Which One Sells Better? A Study of Thin/Plus-size Perceptions of Models and their Relationships with Purchase Intention of Healthier/Unhealthier Branded Food Products

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Abstract:

For three decades, marketers have commonly relied on thin models to promote products and services; however, over the past decade, the use of thin models has been widely criticised, resulting in a noticeable shift towards the use of plus-size models. The current thesis uses a correlational approach to investigate the relationships between thin/plus-size perceptions of models and purchase intention of healthier/unhealthier branded food products. Furthermore, this study sets out to determine whether these relationships can be explained through mood, body dissatisfaction and time perspective and whether body image discrepancy moderates the relationships related to thinness perception. This thesis builds on a combination of social comparison theory (Festinger, 1954) and compensatory consumption behaviour (Mandel et al., 2017) as a theoretical framework. An online survey-questionnaire provided data from 447 non-student participants in the UK. Using the PLS-SEM approach, data analyses revealed that thinness perception is associated with the purchase intention of healthier branded food products through mood. In addition, this relationship remains significant for those who desire to be thinner and those who wish to be heavier. Moreover, based on the findings, plus-size perception is not associated with the purchase intention of unhealthier branded food products. This thesis makes several contributions to theory and knowledge. Specifically, it contributes to our understanding of compensatory consumption behaviour (Mandel et al., 2017) by providing conceptual evidence for a direct resolution strategy. Finally, this thesis makes suggestions for policymakers by emphasising the negative consequence of using thin/plus-size models on an ad viewer's mood.

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I would like to start my acknowledgements by mentioning a famous poem from Hafez, the Persian supreme poet from the fourteenth century: "O beautiful wine-bearer, bring forth the cup and put it to my lips, path of love seemed easy at first, what came was many hardships!" (as translated by Shahriari (1999)). Yes, it all started during my master's degree when I fell in love with researching consumer behaviour. However, what came later was so many hardships! Therefore, I am deeply grateful to everyone who helped me overcome these hardships.

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Declaration:

I declare that this thesis is a presentation of original work, and I am the sole author.

This work has not previously been presented for an award at this, or any other,

University. All sources are acknowledged as References.

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Chapter 1 – Thesis Introduction

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1.1 Introduction:

The current thesis investigates the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products. For years, marketers have highly used thin models (Sypeck et al., 2004) to promote various products/services and brands. However, in recent years, plus-size models have been introduced for marketing purposes and are used alongside thin-ideal models (Lin and McFerran, 2016). This thesis builds on this question: "Which branded food products (healthier and unhealthier) will benefit the most from using thin/plus-size images?". To answer the above question, the researcher developed a statistical model with eight variables and twelve hypotheses based on the literature review. Later, the researcher conducted a survey-questionnaire study and analysed the data to test the hypotheses. This thesis draws from the literature on the use of thin/plus-size images in advertisements/media, factors affecting healthy/unhealthy eating and consumer psychology (mood, body image, etc.). The current chapter includes the following sections. First, section 1.2 discusses the research's topic background which presents a summary of the literature for the core ideas of this thesis. Second, sections 1.3 to 1.5 present research gaps, objectives, and questions. Finally, section 1.6 briefly presents the research contributions leading to the chapter conclusion (section 1.7).

1.2 Research Background:

In 2014, a plus-size model launched a healthy meal delivery business in the US. Danika Brysha is the founder (former CEO) and promoter of a healthy meal delivery company named Model Meals (Huffpost, 2017, Brysha, 2019, IMGModels, 2019, Brysha, 2022). Danika Brysha is a plus-size model working with IMG Models agency (IMGModels, 2019). Her company claims they provide healthy ready-to-eat meals and deliver them to their customers. The company's website states: "Because real food has nutrients. (Wow!) And you're less tempted to overeat or use these foods emotionally, which could very well lead to weight loss." (ModelMeals, 2019). The food provided by the company is claimed to help their customers lose weight. However, the company's face/model is herself an overweight person. Considering that the company's promoter is an overweight person, does her body type (plus-size) match her company's product type (healthy food)?

This mismatch between the company's health-related claims and its promoter's lifestyle might be a little confusing for a viewer. However, for a marketing researcher, this incongruity between the company's brand image and its promoter's body size brings many questions to mind. What if the company's promoter was a thin model? In order to answer this question, it is crucial to consider reviewing the studies of thin/plus-size images and corresponding theories in marketing journals as well as other areas, such as psychology and body-image-related journals. This thesis utilises a dual theoretical framework, integrating two foundational theories as its primary conceptual underpinning. The overarching theories are the theory of social comparison (Festinger, 1954) and compensatory consumption behaviour (Mandel et al., 2017). Social comparison theory posits that individuals engage in self-evaluation through

comparisons with others, subsequently leading to the development of pleasant or unpleasant feelings towards self (Richins, 1991). Concurrently, compensatory consumption behaviour suggests how individuals may turn to the consumption of goods and services as a way to address/eliminate the psychological discomfort (Vartanian, 2012, Mandel et al., 2017) stemming from such social comparison. In the context of the current study, the researcher proposes that body image perceptions towards a model (thin or plus-size) leads to either a psychological discomfort or satisfaction. Then these two different psychological experiences will have different outcomes such as leading to consumption of foods that could either eliminate or address the unpleasant feeling. Drawing from the theories of social comparison and compensatory consumption behaviour, it could be anticipated that utilisation of a thin model as the company's face, could potentially increase the sales of healthy meal foods, through the comparisons that the potential customers will make with the company's model and subsequent feelings and behaviour (Richins, 1991).

In recent years, the use of thin-ideal images in media, advertisements and TV programs has been massively criticised by social marketers and psychologists (TheGuardian, 2000, BBC, 2017a, CNN, 2017). Numerous studies have shown the negative consequences of using thin-ideal images in media, such as negative impacts on mood, body satisfaction, self-esteem and eating behaviour (Grogan et al., 1996, Cattarin et al., 2000, Agliata and Tantleff-Dunn, 2004, Dittmar and Howard, 2004, Clay et al., 2005, Blond, 2008, Legenbauer et al., 2008, Ata et al., 2013, Halliwell, 2013, Hausenblas et al., 2013, Tiggemann and Slater, 2013, Benton and Karazsia, 2015, Fardouly et al., 2015). However, few studies have focused on the positive consequences of exposure to thin-ideal images, such as self-enhancements among

restrained eaters (Collins, 1996, Mills et al., 2002, Joshi et al., 2004). For example, Mills et al. (2002) found that exposure to thin images helped restrained eaters to disinhibit their food intake. Despite the few positive findings in this area, governments are setting rules and regulations to limit the use of these idealised images and to increase social awareness to prevent their negative impact on society's well-being. According to BBC (2017c), the French government set a law that media using retouched photos of thin models need to have a warning stating that the photos have been edited. These initiatives suggest a trend towards reducing the use of idealised images. As a result of government and policy makers pressure, some brands have started using plus-size models in their marketing communication ways, such as ASOS Curve (Cosmopolitan, 2019). These new campaigns have begun to show that a customer does not need to have an ideal body and it is accepted to be overweight. Despite the fact that using plus-size images seems to be an alternative to thin-ideal images, brands still make use of thin images in their marketing activities. Perhaps, the reason for using both thin and plus-size images is related to the products being advertised. Now the question emerging is: "Which products/brands will benefit the most from using thin or plus-size images?"

In order to answer the above question, it is crucial to first differentiate between the industries that make use of thin and plus-size images. Various sectors, such as fashion, skincare, food, and sports, use these models/images (Gierl, 2019). Food is one of the largest industries where marketers are interested in using their marketing tactics to promote their products (Cornil et al., 2022). For example, marketers reinforced the idea that Subway is healthier than McDonald's while a sandwich from Subway could have the exact calorie count as a burger from McDonald's ((Chandon and Wansink,

2007) as cited in Cornil et al. (2022), p.58). One of the tactics that marketers use to promote products is using thin/plus-size models (Pickett and Brison, 2019). The connection between a model's body type (thin or plus-size) and a food brand's type (healthier or unhealthier) seems to play a critical role in advertisements. For example, an attractive slim model could either promote a probiotic yoghurt or a supercar. In terms of probiotic yoghurt, the audience could envisage having a healthy and attractive body by consuming this type of yoghurt. Therefore, the message behind this advertisement is congruent with the use of the model. However, for the supercar advertisement, no one could indeed imagine that riding a supercar would make them end up achieving that type of body[1]. Therefore, the product's functionality being advertised here is not congruent with the use of the thin model. Thus, the use of thin/plus-size images in the food industry should be distinguished from other sectors, such as car manufacturing and entertainment, due to the direct relationship between the model's body type (thin or plus-size) and the food's type (healthier or unhealthier).

Moreover, while everyone eats food every day, not everyone engages in exercise and physical activities daily. Hence, when studying the thin/plus-size effect on either food choices or fitness-related products/equipment, it is important to recognize if this could be applied to everyone. Therefore, in the case of the latter (fitness-related products) the research may not provide a comprehensive picture of the entire population since not everyone is interested or already involved in sports and fitness activities. This means studying the thin/plus-size effect on one's food choices has the potential to provide insights into the understanding of the behaviour of a more diverse group of

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[1] It should be noted that marketers could have other intentions for using a slim model for promoting a super car such as reinforcing this idea that elegant and stylish models ride this car. The use of slim models in this scenario could be related to brand personality strategies.

people. Similarly, other body image-related industries such as fashion restrict the findings of such study to smaller group of society.

1.2.1 Thin/Plus-size Images, Eating Behaviour and Purchase Intention:

While Mills et al. (2002) showed that exposure to thin (idealised) images helps restrained eaters to control/reduce their food intake, Klesse et al. (2012) showed that repeated exposure to thin images makes female restrained eaters (people who want to reduce/control their food intake) eat more unhealthy foods. And for plus-size images, Lin and McFerran (2016) showed that exposure to these images increases the consumption of unhealthy foods. In terms of the effects of thin and plus-size images on eating behaviour, mixed findings suggest an increase/decrease in one's healthy vs unhealthy consumption. However, the effects on one's purchase intention of healthier/unhealthier branded food products are not precise yet. Recent efforts have started to examine the impact of exposure to thin and plus-size images on purchase intention in general or on the purchase intention of some specific products. For instance, Jung and Heo (2018) suggest that exposure to heavier models increases the positive attitude toward an ad which in turn increases the purchase intention. Their study offers the affect as a mediator, which explains this mechanism. To be more exact, an ad viewer's affective state becomes positive when they see a model who is heavier than themselves. Later, that positive affect positively influences their attitude and purchase intention. Although their study shed light on the mechanism and offers a good understanding of this area of knowledge, they cannot generalise their findings on every product's purchase intention. In fact, they investigated the above mechanism only on women's underwear brand and not on other products. As they mentioned in

their direction for future research, this relationship needs to be tested on other products. As mentioned in the previous part above, the relationship between a model's body type and the food advertised is more straightforward than between a model's body type and the advertised clothes. Moreover, their findings regarding the positive influence of heavier models on purchase intention are inconsistent with the findings of Melbye et al. (2015).

