Visual and verbal processing effects on human memory

A study with brand names and information incongruity and congruity

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Abstract

In this study in the field of Consumer Behavior, brand name memory of consumers with regard to verbal and visual incongruent and congruent information such as memory structure of brands was tested. Hence, four experimental groups with different constellations of verbal and visual congruity and incongruity were created to compare their brand name memory performance. The experiment was conducted in several classes with 128 students, each group with 32 participants. It was found that brands, which are presented in a congruent or moderately incongruent relation to their brand schema, result in a better brand recall than their incongruent counterparts. A difference between visual congruity and moderately incongruity could not be confirmed. In contrast to visual incongruent information, verbal incongruent information does not result in a worse brand recall performance.

1. Introduction

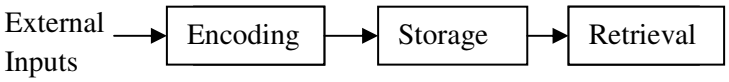
The ability of consumers to recall or recognize brands is important, since consumption and buying behavior of consumers are dependent on it. Therefore, it is essential for marketers to understand, which memory processes are either necessary for or have at least a positive influence on brand recall. Within this study, it was determined to what extent consumers are able to memorize a number of suggestive and well known brands in relation to varied stimuli of congruent and incongruent information concerning the constellation of brand name, picture and brand slogan. Congruency describes an overall "fit" and is related to fulfilled expectancy of customers regarding the brand or the brand's advertisement in general. Incongruency, also termed incongruity refers to the contrary phenomenon. The overall question is, whether congruency is desirable for suggestive brands and does lead to a better brand memory or if incongruity at least to a

certain extent - like moderate incongruity - might arouse more attention, leading to a better brand name recall. In addition, the brand name memory effect of pictures, which underlines the brand message either congruent or varied incongruent, brand slogan and brand names will be tested. So far, studies with the focus on verbal and visual incongruity Heckler and Childers, 1992; Lee and Ang, 2003 were conducted on the memory effect of the elements brand name, copy and picture in their relation to attributes within advertisements. In that case, participants were requested to remember ad attributes. In this study, the focus lies on the overall recall of the brand names with respect to a picture and a brand slogan. Researchers as Heckler and Childers (1992) indicated that ads with incongruent verbal and visual information resulted in a higher memorability than congruent versions of ads. In the follwing, the memory structure of brand names will be investigated as well as other important memory dimensions and memory functions.

2. Theoretical Framework: The Memory Process

Memory can be understood as a process of gaining information, which will be retrieved when the information is required. In the course of this, the memory process (Fig.1) passes several steps as receiving data from external input, encoding it, which can be described as entering, storing it as a mean of retaining memory and finally retrieval or in other words making the information accessible (Atkinson and Shiffrin, 1968). For processing brand related information, there are three memory systems of importance: Working Memory (WM), Short Term Memory (STM) and Long-Term Memory (LTM). They will be further explained in the following based on the “Multicomponent Model” of Alan Baddeley.

Figure 1. THE MEMORY PROCESS



Source: Solomon, Michael R.; Consumer Behavior, Buying, Having and Being; Ninth Edition, Pearson 2011

2.1. The Multicomponent Model

The Multicomponent Model from Baddeley and Hitch is a framework to approach working memory (WM) theories and models. It consists of the following components: The Central Executive, which is the most complex component of WM coordinates and serves as attention function and decision maker; the Visuospatial Sketchpad, which stores and processes visual information; the Phonological Loop that stores and processes verbal-numeric information and the Episodic Buffer, which stores information about the model and which is linked to long term memory. Throughout this study, one main focus of the memory span task will lie on the Visuospatial Working Memory. The Visuospatial Component stores and processes visualized information. This is important, since incongruent and congruent information is illustrated based on pictures. The Phonological Loop is of importance in distinguishing the brand slogan with a congruent brand message from an incongruent one. Memory span tasks as the recall of brand names can have several subsystems for content and process. Working Memory evolved from the concept of Short Term Memory (STM), but STM only keeps information, whereas WM processes it (Baddeley, 2012). The main task of a Long Term Memory (LTM) system is to retain information for a long period of time. The LTM being beyond the scope of this study was not examined. Still, more recent researches of Baddeley conclude that LTM and STM are no separate systems, but rather linked to each other. The more efforts it takes to memorize a task, the more likely the information will enter the LTM (Solomon, 2011).

2.2. Definition of Incongruence and Congruence

In order to ease comprehension of the effect of incongruence on processing in human memory, the terminology of incongruence and congruence will be explained in the following. The meaning of incongruence refers to a discrepancy between a person's expectation or experience and the actual situation the person is confronted with. It follows that congruence refers to expected information. Incongruity research investigates the effect of information, which is not compatible with an existing knowledge or which does not fit usual predefined patterns (Stayman, Alden and Smith, 1992). It was shown that information which is incongruent with the actual expectancy may have a beneficial effect as being more efficiently remembered than congruent information. It can be suggested that ads, which are incongruent with the brand and the associations of consumers, should have similar effects. Two explanations for this effect were summarized by Trafimow and Porter. The first one focuses on the explanation process of understanding the incongruent information and the second one is related to the updating process of the people's expectancies. This concludes that additional cognitive processing is one of the reasons for the incongruity effect, meaning that people are more likely to remember incongruent information (Trafimow and Porter, 1997).

Several studies on people's behavior as the one conducted by Bargh and Thein confirm the positive effect of incongruence, for example that incongruent behavior is better recalled than congruent behavior (Bargh and Thein, 1985). Further studies showed that the effect which leads to more ad processing and better memory is dependent on the degree of incongruity with the established brand schema. A schema is a cognitive structure of an individual, which contains knowledge about a given topic. (Halkias and Kokkinaki, 2011). A theoretical framework about two dimensions of incongruity was

developed. The determination of the degree of incongruity is based on how relevant or irrelevant and expected or unexpected a new information is in relation to an already existent cognitive structure. Expectancy is related to the degree an information fits to a certain kind of pattern which is aroused by the theme. Relevancy is defined as meaning of the theme and describes if the stimulus is rather contributing to or detracting from the initial communicated message (Heckler and Childers, 1992). For relevancy different conceptualizations are actually existent. Heckler and Childers (1992) perceive the relevance of, for instance visually presented information, as the degree to which the theme will be clarified or identified. The topic of incongruence is also subject to research on advertising and persuasive communication. Studies on marketing communication dealing among others with the fit of consumer's cognitive schema and the content of communication came to the conclusion that a direct match of a brand message and the communication content is not the best promoting strategy in any cases (Rossiter, Percy and Donovan, 1991). In contrast to congruent information which is perceived as more likely to process and being more predictable, stimuli being schema incongruent arouse more attention. It results in an aggravation of people's cognitive arousal trying to process inconsistencies. This effort is triggered by the psychological reward of successfully resolving those inconsistencies. A severe incongruity perceived as extremely bizarre information content however can lead to a non willingness or inability to process the information, which would be an undesirable outcome (Heckler and Childers, 1992). Meyers-Levy and Tybout (1989) found out that information on products which are moderately incongruent with their assumed category result in a more favorable process evaluation. Increased cognitive activity leads to progressive memory performance. Cognitive activity, which is generated by schema incongruity stimulates

an encoding process that leads to enhanced linkages between the stimulus and the stored memory knowledge (Hastie, 1980).

