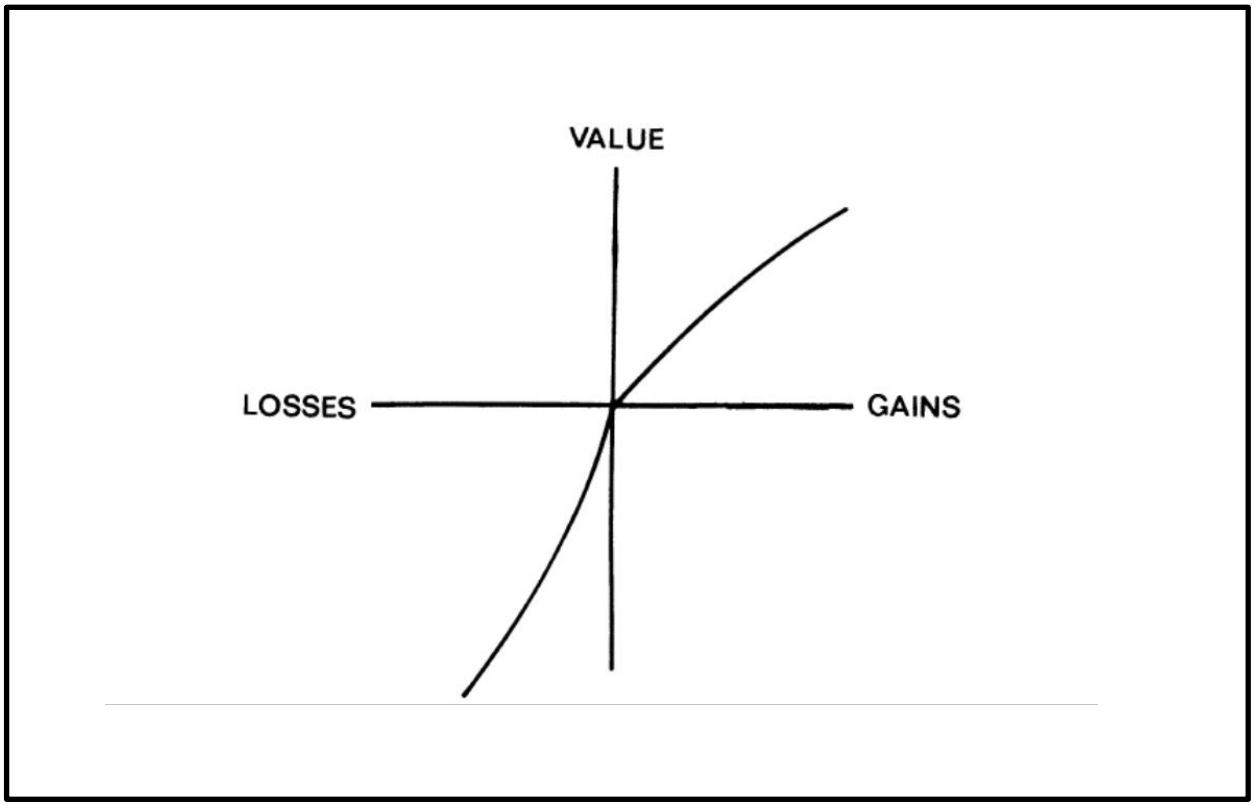

Figure 1: Value Function according to Prospect Theory

Source: Kahneman and Tversky 1979, p. 279

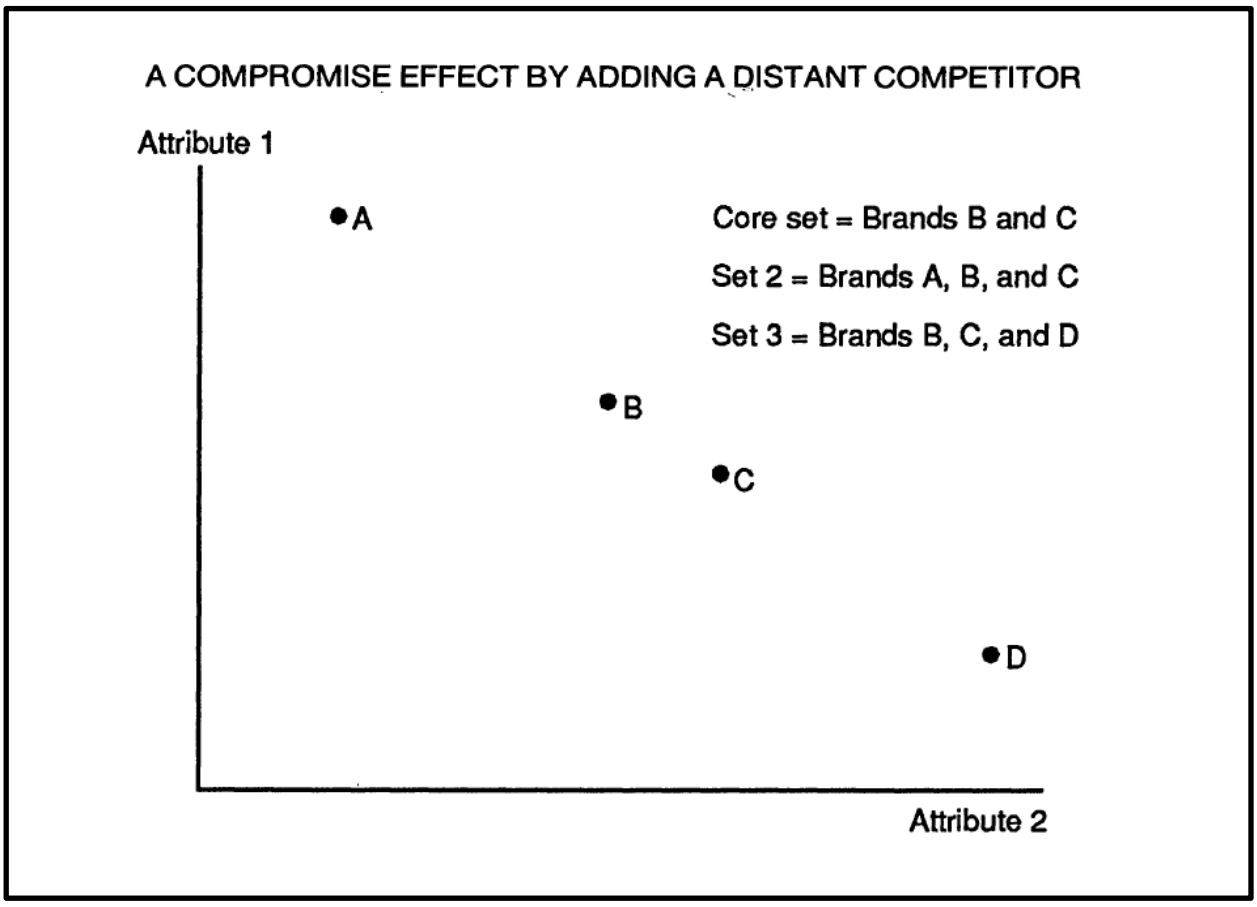

Figure 2: Illustration of Typical Choice Sets including Compromise Options

Source: Simonson 1989, p. 161

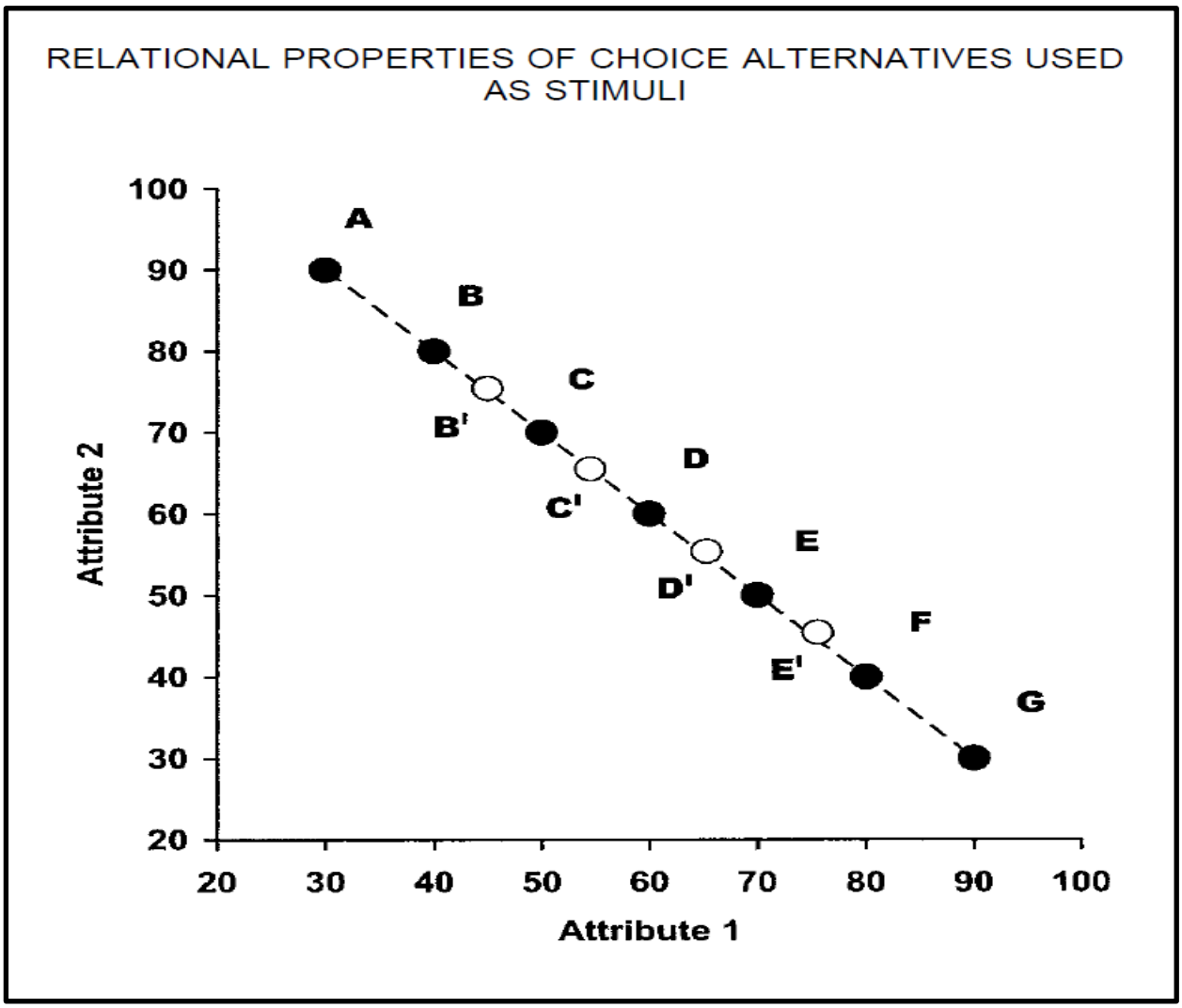

Figure 3: Illustration of possible Choice Set Combinations including a Scale Equivalent Option

Source: Chernev 2004, p. 253

References

Bell, David E. (1982), "Regret in Decision Making under Uncertainty", *Operations Research*, 30 (5), 961–981.

Bettman, James R., Mary Frances Luce and John W. Payne (1998), "Constructive Consumer Choice Processes", *Journal of Consumer Research*, 25, 187-217.