Melbye et al. (2015) studied the effects of physical body type in combination with appeal type (emotional vs functional) on the purchase intention of a functional food (foods with additives that gives energy or vitamins). Their study emphasises the importance of an endorser's (an advertisement's model) body type (heavy or thin). Melbye et al. (2015) showed that as the model's body type becomes smaller, the purchase intention of that functional food product increases. However, the result of their study is limited. First, they only studied one type of food product with a specific categorisation which is the functionality of the food product. In this case, they have studied an energy drink. So, their study lacks examining the effect on foods without any functions, like a bar of regular chocolate, which is tasty but has no special features. Their study only considers a specific food categorisation based on its functionality. This categorisation limits the generalisability of their research. A different categorisation, such as dividing foods into two types of healthier and unhealthier, could make the findings more generalised. Second, their study only focuses on female endorsers, and it is tested on both genders. They suggested to limit the endorser's gender to the participant's gender (female for females and male for males) for future research. Their study's results align with Pickett and Brison (2019). Pickett and Brison (2019) showed that using idealised male endorsers (e.g., athletes) increases the

purchase intention of weight-loss products among men. However, this study did not mention any particular food type as their weight-loss products, and the main focus of the study was weight-loss management programs for men. Therefore, the effects of using thin/plus-size images on the purchase intention of different branded food products are still not apparent.

Briefly, the following conclusions can be drawn from the above studies. a) the model's body type (thin or plus-size) influences consumers' eating behaviour, b) the model's body type influences the purchase intention, particularly one's purchase intention of a branded food product, c) a model's body type affects men as well as women, and d) one's affective states gets affected by exposure to a model which later influences their attitude toward advertisement and purchase intention. However, it is still unclear what the effect of each model's type (thin or plus-size) on the purchase intention of (healthier/unhealthier) branded food products is. Hence, this thesis posits these two main effects: a) the use of thin/idealised images increases the purchase intention of healthier branded food products, and in contrast, b) the use of plus-size images increases the purchase intention of unhealthier branded food products. The rationales for each suggested effect are discussed in the literature review (Chapter 2).

1.2.2 Mood, Body Dissatisfaction, Time Perspective, and Body Image Discrepancy:

The effects mentioned earlier may also be dependent on mood (affect) and body dissatisfaction as underlying mechanisms. These two factors are believed to get affected following exposures to both thin and plus-size images (Harper and Tiggemann, 2008, Ata et al., 2013, Halliwell, 2013, Hausenblas et al., 2013,

Tiggemann and Slater, 2013, Benton and Karazsia, 2015, Fardouly et al., 2015, Moreno-Domínguez et al., 2019). Subsequently, these two factors could influence one's eating behaviour (Andrade, 2005, Cohen, 2006, Labroo and Mukhopadhyay, 2009, Tiggemann and Miller, 2010, Gardner et al., 2014). Thus, theoretically, they are likely to influence the purchase intention of branded food products (healthier/unhealthier) as well. The main theoretical background for the suggested mediators is based on social comparison theory (Festinger, 1954, Richins, 1991). These mediators and related theories will be discussed in detail in chapter 2 (literature review).

In addition, this study suggests that both central relationships of the current thesis are also dependent on time perspective. Time perspective is defined as one's unconscious focus/attention to the past, the present, and the future (Klingemann, 2001). In behavioural studies, it is believed that an individual's focus on the future or present could affect their behaviour differently (Crockett et al., 2009, Zimbardo and Boyd, 2015). Future-focused time perspective is when someone tends to think and focus on the future (Rabinovich et al., 2010). Furthermore, future-focused time perspective is believed to help people stick to their long-term goals (Trope and Liberman, 2003, Boyd and Zimbardo, 2006) such as keeping a healthy diet. In contrast, present-focused (attention towards the present time) is believed to be related to pleasure, hedonic behaviour, and short-term goals (Crockett et al., 2009, Zimbardo and Boyd, 2015). Therefore, while a future-focused time perspective could increase the purchase intention of healthier branded food products, a present-focused time perspective could increase the purchase intention of unhealthier branded food products. To this end, time perspective would be the third mediator variable in the study's statistical model.

Finally, Jung and Heo (2018) used BMI (Body Mass Index) as a way to measure their independent variable, which was the "body gap" (a gap between one's actual body and a model's body). BMI can be calculated by knowing someone's weight and height. This index is used by health-related organizations like the NHS (NHS, 2018). However, Jung and Heo (2018) suggested a perceived (subjective) gap instead of an objective one for future research direction. In fact, they mentioned that the gap between one's perceived body size/shape and an ideal body (model) could affect attitude toward an ad and, later, the related purchase intention. In line with this suggestion, this research will benefit from body image related self-discrepancy as a moderator for the first central relationship and its mediation variables. Self-discrepancy is the gap between one's actual and ideal selves (Higgins, 1987). This gap could be different for each individual. The different levels of self-discrepancy could possibly affect the strength of the relationship between the perceived thinness of images and the purchase intention of healthier branded food products. In fact, thin images might not be ideal for those who already believe they have ideal bodies. As an example, having six-pack abs might be unachievable for some individuals. But there are already other individuals that have six-packs. Therefore, for those with these abs, a body with a six-pack no longer represents an unachievable ideal body. Similarly, this self-discrepancy could possibly affect the strength of the relationship between the perceived thinness of images and the three mediators (mood, body dissatisfaction, and time perspective).

1.3 Research Gaps:

GAP 1: The literature contains contradicting findings regarding the impact of thin images on health-related behaviour of individuals such as healthy or unhealthy eating. According to Mills et al. (2002), restrained eaters became able to control their food intake after being exposed to thin-ideal images. This shows that exposure to idealised images could end up in healthier eating habits. However, Klesse et al. (2012) suggest the opposite. They showed that female dieters who were repeatedly exposed to thin-ideal images found their dieting goals less achievable, having less success in losing weight and eating more unhealthy foods. In one study, exposure to thin images resulted in healthy eating behaviour, but in another study, it resulted in unhealthy eating behaviour. Despite the contradicting findings, both healthier and unhealthier food brands make use of thin images in their advertisements. It is not clear which one of the branded food types healthier or unhealthier could benefit the most from using thin images.

GAP 2: The literature lacks enough findings regarding the impact of plus-size images on health-related behvaiour of individuals. Perhaps this can be attributed to the novelty of using plus-size images comparing to the use of thin-images in marketing and advertisement industry. According to Lin and McFerran (2016), cues suggesting the acceptance of larger body types, such as plus-size images, end up in unhealthy behaviours. The unhealthy behaviour could be consuming greater portions of unhealthy foods, followed by less motivation to participate in healthy behaviours because of exposure to plus-size images (Lin and McFerran, 2016). Thus, it could be envisaged that plus-size perception is not linked to purchase intention of healthier branded food products while this could be connected to purchase intention of

unhealthier branded food products. However, such an effect needs to be empirically tested, as another study found no significant association between less healthy food choices and being exposed to larger body sizes (Simon and Hurst, 2021).

GAP 3: According to temporal construal theory, present vs future-focused time perspectives evokes low vs high-level construal, which make a person think of short-term vs long-term goals, respectively (Trope and Liberman, 2000, Freitas et al., 2001, Frederick et al., 2002, Trope and Liberman, 2003, Fujita et al., 2006, Trope and Liberman, 2010, Trope, 2012). Thus, such a distance in time could make a person focus on one's health-oriented goals (Gardner et al., 2014) increasing the purchase intention of healthier branded food products. In the opposite direction, the present focus time perspective (closer distance to the present) evokes immediate pleasure-seeking and hedonic behaviours (Gardner et al., 2014); thus, this present focus might increase the purchase intention of unhealthier branded food products. Therefore, it is crucial to study the effects of thin and plus-size perceptions on one's perception of time and the potential consequences on one's food buying behaviour.

1.4 Research Objectives:

This research aims to investigate the relationships between thinness/plus-size perceptions on purchase intention of healthier/unhealthier branded food products. Moreover, to understand the mechanism behind the effects of thin and plus-size perceptions on the dependent variables (purchase intention of healthier and unhealthier branded food products), a) it investigates the effect of thin and plus-size perceptions on mood, body dissatisfaction and time perspective. b) it investigates the

effect of mood, body dissatisfaction, and time perspective on purchase intention of healthier and unhealthier branded food products. In addition, it investigates the moderating role of body image discrepancy on the relationships related to thinness perceptions. According to the above, five specific objectives are presented below:

Research Objective 1:

To examine the relationship between perceived thinness and purchase intention of healthier branded food products.

Research Objective 2:

To examine the relationship between perceived plus-sizeness and purchase intention of unhealthier branded food products.

Research Objective 3:

To examine the mediating effects of mood and body dissatisfaction on the study's main relationships.

Research Objective 4:

To examine the mediating effect of time perspective on the study's main relationships.

Research Objective 5:

To examine the moderating effect of body image discrepancy on the relationships between thinness perception and purchase intention of healthier branded food products, as well as on mediation variables (mood, body dissatisfaction, and time perspective).

1.5 Research Questions:

The researcher developed the following four research questions derived from the research objectives.

RQ1: Do perceived thinness/plus-sizeness lead to an increase in purchase intention of branded food products when rating for the pairs of healthier and unhealthier ones?

RQ2: Do mood and body dissatisfaction play mediation roles in the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products?

RQ3: Does time perspective play a mediation role in the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products?

RQ4: Does body image discrepancy moderate the relationships between perceived thinness and purchase intention of healthier branded food products as well as mediators (mood, body dissatisfaction and time perspective)?

Table 1 shows a summary of research objectives, research questions and corresponding hypotheses. The detailed explanation for each hypothesis is discussed in chapter 3.

Table 1 - Overview of Research Objectives, Research Questions and Research Hypotheses

Research Objectives:	Research Questions:	Research Hypotheses:
RO1: To examine the relationship between perceived thinness and purchase intention of healthier/ branded food products.	**RQ1:** Do perceived thinness/plus-sizeness lead to an increase in purchase intention of branded food products when rating for the pairs of healthier and unhealthier ones?	*H1: Perceived thinness is associated (positive) with the purchase intention of healthier branded food products.*
RO2: To examine the relationship between perceived plus-sizeness and purchase intention of unhealthier/ branded food products.		*H2: Perceived plus-sizeness is associated (positive) with the purchase intention of unhealthier branded food products.*
RO3: To examine the mediating effects of mood and body dissatisfaction on the study's main relationships.	**RQ2:** Do mood and body dissatisfaction play mediation roles in the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products?	*H3: Mood is expected to positively mediate the association between perceived thinness and purchase intention of healthier branded food products.*
		H4: Body dissatisfaction is expected to positively mediate the association between perceived thinness and purchase intention of healthier branded food products.
		H5: Mood is expected to negatively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.
		H6: Body dissatisfaction is expected to negatively mediate the association between

Research Objectives:	Research Questions:	Research Hypotheses:
		perceived plus-sizeness and purchase intention of unhealthier branded food products.
RO4: To examine the mediating effect of time perspective on the study's main relationships.	**RQ3:** Does time perspective play a mediation role in the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products?	*H7: Time perspective is expected to negatively mediate the association between perceived thinness and purchase intention of healthier branded food products*
		H8: Time perspective is expected to positively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.
RO5: To examine the moderating effect of body image discrepancy on the relationships between thinness perception and purchase intention of healthier branded food products, as well as on mediation variables (mood, body dissatisfaction, and time perspective).	**RQ4**: Does body image discrepancy moderate the relationships between perceived thinness and purchase intention of healthier branded food products as well as mediators (mood, body dissatisfaction and time perspective)?	*H9: Body-image discrepancy moderates the association between perceived thinness and purchase intention of healthier branded food products. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.*
		H10: Body-image discrepancy moderates the relationship between perceived thinness and mood. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.
		H11: Body-image discrepancy moderates the relationship between perceived thinness and body dissatisfaction. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.
		H12: Body-image discrepancy moderates the relationship between perceived thinness and time perspective. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.

