

**The Impact of Task Congruence Variations on Product Evaluations: A
Comparison of Strong and Weak Brand Products**

THESIS SUBMITTED

In the partial fulfillment of the requirement for the degree of

MASTER OF ARTS IN PSYCHOLOGY

(Clinical)

Submitted By:

Nidhi Jain(862102034)

Supervised by

Prof. Dr. Richa Nigam

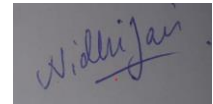


Thapar School of Liberal Arts and Sciences

THAPAR UNIVERSITY, PATIALA- 147004

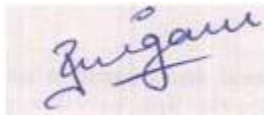
CERTIFICATE

This is to certify that the thesis entitled “The Impact of Task Congruence Variations on Product Evaluations: A Comparison of Strong and Weak Brand Products” being submitted in partial fulfillment of requirements for the award of the degree of Master of Arts in Clinical Psychology, submitted at the Thapar School of Liberal Arts and Sciences, Thapar Insitute of Engineering and Technology, Patiala is a Bonafide work carried out under the supervision of Dr. Richa Nigam, Assistant Professor, Thapar School of Liberal Arts and Sciences, Thapar Institute of Engineering and Technology, Patiala and that no piece of this venture has been submitted for the honor of some other degree.



Nidhi Jain

This is to certify that the above statement by the student concerned is correct and truly accurate the best of my knowledge.



Dr. Richa Nigam

Assistant Professor

Thapar School of Liberal Arts and Sciences

Thapar Institute of Engineering and Technology

Patiala

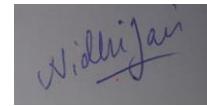
CANDIDATE'S DECLARATION

I hereby declare that the work presented in this thesis entitled “The Impact of Task Congruence Variations on Product Evaluations: A Comparison of Strong and Weak Brand Products” is submitted in partial fulfillment of requirements for the award of the degree of **Master of Arts in clinical psychology, submitted in the Thapar School of liberal arts and Sciences, Thapar Insitute of Engineering and Technology, Patiala** is an authentic record of my work carried out under the supervision and guidance of Dr. Richa Nigam, Thapar School of Liberal Arts and Sciences, Thapar Institute of Engineering and Technology, Patiala, and referred other researchers 'work which is duly listed in the reference section.

The matter embodied in this thesis has not formed the basis for awarding any other degree of this or any other university.

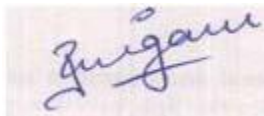
Date: May 2023

Place: Patiala



Nidhi Jain

This is to certify that the above declaration made by the student concerned is correct and true to the best of my knowledge.



Dr. Richa Nigam

Assistant Professor

Thapar School of Liberal Arts and Sciences

Thapar Institute of Engineering and Technology

Patiala

ACKNOWLEDGEMENT

A major project is never the work of anyone alone. The contribution of many different people in their different ways made this possible. A statement of thanks is evident to inculcate my deep sense of gratitude and obligation to all those who helped me in the work of my thesis. It has been great honor and privilege to undergo my project in the Thapar School of Liberal Arts and Sciences at Thapar Institute of Engineering and Technology, Patiala.

First and foremost, I am incredibly thankful to my research supervisor, Dr. Richa Nigam (Assistant Professor, Thapar School of liberal arts and Sciences), for her valuable supervision and consistent encouragement throughout the research work. She always made it a point to be available to clarify my doubts despite his busy schedule. It is a great opportunity to do my research program under her guidance and learn the techniques of research expertise.

I would also like to thank the participants of this study for taking the time and effort to give their consent and to perform the experiment as honestly as they did, as they made the research possible. Finally, thank my family for supporting me throughout my college education and encouraging me.

ABSTRACT

This study aimed to investigate the impact of task congruence variation on product evaluations while comparing strong versus weak brand products. In particular, brand strength effects in terms of product evaluation were examined by comparing strong and weak brands in the context of conflict and non-conflict trials. The research employed a controlled experimental design and utilized measures of brand perception, preference, and purchase intention. Participants were exposed to various brand stimuli representing both strong and weak brands, while their responses were measured during conflict and non-conflict trials. The manipulation involved strong versus weak brand presentation after trials with first 70-30 ratio of incongruent-congruent trials and secondly with 30-70 ratio of incongruent-congruent trials of stroop task among hungry and non-hungry participants. The hunger was made task relevant to see its effect on product evaluation as well in conjunction to task congruency. The findings revealed significant differences in consumer perceptions and evaluations for strong as compared to weak brands in the presence of conflict trials. Strong brands demonstrated higher levels of brand strength as compared to weak brand in the presence of 70% conflict trails, leading to greater positive perceptions and increased purchase intentions compared to weak brands. The stroop effect had no influence on strong brand image. The purchase intention was better for hungry participants as compared to non-hungry participants thereby implying hunger influencing purchase intentions as well. These results have important implications for brand management and marketing strategies, highlighting the importance of building and maintaining brand strength for long-term success. Future research directions may explore additional factors influencing the relationship between brand strength, conflict, and consumer evaluations, further enhancing our understanding of the dynamics between brands and consumer behavior.

Keywords: Brand, Brand Strength, Task Conflict

TABLE OF CONTENT

Certificate	2
Candidate Declaration	3
Acknowledgement	4
Abstract	5
Chapter 1– Introduction.....	8
1.1 Brands: Strong versus Weak.....	8
1.2 Stroop effect conflict	9
1.2.1 Proportional Congruence Effect in Stroop.....	9
1.3 Hunger and performance	11
Chapter 2 - Review of literature	12
Chapter 3– Motivation, Research Gap, Objectives and Hypothesis	15
3.1 Motivation	15
3.2 Research Gap	15
3.4 Theoretical Framework	16
3.4 Aim of Study	16
3.5 Objectives	16
3.6 Hypothesis	16
Chapter 4– Methodology	17
4.1 Sample	17
4.2 Design	17

4.3 Tools Used	17
4.4 Procedure	17
4.5 Trial Structure	19
Chapter 5- Results	20
5.1 T-test- independent sample T-test phase 1	20
5.2 T-test- independent sample T-test phase 2	21
5.3 Repeated measures	23
5.4 One sample test	29
5.5 Post Hoc	34
Chapter 6 – Discussion	36
Chapter 7- Conclusion, Implication, Limitations, Scope for future research.....	39
7.1 Conclusion	39
7.2 Implication	39
7.3 Limitation	40
7.4 Scope for the Future	40
References	42
Appendix	47
Consent Form.....	47

CHAPTER 1

INTRODUCTION

1.1 Brands: Strong versus Weak

When a brand enjoys a strong and favorable reputation in the marketplace, it is said to be strong. A powerful brand is one that clients are familiar with, believe in, and that distinguishes it from the competition. Strong brands regularly satisfy client expectations, offer high-quality goods or services, and develop an emotional bond with them. In order to increase brand identification and loyalty, a great brand also requires a distinct visual identity and messaging. Research on branding often includes a variety of factors, including consumer perception, buying behavior, brand awareness, market share, and customer loyalty, in order to gauge the strength of a brand (Keller, K. L., & Lehmann, D. R. 2006). A brand can also be seen as strong if it has a distinct purpose that appeals to its target audience and is consistent with its values, mission, and vision Keller, K. L. (2009). In general, a brand's strength is directly correlated to its capacity to offer value to its clients and forge enduring, meaningful connections with them. Based on validated research, a strong brand possesses the qualities such as reliability, emotional connection, differentiation, consistency, brand loyalty and so on. In contrast to this, numerous characteristics can be used to describe a weak brand, as explored in research and marketing literature. While the precise definition may change, the few traits are frequently connected to a poor brand such as low brand awareness, negative brand associations, lack of consistency in brand messaging, lack of differentiation, limited client loyalty, weak market position and so on (K. L. Keller (1993).