2.3. The Incongruity Hypothesis

Incongruity with an active conceptual framework leads to increased attention, which is associated with orienting response and cortical arousal. Psychological measures like the before mentioned are indices, but cannot be used independently. According to the incongruity hypothesis, incongruity has an effect on memory going through three phases of processing. In phase 1, a stimulus is evoked by comparing the presentation of the ad and the stored conceptual framework. Additional response results of the matching degree between the stimulus and the given information which is context bound. Phase 2 includes the processes as elaboration, relational processing and rehearsal. During the memory test phase 3, the effect of incongruity on memory is dependent on the stored information which supports memory performance by linking the information to the stored framework (Schmidt, 1991). Literature dealing with information incongruity also states that incongruent information not just enhances arousal; it also evokes curiosity and interest (Muehling and Laczinak, 1988), which furthermore leads to enhanced message involvement.

2.4. Memory Structure of Brands

As already mentioned before, the memory of brands is also related to the structure of memory that the consumer has in mind. In the course of the investigation regarding brand extension strategies, researchers as Milberg, Lawson and Whan Park (1989) found out that brand name memory associations for new products are connected to a certain memory structure related to the brand name. Experiments with three existing

brand name concepts were conducted. The symbolic brand name concept is linked to a superordinate concept, the functional brand name concept is linked to product characteristics and usage based concept is linked to situations of product usage (Lawson, Milberg and Whan Park, 1989). Within this study, the brands were divided into these three categories ”symbolic”, “functional” and “usage based” to test if there are brand recall differences between these concepts as well.

Concerning the brand name memory concept, Cohan and Kunal (1987) referred to brand names as a facilitation to define a category membership or to organize product-category associations. This means that some brands are based on certain features or cues in memory, which is called feature based, while others rely on a more abstract cue, which is called concept based. Feature based brand names are evaluated with a “certain goodness of fit” as physical attributes, functions or usage context. More abstract based brands as symbolic brands are evaluated with an overall fit of the concept, as for example luxury and prestige, not relying on certain features. In the concept of symbolic brands products and features can be linked, which otherwise would be perceived as an untypical (Cohen and Kunal, 1987).

3. Experiment

For the experiment of brand name memory, existing brands were used that are suggestive and well known. Moreover, the brands were of different product categories in order to avoid biased recall for a category. For familiar brands, consumers usually have elaborated brand schemas stored in their memory. According to Low and Lamb (2000), consumers are furthermore able to store several associations for familiar brands in contrast to unfamiliar ones (Low and Lamb, 2000). New brand related information is also more easily stored if there is already stored information for familiar brands in

memory (Heckler and Childers, 1992). Therefore, the influence of familiarity and favorability on brand name memory was tested within this study as well.

For the experiment, 15 brand names were presented to the participants. The brand names can be categorized in the following three brand name concepts, which are "symbolic", "functional" and "usage based" according to the brand name structure concept of (Park, Lawson and Milberg, 1989). Symbolic brand concepts are related to the luxury brands as Chanel, Tiffany, Rolex, Hugo Boss and Jaguar. The usage based brand name concept includes the brands which are frequently used and have to be repurchased again as beverages, food or bathroom articles. These ones are Milka, Coca-Cola, Kelloggs, Energizer and Nivea. The functional brand names are due to reusable products as electronic products or clothes as Nikon, Nike, Lego, Eastpak and Ikea. The brands were randomly showed in the experiments and were not ordered in category. The brand slogans were taken from the official websites of the brands.

The participants were shown several powerpoint slides. Each slide depicted the brand label on the left side, a picture on the right and a brand slogan underneath. The picture and the brand slogan supported and aroused the perception of incongruent, congruent or moderately incongruent information compared to the brand information and association the consumer has in mind. From the congruent group, to moderately incongruent and to incongruent, the pictures on the right side varied from congruent, moderately incongruent to incongruent effects (Fig.2). For the incongruent with different stimuli group, the incongruent figure was used as in the incongruent group. The slogan remained the same within the groups of congruity, incongruity and moderately incongruity. In order to test if there is a positive influence of the slogan on brand memory recall, the slogan was changed for the incongruent group with different stimuli (IDS). For this group, a fictional incongruent slogan was chosen as a further stimulus.

Figure 2. EXAMPLE OF A CONGRUENT, MODERATELY INCONGRUENT AND INCONGRUENT PICTURE FOR THE BRAND “MILKA”

1.1 Congruent 1.2.Moderately Incongruent 1.3 Incongruent

The overall constellation of brand label, picture and brand slogan resembles an advertisement of brands that applies congruent or incongruent messages to catch the customer’s attention. However, the participant’s task was not to remember a certain advertisement or attributes, but just the brand names of brands that are supposed to be mostly familiar to the participants. The effect of the varied degrees of incongruity on brand name recall of the participants was investigated in this study. In the case of recalling advertisements, literature on brand familiarity hypothesized that familiar brands may rather benefit from incongruent advertisement than unfamiliar ones, which are recommended to rather stick to a more congruent message in order to educate and introduce their products to consumers (Lange and Dahlén, 2003). It was tested in this study, if this also includes the brand name in general. Based on previous research of (Bargh and Thein, 1985), (Meyers-Levy and Tybout, 1989) it is expected that moderate brand information incongruity increases to a better recall of the presented brands. According to Friedman, recognition memory for unexpected ads is greater because of the greater processing effort due to more detailed encoding (Friedman, 1979). The level of incongruity of picture and slogan was tested with a survey afterwards, in which participants had to specify the picture-brand fit. The picture-brand fit/ slogan-brand fit refers to the Expectancy and Relevancy Principal of Hecklers and Childers 1992 in

order to define incongruity and is used as well in researches of Lange, Dahlén 2003. Based on the previous literature review, the following hypothesis' were tested within the experiment:

Hypothesis 1: Brands, which are moderately incongruent regarding their brand schema and visual component result in a better brand recall than those whose brand schema components are either congruent or incongruent.