1.6 Research Contribution:

This thesis makes several contributions to theory and knowledge. In addition, it provides suggestions for policymakers and managers. The details of the research contributions and suggestions could be found in chapter 9. In brief, this study contributes to our understanding of compensatory consumption behaviour (Mandel et al., 2017) by providing conceptual evidence for a direct resolution strategy. Moreover, it expands the understanding of the social comparison theory (Festinger, 1954, Richins, 1991) and refines it by showing that perceived plus-sizeness (downward comparison) does not necessarily lead to a better mood. In addition, this study makes a theoretical contribution by explaining the process by which perceived thinness is associated with the purchase intention of healthier branded food products. Accordingly, this study offers empirical evidence on the mediation role of mood on the relationship between perceived thinness and purchase intention of healthier branded food products.

1.7 Conclusion:

This chapter showed an introduction to the research background. Moreover, it presented research gaps and research objectives as well as research questions. Further, it offered a summary of the research contributions. The next chapter reviews the literature and discusses the concepts/theories in detail. The conceptual framework, hypotheses development and methodology will be discussed in upcoming chapters.

Chapter 2 – Literature Review

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2.1 Introduction:

This chapter reviews the literature in detail. The chapter presents the thesis's main concepts and theories, as well as the definitions of terms being used in this thesis. Sections 2.2 and 2.3 present a review of the literature regarding the use of thin and plus-size images. Sections 2.4, 2.5, and 2.6 reviews the literature on mood, body dissatisfaction and time perspective. Section 2.7 presents the literature regarding body image discrepancy. Finally, section 2.8 offers the chapter's conclusion.

Before delving into the narrative literature, the researcher conducted a systematic literature review on factors affecting eating behaviour. The researcher reviewed 39 journal articles published in academic marketing journals that ranked 4* and 4 in the ABS ranking lists (CABS, 2015). The journal articles were published between 2008 and 2018. As an outcome of the systematic literature review, the researcher concluded that thin/plus-size images and mood affect one's eating behaviour (Grogan et al., 1996, Cattarin et al., 2000, Agliata and Tantleff-Dunn, 2004, Dittmar and Howard, 2004, Clay et al., 2005, Blond, 2008, Legenbauer et al., 2008, Ata et al., 2013, Halliwell, 2013, Hausenblas et al., 2013, Tiggemann and Slater, 2013, Benton and Karazsia, 2015, Fardouly et al., 2015, Pickett and Brison, 2019, Moreno-Domínguez et al., 2019). In addition, based on the systematic literature review, the researcher found out that there is a relationship between thin images and mood (Cattarin et al., 2000, Tiggemann and McGill, 2004, Bourn et al., 2015, Fardouly et al., 2015). Moreover, the stated factors turned out to have an impact on one's choices between healthy and

unhealthy foods (Heinberg et al., 2001, Chrysochou and Nikolakis, 2012, Gardner et al., 2014). Next, the researcher reviewed the literature regarding thin/plus-size images, mood, body dissatisfaction, time perspective and body image discrepancy. The following sections contain a review of the literature across different disciplines focusing on the factors mentioned above.

2.2 Thin Images:

Thin images (also known as thin-ideal) are images of human models with body shapes that are mostly unachievable for ordinary people (Richins, 1991, Humphreys and Paxton, 2004, Halliwell and Dittmar, 2005, van der Deen et al., 2011, Guardian, 2015). Marketers have widely used these types of images for advertising different products and services for many years. However, these images do not represent ordinary people but something that ordinary people desire to achieve (Freedman, 1984, Snow and Harris, 1986). As Schudson (1984) emphasises, "Advertising does not claim to picture reality as it is but reality as it should be" (as cited in Richins (1991), p.2215). According to Guardian (2017), an average model has a BMI of 16. A BMI of 16 is considered underweight (WHO, 2010, BBC, 2018) and only 1.8 percent of people in England in 2019 were considered underweight (Parliament, 2022). Therefore, it can be said that advertisers illustrate a body type that does not represent society's norm but a particular group of people. Furthermore, these images sometimes show a real model but sometimes show a digitally altered image of a real model (Gierl, 2019). Hence, some academics call these images idealised images, the ideal that ordinary people desire to achieve, which can also include muscular images (primarily for men) (Pickett and Brison, 2019). Accordingly, the terms thin, skinny, slim, idealised, thin-ideal, and muscular-ideal are used to describe any ideal condition of a body type

(either thin or muscular) that marketers use to promote products and services (Dittmar and Howard, 2004, Ata et al., 2013, Benton and Karazsia, 2015, Tiggemann and Zaccardo, 2015, Jung and Heo, 2018, Gierl, 2019, Stewart and Ogden, 2021).

The past twenty years have seen increasingly rapid advances in the field of body image and eating behaviour studies. Exposure to idealised images (thin or muscular) is believed to have two contradictory impacts on individuals. These impacts could be classified into positive and negative ones. The positive impact includes increased self-control among restrained eaters (Collins, 1996, Mills et al., 2002, Joshi et al., 2004). The negative impact includes negative mood, body image disturbance, body dissatisfaction, negative self-esteem and eating disorder (Grogan et al., 1996, Cattarin et al., 2000, Agliata and Tantleff-Dunn, 2004, Dittmar and Howard, 2004, Clay et al., 2005, Blond, 2008, Legenbauer et al., 2008, Ata et al., 2013, Halliwell, 2013, Hausenblas et al., 2013, Tiggemann and Slater, 2013, Benton and Karazsia, 2015, Fardouly et al., 2015). Thus, these images impact one's eating behaviour either by increasing self-control or by increasing indulgence behaviour. The fact that idealised images could have either a positive or a negative impact on one's eating behaviour led the author to consider the phenomenon from the marketing perspective.

From a marketing perspective, it is unclear whether thin images affect the purchase intention of branded food products. Still, food brands make use of them. To study this phenomenon, the author divided branded food products into two types: healthier and unhealthier. This classification is derived from the notion that thin models are believed to have healthy fit bodies and lifestyles, and plus-size models are believed to have less

healthy bodies and habits. Therefore, models' body types are either congruent or incongruent with the branded food products they promote.

Some might think that by consuming a product advertised by a thin model, they will obtain that healthy looking body. The phenomenon is known as aspirational branding, which helps consumers enhance their self-concept (Malär et al., 2011). According to self-congruity theory, the match between a brand's image and a consumer's self-concept (actual or ideal) increases the positive attitude toward a brand (Sirgy, 1985, Sirgy et al., 1991). This could shed light on why some healthier brands make use of thin images. However, it is unclear why some unhealthier brands use thin images. The reason might be that they try to associate in a consumer's mind that by consuming these unhealthier products, they can still achieve/keep that thin body. For reasons that may vary, healthy and unhealthy food brands use thin images in their advertisements. Therefore, this thesis wants to test the relationships between the perception of thin images and the purchase intentions of healthier/unhealthier branded food products.

Thin Images, Self-Discrepancy Theory and Compensatory Consumption Behaviour:

Individuals exposed to thin images are likely to perceive self-discrepancy (Sobol and Darke, 2014b). Self-discrepancy is the gap between one's actual self and ideal (or ought) self (Higgins, 1987). The stated gap is believed to play a critical role in compensatory consumption (Higgins, 1987). Compensatory consumption is the consumption of goods or services, which helps consumers reduce or eliminate self-

discrepancy and other psychological discomfort (Mandel et al., 2017). From this perspective, two different outcomes can be anticipated. Firstly, it can be expected that the perception of thinness results in an increase in purchase intention of healthier branded food products rather than unhealthier ones. This result is expected because such behaviour (buying healthier food) helps an individual reduce perceived self-discrepancy or eliminate the source of their psychological discomfort. Such behaviour is called "direct resolution" (Mandel et al., 2017). As stated by Mandel et al. (2017), "Direct resolution involves consumers engaging in behaviours that directly address the source of the self-discrepancy. This strategy represents a form of goal-directed behaviour, where consumers purchase or use products that can directly resolve a self-discrepancy" (Mandel et al., 2017, p.137). In terms of branded food products, the individuals who have been exposed to thin images (only if they perceive the model in the image to be thin) would consciously/unconsciously feel some gap between their actual and their ideal bodies. Then, they unconsciously or consciously would choose to buy items (healthier branded food products) that help them reduce the stated gap.

Secondly, the opposite can be expected as well. An "escapism" behaviour (Mandel et al., 2017) predicts that exposure to thin images increases the purchase intention of unhealthier branded food products rather than healthier ones. As stated by Mandel et al. (2017), "Escapism involves deliberately directing one's thoughts away from a self-discrepancy by turning attention elsewhere; in the domain of consumer behaviour, escapism can manifest in focusing one's attention to eating or shopping" (Mandel et al., 2017 p.139). According to Heatherton and Baumeister (1991) and Polivy, Herman, and McFarlane (1994), individuals try to direct their attention to hedonic stimuli such as bingeing on chocolate and cakes to escape the perceived self-

discrepancy. Hence, an increase in purchase intention of unhealthier branded food products could also be predicted. This thesis supports the first prediction since engaging in escapism compensatory consumption sounds irrational when the consumption reminds the consumer of their self-discrepancies, as stated by Lisjak et al. (2014a). Therefore, it is worth studying these two predictions to see which one is correct. Knowing this helps the researcher to discover if thinness perception results in healthier or unhealthier food buying behaviour.

2.3 Plus-size Images:

In contrast to thin images, plus-size images portray the types of models which do not represent the ideal of thinness (Papies and Nicolaije, 2012). Plus-size images often illustrate overweight models (Moreno-Domínguez et al., 2019) which are closer to the norm of society. These overweight models promote a range of different products, from clothes to cosmetics and even food. Companies use plus-size images to somehow escape from the societal criticisms around the use of thin images and related body image concerns (Papies and Nicolaije, 2012). Accordingly, campaigns like "real beauty" by Unilever's Dove have started using models that represent normal or real individuals (Bissell and Rask, 2010, Lin and McFerran, 2016, Dove, 2022). Also, the fashion and cosmetic company ASOS uses plus-size images in their ASOS Curve campaign (ASOS, 2022). From a marketing perspective, such a strategy is called authentic branding (Malär et al., 2011). According to self-congruity theory, this type of branding allows consumers to express their actual selves rather than their ideal ones (Sirgy, 1985, Sirgy et al., 1991). Accordingly, the match between one's self-concept (actual self) and the brand's image increases the positive attitudes toward the brand. This could shed light on why some unhealthier branded food products make use of

plus-size images, yet the use of such images/models for healthier branded food products remains unclear. This study aims to test whether plus-size perception significantly relates to the purchase intention of unhealthier/healthier branded food products.

Plus-size image and Social Comparison Theory:

Compared to thin images, very little is found in the literature on the effect of plus-size images. Perhaps the reason is that using plus-size models/images is a relatively recent marketing communication tool compared to the use of thin images. According to Moreno-Domínguez et al. (2019), exposure to overweight models decreases body dissatisfaction and enhances body image through downward social comparisons. Social comparison theory (Festinger, 1954) posits that individuals compare themselves to others in many aspects of life, for example income, education levels and body size conditions. This comparison helps people to do a form self-evaluation ((Gruder, 1977) as cited in Wills (1981)). According to the theory, people sometimes compare themselves to people who are less fortunate (Wills, 1981). For example, a person might compare their body size to the body size of a heavier person. This way, the first person might feel better about his own body size by doing this so called downward social comparison (Wills, 1981). Now, this self-evaluation leads to a satisfaction towards the self. Thus, it could be anticipated that exposure to plus-size images might not be associated with the purchase intention of healthier branded food products since an individual is more satisfied with their body. In addition, Lin and McFerran (2016) have demonstrated that using plus-size images could increase unhealthy behaviour, which is associated with larger portions of food intake.