Both strong and weak brands continue to have a significant impact on market as well as on society. These brands are constantly evaluated on various aforementioned dimensions and hence to check the tenacity of their strength remains a constant curiosity among consumers.

1.2 Stroop effect conflict

The Stroop task requires the participants to inhibit interference from task irrelevant features while resolving a task induced conflict. According to the conflict monitoring theory (Botvinick, Braver, Barch, Carter, & Cohen, 2001), a conflict between the task-relevant (color) and task-irrelevant (word) components of the stimulus is what causes the Stroop effect. A typical color word stroop task would involve detecting the ink color of the color word presented at the center of the screen through a button press (De Houwer, 2003; Zhang & Kornblum, 1998). These ink colors might be same as the color word itself like color word “RED” written in red ink as well which is called a congruent trial. Ink color may also be different than the color word, for example color word “RED” written in yellow ink color which is called as an incongruent trial. During the task process naming the color of the ink in which word is displayed while disregarding the word's meaning is a test of cognitive control and selective attention (De Houwer, 2003; Zhang & Kornblum, 1998). The incorrect conditions demand greater cognitive effort and focus to prevent the reflexive reaction of reading the word's meaning, making the task more challenging and requiring a longer reaction time. This task enables researchers to explore the resolution of interference produced on incongruent trials (e.g., MacLeod, 1991; Stroop, 1935).

The brain keeps an eye out for this conflict, and when it does, cognitive control mechanisms kick in to help settle it. The increased time and resources needed for these control operations can result in slower response times and a negative state within the respondent (Ben –Heim et al., 2016). The

anterior cingulate cortex (ACC), which is assumed to be involved in monitoring for conflict and signaling the need for cognitive control, evokes conflict negativity in the Stroop task (Gruendler, Egner, and Hirsch, 2019). When a task demands more cognitive control to resolve the conflict, the magnitude of this negativity is greater and is connected with the task's degree of conflict.

1.2.1 Proportional Congruence Effect in Stroop

In a Stroop task, proportion congruency is the ratio of congruent trials to incongruent trials. A Stroop task's percentage of congruent trials has been found to have an impact on the Stroop effect's size, with a higher percentage of congruent trials resulting in a smaller Stroop effect. This has been explained by the theory that the degree of conflict adaptation—the capacity to modify cognitive control based on prior experience—is affected by the fraction of congruent trials (Egner, T. 2007).

The proportion congruence effect may not just be the result of tactical modifications in cognitive control, but may also be influenced by other elements like response biases or perceptual fluency (J. R. Schmidt 2013). The contribution of response bias to the effect of proportional congruence speculate that rather than a tactical shift in cognitive control, the impact may be caused by a propensity to respond to the most frequent input (Spapé et al., 2014).

1.3 Hunger and Task Performance

According to the resource depletion concept, exercising self-control and making decisions call for a finite quantity of mental resources. These resources can be depleted by hunger, which may cause problems when doing tasks that call for self-control or judgement. Physically, hunger can result in low glucose levels, which can affect mental performance (Lange et al., 2017). Psychologically, hunger can cause impulsivity and poor attention, which can impede performance on tasks that call for concentration (Karin Mogg, Brendan P. Bradley, Harpfreet Hyare, Sui Lee 1998). Product evaluations are influenced by biologically relevant physical conditions of the participants (Damen 2021). Hence exploring its association to brand strength remains a question of interest.

CHAPTER 2

REVIEW OF LITERATURE

Damen (2021) found in a study that participants who performed the Stroop task gave lower evaluations of the products than those who performed the control task. The effect of the Stroop task on product evaluations was stronger for products that required more cognitive effort to evaluate. The effect of the Stroop task on product evaluations was not due to changes in mood or arousal. The study used a well-established cognitive task (the Stroop task) to manipulate cognitive control and mental fatigue. The study used a within-subjects design, which allowed for direct comparisons between the Stroop and control conditions also used a range of products that varied in the amount of cognitive effort required for evaluation, which allowed for an investigation of the moderating role of cognitive effort. The study was conducted with a relatively small sample size of 32 participants, which may limit the generalizability of the findings, did not include a manipulation check to confirm that the Stroop task induced mental fatigue and a manipulation check to confirm that the products varied in the amount of cognitive effort required for evaluation. The research provides interesting insights into how cognitive tasks can influence subsequent product evaluations however, the small sample size and lack of manipulation checks suggest that further research is needed to confirm and extend the findings. In another study Zhang & Gao (2016) investigated the influence of attentional bias, measured using the Stroop task and eye-tracking technology, on product evaluation. The researchers examined how attentional biases towards specific product attributes affect consumers' evaluations and preferences. Participants were presented with product stimuli, and their eye movements were tracked while they perform a Stroop task. Subsequently, their product evaluations and preferences were assessed. The results suggested that attentional biases towards certain product attributes influence consumers' evaluations and preferences. Participants who exhibit stronger attentional biases towards positive

product attributes tend to evaluate those products more positively and show a higher preference for them. The study highlighted the importance of understanding how attentional biases affect consumer evaluations and preferences. It suggested that manipulating attentional biases towards positive product attributes can potentially enhance consumers' evaluations and increase their preference for specific products. In contrast to these, there are studies who do not find the influence of alternating task demands on product evaluations ((Damen 2021)) and this remains a matter to be explored in greater depth.

There is an additional impact of current physical state of participant that may or may not be task relevant which seldom influences studies of product evaluations. Svaldi, Tuschen-Caffier & Peyk (2017) studied the impact of hunger on impulse control as measured by the Stroop task. The Stroop task is a widely used cognitive test that assesses inhibitory control and the ability to suppress automatic responses. The researchers found that participants exhibited reduced inhibitory control when they were in a hungry state. This was observed through higher interference effects in the Stroop task, indicating difficulties in suppressing automatic responses and overcoming interference from irrelevant information. The study might have revealed that hunger led to an enhanced attentional bias towards food-related cues. The effect of hunger on food brands under conditions demanding high cognitive control have not been explored in the past. We assume that the dominant physical state like hunger might interact strongly with such tasks and influence the overall product evaluation. The idea of a product being favorable amongst consumers therefore, has also to do with their current physical state as compared to the product alone that requires further thought and research.

Product evaluation has also been explored in the context of brand personality and brand identification (Luo, Qin, & Zhang (2020)). The study utilized validated scales to measure the

variables of interest, including brand personality, brand identification, and brand loyalty. The study selected a specific set of brands to compare their brand personality, brand identification, and brand loyalty effects. The study found a positive relationship between brand personality and brand identification. Consumers who perceive a stronger brand personality are more likely to develop a stronger identification with the brand. The study revealed that brand identification significantly predicts brand loyalty and thereby its strength. The study highlights the importance of developing a strong brand personality that resonates with consumers and fosters brand identification, ultimately leading to brand loyalty.