Hypothesis 2: Among the participants of incongruent picture groups, experiment participants of the incongruent group with incongruent stimuli (IDS) are less able to remember brand names than participants of the incongruent group (I) due to the higher level of incongruity.

Hypothesis 3: The difference of symbolic brand recall performance between the Congruent/Moderately Incongruent group (C/MI) and Incongruent with different stimuli/Incongruent group (IDS/I) is lower than between both other brand memory groups (functionality and usage based), since the concept of luxury brands is not due to a schema of special attributes, rather to the general concept of luxury. As a matter of fact, incongruity could be also seen as a kind of fit, since there are no clear definitions of an overall fit in the case of a luxury brand. The presence of luxury brand names always makes the products fit (Lawson, Milberg and Whan Park, 1989). This would also refer to incongruent pictures being perceived as more congruent. This leads to a greater acceptability for extensions, so incongruity as well, for symbolic names than for functional and usage based names. The incongruity effect affects the participants less.

Hypothesis 4: People are decisively more likely to remember brands if they a) favor the brands, b) are familiar to them or c) frequently purchase the brand.

3.1 Method:

A total of 128 subjects participated in this study, 68 % females, 32 % males. (M age = 21.39; SD= 2.4). The data was analyzed with IBM SPSS Statistics 22. The experiment participants were divided in four experimental groups. An experiment with a sample of 32 persons for each group was conducted in class. Hereby four levels, which are moderately incongruity, congruity, incongruity and incongruity with different stimuli, were examined. The picture format was held constant. Within the experimental design, the independent variables were manipulated, which means different degrees of congruity/ incongruity of picture and brand slogan related to the brand label within the groups.

Independent variable

Moderately incongruity was presented by pictures, which are not very common for each mentioned brand. It is unusual and less expected, but still obviously connected to the brand.

Congruity was presented by pictures, which fit the brand schemata very well and which are associated with the brand itself. Therefore main products of the brand were depicted.

Incongruity was presented by pictures, which are not related to the brand and its products.

Incongruent with different stimuli was presented by pictures, which are not related to the brand and its products and in addition it includes an incongruent brand slogan. It is in contrast to the other groups, since the brand slogan does not differ in the other groups.

Familiarity, Favorability and Purchase Patterns: according to the given consumer behavior of the participants.

Dependent Variable

Recall of remembered brands: Recall was measured by asking the participants to write down in a row the name of the brands they remember. The total number of recalled brands was summed up for each respondent. The remembered brand names can also be divided in number of "symbolical" luxury brand names remembered, number of "functional" brand names remembered and number of "usage based" brands remembered.

3.2 Experimental Procedure

In order to make sure that the short-term working memory for the 15 brands is interrupted and participants inhibit silent rehearsal, distractions of landscape pictures were shown after each slide (Barrouillet, Bernardin and Camos, 2004). Each slide including the distraction slides, were shown for 8 seconds. This duration was chosen from an experiment of Memory for print ads, which was conducted by Schmitt and Tavassoli (1993). As in their experiment of testing the brand memory of brand names in the context of picture, text and brand name, the participants of this study were also asked to pay equal attention to each aspect of the slide meaning the brand slogan, the picture and the brand label. The experiment structure is similar, but with varied picture and slogans according to the congruent and incongruent principal. After the slides were shown, the participants had to recall all the name of the brands they were able to remember. The amount of elements, in this case the brand names that can be stored varies between individuals. In some approaches, it is cited that the stored contents of WM can increase to even 20 elements, but this figure exceeds the capacity limit the Baddeley's storage model indicates (Woltz and Was, 2006). After the participants finished the recall task, they responded to a small survey with filler questions as

demographic information about gender, age and study track. (Appendix: Survey). Within the survey, the participants were asked several questions about picture-brand fit, slogan-brand fit and familiarity, favorability and purchase patterns. For scaling the picture-brand fit, slogan-brand fit and familiarity such as favorability, a 10 point scale was chosen similar to the experiments of (Lange and Dahlén, 2003) related to their question of "How well do the picture and the brand fit together". Furthermore, the option of "Do not remember" was given in order not to refract results. To assess the capability of retrieving information that is stored in memory, performing a recall test is important (Heckler and Childers, 1992), as implemented in the experiment as well. Recall tests were also used in other studies as (Morrison, Browne and Breneiser, 2012) to test the effect of imagery instruction on memory. In the course of this experiment, brand identification (Solomon, 2011), as a memory recall in terms of remembering the brand name is of importance.

3.3. Control and check manipulation

In order to control and to check manipulation of the experiment, the overall percepted picture brand fit mean of the different groups was investigated. This is an important measure for group differentiation and perception of the varied models of congruity and incongruity. The experiment confirmed what has been expected: The Moderately Incongruent group perceived the pictures as "less fitting" as the congruent results and the results of both incongruent groups with the same picture showed almost the same perception of results which were very low.

Table 1: BRAND FIT TOTAL SCORE WITHIN THE GROUPS

Brand Fit Total Score				
	Mean	SD	F	Sig.
MI	5.89	2.14		
C	7.68	1.55		

I	1.62	1.65		
IDS	2.57	2.81		
Total	4.49	3.21	7.054	.000

In the congruent group, the main product of the brand was depictured, so congruity and a certain good fit was guranteed. Still, the determined congruity mean could have been higher in the congruent group. The mean was expected to be higher than 7.68 (Table 1). This result might be due to false remembered memory of different perception of what suits the brand or similar. Moreover, participants tend to choose not the highest points available on a scale.

The slogans for the first three groups (Moderately Incongruent, Congruent and Incongruent) were taken from the website of the brands, so a strong slogan brand fit was guaranteed. For the last group a completely incongruent und fictional brand slogan was created in order to investigate how the results of the memory task differs, namely between the incongruent group and the incongruent with different stimuli group. The overall percepted slogan brand fit of the different groups and the mean for each brand confirmed what has been expected. (Table 2)

Table 2: SLOGAN FIT TOTAL SCORE WITHIN THE GROUPS

Slogan Fit Total Score				
	Mean	SD	F	Sig.
MI	7-63	1.68		
C	7.83	1.03		
I	7.75	1.56		
IDS	1.48	2.08		
Total	6.59	2.88	3.140	.028

Manipulation Check/Bias Check and possible sources of error

Possible sources of error in the experimental settings might remain. Participants might not have been able to completely follow and understand the instructions of the experiment. Furthermore, participants might not have understood the instructions regarding the questionnaire or did not fully answer the questionnaire to their very best

due to the respondent error. Incomplete questionnaires were excluded. Furthermore, a nationality bias could not have been fully excluded as for instance non- European students specified that they were not that familiar with the brands and accordingly their brand name recall performance was worse than among the other participants.