Therefore, plus-size perception is expected to increase the purchase intention of unhealthier branded food products rather than healthier ones.

The following sections (2.4, 2.5, and 2.6) explain the literature regarding mood, body dissatisfaction, and future-focused time perspective. These factors are the study's mediator variables that help understand the mechanism behind this study's main relations.

2.4 Mood and Body Dissatisfaction:

The researcher suggests that mood and body dissatisfaction can explain the relationships between thin/plus-size images and purchase intention of healthy/unhealthy foods. These mediation roles could be explained within the framework of the social comparison theory (Festinger, 1954) and compensatory consumption behaviour (Mandel et al., 2017).

According to social comparison theory, individuals make upward and downward comparisons with others. As stated in the previous part, upward comparison happens when a person compares themselves with someone better/superior in the compared attributes, while downward comparison occurs when someone compares themselves to a less fortunate person (Festinger, 1954, Collins, 1996, Vartanian, 2012, Fardouly and Vartanian, 2015). Since idealised images illustrate unachievable and unrealistic bodies (Freedman, 1984, Humphreys and Paxton, 2004, Guardian, 2015), people making comparisons will face an upward comparison. Upward comparison could intensify the gap between one's actual body size and those thin models. Thus, when people notice this gap, they suffer from a negative mood. Similarly, upward comparison to thinner models reminds an individual of the gap between their actual

body and those advertised; thus, it increases body dissatisfaction. For example, the average BMI of a model is 16 (Guardian, 2017), but more than 98 per cent of people in England in 2017 had a BMI of more than 18.5 (Parliament, 2019). In fact, a vast majority of body sizes in society is larger than the thin images advertised, hence resulting in an upward comparison for most people. Concurrently, these unpleasant feelings of body dissatisfaction and negative mood make the individual to take an action which either helps the person to escape from them or to address them (see compensatory consumption behaviour). Despite the mixed predictions, this thesis suggests that the negative mood and body dissatisfaction result in an increase in purchase intention of healthier branded food products (direct resolution) rather than unhealthier ones (escapism). According to Lisjak et al. (2014a) , escapism compensatory consumption does not work when the act of consumption emphasises self-discrepancy again. Lisjak et al. (2014a) note that people avoid consuming products that remind them of exhibiting self-discrepancy. Regarding the food domain, when a consumer is sad because of not having an idealised thin body, they cannot improve their mood and body image by eating unhealthier foods. This is because the act of eating/buying unhealthier food reminds consumers about their dissatisfied bodies. In conclusion, thin images increase one's engagement with healthy behaviours (e.g., buying healthy foods) through worsening a person's mood and body dissatisfaction.

In contrast, exposure to plus-size images results in downward social comparison (Moreno-Domínguez et al., 2019). Next, the downward social comparison could possibly generate a positive mood and body satisfaction (Irving, 1990, Lin and Kulik, 2002, Dittmar and Howard, 2004). This is because when people compare themselves

to less fortunate others, they start feeling better (Wills, 1981). As a result of comparing their own body size to the other person's, they start feeling better and more comfortable about their own body. Thus, better mood and reduced body dissatisfaction could lower a person's tendency for healthy behaviours (such as drinking Diet Coke), as compensation is no longer needed. With the absence of a perceived gap between one's ideal and current state of body, the desire to become thinner declines, and compensatory consumption behaviour loses relevance (Randles et al., 2013). Similarly, based on static affect evaluation and dynamic affect regulation theories (Andrade, 2005), a person with a positive mood not only perceives the positive sides of food (e.g., its tastiness) but also engages in activities that help them keep their current positive mood (like indulging) (mood maintenance Clark and Isen (1982) as cited in Andrade (2005), p.356). In conclusion, plus-size images increase one's engagement with unhealthy behaviours (e.g., buying unhealthy foods) through improving a person's mood and body dissatisfaction.

2.5 Time Perspective and Temporal Construal Theory:

According to temporal construal theory, a psychological distance such as distance in time could affect people's thinking and decision-making (Trope and Liberman, 2000, Trope and Liberman, 2003, Trope and Liberman, 2010, Trope, 2012). The theory indicates that when people think of an object or an event in the present vs future, they adopt either low-level or high-level construal respectively. According to the theory, low-level construal enables people to think of the details of a near object/event, while high-level construal enables people to think of general features of a distant object/event (Trope and Liberman, 2003). For example, someone might think of a trip

happening in the near future; thus, the person might think of details about the trip, such as finding a place to stay or booking a train ticket (low-level thinking). However, if that person thinks about a trip in the distant future, he/she might think of the general features of a trip, such as which country/city to travel to (high-level thinking). Since low-level and high-level thinking could remind different characteristics of an event to mind, they could also affect someone's decision-making and actions. Accordingly, high-level thinking could lead to greater self-control (Freitas et al., 2001, Frederick et al., 2002, Fujita et al., 2006).

Furthermore, the activation of high-level thinking could help someone act according to one's future goals (Fujita et al., 2006). Thus, high-level construal allows people to sacrifice their short-term goals to achieve their long-term goals. This behaviour is known as exerting self-control (Wertenbroch, 1998, Trope and Fishbach, 2000, Fujita et al., 2006). For example, a dieter who has the (long-term) goal to lose weight would forgo eating a delicious snack (i.e., short-term hedonic goal) if he/she thinks of having a healthy lifestyle (abstract high-level thinking). Therefore, the dieter performs in accordance with his/her long-term goals by exerting self-control. To be more exact, the dieter in the example prefers delayed outcomes to immediate ones.

For those with higher BMIs (normal, obese, and overweight), thinness perception (lower BMI) might be associated with a self in a distant future. Thus, thinking of self in the future could make consumers adopt a future time perspective unconsciously, which evokes high-level construal. Later, that high-level construal helps consumers exert self-control and act congruently with their long-term goals, such as having a healthy lifestyle. Thus, exposure to thin images might increase the purchase intention

of healthier branded food products. According to Trope and Liberman (2003), priming a distant future enhances the construal level, which helps consumers with self-control. Rabinovich et al. (2010) suggested that when participants were asked to think of their financial status (time perspective manipulations) within the next five years (distant future), participants showed a strong consistency between their attitude and intention towards saving compared to the participants that had been asked to think of their financial status with the next month (near future). Thus, thinking about the distant future could decrease the gap between attitudes and behaviour for long-term goals (Rabinovich et al., 2010) and thinking of a distant future-self evokes high-level construal among consumers (Wakslak et al., 2008). While the future-focused time perspective is associated with future goals, healthy eating and self-control behaviour, the present-focused time perspective is associated with immediate rewards, less self-control and hedonistic behaviour (Rothspan and Read, 1996, Keough et al., 1999, Boyd and Zimbardo, 2006, Crockett et al., 2009, Zimbardo and Boyd, 2015). Therefore, theoretically, it is expected to see that plus-size images are associated with the present (as opposed to thin images and the future-focused time perspective); subsequently, this should be connected to hedonic behaviours such as snacking and eating unhealthier foods.

2.6 Body Image Discrepancy:

Compensatory consumption behaviour is one of the two overarching frameworks conceptualising the current study's model. Since compensatory consumption behaviour emphasises the gap between one's current and ideal body image as the main motivation to engage in healthy or unhealthy behaviour (Sela and Shiv, 2009), it is

crucial to consider this variable in the study's model to evaluate under what circumstances this can strengthen/weaken the relationships associated with thinness perception. According to Halliwell and Dittmar (2006) and Vartanian (2012), a person's level of self-discrepancy could influence their eating behaviour, as well as their mood and body dissatisfaction (Higgins, 1987, Packard and Wooten, 2013, Sobol and Darke, 2014a). These discrepancy levels could vary from one person to another. For example, a person who perceives their body as close to their ideal could have less psychological discomfort (such as negative mood and body dissatisfaction) and subsequently less motivation for healthy behaviours following their exposure to thin images.

In order to evaluate if the above relationships vary for the participants in this study, it is necessary to include a moderator variable in the study's model that could measure the gap between one's actual and ideal body image. Accordingly, self-discrepancy is defined as "an incongruity between how one currently perceives oneself and how one desires to view oneself" (Higgins (1987) as cited in Mandel et al. (2017), p.134). In terms of body image, this discrepancy is the gap between one's actual and ideal body image (Vartanian, 2012). For instance, if a person with a BMI of 30 (overweight) thinks that they have to/desire a BMI of 18 (thin), then they have a body image discrepancy. Thus, the researcher suggests measuring participants' body image discrepancy to evaluate how this could affect the relationships related to thinness perception. This evaluation could reveal if the association between thinness perception and purchase intention of healthier branded food products is stronger for a certain group of individuals (such as those who desire to be thinner).

2.7 Conclusion:

This chapter presented the literature review. The chapter provided information from previous works about thin and plus-size images. Further, it details the theories of social comparison, compensatory consumption behaviour theories, self-discrepancy, and temporal construal. In addition, it supplies information regarding mood, body dissatisfaction, time perspective, and body image discrepancy. The next chapter represents the hypotheses developments as well as the study's conceptual framework.

Chapter 3 – Hypotheses Development and Conceptual Framework

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3.1 Introduction:

This chapter presents the rationale for each hypothesis' development and conceptual framework. The chapter is organised as follows. The first section (section 3.2) offers the hypotheses development based on the literature and the thesis' research questions/objectives. Subsection 3.2.1 describes the research's primary effects to be tested. Subsection 3.2.2 presents mediated effects. Next, subsection 3.2.3 explains moderated effects. Then, section 3.3 presents the conceptual framework showing relationships between variables. Finally, section 3.4 offers the chapter's conclusion.

3.2 Hypotheses Development:

This section explains the hypotheses' development and rationale. It consists of three subsections describing the research's main effects (H1 and H2), mediation effects (H3, H4, H5, H6, H7, and H8) and moderation effects (H9, H10, H11, and H12). It should be noted that for branded food/beverage products, defining them as healthy or unhealthy seems to be irrational. For example, accepting Diet Coke as a healthy beverage might not be logical, however Diet Coke could be considered as a healthier option compared to regular Coke as it has less sugar/calorie. Thus, in this thesis, the researcher uses the terms healthier and unhealthier options.

3.2.1 Main Effects (H1 and H2)

Exposure to idealised images (e.g., thin, muscular images) can have contrasting impacts on one's eating and food-purchasing behaviour. For example, it could increase one's self-control, thus, resulting in sticking to one's diet plan or choosing healthier food options (Collins, 1996, Mills et al., 2002, Joshi et al., 2004). However, it could also affect one's body image and self-esteem negatively, which could lead to eating disorders (e.g., unhealthy food eating or excessive restrictions on food intake) (Grogan et al., 1996, Cattarin et al., 2000, Agliata and Tantleff-Dunn, 2004, Dittmar and Howard, 2004, Clay et al., 2005, Blond, 2008, Legenbauer et al., 2008, Ata et al., 2013, Halliwell, 2013, Hausenblas et al., 2013, Tiggemann and Slater, 2013, Benton and Karazsia, 2015, Fardouly et al., 2015). Like eating, food purchasing behaviour is affected by exposure to thin images. Therefore, there is a need to investigate how perceiving thin images could impact one's purchase intention of healthier and unhealthier branded food products. As outlined by Mandel et al. (2017), as a consequence of comparing one's self to idealised images (like thin images), one might choose the option which could help them to become closer to the idealised image (known as the direct resolution strategy). Alternatively, the person might choose another option which could shift their thoughts to something else (known as escapism) (Heatherton and Baumeister, 1991). Although the person might use any of the two strategies, the researcher predicts that the person will use the direct resolution. This prediction is based on Tesser et al. (2000), Lisjak et al. (2014a), and Lisjak et al. (2014b) suggesting that engaging in escapism does not work when the consumption reminds the consumer of their psychological discomfort. Therefore, it is expected that when participants are rating their intention to purchase branded food products

(healthier and unhealthier), perceived thinness will have an association (positive) with the purchase intention of healthier branded food products. According to the above, the following hypothesis is suggested:

H1: Perceived thinness is associated (positive) with the purchase intention of healthier branded food products.