Overall, the integrated effect of brand strength needs to be explored to verify such researches thereby highlighting plausible factors working in favor of a brand with strong image. Additional consequence of exploring brand strength under demanding conditions might also give greater insights into factors that need more attention to evolve a weak brand into a strong brand over a period of time.

CHAPTER 3

MOTIVATION, RESEARCH GAP, OBJECTIVES AND HYPOTHESES

3.1 Motivation

The Stroop task is a psychological test that measures the interference between automatic and controlled cognitive processes by presenting incongruent color-word stimuli and assessing response times or accuracy in naming the color of the ink rather than the word itself. Overall, the research of consumer behavior, the study of cognitive processes, the application of the field's theory, and the practical consequences for brand management served as the driving forces behind this study. The study seeks to make significant contributions to both academic research and actual applications in the area by addressing these motives of branding.

3.2 Research gap

The available studies mostly concentrated on elements boosting brand equity or strength without specifically addressing the idea of brand strength, Lack of Strong and Weak Brand Comparisons, limited knowledge of the function of non-conflict trials. By identifying and addressing these research gaps, the study aims to advance the understanding of brand strength, consumer behavior, and the interaction between brand strength and trial conditions. It seeks to provide valuable insights for practitioners in brand management and marketing, as well as contribute to the theoretical development of the field.

3.3 Theoretical framework

The theoretical framework used for this study is to explore brand strength in the presence of conflicting task demands.

3.4 Aim of Study

The aim of the present study was to examine brand strength effect by comparing (strong versus weak brands) in the presence of conflict and non-conflict trials.

3.5 Objectives

The current study set out to confirm earlier findings that the Stroop task can affect how people rate related stimuli (Damen et al., 2021). By examining the generalizability and applicability of Stroop (non-)conflict as a strategy to influence assessments of consumer goods, it also sought to advance research in this area. The exploration of goal relevance as a significant mediator of the brand strength impact in a consumer environment was the end objective.

3.6 Hypotheses

- **H0:** There is no effect of Phase (varying conflict ratios) on product evaluation.
- **H1:** There is no effect of Brand strength on product evaluation
- **H2:** There is no effect of hunger on product evaluation

CHAPTER 4

METHODOLOGY

4.1 Sample

A total of 70 participants (35 females), participated in the study. Out of these participants 35 (males and females) belonged to hungry group, and 35 (males and females) belonged to non-hungry. The age range of the participants was 18-30 years.

4.2 Design

A mixed design was adopted for the current study where the between subject variable was hungry versus non hungry group of participants and within subject variable was trial congruence in the 70-30 versus 30-70 incongruent-congruent ratio of trials.

The independent variable was Chocolate Brands (Cadbury as strong brand and Amul as weak brand) and hunger type (Hungry versus non hungry), whereas the dependent variable was product evaluation.

4.3 Tools

The experiment was presented using E-Prime 3.0 software. The data analysis was conducted using IBM SPSS (Statistical Package for the Social Sciences).

4.4 Procedure

Aproprate rating of 4 different chocolate brands was firstly conducted across a group of 37 participants (age 18-25yrs) belonging to Thapar University to rate certain brands of chocolates as strong or weak. In particular, a google form was circulated before these raters who did not participate in the actual experiment. The google form that consisted of the chocolate brands images

and they were asked to rate the stims on the scale of 1 to 5 (where 1 meant weak and 5 meant strong). The overall rating across participants revealed significant difference between two brands namely Cadbury (Mean rating = 4.08) and amul (Mean rating = 3.02), $t(36) = -2.82, p = .008$.

This was followed by conducting the actual experiments which were divided between groups of hungry and non-hungry participants each of which participated in the two experiments with varying ratios of congruency. The process for each experiment was as follow:

Experiment 1

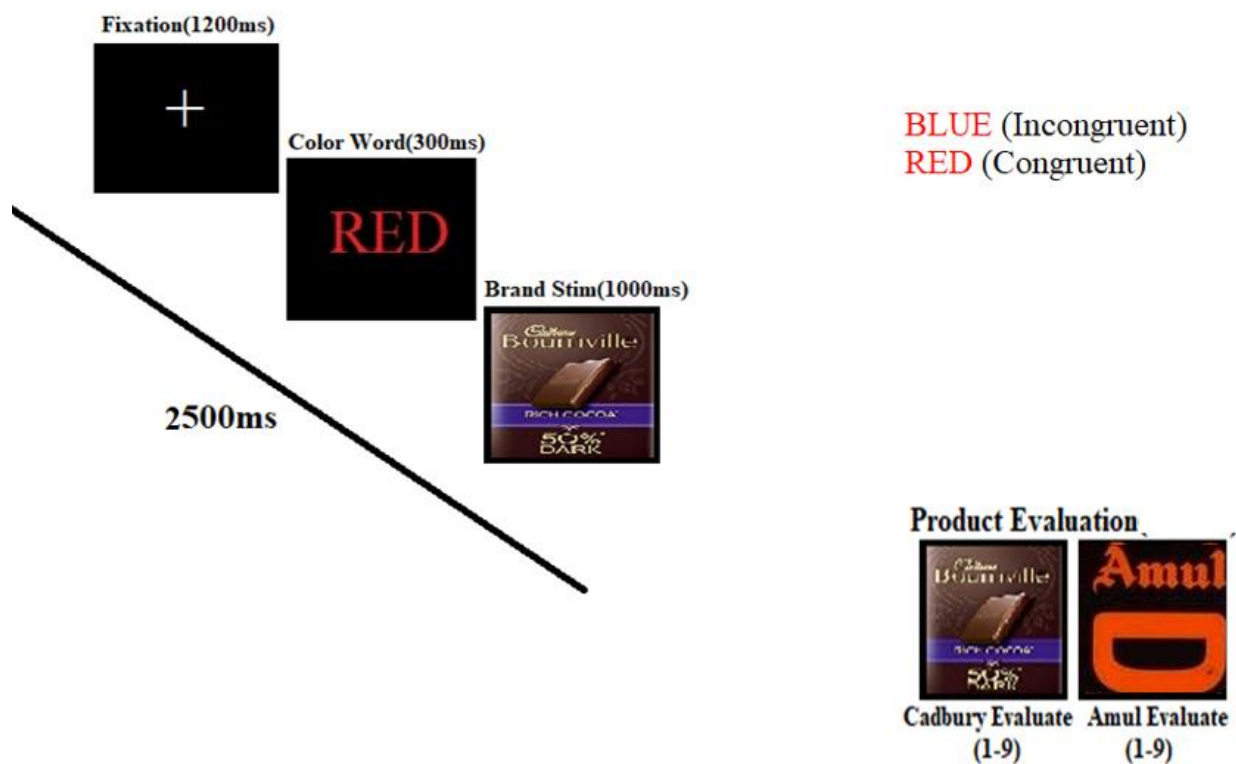
35 hungry and 35 non hungry participants participated in the current task. The criteria of hunger was specified before hand where a hungry participant was to have his last meal not less than 4hours before participating in the actual experiment. The non-hungry participants were requested to perform the task after 1hour of consuming a meal. After this, the subject was called in a quiet laboratory and made to sit and be comfortable. After forming the rapport, informed consent was obtained from the participants. This was followed by briefing the participant about the computer based task that they were subjected to. In particular, the participant were asked to perform a color-word Stroop task that took 3-4 minutes on E-prime software. A single trial in the task comprised of a fixation coming at the center of the screen followed by a color word written in either the color that matched the name of the word (congruent) or did not match the name of the word (incongruent). The participants were asked to detect the color of the ink by pressing 'z' key if the ink color was congruent and 'm' key if the ink color was incongruent. The products appeared for 1000ms at the center of the screen after every accurate response in each trial. The participants were informed to respond immediately after the stimulus had been presented. There were 40 trials in the experiment from which 28 were incongruent and 12 were congruent trials (70-30 ratio of