Chernev, Alexander (2004), "Extremeness Aversion and Attribute-Balance Effects in Choice", *Journal of Consumer Research*, 31, 249–263.

——— (2005), "Context Effects without a Context: Attribute Balance as a Reason for Choice", *Journal of Consumer Research*, 32, 213–223.

Chuang, Shih-Chieh, Yin-Hui Cheng, Chia-Jung Chang and Yu-Ting Chiang (2013), "The Impact of Self-Confidence on the Compromise Effect, *International Journal of Psychology*, 48 (4), 660–675.

Day, Robert C. and Robert L. Hamblin (1964), "Some Effects of Close and Punitive Styles of Supervision", *Amercian Journal of Psychology*, 69, 599–611.

Dhar, Ravi, Stephen M. Nowlis and Steven J. Sherman (2000), "Trying Hard or Hardly Trying: An Analysis of Context Effects in Choice", *Journal of Consumer Psychology*, 9 (4), 189–200.

———, and Itamar Simonson (2003), "The Effect of Forced Choice on Choice", *Journal of Marketing Research*, 40, 146–160.

———, Anil Menon and Bryan Maach (2004), "Toward Extending the Compromise Effect to Complex Buying Situations", *Journal of Marketing Research*, 41, 258–261.

Drolet, Aimee (2002), "Inherent Rule Variability in Consumer Choice: Changing Rules for Changing's Sake", *Journal of Consumer Research*, 29, 293–305.

Duncan, Robert B. (1972), "Characteristics of Organizational Environments and Perceived Environmental Uncertainty", *Administrative Science Quarterly*, 17 (3), 313–327.