In contrast to perceived thinness, perceived plus-sizeness should possibly have an effect on the purchase intention of unhealthier branded food products. Studies suggest that individuals exposed to plus-size images reported increased body satisfaction and decreased social comparison (Clayton et al., 2017). These two, in turn, drop one's preference for healthy food, increase one's intended/actual food intake, and reduce the motivation for having a healthy lifestyle (Lin and McFerran, 2016, Clayton et al., 2017). In contrast, Simon and Hurst (2021) reported that their participants did not choose less healthy food choices after viewing pictures of women with larger body sizes. Because of the inconsistency in the literature, the effect of plus-sizeness perception on food purchasing intention is worth investigating. Following the social comparison theory (downward comparison), the researcher expects that when participants are rating their intent to purchase branded food products (healthier and unhealthier), perceived plus-sizeness will have an association (positive) with purchase intention of unhealthier branded food products. According to the above, the following hypothesis is suggested:

H2: Perceived plus-sizeness is associated (positive) with the purchase intention of unhealthier branded food products.

3.2.2 Mediation Effects (H3, H4, H5, H6, H7, and H8):

In order to explain the proposed relationship between perceived thinness and purchase intention of healthier branded food products (H1), the researcher suggests considering the role of mood in relation to thinness perception and food buying behaviour. Several studies emphasise on the fact that mood is associated with both thin images and food related behaviours (Ata et al., 2013, Halliwell, 2013, Kleemans et al., 2018, Brown and Tiggemann, 2016, McComb et al., 2023, McComb and Mills, 2020) highlighting its role in understanding the above proposed relationship.

Previous studies consistently indicate that there is a positive correlation between exposure to thin images and negative mood (Harper and Tiggemann, 2008, Hawkins et al., 2004, Anixiadis et al., 2019). Social comparison theory explains this phenomenon, suggesting that when individuals perceive a negative difference between themselves and others (upward comparison), it leads to a decline in mood (Festinger, 1954, Wills, 1981, Sobol and Darke, 2014a, Fardouly et al., 2015, Tiggemann and Zaccardo, 2015). In line with compensatory consumption behaviour, individuals attempt to improve their mood by consuming products that bridge the identified gap or redirect their thoughts (Mandel and Smeesters, 2008, Kim and Gal, 2014, Mandel et al., 2017). Accordingly, Lisjak et al. (2014a) argues that when a product reminds consumers of their identified gap, they tend to avoid consuming it. In the context of this study, the researcher suggests that individuals experiencing negative mood after seeing thin images, are likely to intentionally choose healthier products. This implies a conscious decision to address negative emotions by opting for products promoting a healthier lifestyle. Thus, it can be concluded that negative mood which is resulted from

comparison to thin images could be linked to healthier consumption. Based on the above, the researcher suggests the following hypothesis:

H3: Mood is expected to positively mediate the association between perceived thinness and purchase intention of healthier branded food products.

Similar to mood, several studies suggest that body dissatisfaction is also associated with exposure to thin images and food related behaviour (Ata et al., 2013, Halliwell, 2013, Hausenblas et al., 2013, Tiggemann and Slater, 2013, Benton and Karazsia, 2015, Fardouly et al., 2015, Möri et al., 2022). As in H3, social comparison and self-discrepancy seem to play critical role in the relationship between exposure to thin images and body dissatisfaction (Halliwell and Dittmar, 2005, Fardouly et al., 2015, Tiggemann and Zaccardo, 2015, Möri et al., 2022). According to previous studies (Tiggemann and Slater, 2013, Benton and Karazsia, 2015), upward comparison to thinner models increases one's drive for thinness. Later, the drive for thinness, which is resulted from exposure to thin images, leads to dieting and restricting food intake (Jiotsa et al., 2021). Thus, it could be anticipated that becoming less satisfied with body raises the willingness to consume healthier foods; since healthier foods could help a consumer reach the desired level of thinness. From the above, the following hypothesis is suggested:

H4: Body dissatisfaction is expected to positively mediate the association between perceived thinness and purchase intention of healthier branded food products.

An individual's social comparison condition will change from upward to downward comparison following exposure to plus-size images (Moreno-Domínguez et al., 2019). This downward comparison results in a better mood state, as outlined by Wills (1981) "persons can increase their subjective well-being through comparison with a less fortunate other." (p. 245). Thus, exposure to models perceived as plus-size should theoretically generate a positive mood. Later, the positive mood increases consumption by drawing attention to the positive sides of food (such as taste, fattiness, etc.) (Andrade, 2005). Therefore, the researcher suggests that a positive mood increases the preference for unhealthier foods. Based on the above, the following hypothesis is formed:

H5: Mood is expected to negatively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.

In contrast to thin images, exposure to plus-sized images decreases body dissatisfaction (Moreno-Domínguez et al., 2019, Hendrickse et al., 2021, Talbot et al., 2021). Exposure to plus-sized images generates downward social comparison, which later results in a decrease in body dissatisfaction (Irving, 1990, Lin and Kulik, 2002, Dittmar and Howard, 2004). Thus, one who feels more satisfied with one's body might not feel the need to engage in healthy habits anymore. To be more exact, one might lose their motivation to reduce their body dissatisfaction levels by purchasing healthy food brands since their body dissatisfaction has already been reduced due to exposure to plus-size images. Thus, a consumer might have a tendency to purchase unhealthy food brands rather than healthy ones. From the reasoning above, the following hypothesis is suggested:

H6: Body dissatisfaction is expected to negatively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.

While the future-focused time perspective is associated with future goals, healthy eating and self-control behaviour, the present-focused time perspective is associated with immediate rewards, less self-control and hedonistic behaviour (Crockett et al., 2009, Zimbardo and Boyd, 2015). In general, the future-focused time perspective is associated with health maintenance behaviours, whereas the present-focused time perspective is associated with health-compromising behaviours (Keough et al., 1999). From the above explanations, the researcher suggests that time perspective plays a mediating role in the relationship between perceived thinness (and plus-sizeness) and purchase intention of healthier (and unhealthier) branded food products. From the above explanations for future-focused and present-focused time perspectives, the following hypotheses are suggested:

H7: Time perspective is expected to negatively mediate the association between perceived thinness and purchase intention of healthier branded food products. Specifically, the future-focused time perspective mediates the relationship.

H8: Time perspective is expected to positively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products. Specifically, the present-focused time perspective mediates the relationship.

3.2.3 Moderation Effects (H9, H10, H11, and H12):

As stated by Higgins (1987), self-discrepancy is when a person perceives their current state as not matching their desired or ideal state. The same applies when a person perceives their ideal body image to be different from their actual one (Vartanian, 2012). This gap is called body image discrepancy. The motivation to reduce this body-related self-discrepancy is believed to cause people to engage in compensatory consumption behaviour (Vartanian, 2012, Mandel et al., 2017). The critical point about this type of discrepancy is that everyone's current and desired states are different from others. In fact, someone's ideal state might be the actual state of another person. A person's current body state might be close to what they desire; thus, the person might have less motivation to reduce this gap. To this end, the person engages less in activities that help reduce the gap. The stated process might be entirely different for another person with a more significant body image discrepancy. Based on Vartanian (2012), a person's level of body image discrepancy could influence appearance-related behaviour (e.g. restrictions on food intake). The current study is interested in investigating if certain groups of individuals will be affected more by thinness perception. This helps the researcher to gain a deeper understanding of whether the relationship between thinness perception and purchase intention of healthier branded food products is stronger for one group. Accordingly, following previous work (McComb and Mills, 2022b), this moderation analysis assists the researcher to examine if certain group of individuals are more vulnerable in regard to thinness perception (for example, their mood). Therefore, as for the current study, all the dependant variables that are hypothesised to be associated with thinness perception, could have either stronger or weaker association among individuals with different levels of body image discrepancy. Following Sánchez et al. (2018), body image

discrepancy could be classified into three categories, a) happy with the current state, b) desire to be thinner, and c) desire to be heavier. Based on the classification above, this study suggests the following hypotheses:

H09: Body-image discrepancy moderates the association between perceived thinness and purchase intention of healthier branded food products. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body. Specifically, the relationship between perceived thinness and purchase intention of healthier branded food products is stronger for those who desire to be thinner.

H10: Body-image discrepancy moderates the relationship between perceived thinness and mood. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body. Specifically, the relationship between perceived thinness and mood is stronger for those who desire to be thinner.

H11: Body-image discrepancy moderates the relationship between perceived thinness and body dissatisfaction. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body. Specifically, the relationship between perceived thinness and body dissatisfaction is stronger for those who desire to be thinner.

H12: Body-image discrepancy moderates the relationship between perceived thinness and time perspective. The relationship for those who desire a thinner body is

significantly different from the relationship for those who desire a heavier body. Specifically, the relationship between perceived thinness and time perspective is stronger for those who desire to be thinner.

3.3 Conceptual Framework:

The following figure shows the relationship between variables based on the hypotheses presented in the previous section. As illustrated, the above path in the figure shows the relationship between perceived thinness and purchase intention of healthier/(H1). Similarly, the below path shows the relationship between perceived plus-sizeness and purchase intention of unhealthier/(H2). The three boxes in the middle show the three mediator variables. As illustrated, mood, body dissatisfaction, and time perspective mediate the main relationship (H3, H4, H5, H6, H7, and H8). In addition, the box above the figure shows the moderator, body image discrepancy. The four arrows related to the moderator show moderation paths (H9, H10, H11, and H12).

Figure 1 - Conceptual Framework:
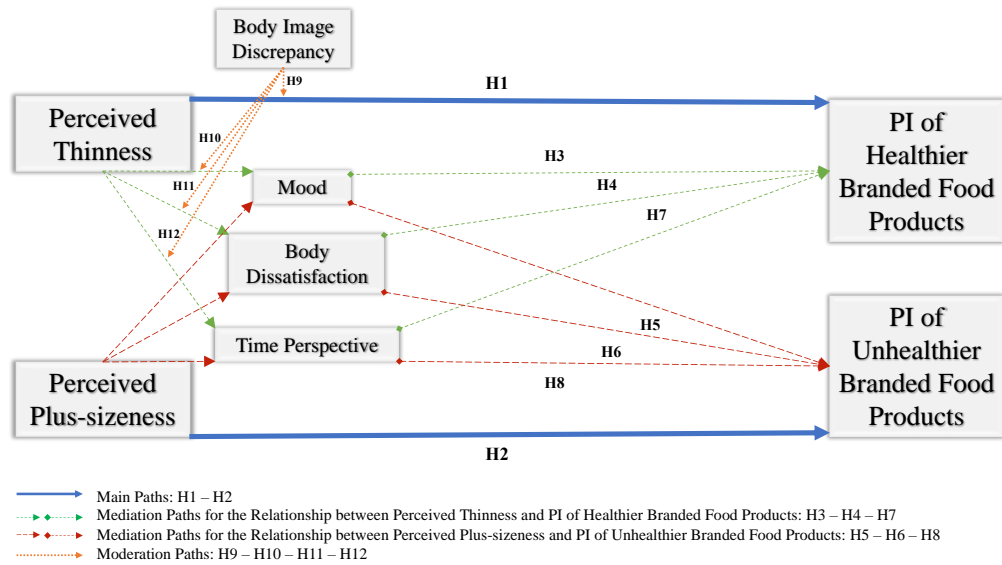
Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

3.4 Conclusion:

This chapter presented the rationale for each hypothesis's development based on the explanations presented in the literature review chapter. Twelve hypotheses were proposed to test the study's statical model. In addition, it introduced the study's conceptual framework, which helps with a better understanding of the relationship between variables. The next chapter discusses the thesis's methodology, philosophical approach, and data collection procedure.