incongruent-congruent trials). The image of strong brand was presented only after the incongruent trials and image of the weak brand was presented only after the congruent trials in Experiment 1. At the end of the task, the participants were shown the images of both brands one after the which they were asked to evaluate on a scale of 1 to 9 individually.

Experiment 2

The procedure to conduct experiment 2 was similar to experiment 1 except for the difference in ration of incongruent-congruent trails which was 30-70 now.

Trial Structure



CHAPTER 5

RESULTS

1) T-Test- Independent Sample T-Test Experiment 1

Table 1 Descriptive Statistics

Group Statistics					
	Hungry Non-hungry	N	Mean	Std. Deviation	Std. Error Mean
Cadbury_Rating	Hungry	35	7.2857	1.50629	0.25461
	Non-Hungry	35	5.1714	1.31699	0.22261
Amul_Rating	Hungry	35	5.1429	2.49874	0.42236
	Non-Hungry	35	3.8	2.41076	0.40749

Table1 shows descriptive statistics for 35 participants. In Cadbury rating there are hungry and non-hungry participants in which the mean value for hungry participants came out to be 7.285 and standard deviation came out to be 1.506. Also, the standard error mean came out to be .2546 whereas for non-hungry participants the mean and standard deviation came out to be 5.171 and 1.316 respectively. The standard error mean came out to be .2226. Similarly, In Amul rating, there are hungry as well as non-hungry participants in which the mean and standard deviation came out to be 5.142 and 2.498 respectively whereas the standard error mean came out to be .4223 for

hungry participants. Also, in non-hungry participants the mean and standard deviation came out to be 3.800 and 2.410 whereas the standard error mean came out to be 0.4074.

Table 2: Independent Sample T-Test Experiment 1

	f	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	t-crit	t-cal
Cadbury_Rating	0.190	0.664	6.252	68	0.000	2.11429	0.33820	1.43941	2.78916
Amul_Rating	0.006	0.939	2.288	68	0.025	1.34286	0.58689	0.17173	2.51398

Table 2 shows Independent Sample t-test was conducted among participants from Experiment 1 with 70-30 ratio of incongruence-congruence. The results suggested better Cadbury evaluations of hungry participants (7.28) in comparison to non-hungry participants (5.17), $t(68) = 6.25, p < .001$. Similarly, evaluations of hungry participants (5.14) were also better than non-hungry (3.8) for their amul evaluations in experiment 1, $t(68) = 6.25, p = .0.025$.

2) T-Test- Independent Sample T-Test Experiment 2

Table 3 Descriptive statistics

Group Statistics					
	Hungry Non-hungry	N	Mean	Std. Deviation	Std. Error Mean
Cadbury_Rating	Hungry	35	7.2571	1.35783	.22951
	Non-Hungry	35	4.2286	1.78368	.30150
Amul_Rating	Hungry	35	4.2000	1.71155	.28931

Non-Hungry	35	3.0571	1.96952	.33291
------------	----	--------	---------	--------

Table 3 shows descriptive statistics for 35 participants i.e., N is 35. In Cadbury rating there are hungry and non-hungry participants in which the mean value for hungry participants came out to be 7.257 and standard deviation came out to be 1.357. Also, the standard error mean came out to be .229 whereas for non-hungry participants the mean and standard deviation came out to be 4.228 and 1.783 respectively. The standard error mean came out to be .301. Similarly, In Amul rating, there are hungry as well as non-hungry participants in which the mean and standard deviation came out to be 4.200 and 1.711 respectively whereas the standard error mean came out to be .289 for hungry participants. Also, in non-hungry participants the mean and standard deviation came out to be 3.057 and 1.969 whereas the standard error mean came out to be .332.

TABLE 4 Independent Sample T-Test Experiment 2

			t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	t-crit	t-cal
	f	sig							
Cadbury_Rating	1.208	0.276	7.993	68	0.000	3.02857	0.37892	2.27246	3.78469
Amul_Rating	0.215	0.644	2.591	68	0.012	1.14286	0.44105	0.26275	2.02296

Independent Sample t-test was conducted among participants from Experiment 2 with 30-70 ratio of incongruence-congruence. The results suggested better Cadbury evaluations of hungry participants (7.25) in comparison to non-hungry participants (4.22), $t(68) = 7.99, p <.001$.

Similarly, evaluations of hungry (4.2) participants were also better than non-hungry (3.05) for their amul evaluations in experiment 1, $t(68) = 2.59, p =.0.01$.

3)Three-way ANOVA

A three way repeated measures ANOVA was conducted with 2 Phase/Experiment (70 incongruent:30 congruent and 30 incongruent:70 congruent) x 2 product rating (Cadbury, Amul) x 2 hunger (hungry, non-hungry).

Table 5 Descriptive Statistics

Descriptive Statistics				
	Phase	Mean	Std. Deviation	N
Cadbury Hungry	70Incong	7.2857	1.50629	35
	70Cong	7.2571	1.35783	35
	Total	7.2714	1.42362	70
Cadbury Nonhungry	70Incong	5.1714	1.31699	35
	70Cong	4.2286	1.78368	35

	Total	4.7000	1.62721	70
Amul Hungry	70Incong	5.1429	2.49874	35
	70Cong	4.2000	1.71155	35
	Total	4.6714	2.17843	70
AmulNonHungry	70Incong	3.8000	2.41076	35
	70Cong	3.0571	1.96952	35
	Total	3.4286	2.21701	70

Table 5 shows Descriptive statistics for 2 phases (incongruent as well as congruent). For Cadbury hungry, (70incongruent) the mean and standard deviation came out to be 7.285 and 1.506 respectively. Now, (70 congruent) the mean and standard deviation came out to be 7.257 and 1.357. For Cadbury non hungry (70incongruent) the mean and standard deviation came out to be 5.171 and 1.316 respectively. Now, (70 congruent) the mean and standard deviation came out to be 4.228 and 1.783. For Amul hungry, (70incongruent) the mean and standard deviation came out to be 5.142 and 2.498 respectively. Now, (70 congruent) the mean and standard deviation came out to be 4.200 and 1.711. For Amul non hungry, (70 incongruent) the mean and standard deviation came out to be 3.800 and 2.410 whereas, (70 congruent) the mean and standard deviation came out to be 3.057 and 2.217 respectively.