Farquhar, Peter H. and Anthony R. Pratkanis (1993), "Decision Structuring with Phantom Alternatives", *Management Science*, 39 (10), 1214–1226.

Glazer, Rashi and Itamar Simonson (1995), "Context Effects in Managerial Decision Making by Groups and Individuals", Research Paper No. 1338, Stanford University.

Huber, Joel, John W. Payne and Christopher Puto (1982), "Adding Asymmetrical Dominated Alternatives: Violations of Regularity and the Similarity Hypothesis", *Journal of Consumer Research*, 9 (1), 90–98.

Kahneman, Daniel and Amos Tversky (1972), "Subjective Probability: A Judgement of Representativeness", *Cognitive Psychology*, 3, 430–545.

———, ——— (1979), "Prospect Theory: An Analysis of Decision under Risk", *Econometrica*, 47 (2), 263–291.

Kivetz, Ran, Oded Netzer and V. Srinivasan (2004a), "Alternative Models for Capturing the Compromise Effect", *Journal of Marketing Research*, 41, 237–257.

———, ———, ——— (2004b), "Extending Compromise Effect Models to Complex Buying Situations and Other Context Effects", *Journal of Marketing Research*, 41, 262–268.

Luce, Duncan R. (1977), "The Choice Axiom after Twenty Years", *Journal of Mathematical Psychology*, 15, 215–233.

Mourali, Mehdi, Ulf Böckenholt and Michel Laroche (2007), "Compromise and Attraction Effects under Prevention and Promotion Motivations", *Journal of Consumer Research*, 34, 234–247.

Müller, Holger, Bodo Vogt and Eike B. Kroll (2012), "To Be or Not to Be Price Conscious – a Segment-Based Analysis of Compromise Effects in Market-Like Framings", *Psychology & Marketing*, 29 (2), 107–116.

Pan, Yigang and Donald R. Lehmann (1993), "The Influence of New Brand Entry on Subjective Brand Judgements", *Journal of Consumer Research*, 20, 76–86.

Pleskac, Timothy J. (2012), "Decision and Choice: Luce's Choice Axiom", Department of Psychology, Michigan State University.

Pocheptsova, Anastasiya, On Amir, Ravi Dhar and Roy F. Baumeister (2009), "Deciding Without Resources: Resource Depletion and Choice in Context", *Journal of Marketing Research*, 46, 344–355.

Rosenberg, M. (1965), "Society and the Adolescent Self-Image", Princeton, NJ: Princeton University Press

Rooderkerk, Robert R., Harald J. Van Heerde and Tammo H.A. Bijmolt (2011), "Incorporating Context Effects into Choice Models", *Journal of Marketing Research*, 48, 767–780.

Sheng, Shibin, Andrew M. Parker and Kent Nakamoto (2005), "Understanding the Mechanism and Determinats of Compromise Effects", *Psychology & Marketing*, 22 (7), 591–609.

Simonson, Itamar (1989), "Choice Based on Reason: The Case of Attraction and Compromise Effects", *Journal of Consumer Research*, 16 (2), 158–174.

———, and Amos Tversky (1992), "Choice in Context: Tradeoff Contrast and Extremeness Aversion", *Journal of Marketing Research*, 29 (3), 281–295.

———, and Stephen M. Nowlis (2000), "The Role of Explanations and Need for Uniqueness in Consumer Decision Making: Unconventional Choices Based on Reason", *Journal of Consumer Research*, 27, 49–68.

Wernerfelt, Birger (1995), “A Rational Reconstruction of the Compromise Effect: Using Market Data to Infer Utilities”, *Journal of Consumer Research*, 21, 627−633.

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Bell (1982) [*Operations Research*]	decision making under uncertainty and anticipated regret	consumer behavior, utility-theorem	Theoretical analysis	• decision makers try to anticipate regret and therefore consider the choice that is easiest to justify rather than the best one • extension of utility theorem; multi-attribute utility function

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Bettman, Luce and Payne (1998) [*Journal of Consumer Research*]	consumer choice	Constructive choice, decision strategies	Literature review and theoretical model	• development of integrative framework in regard to constructed consumer choice • Identifying research gaps and pave the way for future research

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Chernev (2004) [*Journal of Consumer Research*]	extremeness aversion in consumer choice and scale equivalence of options	Consumer choice, compromise effect	theory and experiments	• a balanced option might be seen as compromise alternative rather than middle option • middle option loses share in the presence of an adjacent scale equivalent option • compromise effect is stronger if no scale equivalent option is present