Chapter 4 – Methodology

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4.1 Introduction:

The current chapter presents the methods, design, and data collection procedures. This research aims to investigate the relationships between thin/plus-size perceptions and purchase intention of healthier/unhealthier branded food products. In addition, it studies the role of mood, body dissatisfaction, and time perspectives as underlying mechanisms for the above relationships. Moreover, it examines the role of body image discrepancy as a moderator. This thesis adopts a positivist approach and uses a survey-questionnaire for the purpose of data collection. The researcher uses the correlational method to explore the possible associations among the above-stated variables. This chapter is structured as follows. First, sections 4.2 and 4.3 introduces the research philosophy, approach, and method. Next, section 4.4 discusses the data collection, sampling frame, geographical scope. Then, section 4.5 explains the research instruments development. Section 4.6. introduces the analysis approach. Finally, section 4.7 presents the conclusion.

4.2 Research Philosophy:

As defined by Mills and Birks (2014), philosophy is about how individuals view the world, how they view the questions and how they utilise mechanisms for findings the answers. Therefore, a researcher must develop a philosophical approach to find the answers to their questions. This also helps other academics to understand the

researcher's perspective on the utilised research methods. Accordingly, philosophy consists of ontology and epistemology perspectives. In brief, ontology is concerned with what we already know/perceive about the world, and epistemology is concerned with how we can gain knowledge to better understand the world (Denzin and Lincoln, 2011, Howell, 2013). In addition, positivism and interpretivism are two main research paradigms that help us define reality and truth. These two paradigms hold different suppositions toward ontology and epistemology (Baldwin et al., 2014). From an ontological point of view, positivism believes that reality is fixed, observable and measurable (Howell, 2013). In contrast, interpretivism is grounded on a reality that is formed by society's interpretations; thus, multiple realities exist (Steup and Neta, 2005). From an epistemological point of view, positivism is concerned with gaining knowledge through scientific and experimental research; thus, knowledge is objective and quantifiable (Howell, 2013). However, interpretivism is concerned with the researchers' experiences, therefore, knowledge cannot be quantified (Steup and Neta, 2005). From the philosophical stance, this research reflects positivism. According to Burrell and Morgan (1979), positivist researchers search for regulations and relationships in social reality; therefore, positivism could generate objective knowledge. As a result, these researchers like to generalise their findings (Remenyi et al., 1998). Therefore, positivists use existing theories to develop their hypotheses which later need to be tested by conducting empirical research (Saunders et al., 2009). In terms of the current research, the researcher assumes that reality is measurable and the knowledge for knowing reality can be obtained through scientific research. The researcher aims to collect quantified data from respondents in order to measure their perceptions toward thin/plus-size images as well as to measure their purchase

intentions. Later, the researcher could use these data to investigate the possible correlations between the stated factors.

4.3 Research Approach and Method:

For the purpose of this thesis, the researcher used a quantitative approach. According to Dawson (2019), the quantitative research method is suitable for obtaining quantified data, enabling the researcher to analyse the data with statistical tools. As stated by Saunders et al. (2009), these quantitative data are meaningless for most people until the researcher analyses and interprets them. Using quantitative data enables the researcher to test research hypotheses and thus respond to research questions with clear answers. While the qualitative method is better for establishing potential relationships among variables, the quantitative method is better for testing the relationships' existence, strength, and direction. In brief, qualitative data is about words, whereas quantitative data is about numbers (Saunders et al., 2009). In order to obtain quantitative data, the researcher used the online survey-questionnaire method. Using surveys, especially online ones, helps the researcher in many aspects. Firstly, it is less expensive and quicker than other methods (Saunders et al., 2009, Dawson, 2019). Second, it avoids non-response by programming the survey so that participants must answer all questions to be able to move to the next one. Third, it enables the researcher to collect data from a large sample (Saunders et al., 2009). Fourth, it reduces errors in transferring data to data analysis programs (De Vaus, 2013).

Moreover, the researcher has adopted the online survey-questionnaire method based on previous correlational research in consumer behaviour studies (Kim and Makana,

2015, Hendrickse et al., 2017, He and Yang, 2022, Delle et al., 2023) . According to the correlational nature of this study, an online survey-questionnaire helps the researcher to explore the associations between the perceptions and intentions of participants. However, there are researchers that used experimental methods in regard to body image studies (Mills et al., 2002, Bould et al., 2018). While experimental studies are beneficial for establishing causations, correlational studies only investigate if there is an association (either positive or negative) between two variables of interest (Coolican, 2017). For the body image related studies, previous researchers used the two methods separately or in combination (Jarman et al., 2021, Duan et al., 2022, Fioravanti et al., 2022, McComb et al., 2023, Seekis and Kennedy, 2023, Vall-Roqué et al., 2023). While the main limitation of a correlational study is that it cannot establish causation between two variables, one of the main benefits of this method is that the researcher has minimal control over the study procedure (e.g., non-manipulation) so they can use a more naturalistic observation to understand and find real-world relationships (Coolican, 2017). As mentioned above, the researcher used correlational method for the current thesis since it helps the researcher to identify the associations without manipulations, to generalise findings, and to analyse a more complex statistical model with four main variables, three mediators, and one moderator. Nonetheless, the limitation of a correlational study is acknowledged in the limitation section of the thesis.

4.4 Data Collection Information:

This section presents detailed information on the geographical scope of data collection as well as population, sampling frame and sample size. It discusses the rationale behind selecting the thesis population.

4.4.1 Geographic Scope:

Regarding the geographic scope of the research, this study examined participants living in/from the UK. Studies have mostly collected data from participants in the US, the UK, Canada, and Australia (Bourn et al., 2015, Lin and McFerran, 2016, Clayton et al., 2017, Huang et al., 2021). Generally, these countries are quite similar in terms of having developed economics and their language. Despite the sociocultural differences that could exist between any two countries, the stated countries have roughly the same rates in terms of Hofstede's six dimensions (power distance, individualism, masculinity, uncertainty avoidance, long-term goals, indulgence) (Hofstede, 2019). Specifically, the rates for Indulgence vs Restraint are quite similar, which could be considered as consumers' lifestyles and cultures. Therefore, in terms of the consumption of healthy and unhealthy food brands, it could be predicted that these countries are quite similar.

Figure 2 -The Hofstede Six Dimensions Country Comparisons
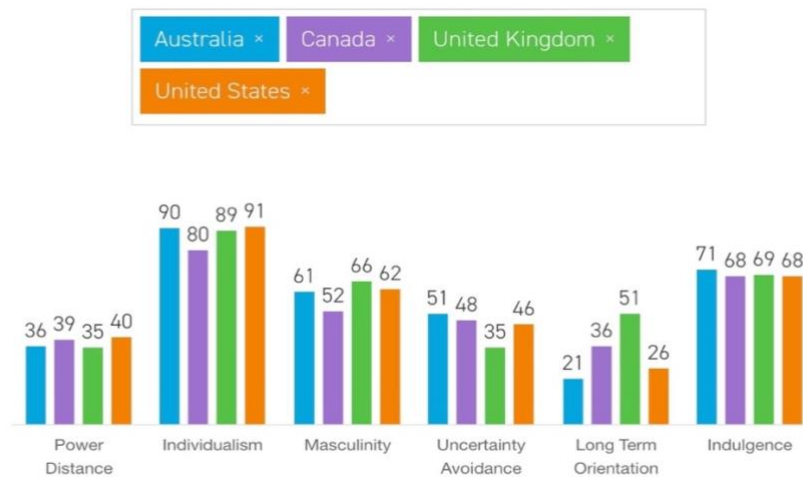
Source: Hofstede (2019)

Moreover, these countries have obesity rates which are close to one another. While obesity rates in 2019 for the world ranges from 2.10% (Vietnam) to 74.60% (American Samoa), the US, Canada, Australia and the UK have obesity rates of 36.20%, 29.40%, 29% and 27.80%, respectively (Review, 2019). In addition, in terms of average BMI, these countries share quite the same numbers, which are 28.8 (USA), 27.8 (UK), 27.2 (Canada) and 27 (Australia) (Review, 2019). According to NHS (2019), these numbers show that the average BMI for the stated countries is above the healthy range (18.5 and 24.9), which is considered overweight. Thus, in terms of people's healthy eating habits, they seem to have the same culture.

Figure 3 - The Obesity Rates and Average BMI

Countries	Obesity Rates	Average BMI
American Samoa	74.60%	34.9
United States	36.20%	28.8
Canada	29.40%	27.2
Australia	29%	27
United Kingdom	27.80%	27.8
Vietnam	2.10%	21.6

Source: Review (2019)

From the above justifications, participants from the UK would be expected to make no unpredicted difference to the study. Therefore, this study could confidently rely on the literature and could make its contribution to the existing knowledge. In addition, as the researcher is based in the UK, accessing to participants from the UK would be considerably more manageable than accessing participants in other countries. In terms of conducting a cross-country research, based on the explanations above, there appears to be no difference between developed countries. However, conducting a cross-country between a developed country and a developing/undeveloped country necessitates additional financial resources as well as comprehensive understanding of the nuances in data collection processes within a foreign context. This could pose a significant challenge to a researcher based in the UK. Finally, the results of the data analysis from the UK participants are more likely to be of interest to researchers and academics in the UK.

4.4.2 Population, Sampling Frame and Sample Size:

According to De Vaus (2013), an ultimate goal of a research is to generalise its findings. Therefore, it is essential first to define a suitable population from which the

samples would come. According to the previous section (Section 4.4.1), the geographical scope of this thesis is the UK. Accordingly, the population for the current thesis is adults living in/from the UK. Previous studies on the topic of body image mainly used participants from university students and/or only female samples and/or restricted the participants' BMIs (Irving, 1990, Baker et al., 1995, Bissell and Zhou, 2004, Tiggemann and McGill, 2004, Tiggemann and Slater, 2004, Aubrey, 2006, Martin et al., 2007, Clayton et al., 2017, Hendrickse et al., 2017, Bould et al., 2018, Gierl, 2019, Stewart and Ogden, 2021, Cornil et al., 2022). However, the current thesis expanded the population to all adults living in/from the UK, including male and female, student-and-non-student participants with all ranges of BMIs so that the results could be generalised to real-world consumers. This way the results will be also interesting for companies and managers.

The researcher used Qualtrics for data collection. Qualtrics is an online platform that facilitates survey design and data collection, also it is commonly used by researchers (Armstrong et al., 2021). The list of samples was randomly obtained by Qualtrics itself and the researcher used an online panel with random respondents. The use of Qualtrics had been tested before for consumer behaviour studies (Hendrickse et al., 2017, Tiggemann et al., 2020) for recruiting participants and/or data collection in the UK (Forwood et al., 2015, Chang et al., 2020, Simon and Hurst, 2021, Stewart and Ogden, 2021).