Table 6 ANOVA

Tests of Within-Subjects Contrasts

Measure:		MEASURE_1								
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^a	
ProductsRating	Linear	262.289	1	262.289	86.276	0.000	0.559	86.276	1.000	
ProductsRating * Phase	Linear	2.232	1	2.232	0.734	0.395	0.011	0.734	0.135	
Error(ProductsRating)	Linear	206.729	68	3.040						
Hunger	Linear	254.604	1	254.604	64.262	0.000	0.486	64.262	1.000	
Hunger * Phase	Linear	2.232	1	2.232	0.563	0.455	0.008	0.563	0.115	
Error(Hunger)	Linear	269.414	68	3.962						
ProductsRating * Hunger	Linear	Linear	30.889	1	30.889	10.454	0.002	0.133	10.454	0.890
ProductsRating * Hunger * Phase	Linear	Linear	5.432	1	5.432	1.838	0.180	0.026	1.838	0.267
Error(ProductsRating*Hunger)	Linear	Linear	200.929	68	2.955					

a. Computed using alpha = .05

Table 6 shows three way repeated measures ANOVA with 2 Phase/Experiment (70 incongruent:30 congruent and 30 incongruent:70 congruent) x 2 product rating (Cadbury, Amul) x 2 hunger (hungry, non-hungry). The main effect of Phase was significant, $F(68) = 7.74, p = .007, \eta_p^2 = .102$. The main effect of Product Rating was significant, $F(68) = 86.27, p < .001, \eta_p^2 = .559$. The main effect of Hunger was significant, $F(68) = 64.26, p < .001, \eta_p^2 = .486$.

The two way interaction between product rating and phase/experiment was not significant, $F(68) = .73, p = .39, \eta_p^2 = .011$.

The two way interaction between Hunger and phase/experiment was not significant, $F(68) = .56, p = .45, \eta_p^2 = .008$.

The two way interaction between product rating and hunger was significant, $F(68) = 10.45$, $p = .002$, $\eta_p^2 = .133$.

The three way interaction between Phase/experiment, product rating and hunger was not significant, $F(68) = 1.83$, $p = .18$, $\eta_p^2 = .026$.

Table 7 Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^a
Intercept	7050.089	1	7050.089	1767.25	.000	.963	1767.256	1.000
t				6				
Phase	30.889	1	30.889	7.743	.007	.102	7.743	.783
Error	271.271	68	3.989					

a. Computed using alpha = .05

Table 7 shows The main effect of Phase was significant, $F(68) = 7.74$, $p = .007$, $\eta_p^2 = .102$.

4) Three-way ANOVA

A three way repeated measures ANOVA was conducted with 2 Phase/Experiment (70 incongruent:30 congruent and 30 incongruent:70 congruent) x 2 hunger (hungry, non-hungry) x 2 Stroop

TABLE 8 DESCRIPTIVE STATISTICS

			Std.	
	Phase	Mean	Deviation	N
StroopHungry	70Incong	.0676	19.86277	35
	70Cong	8.1966	19.40718	35
	Total	4.1321	19.91872	70
StroopNonHungry	70Incong	8.0449	28.15320	35
	70Cong	5.8078	15.75457	35
	Total	6.9264	22.67447	70

Table 8 shows Descriptive statistics for 2 phases (incongruent as well as congruent). For Stroop hungry, (70incongruent) the mean and standard deviation came out to be 0.676 and 19.862 respectively. Now, (70congruent) the mean and standard deviation came out to be 8.196 and 19.407. For Stroop non hungry (70incongruent) the mean and standard deviation came out to be 8.044 and 28.153 respectively. Now, (70congruent) the mean and standard deviation came out to be 5.807 and 15.754 respectively.

TABLE 9 TESTS OF WITHIN-SUBJECTS CONTRASTS

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source		Type III			F	Sig.	Partial		
		Sum of	df	Mean			Eta	Noncent.	Observed
		Squares		Square			Squared	Parameter	Power ^a
StroopHungryNonhungry	Linear	273.270	1	273.270	0.593	0.444	0.009	0.593	0.118
StroopHungryNonhungry * Phase	Linear	940.246	1	940.246	2.040	0.158	0.029	2.040	0.291
Error(StroopHungryNonhungry)	Linear	31346.203	68	460.974					

a. Computed using alpha = .05

Table 9 shows three way repeated measures ANOVA was conducted with 2 Phase/Experiment (70 incongruent:30 congruent and 30 incongruent:70 congruent) x 2 hunger (hungry, non-hungry) x 2 Stroop . The main effect of Phase was not significant, $F(68) = 0.68, p = .41, \eta_p^2 = .010$.

The two way interaction between Hunger and Stroop was not significant, $F(68) = .59, p = .44, \eta_p^2 = .009$.

The three way interaction between Phase/experiment, hunger and stroop was not significant, $F(68) = 2.04, p = .15, \eta_p^2 = .029$.

Table 10 Tests of Between-Subjects Effects

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum		Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^a
	of Squares	df						
Intercept	4280.169	1	4280.169	9.618	.003	.124	9.618	.864
Phase	303.746	1	303.746	.683	.412	.010	.683	.129
Error	30261.022	68	445.015					

a. Computed using alpha = .05

Table 10 shows The main effect of Phase was not significant, $F(68) = 0.68$, $p = .41$, $\eta_p^2 = .010$.

5) t-Test cad hungry versus non hungry Exp 1

Table 11 One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
CadburyHungry	35	7.2857	1.50629	.25461
CadburyNonHungry	35	5.1714	1.31699	.22261

Table shows descriptive statistics for 35 participants. In Cadbury rating there are hungry and non-hungry participants in which the mean value for hungry participants came out to be 7.285 and standard deviation came out to be 1.506. whereas for non-hungry participants the mean and standard deviation came out to be 5.171 and 1.316 respectively

Table 12 One-Sample Test

One-Sample Test	
	Test Value = 0

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CadburyHungry	28.615	34	.000	7.28571	6.7683	7.8031
CadburyNonHungry	23.231	34	.000	5.17143	4.7190	5.6238

Table shows one Sample t-test was conducted among participants from Experiment 1 with 70-30 ratio of incongruence-congruence. The results suggested evaluations of hungry participants (7.28) , $t(34) = 28.61, p < .001$ and for non-hungry participants (5.17), $t(34) = 23.23, p < .001$.

6) t-Test amul hungry versus non hungry Exp 1

Table 13 One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
AmulHungry	35	5.1429	2.49874	.42236
AmulNonHungry	35	3.8000	2.41076	.40749

Similarly, In Amul rating, there are hungry as well as non-hungry participants in which the mean and standard deviation came out to be 5.142 and 2.498 respectively for hungry participants. Also, in non-hungry participants the mean and standard deviation came out to be 3.800 and 2.410.

Table 14 One-Sample Test

One-Sample Test						
Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AmulHungry	12.176	34	.000	5.14286	4.2845	6.0012
AmulNonHungry	9.325	34	.000	3.80000	2.9719	4.6281

Table shows one Sample t-test was conducted among participants from Experiment 1 with 70-30 ratio of incongruence-congruence. The results suggested evaluations of hungry participants (5.14), $t(34) = 12.17, p < .001$ and for non-hungry participants (3.80), $t(34) = 9.32, p < .001$.