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Chernev (2005) [*Journal of Consumer Research*]	Influence of attribute balance on choice	Consumer choice, context effects	Theory and experiments	• consumers employ attribute balance as a reason for choice • attribute balance moderates the impact of justification on the strength of extremeness aversion

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Chuang, Cheng, Chang, Chiang (2012) [*International Journal of Psychology*]	Impact of self-confidence on the compromise effect	Personality aspect of self-confidence, risk preference and uncertainty; compromise effect	Three studies; hypotheses and experimental testing	• Consumers with high self-confidence are less likely to choose a compromise option • High uncertainty leads to lower self-confidence

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Dhar, Simonson (2003) [*Journal of Marketing Research*]	Effect of forced choice on choice, effect of no-choice option on choice theories	Attraction effect, compromise effect, previous findings on consumer choice behavior	5 studies , discussion of theoretical implications of findings	• No-choice option strengthens attraction effect and weakens compromise effect • Share of scale equivalent option decrease under no-choice condition • No-choice option offers alternative way to solve difficult decisions

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Dhar, Menon, Maach (2004) [*Journal of Marketing Research*]	Extension of compromise effect to complex buying situations, compromise in B2B	Findings by Kivetz, Netzer and Srinivasan (2004) on the compromise effect	Critical analysis of previous findings, recommendations for further research	• Compromise effect was mainly discussed in a traditional product-centric purchase context • Shift towards solution-centric marketing has to be incorporated

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Dhar, Nowlis, Sherman (2000) [*Journal of Consumer Psychology*]	Preference for all average options, effect of time pressure on choice in context	Context effects in choice	3studies among undergraduate marketing students, analysis of theoretical implications	• Significance of the compromise effect is reduced under time pressure • Choice of compromise option cannot be seen as effort minimizing heuristic • Preference for all-average options

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Drolet (2002) [*Journal of Consumer Research*]	Consumer choice	Assumption of consistency in consumer choice	5 experiments	• Consumers are inconsistent in their decision making • Variation of choice independent of option characteristic • Consumers favor change

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Farquhar, Pratkanis (1993) [*Management Science*]	Influence of unavailable alternatives on consumer choice	Consumer choice	Theoretical analysis	• Phantom alternatives should be considered in decision structuring • Guidelines for recognizing unavailable alternatives • Utilizing information provided by phantom alternatives

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Huber, Payne, Puto (1982) [*Journal of Consumer Research*]	Influence of asymmetrical dominated alternatives	Similarity hypothesis, different choice models	Experiment (subjects were 153 graduate and undergraduate students)	• Inadequacy of many so far used choice models • Presence of asymmetrical dominated alternative violates similarity hypothesis • Middle option in a given choice set gains share when asymmetrical dominated alternative is present

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Kahneman, Tversky (1979) [*Econometrica*]	Choices among risky prospects	Expected utility theory	Critical analysis, development of theoretical model (Prospect Theory)	• Subjects evaluate gains and losses in respect to the presence of a subjective reference point • Losses generally loom larger than gains

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Kivetz, Netzer, Srinivasan (2004) [*Journal of Marketing Research*]	Alternative models for capturing the compromise effect	Choice models neglected to incorporate compromise effect	4 theoretical models for capturing the compromise effect	• Incorporating the compromise effect by modeling the local choice context leads to superior predictions • superiority of models that use a single reference point over "tournament models"

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Kivetz, Netzer, Srinivasan (2004) [*Journal of Marketing Research*]	Compromise effect models	Choice models developed by Kivetz, Netzer, Srinivasan (2004)	Commentary	• Extension of models to complex (B2B) purchase decisions • Influence of B2B on context effects

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Luce (1977) [*Journal of Mathematical Psychology*]	Evaluation of Luce's choice axiom	Luce's choice axiom	Mathematical analysis, application of mathematical models	• Validity and limits of Luce's Choice Axiom

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Mourali, Böckenholt, Laroche (2007) [*Journal of Consumer Research*]	Compromise and attraction effects under prevention and promotion focus	Sensitivity to context effects	Experimental testing of theories	• Prevention-focused costumers are more susceptible for the compromise effect • Promotion-focused subjects are less susceptible • Effects were amplified when cosnumers were asked to justify their choice