4. Results

The first three and the last three brand names were more likely to be remembered than the others in between the total 15 brand names due to the "serial position effect" on memory (Table 3) concerning items at the beginning or the end of the list. The effect is also called "primacy effect" for the first and "recency effect" for the last to be remembered. Some authors (Rundus, 1971) suggested that first presented items benefit of the fact that those items can be rehearsed, whereas recency effect might benefit from the condition that brands are still held in short term memory.

Table 3: AMOUNT OF REMEMBERED BRANDS OF THE OVERALL SAMPLE
Amount of remembered brand (N=128)

Brand Name	Mode	Mean
Tiffany	98	0.77
Milka	93	0.73
Coca Cola	98	0.77
Nikon	51	0.40
Energizer	55	0.43
Jaguar	74	0.58
Lego	56	0.44
Hugo Boss	57	0.45
Eastpak	46	0.36
Rolex	68	0.53
Ikea	61	0.48
Nivea	41	0.32
Kelloggs	66	0.52
Nike	97	0.76
Chanel	96	0.75

Hypothesis Testing

The first tested hypothesis refers to the assumption, that the moderately incongruent group is supposed to have the best brand name recall results. The mean of remembered brands within this experiment revealed that the moderately incongruent group was more likely to remember the brands than the other groups did. The group with the least number of remembered brands was the incongruent with different stimuli group (Table 4). Due to the experiments of Meyers-Levy and Tybout (1989), advantages of the moderately incongruent group with respect to the samples mean can be detected. In the moderately incongruent groups, 5 people were able to remember 12 brand names, which was also the highest number of brands names remembered. This is a much better performance than in the other groups. Compared to this result, only one person of the congruent group was able to remember 12 brands and none of the other groups were able to recall 12 brand names. But taken alone, the result is not significant due to a high significance niveau.

Table 4: AMOUNT OF REMEMBERED BRANDS WITHIN THE GROUPS

Amount of remembered brands				
	Mean	SD	F	Sig.
MI	9.13	2.15		
C	8.78	1.66		
I	7.78	1.45		
IDS	7.34	2.25		
Total	8.26	2.02	1.381	.252

To better assess the experimental outcome, an ANOVA-Anylsis of Remembered Brands ($p = 0.001$; $F = 6.116$), Picture Brand Fit ($p = 0.000$; $F = 57.6$) and Slogan Brand Fit ($p = 0.000$; $F = 90.08$) was applied which concluded highly significant results between the group. Since there is a highly significant difference between most groups, further investigations on the level of the dependent variable “Amount of remembered brands”

in comparison of the groups were implemented. As depicted in table 5, there are no significant differences between the incongruent group and the incongruent group with different stimuli, and between the congruent group and the moderately incongruent group.

Table 5: AMOUNT OF REMEMBERED BRANDS BETWEEN THE GROUPS

Amount of remembered brands				
Exp. Group i)	Exp. Group ii)	Mean Diff.	STD	Sig.
MI	C	.344	.477	1.00
	I	1.34	.477	.034
	IDS	1.78	.477	.002
C	MI	-.343	.477	1.00
	I	1.00	.477	.229
	IDS	1.44	.477	.019
I	MI	-1.34	.477	.002
	C	-1.00	.477	.019
	IDS	.437	.477	1.00
IDS	M	-1.78	.477	.002
	C	-1.44	.477	.019
	I	-.437	.477	1.00

While taking a closer look at the brand picture fit, which defines the groups into their level of congruity or incongruity, the following conclusions can be drawn. The picture brand mean of the moderately incongruent group with 5.89 and the mean of the congruent group of 7.68 are relatively low. As an interpretation, it can be assumed that the congruent group could be perceived as a kind of moderately incongruent group as well. The perceived picture brand fit might be not sufficient to provide real congruity. According to scale interpretations like the GPA scale employed by Indian Institutes of Technology, a very good fit is 8 and above. Consequently, the picture brand fit of congruity is too low, which weakens the congruity principle of indicating a very strong fit. Nevertheless, it is clear that moderately incongruence or congruence are significant and clearly more likely to be remembered than incongruity or incongruity with different stimuli. This outcome confirms the results of the research of Lutz and Lutz (1977), on

interactive imgagery. A positive relationship of remembering brand names was found between the brand name and a closely related visual information in contrast to an unrelated visual information. As a conclusion of this experiment, a positive relationship of remembering brands was also found for the moderately incongruence and congruence concept. It can be concluded that even a slightly degree of incongruity, namely moderatly incongruent relation between the brand and the picture, results in a better brand recall.

The second hypothesis tested states that the incongruent group is supposed to have a better recall result than the incongruent group with different stimuli. By comparing the mean of the incongruent and incongruent group with different stimuli, the overall memory performance of the group with an incongruent picture and an incongruent slogan was worse compared to the incongruent group. The range of amount of remembered brands within the group incongruent with different stimuli was more spread. From this sample, it can be concluded that some participants are better able to remember incongruent information than others and for some it is even more distracting. However, by comparing the incongruent with the incongruent with different stimuli group as depicted above in table 5, there was no significant difference between both groups regarding their brand name recall performance. This is unexpected, since the incongruent slogan is an additional distraction factor in the incongrent with different stimuli group. Further investigations regarding the brand slogan fit between the incongruent and IDS group delivered the following results (Table 6).

Table 6: BRAND SLOGAN FIT BETWEEN INCONGRUENT AND INCONGRUENT WITH DIFFERENT STIMULI GROUP

Brand Slogan Fit				
Exp. Group i)	Exp. Group ii)	Mean Diff.	STD	Sig.
I	IDS	6.26	.445	0.00

The mean difference of 6.26 is very high. Accordingly to the incongruency principle, the slogan should be more distracting and in the following the participants should be less able to remember the brands in the IDS group. This phenomenon could be explained with regard to the Picture-Superiority, referring to the relationship of the depicted brand label and the picture above the verbal brand slogan. Picture-Superiority describes a finding that pictures are more likely being recognized or recalled than the verbalised version (Childers and Housten, 1984). In conclusion, the information of a brand slogan for the participants brand name memory is less attractive within the given time of 8 seconds during that experiment. Participants seem to focus less on the brand slogan. Another important information could also be the condition of verbal-numeric and visuospatial memory span constructs. Ferreira, Almeida and Prieto, (2011), suggestested that verbal-numeric constrcuts important for verbal storage and visuospatial memory span constrcuts for picture storages share about 49% of their common variance, but are independent. The hypothesis that the incongruent with different stimuli group can less likely remember brand names can not be verified.

The third hypothesis tested states, that the difference of symbolic brand recall performance between the congruent groups and incongruent groups is lower than between both other groups. A significant difference between the groups for usage based brands and symbolic brands was calculated, but not for the functional brands. Regarding the symbolic and usage based brands, the following significant results were investigated as depicted in the table below.