7) T-Test T-Test cad hungry versus non hungry Exp 2

Table 15 One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
CadburyHungry2	35	7.2571	1.35783	.22951
CadburyNonhungry2	35	4.2286	1.78368	.30150

Table shows descriptive statistics for 35 participants. In amul rating there are hungry and non-hungry participants in which the mean value for hungry participants came out to be 7.257 and standard deviation came out to be 1.357. whereas for non-hungry participants the mean and standard deviation came out to be 4.228 and 1.783 respectively.

Table 16 One-Sample Test

One-Sample Test						
Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CadHungry2	31.619	34	.000	7.25714	6.7907	7.7236
CadNonhungry2	14.025	34	.000	4.22857	3.6159	4.8413

Table shows one Sample t-test was conducted among participants from Experiment 2 with 30-70 ratio of incongruence-congruence. The results suggested evaluations of hungry participants (7.25) , $t(34) = 31.61, p < .001$ and for non-hungry participants (4.22), $t(34) = 14.02, p < .001$.

8) T-Test T-Test Amul hungry versus non hungry Exp 2

Table 17 One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Amulhungry2	35	4.2000	1.71155	.28931
AmulNonhungry2	35	3.0571	1.96952	.33291

Table shows descriptive statistics for 35 participants. In amul rating there are hungry and non-hungry participants in which the mean value for hungry participants came out to be 4.200 and standard deviation came out to be 1.711. whereas for non-hungry participants the mean and standard deviation came out to be 3.057 and 1.969 respectively.

Table 18 One-Sample Test

One-Sample Test						
Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Amulhungry2	14.518	34	.000	4.20000	3.6121	4.7879
AmulNonhungry2	9.183	34	.000	3.05714	2.3806	3.7337

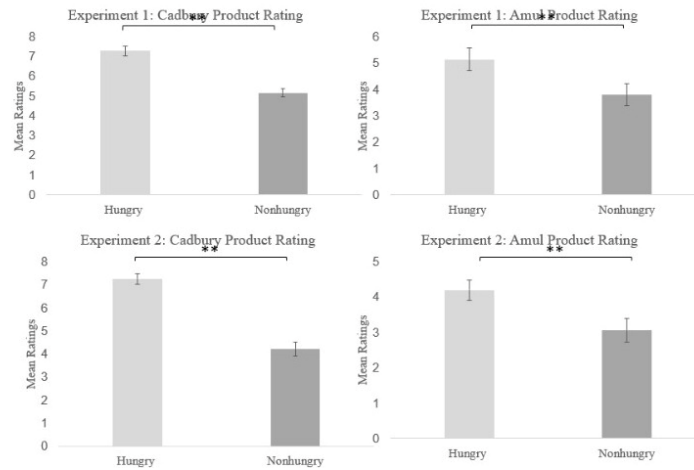
Table shows one Sample t-test was conducted among participants from Experiment 2 with 30-70 ratio of incongruence-congruence. The results suggested evaluations of hungry participants (4.20), $t(34) = 14.51, p < .001$ and for non-hungry participants (3.05), $t(34) = 9.18, p < .001$.

POST HOC

Bar graph

1) One sample t-test

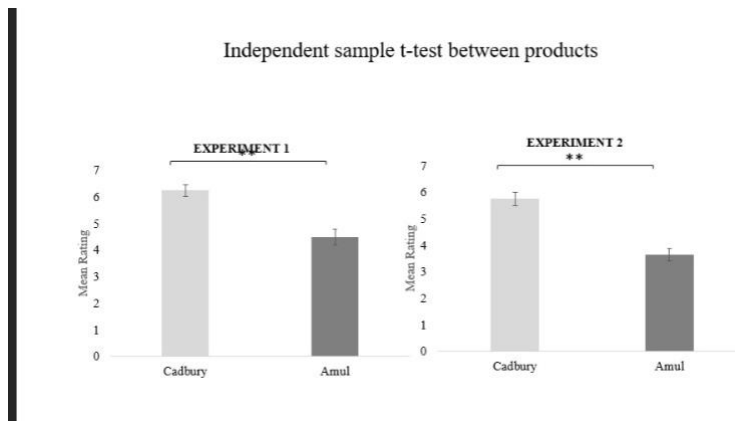
Graph 1



Graph 1 shows comparison of hungry and non-hungry participants of Cadbury and Amul in experiment1 and experiment 2

2) Independent sample t-test

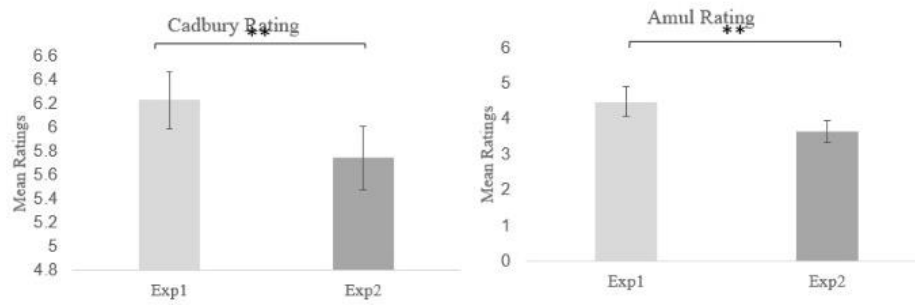
Graph 2



Graph 2 shows comparison of Cadbury and amul in experiment 1 and experiment 2

3) Paired Sample T-test

Graph 3



Graph 3 shows Cadbury and amul rating in of experiment 1 and 2.

CHAPTER 6

DISCUSSION

The study aimed to examine brand strength effect by comparing (strong versus weak brands) in the presence of conflict and non-conflict trials. There were 70 participants, both males and females who participated in the study. Out of which 35 were hungry, and 35 were illiterate. The age range was 18-30 years. For the same, an experiment was conducted, and the instructions were given clearly and precautions were taken. Three null hypothesis were formulated . Analysis was done and according to the results the first hypothesis that There is no effect of Phase (varying conflict ratios) on product evaluation. was rejected as Effect of varying proportion of conflict is prevalent on product evaluation . Funes, M. D., Cabello, P., & Cañas, J. J. (2015) findings of the study revealed that participants had better brand recognition for congruent color-word pairings compared to incongruent pairings. The congruency between the color and meaning of the brand names influenced participants' ability to recognize and evaluate the brands accurately. This suggests that the incongruence between color and meaning in brand names can create interference, leading to lower brand recognition. Suyanti, A. D., Wibowo, S. A., & Surjandari, I. K. (2020) the study indicated that congruent color-word pairings resulted in higher brand recognition compared to incongruent pairings The color-word interference influenced participants' ability to accurately recognize and evaluate the brands. second hypothesis that There is no effect of Brand strength on product evaluation was rejected Also, in a study by Laran, J., Dalton, A. N., & Andrade, E. B. (2011) investigated the phenomenon of behavioral backlash in the context of brands and slogans. The authors conducted several experiments, including a Stroop task, to examine how priming effects can