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Müller, Vogt, Kroll (2012) [*Psychology and Marketing*]	Influence of price consciousness on the significance of the compromise effect	Compromise effects	2 studies (233 female undergraduate students in study 1 and 86 undergraduate students, male and female in study 2)	• Compromise effect is strong among quality-conscious consumers and weak and insignificant among price-conscious consumers • Compromise effect is stronger if experienced consumer make unforced choice

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Pan, Lehmann (1993) [*Journal of Consumer Research*]	Influence of new brand entries on subjective brand judgements	Previous studies on how new brand entries affect choice, attraction and compromise effect	Theory and experimental testing	• New entrant has significant impact on subjective brand judgements • Significant impact of new brand entry on choice was demonstrated • changes in brand choice and preference are consistent with judgment

Author/s (Year) [*Journal*]	Research Focus	Theoretical	Method / Analysis	Main Findings
Pleskac (2012) [Published at Michigan State University]	Luce's choice axiom	Consumer choice	Literature review	• Luce's choice axiom is a powerful tool for understanding consumer choice • Identification of challenges faced

Author/s (Year) [*Journal*]	Research Focus	Theoretical	Method / Analysis	Main Findings
Pocheptsova, Amir, Dhar, Baumeister (2009) [*Journal of Marketing Research*]	Resource depletion and choice in context	Consumer choice behavior	6 studies to test theories	• resource depletion increases the share of reference-dependent choices and decreases the compromise effect, and magnifies the attraction effect • scope of the depleted resource is not constrained to self-regulation activities but rather extends to choice in general

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Sheng, Parker, Nakamoto (2005) [*Psychology and Marketing*]	Mechanism and determinants of the compromise effect	Compromise and attraction effects	Theoretical analysis, empirical studies	• Consumer show extremeness aversion for quality but not for price • Increased uncertainty leads to a more significant compromise effect

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Simonson, Nowlis (2000) [*Journal of Consumer Research*]	Role of explanations and uniqueness in consumer decision making	Consumer choice in context	Experimental testing of theories	• If customers expect to explain their choice they tend to switch to the brand which is easiest to justify • Consumer with a high need for uniqueness are less likely to choose compromise options

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Simonson, Glazer (1995) [Working Paper No. 1338, Stanford University]	Context effects in managerial decision making by groups and individuals	Asymmetric dominance, compromise effect	Studies to test hypotheses	• When making strategic choices both groups and individuals avoid taking the compromise option • Compromise options appear to be less likely to provide a competitive advantage • No difference in the susceptibility of groups and individuals towards the compromise effect can be observed

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Simonson (1989) [*Journal of Consumer Research*]	Consumer choice based on reasons	Influence of the presence of asymmetrical dominated alternatives in a choice set, attraction effect	Studies to test hypotheses	• Brands tend to gain share when they become a compromise option in a choice set • Selection of compromise option is associated with more elaborate and difficult decisions

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Tversky and Simonson (1992) [*Journal of Marketing Research*]	Tradeoff contrast and extremeness aversion	Previous findings on choice in context including attraction and compromise effects; prospect theory	Theory and empirical analysis	• Consumers show extremeness aversion as potential losses loom larger than potential gains • This fact leads to an increased choice of the middle alternative

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Van Heerde, Rooderkerk, Bijmolt (2011) [*Journal of Marketing Research*]	Incorporating context effects into a choice model	Compromise, attraction and similarity effects in choice	Literature review and proposition of a discrete-choice model	• Context effects do not necessarily need to lead to a rejection of commonly used choice models but can be added as extra components to these models • Discrete-choice model accounting for the influence of context effects

Author/s (Year) [*Journal*]	Research Focus	Theoretical Background	Method / Analysis	Main Findings
Wernerfelt (1995) [*Journal of Consumer Research*]	Recon-struction of the compromise effect, using market data to infer utilities	Compromise effects	Line of argument, development of decision rule	• Decision rule with which consumer leverage market information to infer product utilities • Compromise effect compatible with rank-order decision rule

Affidavit

For each bachelors thesis compiled at the Chair of Quantitative Marketing and Consumer Analytics, the following affidavit is to be included and signed:

"I hereby declare that I have developed and written the enclosed bachelors thesis entirely on my own and have not used outside sources without declaration in the text. Any concepts or quotations attributable to outside sources are clearly cited as such. This bachelors thesis has not been submitted in the same or substantially similar version, not even in part, to any other authority for grading and has not been published elsewhere. I am aware of the fact that a misstatement may have serious legal consequences."

Mannheim, June 14, 2015