Table 7: MULTIPLE COMPARISONS OF SYMBOLIC AND USAGE BRAND BETWEEN THE GROUPS

Multiple Comparisons

Dependent variable	Experiment group i)	Experiment group ii)	Mean diff.	STD	Sig.
Symbolic	C	IDS	.7500	.269	.037
Usage Based	MI	I	.8750	.269	.005
	MI	IDS	.7812	.269	.017

In this case, it can be assumed that C = MI, since there was no significant difference proofed between C and MI. Moreover, it could also be assumed that regarding the means, the difference between the C group and the IDS group is similar to the difference of the MI and I group. All aspects considered, the difference mean between the luxury brands of incongruent and congruent group is smaller than the difference of the usage based brands between incongruent and congruent group. The hypothesis can not be rejected based on the results of this study. In this study, a lower difference between symbolic brand recall performance of the congruent groups and incongruent groups was indicated than the difference of usage based brands between both groups. The fourth hypothesis tests the influence of a) Familiarity, b) Favorability and c) Purchase Patterns on Brand Name Recall. A Pearson correlation test was implemented in order to confirm or reject a connection between the above mentioned traits. As depicted below, a significant result of correlation can be concluded. The hypothesis that familiarity, favorability and purchase patterns influence the Brand Name Recall can be verified. Still, the correlation between the amount of remembered brands and familiarity, favorability and purchase patterns is weak and therefore lower than expected.

Table 8: CORRELATIONS OF FAMILARITY, FAVORABILITY AND PURCHASE PATTERNS WITH REMEBERED BRAND NAMES

Correlations Familiarity, Favorability and Purchase Patterns

		Familiarity	Favorability	Purchase Patterns
Amount of remembered brands	Pearson Correlation	.251	.200	.224
	Sig. (2 tailed)	.004	.023	.011
	N	128	128	128

5. General Discussions and Outlook

In general, studies dealing with the topics of incongruity and congruity are still very rare and further research is necessary imposed by the fact, that every brand benefits from consumers, who are able to recognize and furthermore recall their brand name. Finding the most effective degree of incongruity to achieve a better brand name memory is essential. As an example, incongruity based tactics could be further tested in advertisements and if it is successful, the results might serve to find ad strategies which stand out from those of competitors, to increase ad memorability and to consolidate the brand in the consumer's mind. This could also answer the question, if brands should advertise with unusual products in order to be more memorable. In this case, the focus lies on suggestive brands as analyzed in this study. New brands need to firstly establish their brand image and offer. For this purpose, incongruent information would lead to misunderstandings and would harm the brands positioning. Within the sample of the study's experiment, participants of the moderately incongruent group remembered more brand names than other groups. This could not be tested as significantly reliable in comparison to the congruent group, but it could be a clue for further research especially on moderately incongruent information in comparison to congruent information. By conducting this experiment with a bigger sample, significant results might be found that reveal more insights concerning the topic of moderately incongruity as well.

Furthermore, further aspects of the effect of incongruity among congruent information could be tested exceeding the scope of this study. The new test setting could be the presentation of one incongruent brand among several congruent ones. Should the incongruent brand be more likely to be remembered than the congruent brands, it would reveal, that there is a certain dependence on information congruence in the presentation of brand names. This is further influenced by the market environment and the

competitor's advertising strategy for instance. Additionally, effects on LTM could be tested as well by conducting the experiment again after a few days with the same participants. By repeating the memory recall task, it could be examined how many brands the participants were still able to remember.

Moreover, it could be tested if there are differences between incongruity tactics regarding low-involvement and high-involvement products and how the tactics should be implemented. Further tests regarding the brand memory structure could be conducted as well. A further topic of future studies could be whether certain industries or product categories might benefit from the incongruity principle, whereas some might suffer from it.

An interesting finding of this study is, that there is no significant difference of remembered brand names between the incongruent and incongruent group with different stimuli. This is unforeseen, since the group with the higher incongruity degree, namely the one with an additional incongruent or "confusing" brand slogan, was expected to remember fewer brand names. The additional incongruent slogan does not seem to make a difference in this case. Comparing the congruent and incongruent group, there was no significant difference as well, but the degree of incongruity between the pictures was rather low. It could be concluded, that the incongruity principle affects verbal and visual information in a different manner, which was probably influenced by the discussed picture-superiority principle. It would be interesting to conduct the experiment again with two new groups with a similar congruent picture. Showing one group a congruent and the other one an incongruent brand slogan could achieve a deeper insight about the strength of picture superiority effect paired with incongruity and congruity. With regard to brand name memory in general, it could be interesting to determine, regardless of the incongruity or congruity principle, under which settings it

is easier to remember brand names of non-suggestive brands. The focus of the study should lie on association factors, brand name length, labels including illustrations or extraordinary labels.

As it was tested in this study, the brand name memory of consumers also relies on the familiarity, favorability and purchase patterns of a brand. Yet, the correlation between remembered brands and the mentioned aspects is weak and not as important as it was expected.

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APPENDICES:

Table I: Brands divided in Brand Concepts with original Brand slogan

Functional Concept	**Symbolical Concept**	**Usage based Concept**
Nikon: "I am a Nikon"	**Chanel:** "Keep it classy"	**Milka:** "Dare to be tender"
Ikea: "Affordable solutions for better living"	**Tiffany:** "Say it with Tiffany"	**Energizer:** "Keep going and going"
Eastpak: "Built to resist"	**Jaguar:** "The art of performance"	**Kellogg's:** "The best to you each morning"
Lego: "Play on"	**Rolex:** "A crown for every achievement"	**Nivea**: " Inspired by the way skin works
Nike: "Just do it"	**Hugo Boss:** "Don't imitate, innovate"	**Coca-Cola**: "Life tastes good"

Table II: Survey

Survey for Memory Experiment

The following questions concern the experiment of brand memory. The survey will take about 5 minutes and all answers are anonymous.
I appreciate your sincere answers and thank you a lot for your participation.