influence consumer evaluations. The findings revealed that priming participants with a brand name led to positive evaluations, whereas priming with a slogan produced negative evaluations. The study demonstrated the impact of priming on consumer evaluations and highlights the role of cognitive processes in brand perception. Thomas, A., & Pasca, R. (2017) The study examines the influence of cognitive conflict on consumers' evaluations of ethical products. The authors conducted experiments using a modified Stroop task, where participants were presented with ethical and non-ethical brand names in incongruent or congruent color conditions. The findings suggested that when there was a conflict between ethical brand names and color, participants' evaluations of the ethical products were more positive, indicating that cognitive conflict can enhance the evaluation of ethical products. the third hypothesis that There is no effect of hunger on product evaluation was rejected as Effect of hunger is prevalent for both products across both phases. Wang, S., Zhu, J., & Li, W (2013) indicated that hunger affects cognitive inhibition. Hungry participants exhibited longer response times and lower accuracy compared to the satiated group, particularly in the incongruent trials. These results suggest that hunger impairs the ability to inhibit automatic responses and resolve interference, indicating a potential impact on cognitive control processes. Gronau, N., Cohen, A., & Ben-Shakhar, G (2018) in the study the results showed that hungry participants exhibited slower response times and higher error rates compared to satiated participants, particularly during task-switching trials. This suggests that hunger impairs cognitive flexibility, making it more challenging for individuals to switch between different cognitive sets and inhibit irrelevant responses. Massey, A., Hill, A. J., & Freeman, P. (2019) review highlighted that hunger has consistent effects on cognitive functioning across different tasks, including the Stroop task. Hungry individuals tend to show reduced cognitive control, increased distractibility, and

difficulties in inhibiting automatic responses. These effects are particularly evident in tasks that require inhibitory control, selective attention, and cognitive flexibility. The results suggest that the congruency between color and meaning plays a significant role in brand recognition and perception. Stroop Scores comparable in both phases across hungry and non hungry participants in both phases. Opposing previous literature (Damen, 2021) and thereby highlighting the effect of brand strength

CHAPTER 7

CONCLUSION, IMPLICATIONS, LIMITATIONS, SCOPE FOR FUTURE RESEARCH

7.1 Conclusion

The present experiment was aimed to examine brand strength effect by comparing (strong versus weak brands) in the presence of conflict and non-conflict trials among 70 participants in which 35 were hungry and 35 were nonhungry. The findings suggested that brand strength has a significant impact on consumer perception and behavior in both conflict and non-conflict situations. Strong brands tend to exhibit higher levels of sustainability and evoke more positive responses from consumers compared to weak brands. The presence of conflict trials may further amplify these effects, indicating that strong brands maintain their appeal and influence even in challenging circumstances.

The results highlight the importance of brand strength and sustainability in influencing consumer preferences and choices. Strong brands, with their established reputation, trust, and consistent performance, are more likely to withstand challenges and maintain consumer loyalty. The findings of this study contribute to our understanding of the factors that shape brand strength and provide valuable insights for marketers and brand managers in developing effective brand strategies.

7.2 Implications

The study highlights the importance of building and maintaining strong brands. Strong brands are more likely to sustain their appeal and positive consumer perception, even in the face of conflict or challenging situations. The presence of conflict trials may intensify the differences between strong and weak brands. crisis management and strategies for weak brands to improve their sustainability. The study highlights the importance of brand strength as a factor influencing

consumer perception and behavior. The study's findings may suggest that strong brands have a competitive advantage over weak brands, particularly in the presence of conflict.

7.3 Limitations

The study's findings may be limited in their generalizability due to factors such as the specific brands and product categories chosen for investigation, the sample size, and the geographical or cultural context in which the study was conducted. The findings may not be applicable to other brands, industries, or consumer populations. The study's findings may be limited to the specific experimental setting created for the research. The controlled environment of the study may not fully reflect real-world conditions, where various external factors and complexities can influence consumer perceptions and behaviors differently. A longitudinal approach would provide a more comprehensive understanding of how brand strength evolves and its impact on consumer behavior. The study may not account for all possible variables that could impact brand strength and consumer responses. Factors such as brand reputation, marketing strategies, competitive landscape, and individual differences among consumers could play a significant role but might not be fully considered in the study design. The study's emphasis on comparing strong and weak brands in the presence of conflict trials may overshadow the understanding of consumer responses in non-conflict situations. This could limit the comprehensive understanding of brand strength and its effect on consumer behavior across different contexts.

7.4 Scope For the Future

Future studies can delve deeper into understanding the specific brand attributes that contribute to brand strength and their differential impact on consumer responses. Conducting longitudinal studies can provide insights into the long-term effects of brand strength on consumer behavior.

Expanding the research to include multiple industries can help identify industry-specific factors that influence brand strength. Comparing the sustainability efforts and consumer responses across different sectors can provide a more comprehensive understanding of the role of brand strength in various contexts. Exploring the impact of brand strength and consumer responses across different cultural contexts can shed light on the cultural variations in consumer perceptions and behaviors. Comparative studies can reveal how cultural values and norms interact with brand strength, highlighting the need for customized strategies in global branding. Factors such as consumer values, individual differences, and situational variables can shape the impact of brand strength on consumer behavior and should be considered in future research.

REFERENCES

1. Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name. Free space.
2. Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review*, 38(3), 102-120.
3. Bienkowski, P., Radkiewicz, P., & Warchoń, K. (2018). The Influence of Color-Word Compatibility on Brand Recognition. *Current Issues in Personality Psychology*, 6(3), 231-238.
4. Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52-68.
5. Brignell, C., Griffiths, E., & Bradley, B. P. (2019) The role of hunger state on inhibitory control and attentional bias towards food cues.
6. Cohen, J. D., Dunbar, K., & McClelland, J. L. (1990). On the control of automatic processes: A parallel distributed processing account of the Stroop effect. *Psychological Review*, 97(3), 332-361.
7. Damen, T. G. E., Strick, M., Taris, T. W., and Aarts, H. (2018). When conflict influences liking: the case of the Stroop task. *PLoS One* 13: e0199700.
8. Damen, T. G. E (July 2021 the Stroop Task Influences Product Evaluations. *Frontiers in Psychology*, 12
9. Donnelly, D., & Dermody, N. (2016) Effects of Hunger and Satiety on Cognitive Function: A Systematic Review of Behavioral Studies.
10. Dreisbach, G., and Fischer, R. (2012). Conflicts as aversive signals. *Brain Cogn.*78, 94–98.
11. Dreisbach, G., and Fischer, R. (2015). Conflicts as aversive signals for control adaptation.