Concerning the sample size, it is advised by some researchers to calculate the sample size before starting the data collection (De Vaus, 2013). However, there are debates on how to calculate the sample size. First, there is a famous 10 times rule by Barclay

et al. (1995). This sample size consideration indicates that the sample size should be 10 times more than the most significant number of structural paths pointing to a dependent variable in the structural model (Hair Jr et al., 2021). However, Hair Jr et al. (2021)'s guidelines suggest another way of calculating the sample size for PLS-SEM analyses. As suggested by Hair Jr et al. (2021) and following Cohen (1992)'s guidelines, researchers should consider three criteria to calculate the sample size. These three criteria are minimum R squared values, desired significance level at a common statistical power of 80 percent, and the maximum number of arrows pointing at a construct. Therefore, based on Hair Jr et al. (2021)'s guidelines, the minimum sample size needed for the current thesis is 130. In addition, while PLS-SEM is suitable for even smaller sample sizes, it is generally advised to have larger sample sizes so the quality of estimations could be increased (Hair Jr et al., 2021, Cohen, 1988). This especially helps to improve the quality of estimations for heterogenous samples (Robson, 2002). For the purpose of this thesis, the researcher collected data from 447 samples (Females = 51%). This large sample size number was essential since the researcher needed to analyse the data for sub-groups (e.g., females and males) to investigate if there was a significant difference in results.

4.5 Preliminary and Main Study Research Instruments and Designs:

The current section explains the designing process, scales that were used and the procedures for participants that took part in preliminary and main studies.

4.5.1 Preliminary Study Research Instruments and Design:

Following previous research (Clayton et al., 2017, Gierl, 2019), the researcher conducted a preliminary study. As suggested by Saunders et al. (2009), based on the research objectives, some researchers need to run a preliminary study to see if their research ideas are feasible. According to the current thesis, the researcher aimed to study the relationship between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products. The objectives of preliminary study were as follows: a) selecting models' pictures based on their body sizes by testing whether participants perceive them as thin (a proxy for idealness)/plus-size for females and muscular vs thin (a proxy for idealness)/plus-size for males. b) to compare the strengths of the correlations between ideal-body-and-thinness vs ideal-body-and-muscularity for males. This helps the researcher to identify whether a muscular or a thin male body serves as a proxy for idealness. c) selecting branded food products by measuring participants' perceptions towards the selected sub-brands regarding their healthiness/unhealthiness. d) testing if participants are generally familiar with the selected branded food products.

In order to design the preliminary study, the researcher had to select suitable images of models. Following previous research (Papies and Nicolaije, 2012, Melbye et al., 2015), the researcher required images of models that could be digitally altered so that they can illustrate different body sizes. This way the researcher would be able to only examine the effect of models' body sizes while controlling all other features of those model (e.g., face, cloths, etc) (Simon and Hurst, 2021). Following previous studies (Clayton et al., 2017, Hendrickse et al., 2021), the researcher selected several pictures from various online apparel websites such as (Target.com) and (Evans.co.uk). Since

the research is taking place in the UK, following previous research (Bould et al., 2018), the researcher selected models that represent white ethnicity as this is the predominant ethnic group in the UK (Coates, 2021, Scotlandscensus.gov.uk, 2021). Each picture was first tested by various mobile phone applications such as (Peachy) and (Slim-&-Skinny)[2] to see whether they can be further altered by (Photoshop). As a result, the researcher selected eight different models that could be reshaped into different sizes/shapes according to the research's objectives. Later, each model's picture was digitally altered by a Photoshop expert to show three different sizes for females and four different sizes for male. Pictures of the final versions can be found in Chapter 5 (figures 4 and 5).

Following suggestions by Chrysochou and Nikolakis (2012) on using real brands, the researcher selected a number of food and beverage brands. To be able to make a comparison between healthier and unhealthier ones, each food/beverage brand had to have a healthier option and an unhealthier option (sub-brands). Following previous studies (Anschutz et al., 2009, Westover and Randle, 2009, Martin and Xavier, 2010, Chrysochou and Nikolakis, 2012, Melbye et al., 2015, Simon and Hurst, 2021), the researcher selected branded food products from the following food/beverage categories: soft drink, hamburgers and fast food, dairy products, crisps, confectionary, sport drink, energy drink, and vegetarian food. In addition, in order to obtain greater generalisability, the researcher added more food/beverage categories to test in the preliminary study (e.g., seafood, alcoholic drink, and hot beverage). Accordingly, each selected brand is different from other brands in terms of its category. Each selected

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[2] Peachy and Slim-&-Skinny are smart phone applications that enable users to edit their body pictures by either increasing/decreasing widths/heights of the pictures or add/cut volumes from parts of their body. These applications are designed to be used by regular users and do not provide high quality results.

brand presents one of the following food/beverage types: soft drink, fast food, confectionary, breakfast, energy drink, canned seafood, dairy, alcoholic beverage, sports drink, vegetarian canned food, crisps, and hot beverage. The selected brands were as follows: Coca-Cola, McDonald's, Snickers, Kellogg's, RedBull, John West, Morrisons Yogurt, Budweiser, Lucozade, Heinz Beanz, Walkers, and Costa. The results of the preliminary study are discussed in Chapter 5.

For the purpose of the preliminary study, the researcher used 7-point scales for measuring body size perceptions, healthiness of foods and brand familiarity. Table 2 presents an overview of the measures used.

Table 2 - Preliminary Study Scales

	Scales Used
Body Size Perceptions	Four items 7-point Agreement/Disagreement Likert scales measuring study's four body attributes: thin, ideal, plus-size, and muscular. Adapted from various studies (Häfner and Trampe, 2009, Diedrichs and Lee, 2010, Papies and Nicolaije, 2012, Hendrickse et al., 2021)
Perceived Healthiness	One item 7-point Likert Scale measuring healthiness of each branded food product (Werle et al., 2013).
Brand Familiarity	One item 7-point Likert scale (Kent and Allen (1994) as cited in Malär et al. (2011), p.41).

4.5.2 Main Study Research Instruments and Design:

After running and analysing the preliminary study, the researcher designed the main study. However, prior to running the main study, following previous research (Bissell and Zhou, 2004, Diedrichs and Lee, 2010, Fardouly et al., 2015) the researcher conducted a pilot study to test the main study's model with fewer samples (Kempf-Leonard, 2004). The results of the preliminary and pilot study could be found in chapter 5.

Based on the correlational nature of this thesis, the researcher had to measure perceptions and intentions of the participants through self-report answers, so they could explore the associations between thinness/plus-size perceptions and purchase intention of healthier/unhealthier branded food products. The main study measured perceived thinness, perceived plus-sizeness, mood, body dissatisfaction, time perspective, body image discrepancy, and purchase intention of healthier and unhealthier branded food products. Moreover, the main study asked respondents about their demographic information. In addition, the main study assesses hunger/thirst as a control variable and service compatibility for the purpose of addressing common menthod variance. This section presents the scales used in the questionnaire. Table 3 shows a review of the scales.

Table 3 - Main Study Scales

Conceptual Framework Constructs	Scales Used
Perceived Thinness	Three items 5-point bipolar adjective scales. Adapted from Brathwaite and DeAndrea (2021).
Perceived Plus-sizeness	Three items 5-point bipolar adjective scales. Adapted from Brathwaite and DeAndrea (2021).
Mood	Five items 10cm VAS scales (Tiggemann and McGill, 2004)
Body Dissatisfaction	Three items 10cm VAS scales (Tiggemann and Slater, 2004)
Time Perspective	Eight items 5-point Likert scales (Zimbardo and Boyd, 1997)
Body Image Discrepancy	Two Stunkard Figure Rating Scales to measure participants' own body size perceptions and ideal body size perceptions. (Stunkard, 1983)
Purchase Intention	Three items 5-point bipolar scales (Spears and Singh, 2004)
	Control Variable
Hunger/Thirst	A single 5-point Likert scale (Harris et al., 2009)
	Common Method Variance
A Mobile Transaction (Service Compatibility)	Three items 5-point scales (Kleijnen et al., 2007)
	Attention Check
Attention Check	A single multiple option item (Oppenheimer et al., 2009)
	Other Scales for Post-hoc Analysis
Endorser-viewer Similarity	Three items 5-point Likert scale (Munnukka et al., 2016)

Conceptual Framework Constructs	Scales Used
Perceived Muscularity	A single item scale (Diedrichs and Lee, 2010)
Perceived Attractiveness	Four items 5-point scale (Munnukka et al., 2016)
Brand Attitude	Three items 5-point scale (Goldsmith et al., 2000)
Brand Affect	Three items 5-point scale (Chaudhuri and Holbrook, 2001)
Demographic	
Age (open end question)	
Gender (single choice question)	
Income (single choice question)	
Education (single choice question)	
Height and Weight (BMI) (dropdown list)	

A. Perceived Body Sizes:

Perceived thinness and perceived plus-sizeness could be measured on a single bipolar scale with two adjectives representing two opposite ends (Brathwaite and DeAndrea, 2021). For example, the researcher could use a bipolar scale with one side representing thin and the other side representing plus-size. However, it was decided to separate the two ends of body size perceptions and measure them. Therefore, the researcher used two sets of three-item scales for measuring perceived thinness and perceived plus-sizeness separately. For example, a participant needed to rate their perception on two bipolar scales from plus-size to medium-sized and from medium-sized to thin. The rationale for measuring body size perceptions separately was to include those body types that might not fall on a single bipolar scale (Plus-size to thin) continuum (e.g., skinny fat). According to Yetman (2021), skinny fat individuals have normal BMI but less muscle mass and more body fat. Therefore, it is common that these individuals' bodies do not merely represent thinness or plus-sizeness. In addition, they cannot be

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classified as medium-sized. The medical term for skinny fat is 'normal weight obesity' (Castañon, 2022). According to Franco et al. (2016), these individuals would have different body compositions (the percentage of fat, bone, muscle and water in the body), which BMI cannot describe. As body fat distribution is based on each individual's gender, age, genetics, ethnicity, etc., for normal weight obese people, body fat may or may not be evenly distributed in their bodies (Franco et al., 2016). Thus, an individual with normal weight obesity might have thin-like shoulders and arms with a rounded waist and vice-versa. In this case, the person might be perceived as both slightly thin and slightly plus-size, since they show both symptoms. For this purpose, the researcher measured thinness and plus-sizeness perceptions separately.

B.   *Mood:*

The mood is defined as short-term emotions (Colman, 2015). To measure mood, researchers need to measure a number of emotions. Following Heinberg and Thompson (1995), mood was measured by measuring depression, happiness, confidence, anger, and anxiety. For each feeling, participants were asked to rate their current feelings from 0 = Not at all to 10 = Very much on a visual analogue scale (VAS). To calculate this variable, five items were averaged (positive mood items were reversed) (Tiggemann and McGill, 2004, Mills et al., 2018).

C.   *Body Dissatisfaction:*

Body dissatisfaction is defined as a negative attitude about an individual's own physical appearance (Heider et al., 2018). Following Tiggemann and Slater (2004), body dissatisfaction was measured by measuring three items: 'Being Fat', 'Being Physically Attractive', and 'Being Satisfied with Body Size and Shape'. For each statement, participants needed to rate from 0 = Not at all to 10 = Very much on a visual

analogue scale (VAS). To calculate this variable, three items were averaged (two positive items were reversed) (Fardouly et al., 2015).