1. **How familiar are you with the following brands?**

	Not familiar at all 0	1	2	3	4	5	6	7	8	9	Very familiar 10
Tiffany											
Milka											
Coca-Cola											
Nikon											
Energizer											
Jaguar											
Lego											
Hugo Boss											
Eastpak											
Rolex											
Ikea											
Nivea											
Kellogg's											

Nike											
Chanel											

2. How much do you favor the following brands?

	Not at all 0	1	2	3	4	5	6	7	8	9	Very much 10
Tiffany											
Milka											
Coca-Cola											
Nikon											
Energizer											
Jaguar											
Lego											
Hugo Boss											
Eastpak											
Rolex											
Ikea											
Nivea											
Kellogg's											
Nike											
Chanel											

3. Within a month, how often do you buy the following brands?

	Less than once	1-2 times	3-4 times	More than 4 times
Tiffany				
Milka				
Coca-Cola				
Nikon				
Energizer				
Jaguar				
Lego				
Hugo Boss				
Eastpak				
Rolex				
Ikea				
Nivea				
Kellogg's				
Nike				
Chanel				

4. How well did picture and brand fit together within the experiment for the following brands?

	No fit at all 0	1	2	3	4	5	6	7	8	9	Very strong fit 10	Don't know
Tiffany												
Milka												
Coca-Cola												
Nikon												
Energizer												
Jaguar												
Lego												
Hugo Boss												
Eastpak												
Rolex												
Ikea												
Nivea												
Kellogg's												
Nike												
Chanel												

5. How well did slogan and brand fit together within the experiment for the following brands?

	No fit at all 0	1	2	3	4	5	6	7	8	9	Very strong fit 10	Don't know
Tiffany												
Milka												
Coca-Cola												
Nikon												
Energizer												
Jaguar												
Lego												
Hugo Boss												
Eastpak												
Rolex												
Ikea												
Nivea												
Kellogg's												
Nike												
Chanel												

6. Which of the following brands do you perceive as luxury brands?

Tiffany		Energizer		Eastpak		Kellogg's	

Milka		Jaguar		Rolex		Nike	
Coca-Cola		Lego		Ikea		Chanel	
Nikon		Hugo Boss		Nivea			

7. Demographical Information

Please state your age:
Please indicate your gender:
Your nationality is:
Your Bachelor or Master's program is:

Oneway

Descriptives

		N	Mean
Amount of remembered brands	Moderately Incongruent	32	9,1250
	Congruent	32	8,7813
	Incongruent	32	7,7813
	Incongruent with different stimuli	32	7,3438
	Total	128	8,2578
Brand Fit Total Score	Moderately Incongruent	32	5,8931
	Congruent	32	7,6775
	Incongruent	31	1,6236
	Incongruent with different stimuli	30	2,5721
	Total	125	4,4940
Slogan Fit Total Score	Moderately Incongruent	31	7,6268
	Congruent	32	7,8312
	Incongruent	31	7,7463
	Incongruent with different stimuli	21	1,4832
	Total	115	6,5940

Descriptives

		Std. Deviation	Std. Error
Amount of remembered brands	Moderately Incongruent	2,15152	,38034
	Congruent	1,66044	,29353
	Incongruent	1,45324	,25690
	Incongruent with different stimuli	2,25202	,39810
	Total	2,02055	,17859
Brand Fit Total Score	Moderately Incongruent	2,13551	,37751
	Congruent	1,55491	,27487
	Incongruent	1,64695	,29580
	Incongruent with different stimuli	2,81437	,51383
	Total	3,21360	,28743
Slogan Fit Total Score	Moderately Incongruent	1,67510	,30086
	Congruent	1,02539	,18126
	Incongruent	1,55538	,27936
	Incongruent with different stimuli	2,08038	,45398
	Total	2,88316	,26886

Descriptives

		95% Confidence Interval for Mean	
		Lower Bound	Upper Bound
Amount of remembered brands	Moderately Incongruent	8,3493	9,9007
	Congruent	8,1826	9,3799
	Incongruent	7,2573	8,3052
	Incongruent with different stimuli	6,5318	8,1557
	Total	7,9044	8,6112
Brand Fit Total Score	Moderately Incongruent	5,1232	6,6630
	Congruent	7,1169	8,2381
	Incongruent	1,0195	2,2277
	Incongruent with different stimuli	1,5212	3,6230
	Total	3,9251	5,0630
Slogan Fit Total Score	Moderately Incongruent	7,0123	8,2412
	Congruent	7,4615	8,2009
	Incongruent	7,1758	8,3168
	Incongruent with different stimuli	,5362	2,4302
	Total	6,0614	7,1266

Descriptives

		Minimum	Maximum
Amount of remembered brands	Moderately Incongruent	4,00	12,00
	Congruent	5,00	12,00
	Incongruent	5,00	10,00
	Incongruent with different stimuli	2,00	11,00
	Total	2,00	12,00
Brand Fit Total Score	Moderately Incongruent	1,40	10,00
	Congruent	3,07	10,00
	Incongruent	,00	5,25
	Incongruent with different stimuli	,00	9,08
	Total	,00	10,00
Slogan Fit Total Score	Moderately Incongruent	2,73	10,00
	Congruent	5,80	10,00
	Incongruent	4,00	10,00
	Incongruent with different stimuli	,00	6,00
	Total	,00	10,00

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Amount of remembered brands	1,381	3	124	,252
Brand Fit Total Score	7,054	3	121	,000
Slogan Fit Total Score	3,140	3	111	,028

ANOVA

		Sum of Squares	df	Mean Square
Amount of remembered brands	Between Groups	66,836	3	22,279
	Within Groups	451,656	124	3,642
	Total	518,492	127	
Brand Fit Total Score	Between Groups	753,180	3	251,060
	Within Groups	527,397	121	4,359
	Total	1280,576	124	
Slogan Fit Total Score	Between Groups	671,731	3	223,910
	Within Groups	275,908	111	2,486
	Total	947,639	114	

ANOVA

		F	Sig.
Amount of remembered brands	Between Groups	6,116	,001
	Within Groups		
	Total		
Brand Fit Total Score	Between Groups	57,600	,000
	Within Groups		
	Total		
Slogan Fit Total Score	Between Groups	90,081	,000
	Within Groups		
	Total		