- Curr. Dir. Psychol. Sci. 24, 255–260.
12. Egner, T., & Hirsch, J. (2005). Cognitive control mechanisms resolve conflict through cortical amplification of task-relevant information. *Nature Neuroscience*, 8(12), 1784-1790.
 13. Egner, T. (2008). Multiple conflict-driven control mechanisms in the human brain. *Trends in Cognitive Sciences*, 12(10), 374-380.
 14. Fritz, J., and Dreisbach, G. (2013). Conflicts as aversive signals: conflict priming increases negative judgments for neutral stimuli. *Cogn. Affect. Behav. Neurosci.* 13, 311–317.
 15. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4993290/>
 16. Fritz, J., and Dreisbach, G. (2015). The time course of the aversive conflict signal. *Exp. Psychol.* 62, 30–39.
 17. Funes, M. D., Cabello, P., & Cañas, J. J. (2015). Effects of Congruency of Color and Meaning on Brand Recognition. *Psicothema*, 27(1), 69-74.
 18. Giner-Sorolla, R., & Chaiken, S. (1997). Selective use of heuristic and systematic processing under defense motivation. *Personality and Social Psychology Bulletin*, 23(1), 84-97.
 19. Giner-Sorolla, R. (2001). Guilt, fear, and social value orientation: Reactions to violations of cooperation in a one-shot versus a repeated prisoner's dilemma. *Journal of Experimental Social Psychology*, 37(3), 266-279.
 20. Goldfarb, L., & Henik, A. (2007). Evidence for task conflict in the Stroop effect. *Journal of Experimental Psychology: Human Perception and Performance*, 33(5), 1170-1176.
 21. Gronau, N., Cohen, A., & Ben-Shakhar, G. (2018). The Effects of Hunger and Satiety on Cognitive Flexibility. *Appetite*, 120, 544-551
 22. Higgs, S., & Thomas, J. (2015) Effects of Hunger on Stroop Task Performance: A Systematic Review and Meta-Analysis.

23. Huang, L., & Lin, C. F. (2020). The Influence of Brand Engagement on Brand Loyalty: Mediating Role of Brand Love and Moderating Role of Product Involvement. *Frontiers in Psychology*, 11, 2100.
24. Kapferer, J. N. (2008). *The new strategic brand management: Creating and sustaining brand equity long term*. Kogan Page Publishers.
25. Kapferer, J. N. (1997). *Strategic brand management: Creating and sustaining brand equity long term*. Kogan Page Publishers.
26. Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
27. Keller, K. L. (1998). *Strategic brand management: Building, measuring, and managing brand equity*. Prentice Hall.
28. Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2019). Brand Logo Color and Consumer Emotion: The Roles of Color Congruity and Color Warmth. *Journal of Business Research*, 94, 132-143.
29. Laran, J., Dalton, A. N., & Andrade, E. B. (2011). The curious case of behavioral backlash: Why brands produce priming effects and slogans produce reverse priming effects. *Journal of Consumer Research*, 37(6), 999-1014.
30. Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring customer-based brand equity. *Journal of Consumer Marketing*, 12(4), 11-19.
31. Luo, N., Qin, X., & Zhang, W. (2020). The Effects of Brand Personality and Brand Identification on Brand Loyalty: A Multilevel Analysis. *Frontiers in Psychology*, 11, 813.
32. MacLeod, C. M. (1991). Half a century of research on the Stroop effect: An integrative review. *Psychological Bulletin*, 109(2), 163-203.

33. Melara, R. D., & Algom, D. (2013). Driven by information: A tectonic theory of Stroop effects. *Psychological Review*, 120(3), 562-582.
34. Massey, A., Hill, A. J., & Freeman, P. (2019). Effects of Hunger on Cognitive Functioning: A Systematic Review. *Appetite*, 141, 104299.
35. Nugraha, R., & Yuniarti, S. P. (2019). Consumer Response to Brand Crisis: A Study on Brand Trust and Purchase Intention. *Jurnal Manajemen Dan Kewirausahaan*, 21(3), 227-238.
36. Papiés, E. K., & Hamstra, P. (2013) Hunger and cognitive control: Attentional bias and disinhibition.
37. Payne, J. W., Bettman, J. R., & Johnson, E. J. (2006). The Effect of Brand-Name Suggestion on Consumer Judgments. *Journal of Marketing Research*, 43(3), 294-301.
38. Simonson, I. (1999). Brand choice and branding: An integrative framework. *Journal of Marketing Research*, 36(2), 269-279.
39. Suyanti, A. D., Wibowo, S. A., & Surjandari, I. K. (2020). Color-Word Stroop Task: A Study on Brand Recognition. *Journal of Social Studies Education Research*, 11(3), 497-512.
40. Svaldi, J., Tuschen-Caffier, B., & Peyk, P. (2017) Hunger impairs impulse control: Evidence from a Stroop task.
41. Thomas, A., & Pasca, R. (2017). Exploring the influence of cognitive conflict on consumers' evaluations of ethical products. *Journal of Business Ethics*, 144(2), 303-319.
42. TStroop, J. R. (1935). Studies of interference in serial verbal reactions. *Journal of Experimental Psychology*, 18(6), 643-662.
43. van den Berg, R., Vink, M., Roefs, A., & de Graaf, C. (2016) Effects of Hunger and Satiety on Cognitive Inhibition: Behavioral and Electrophysiological Findings.

44. Van den Bussche, E., & Reynvoet, B. (2008). Masked color priming in the Stroop task: A tool for measuring unconscious processes in consumers. *Journal of Consumer Psychology*, 18(4), 356-362
45. van Steenbergen, H., Band, G. P., & Hommel, B. (2010). In the mood for adaptation: How affect regulates conflict-driven control. *Psychological Science*, 21(11), 1629-1634.
46. Verwijmeren T. Verwijmeren Johan C Karremans Johan C Karremans Wolfgang Stroebe Wolfgang Stroebe Daniel Wigboldus Daniel Wigboldus (April 2011). The workings and limits of subliminal advertising: The role of habits *Journal of Consumer Psychology* 21(2):206-213
47. Völckner, F., & Sattler, H. (2016). Empirical generalizations about the impact of brand extensions on brand equity. *Journal of Marketing Research*, 53(3), 387-407.
48. Wang, S., Zhu, J., & Li, W. (2013). Effects of Hunger on Cognitive Inhibition: A Study of the Stroop Task. *PLoS ONE*, 8(10), e76509.
49. Wang, Y., Sun, Y., & Zhang, W. (2017) The Effects of Attentional Bias and Product Involvement on Product Evaluation.
50. Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.
51. Zhang, W., & Gao, Z. (2016) Attentional Bias and Product Evaluation: An Eye-Tracking Study".
52. Zwebner, Y., Lee, L., & Goldenberg, J. (2017). How Brand Names Impact Consumer Choice: The Moderating Role of Environmental Disruption. *Journal of Business Research*, 79, 176-184.

Appendix
CONSENT FORM

In the present experiment, you will be given a short task. It is a computer-based task where color words will be shown on the screen with different ink colors randomly. The task requires you to detect the ink color of the word presented to you. You will give your response via a key press which I will specify.

The complete experiment will require approximately 10 minutes of your time. All information you provide will remain confidential and not be associated with your name.

The results of this experiment may be presented at professional meetings or published in the scientific literature. Your name will not be used in the reporting of the results. Only group data will be used; however, your scores and name will be coded for a possible follow-up study or reanalysis of the data. All personal details will be kept confidential.

If you wish to withdraw from the experiment, you may do so at any time without penalty. Following the experiment, I will discuss the experiment's results with you if needed.

If you have any questions, please feel free to ask me or the advisor of the research, *Dr. Richa Nigam, TSLAS, Thapar Institute of Engineering and Technology, Patiala.*

Thank you for participating in the experiment.

I, _____, understand that my participation in

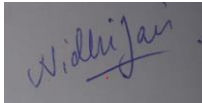
(First Name)

(Last Name)

this experiment is voluntary and I may refuse to participate or withdraw from the experiment at any point of time without penalty.

Date

Signature of Participant

A small, square image showing a handwritten signature in blue ink on a light-colored background. The signature appears to be "William" written in a cursive style.

Signature of Experimenter