Post Hoc Tests

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Amount of remembered brands	Moderately Incongruent	Congruent	,34375	,47713	1,000	-,9355	1,6230
		Incongruent	1,34375*	,47713	,034	,0645	2,6230
		Incongruent with different stimuli	1,78125*	,47713	,002	,5020	3,0605
	Congruent	Moderately Incongruent	-,34375	,47713	1,000	-1,6230	,9355
		Incongruent	1,00000	,47713	,229	-,2793	2,2793
		Incongruent with different stimuli	1,43750*	,47713	,019	,1582	2,7168
	Incongruent	Moderately Incongruent	-1,34375*	,47713	,034	-2,6230	-,0645
		Congruent	-1,00000	,47713	,229	-2,2793	,2793
		Incongruent with different stimuli	,43750	,47713	1,000	-,8418	1,7168
	Incongruent with different stimuli	Moderately Incongruent	-1,78125*	,47713	,002	-3,0605	-,5020
		Congruent	-1,43750*	,47713	,019	-2,7168	-,1582
		Incongruent	-,43750	,47713	1,000	-1,7168	,8418
Brand Fit Total Score	Moderately Incongruent	Congruent	-1,78442*	,52193	,005	-3,1844	-,3844
		Incongruent	4,26949*	,52613	,000	2,8582	5,6807
		Incongruent with different stimuli	3,32101*	,53056	,000	1,8979	4,7442
	Congruent	Moderately Incongruent	1,78442*	,52193	,005	,3844	3,1844
		Incongruent	6,05391*	,52613	,000	4,6427	7,4652
		Incongruent with different stimuli	5,10544*	,53056	,000	3,6823	6,5286
	Incongruent	Moderately Incongruent	-4,26949*	,52613	,000	-5,6807	-2,8582
		Congruent	-6,05391*	,52613	,000	-7,4652	-4,6427
		Incongruent with different stimuli	-,94848	,53469	,472	-2,3827	,4857
	Incongruent with different stimuli	Moderately Incongruent	-3,32101*	,53056	,000	-4,7442	-1,8979
		Congruent	-5,10544*	,53056	,000	-6,5286	-3,6823
		Incongruent	,94848	,53469	,472	-,4857	2,3827
Slogan Fit Total Score	Moderately Incongruent	Congruent	-,20444	,39732	1,000	-1,2718	,8629
		Incongruent	-,11955	,40046	1,000	-1,1953	,9562
		Incongruent with different stimuli	6,14354*	,44559	,000	4,9465	7,3406
	Congruent	Moderately Incongruent	,20444	,39732	1,000	-,8629	1,2718
		Incongruent	,08490	,39732	1,000	-,9824	1,1522
		Incongruent with different stimuli	6,34799*	,44277	,000	5,1586	7,5374
	Incongruent	Moderately Incongruent	,11955	,40046	1,000	-,9562	1,1953
		Congruent	-,08490	,39732	1,000	-1,1522	,9824
		Incongruent with different stimuli	6,26309*	,44559	,000	5,0661	7,4601
	Incongruent with different stimuli	Moderately Incongruent	-6,14354*	,44559	,000	-7,3406	-4,9465
		Congruent	-6,34799*	,44277	,000	-7,5374	-5,1586
		Incongruent	-6,26309*	,44559	,000	-7,4601	-5,0661

*. The mean difference is significant at the 0.05 level.

Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
Amount of remembered brands	8,2578	2,02055	128
FamiliarityTotal Score	7,5177	1,72820	128
Favorability Total Score	6,4422	1,37305	128
Purchase Total Score	1,3550	,20913	128

Correlations

		Amount of remembered brands	FamiliarityTotal Score
Amount of remembered brands	Pearson Correlation	1	,251**
	Sig. (2-tailed)		,004
	N	128	128
FamiliarityTotal Score	Pearson Correlation	,251**	1
	Sig. (2-tailed)	,004	
	N	128	128
Favorability Total Score	Pearson Correlation	,200*	,619**
	Sig. (2-tailed)	,023	,000
	N	128	128
Purchase Total Score	Pearson Correlation	,224*	,080
	Sig. (2-tailed)	,011	,367
	N	128	128

Correlations

		Favorability Total Score	Purchase Total Score
Amount of remembered brands	Pearson Correlation	,200*	,224*
	Sig. (2-tailed)	,023	,011
	N	128	128
FamiliarityTotal Score	Pearson Correlation	,619**	,080
	Sig. (2-tailed)	,000	,367
	N	128	128
Favorability Total Score	Pearson Correlation	1	,181*
	Sig. (2-tailed)		,040
	N	128	128
Purchase Total Score	Pearson Correlation	,181*	1
	Sig. (2-tailed)	,040	
	N	128	128

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F
Remembered Luxury Brands	Between Groups	10,961	3	3,654	3,159
	Within Groups	143,406	124	1,157	
	Total	154,367	127		
Remembered Functional Brands	Between Groups	4,398	3	1,466	1,581
	Within Groups	114,969	124	,927	
	Total	119,367	127		
Remembered Usage Based Brands	Between Groups	15,086	3	5,029	4,782
	Within Groups	130,406	124	1,052	
	Total	145,492	127		

ANOVA

		Sig.
Remembered Luxury Brands	Between Groups	,027
	Within Groups	
	Total	
Remembered Functional Brands	Between Groups	,197
	Within Groups	
	Total	
Remembered Usage Based Brands	Between Groups	,003
	Within Groups	
	Total	

Post Hoc Tests

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Mean Difference (I-J)
Remembered Luxury Brands	Moderately Incongruent	Congruent	-,25000
		Incongruent	,34375
		Incongruent with different stimuli	,50000
	Congruent	Moderately Incongruent	,25000
		Incongruent	,59375
		Incongruent with different stimuli	,75000*
	Incongruent	Moderately Incongruent	-,34375
		Congruent	-,59375
		Incongruent with different stimuli	,15625
	Incongruent with different stimuli	Moderately Incongruent	-,50000
		Congruent	-,75000*
		Incongruent	-,15625
Remembered Functional Brands	Moderately Incongruent	Congruent	,15625
		Incongruent	,12500
		Incongruent with different stimuli	,50000
	Congruent	Moderately Incongruent	-,15625
		Incongruent	-,03125
		Incongruent with different stimuli	,34375
	Incongruent	Moderately Incongruent	-,12500
		Congruent	,03125
		Incongruent with different stimuli	,37500
	Incongruent with different stimuli	Moderately Incongruent	-,50000
		Congruent	-,34375
		Incongruent	-,37500
Remembered Usage Based Brands	Moderately Incongruent	Congruent	,43750
		Incongruent	,87500*
		Incongruent with different stimuli	,78125*
	Congruent	Moderately Incongruent	-,43750
		Incongruent	,43750
		Incongruent with different stimuli	,34375
	Incongruent	Moderately Incongruent	-,87500*
		Congruent	-,43750
		Incongruent with different stimuli	-,09375

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Std. Error
Remembered Luxury Brands	Moderately Incongruent	Congruent	,26885
		Incongruent	,26885
		Incongruent with different stimuli	,26885
	Congruent	Moderately Incongruent	,26885
		Incongruent	,26885
		Incongruent with different stimuli	,26885
	Incongruent	Moderately Incongruent	,26885
		Congruent	,26885
		Incongruent with different stimuli	,26885
	Incongruent with different stimuli	Moderately Incongruent	,26885
		Congruent	,26885
		Incongruent	,26885
Remembered Functional Brands	Moderately Incongruent	Congruent	,24072
		Incongruent	,24072
		Incongruent with different stimuli	,24072
	Congruent	Moderately Incongruent	,24072
		Incongruent	,24072
		Incongruent with different stimuli	,24072
	Incongruent	Moderately Incongruent	,24072
		Congruent	,24072
		Incongruent with different stimuli	,24072
	Incongruent with different stimuli	Moderately Incongruent	,24072
		Congruent	,24072
		Incongruent	,24072
Remembered Usage Based Brands	Moderately Incongruent	Congruent	,25638
		Incongruent	,25638
		Incongruent with different stimuli	,25638
	Congruent	Moderately Incongruent	,25638
		Incongruent	,25638
		Incongruent with different stimuli	,25638
	Incongruent	Moderately Incongruent	,25638
		Congruent	,25638
		Incongruent with different stimuli	,25638

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Sig.
Remembered Luxury Brands	Moderately Incongruent	Congruent	1,000
		Incongruent	1,000
		Incongruent with different stimuli	,392
	Congruent	Moderately Incongruent	1,000
		Incongruent	,174
		Incongruent with different stimuli	,037
	Incongruent	Moderately Incongruent	1,000
		Congruent	,174
		Incongruent with different stimuli	1,000
	Incongruent with different stimuli	Moderately Incongruent	,392
		Congruent	,037
		Incongruent	1,000
Remembered Functional Brands	Moderately Incongruent	Congruent	1,000
		Incongruent	1,000
		Incongruent with different stimuli	,239
	Congruent	Moderately Incongruent	1,000
		Incongruent	1,000
		Incongruent with different stimuli	,935
	Incongruent	Moderately Incongruent	1,000
		Congruent	1,000
		Incongruent with different stimuli	,731
	Incongruent with different stimuli	Moderately Incongruent	,239
		Congruent	,935
		Incongruent	,731
Remembered Usage Based Brands	Moderately Incongruent	Congruent	,543
		Incongruent	,005
		Incongruent with different stimuli	,017
	Congruent	Moderately Incongruent	,543
		Incongruent	,543
		Incongruent with different stimuli	1,000
	Incongruent	Moderately Incongruent	,005
		Congruent	,543
		Incongruent with different stimuli	1,000

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	95% ... Lower Bound
Remembered Luxury Brands	Moderately Incongruent	Congruent	-,9709
		Incongruent	-,3771
		Incongruent with different stimuli	-,2209
	Congruent	Moderately Incongruent	-,4709
		Incongruent	-,1271
		Incongruent with different stimuli	,0291
	Incongruent	Moderately Incongruent	-1,0646
		Congruent	-1,3146
		Incongruent with different stimuli	-,5646
	Incongruent with different stimuli	Moderately Incongruent	-1,2209
		Congruent	-1,4709
		Incongruent	-,8771
Remembered Functional Brands	Moderately Incongruent	Congruent	-,4892
		Incongruent	-,5204
		Incongruent with different stimuli	-,1454
	Congruent	Moderately Incongruent	-,8017
		Incongruent	-,6767
		Incongruent with different stimuli	-,3017
	Incongruent	Moderately Incongruent	-,7704
		Congruent	-,6142
		Incongruent with different stimuli	-,2704
	Incongruent with different stimuli	Moderately Incongruent	-1,1454
		Congruent	-,9892
		Incongruent	-1,0204
Remembered Usage Based Brands	Moderately Incongruent	Congruent	-,2499
		Incongruent	,1876
		Incongruent with different stimuli	,0938
	Congruent	Moderately Incongruent	-1,1249
		Incongruent	-,2499
		Incongruent with different stimuli	-,3437
	Incongruent	Moderately Incongruent	-1,5624
		Congruent	-1,1249
		Incongruent with different stimuli	-,7812

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	95% Confidence Upper Bound
Remembered Luxury Brands	Moderately Incongruent	Congruent	,4709
		Incongruent	1,0646
		Incongruent with different stimuli	1,2209
	Congruent	Moderately Incongruent	,9709
		Incongruent	1,3146
		Incongruent with different stimuli	1,4709
	Incongruent	Moderately Incongruent	,3771
		Congruent	,1271
		Incongruent with different stimuli	,8771
	Incongruent with different stimuli	Moderately Incongruent	,2209
		Congruent	-,0291
		Incongruent	,5646
Remembered Functional Brands	Moderately Incongruent	Congruent	,8017
		Incongruent	,7704
		Incongruent with different stimuli	1,1454
	Congruent	Moderately Incongruent	,4892
		Incongruent	,6142
		Incongruent with different stimuli	,9892
	Incongruent	Moderately Incongruent	,5204
		Congruent	,6767
		Incongruent with different stimuli	1,0204
	Incongruent with different stimuli	Moderately Incongruent	,1454
		Congruent	,3017
		Incongruent	,2704
Remembered Usage Based Brands	Moderately Incongruent	Congruent	1,1249
		Incongruent	1,5624
		Incongruent with different stimuli	1,4687
	Congruent	Moderately Incongruent	,2499
		Incongruent	1,1249
		Incongruent with different stimuli	1,0312
	Incongruent	Moderately Incongruent	-,1876
		Congruent	,2499
		Incongruent with different stimuli	,5937

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Mean Difference (I-J)
	Incongruent with different stimuli	Moderately Incongruent	-,78125*
		Congruent	-,34375
		Incongruent	,09375

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Std. Error
	Incongruent with different stimuli	Moderately Incongruent	,25638
		Congruent	,25638
		Incongruent	,25638

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	Sig.
	Incongruent with different stimuli	Moderately Incongruent	,017
		Congruent	1,000
		Incongruent	1,000

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	95% ... Lower Bound
	Incongruent with different stimuli	Moderately Incongruent	-1,4687
		Congruent	-1,0312
		Incongruent	-,5937

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Experiment Group	(J) Experiment Group	95% Confidence ... Upper Bound
	Incongruent with different stimuli	Moderately Incongruent	-,0938
		Congruent	,3437
		Incongruent	,7812

*. The mean difference is significant at the 0.05 level.

Frequencies

Statistics

		Remembered Usage Based Brands	Remembered Functional Brands	Remembered Luxury Brands
N	Valid	128	128	128
	Missing	0	0	0
Mean		2,7578	2,4297	3,0703
Std. Deviation		1,07033	,96948	1,10249

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Remembered Luxury Brands	3,0703	128	1,10249	,09745
	Remembered Usage Based Brands	2,7578	128	1,07033	,09460

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Remembered Luxury Brands & Remembered Usage Based Brands	128	,215	,015

Paired Samples Test

		Paired Differences			
					95% Confidence ...
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	Remembered Luxury Brands - Remembered Usage Based Brands	,31250	1,36174	,12036	,07433

Paired Samples Test

		Paired ...			
		95% Confidence Interval of the ...			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Remembered Luxury Brands - Remembered Usage Based Brands	,55067	2,596	127	,011