D. Time Perspective:

Generally, time perspective is defined as the nonconscious perception of time categories (past, present, and future) based on personal/social experiences that could affect a person's goals, decision-making, and behaviours (Zimbardo and Boyd, 1997, Crockett et al., 2009). The two future and present-focused time perspectives are believed to have associations with health maintenance and health-compromising behaviours, respectively (Keough et al., 1999). Following previous studies (Zimbardo and Boyd, 1997, Keough et al., 1999, Crockett et al., 2009, Gardner et al., 2014), this variable was measured by averaging eight items on 5-point Likert scales. The items were coded so that higher ratings indicate a present-focused time perspective and lower ratings indicate a future-focused time perspective (Gardner et al., 2014).

E. Body Image Discrepancy:

Body Image Discrepancy is the gap between one's actual and ideal bodies (Clayton et al., 2017) which is originated from the self-discrepancy theory by Higgins (1987). The differences between these two scales indicate participant's level of body image discrepancy. Following previous studies (Vartanian, 2012, Sánchez et al., 2018), two Stunkard Figure Rating Scales (Stunkard, 1983) were used to measure participants' actual and ideal body sizes. The mathematical gap between these two scales' ratings shows the level/direction of body image discrepancy (Hendrickse et al., 2021).

F. Purchase Intention:

Purchase intention is defined as an individual's conscious effort to purchase a certain product, brand, or service in the future ((Spears and Singh, 2004) and (Wu et al., 2011) as cited in Calvo-Porral and Lévy-Mangin (2017), p.931). This is measured by three

items 5-point scale. The purchase intention variable was computed based on the average scores of the three items (Choi and Miracle, 2004). The purchase intention for healthier and unhealthier branded food products was calculated separately.

G. Hunger/Thirst:

Participants' hunger/thirst status was measured as a control variable to ensure that this has not affected the study's statistical model. A single-item scale was used to measure hunger/thirst (Harris et al., 2009).

H. Service Compatibility (Marker Variable CMV):

A Mobile Transactions (Service Compatibility) scale has been sleeted and used as a marker variable (Kleijnen et al., 2007). Service compatibility measures a person's attitude toward mobile services (Kleijnen et al., 2007). The researcher added a marker variable to avoid common method variance based on the guidelines provided by (MacKenzie and Podsakoff, 2012, Chin et al., 2013). Based on the suggestions, the marker variable should have the same scale type and should not have any theoretical relation to other measures (Spector et al., 2019). The service compatibility was calculated by the sum of three items 5-point Likert scales.

4.6 Data Analysis Approach:

The researcher first analysed the data collected from conducting the preliminary study and then continued with the main study. In order to analyse the data for preliminary study, the researcher used SPSS. The software SPSS is a statistical software for editing and analysing the data and it has been used by researchers and students for social sciences since 1968 (Berg, 2022). The researcher used SPSS for calculating one-sample t-tests, pair-sample t-test, Spearman Correlation, Normality Test, Shapiro-

Walk, and two-related samples Wilcoxon Signed Ranked test. The details are provided in chapter 5. Moreover, the researcher used Smart-PLS to analyse the main study's data. Smart-PLS is a statistical software for analysing the data by applying PLS_SEM techniques (Hair Jr et al., 2021). The researcher chose Smart-PLS over similar software, such as AMOS and LISREL. This is because Smart-PLS is based on partial least squares (PLS) for the structural equation modelling, while AMOS and LISREL are based on covariance-based structural equation modelling. Although both techniques are suitable for analysing complex models, PLS is more flexible on potential violations of assumptions and different data types. In addition, PLS is particularly better for its predictive power (Dash and Paul, 2021). It is worth noting that while both techniques are equally effective for social sciences studies, PLS-SEM works better when the model has large number of indicators (Hair Jr et al., 2017). The researcher followed the guidelines from Hair Jr et al. (2021) and Sarstedt et al. (2021). Accordingly, Smart-PLS was used to calculate measurement-and-structural models, mediation, moderation analysis, common method variance leading to hypothesis testing. Chapters (6 and 7) provide details of the data analyses and results.

4.7 Conclusion:

This chapter presented the research methodology. It explained the research philosophy and methodological approach. In addition, it discussed the geographical scope and population definition. It provided the preliminary and main studies' research instruments and design. Finally, it introduced the data analyses approach. The next chapters (5, 6, and 7) explain the data analyses results.

Chapter 5 – Results Preliminary and Pilot Studies

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5.1 Introduction:

The current chapter provides the results of the preliminary and pilot studies. It contains information about these two stages of the thesis, data collection procedures and data analysis. The preliminary study was conducted to find suitable materials for the main study. In addition, the researcher run the pilot study to test the main study's survey with a small number of participants before progressing to the main study. It should be noted that the researcher received ethics approval from the ethics committee in advance of starting the data collection.

This chapter is structured as follows. Section 5.2 introduces the preliminary study, its results, and implications for the pilot study. Section 5.3 reports the pilot study, the results, and implications for the main study. Section 5.4 provides the chapter's conclusion.

5.2 Preliminary Study:

This section presents the respondents' characteristics, the process of conducting the preliminary study, the results, and implications for the pilot study. Prior to the pilot and main studies, there was a need for choosing the most suitable models' pictures and sub-brands. Thus, in line with previous research (Clayton et al., 2017, Gierl,

2019), the researcher conducted a preliminary study. The objectives of the preliminary study were as follows: a) selecting models' pictures based on their body sizes by testing whether participants perceive them as thin/plus-size for females and thin (vs muscular)/plus-size for males. b) to compare the strengths of the correlations between ideal-body-and-thinness vs ideal-body-and-muscularity for males. This helps the researcher to identify whether a muscular or a thin male body serves as a proxy for idealness. c) selecting branded food products by measuring participants' perceptions towards the selected sub-brands of food/beverage products regarding their healthiness. d) testing if participants are generally familiar with the selected branded food products.

5.2.1 Procedure and Demographics:

As mentioned in the previous chapter, respondents were recruited via Qualtrics online panels. Qualtrics is an online platform that facilitates survey design and data collection and is commonly used by researchers (Armstrong et al., 2021). In addition, the use of Qualtrics in body image and consumer behaviour studies has been validated by previous research (Hendrickse et al., 2017). Following previous research (Aubrey, 2006, Liu et al., 2022), all respondents who completed the survey were paid small monetary incentives by the researcher. The payment was also facilitated by Qualtrics.

The preliminary study was conducted with 124 complete responses. A total number of 174 respondents participated in the preliminary study. From the 174 respondents, 42 participants never completed the survey. Two participants failed to answer the attention check question correctly: leading to their exclusion from the study. Eight out of 132 remaining responses were eliminated because of the study's age and geographical location restrictions (e.g., below 18, not living in/being-from the UK,

etc.). Hence, the final number of successful and accepted responses was 124. Half of the respondents were female (n=62).

The average response time was 6 minutes and 7 seconds. The average age of participants was 39 (min= 18, max=80). In line with the previous research (Aubrey, 2006, Bould et al., 2018, Gierl, 2019), participants were asked to indicate their weight and height. Later, the researcher calculated the participants' BMIs (Body Mass Index). The average BMI of participants was 27 (in the overweight range). According to the NHS (2021), different weight ranges classify as: BMI<18.5 underweight, 18.5<BMI<24.9 healthy, 25<BMI<29.9 overweight, 30<BMI<39.9 obese and 40<BMI severely obese. Three participants only answered one of the height and weight questions (2% incomplete answer); therefore, the researcher was not able to calculate their BMIs. Reporting participants' BMIs is essential for future studies. Depending on the research scope, researchers might want to limit the BMI range of participants (e.g. studying normal-weight or overweight adolescents) in a similar way to some previous research (Bould et al., 2018, Gierl, 2019). However, for the current research, the researcher considered having different ranges of BMI, which helps with greater generalisability.

In line with Bould et al. (2018)'s suggestion for future studies, the researcher asked respondents to answer ethnicity questions. This is important for ensuring the samples represent the UK's national population which serves as the thesis's sample population. The respondents' ethnicities were as follows: 81.5%=White or White British, 5.6%=Indian, Pakistani, and Bangladeshi or British Indian, Pakistani and Bangladeshi, 2.4%=Asian or Asian British (Including Chinese and Other Asians), 4.8%=Mixed or

Multiple, 4.8%=Black or Black British, .8%=Other Ethnic Group. This is similar to the UK's population estimates by ethnicity (Coates, 2021, Scotlandscensus.gov.uk, 2021).

5.2.2 Selecting Models' Pictures:

As explained earlier in this chapter, one of the reasons for conducting the preliminary study was to select appropriate models' pictures based on their gender and body sizes. For this purpose, pictures of female and male models have been evaluated separately. For female models, the researcher needed to select a model that could better represent thin and plus-size versions of themselves compared to other female models. For male models, however, it was slightly different. In terms of male models, the researcher had to choose a model that could better represent thin, muscular, and plus-size versions of themselves compared to other male models. Hence, the researcher could compare the correlation strengths between ideal-and-thin and ideal-and-muscular (see section 5.2.3).

As explained in the methodology chapter (Chapter 4), participants saw one body size condition (in a randomised order) with four models. Depending on the body size that they saw randomly, participants were asked to rate on a scale from 1 to 7 (1=Strongly Disagree, 7=Strongly Agree) how much they agreed with one of the following statements: "I think the model in the picture is a thin model", "I think the model in the picture is a plus-size model", and only for male models "I think the model in the picture is a muscular-size model". Following the previous research (Gierl, 2019), the researcher selected the models who, on average, were rated higher in terms of being thin, plus-size and muscular (only for male models). The graphs below show tested

models in their modified body sizes. The following tables present the average ratings of perceptions for female and male models.

Figure 4 – Thin and Plus-size Female Model

Table 4 – Female Models' Body Size Perception Average Ratings

	Model 1	Model 2	Model 3	Model 4
Perceived Thinness	4.90	4.35	3.80	3.90
Perceived Plus-sizeness	5.05	5.36	4.05	4.50

Figure 5 – Thin, Plus-size and Muscular Male Models

Table 5 – Male Models' Body Size Perception Average Ratings

	Model 1	Model 2	Model 3	Model 4
Perceived Thinness	3.80	4.60	4.20	3.20
Perceived Plus-sizeness	4.06	3.50	4.25	3.88
Perceived Muscularity	4.21	4.21	4.43	3.64

From the above ratings, models 1 and 3 were selected as representatives for female and male models, respectively. Following previous research (Chrysochou and Nikolakis, 2012), only one model was selected (per gender). Hence the possible confounding effects (such as levels of attractiveness, clothes, and style) could be kept unchanged.

The researcher also ran one-sample t-tests to check if the means of selected models were statistically significant from the midpoint ($\mu = 4$) (Gerald, 2018). Table 6 shows the results of one-sample t-tests showing that means of the selected female model (in both thin and plus-size versions) were significantly different from the midpoint. It means that the thin version was perceived to be thin; similarly, the plus-size version was perceived to be plus-size.

Table 6 – One-sample t-tests for the Preliminary Study

	Female Model thin version	Female model plus-size version	Male Model thin version	male Model Plus-size version	Male Model Muscular Version
Mean	4.9	5.05	4.20	4.250	4.43
SD	1.334	1.812	1.373	1.612	0.852
N	20	22	15	16	14
t-statistic	3.0172	2.7180	0.564	0.620	1.888
p-value	0.007 **	0.012 *	0.581 NS	0.544 NS	0.081†

† = p<.1; * = p<.05; ** = p<.01; *** = p<.001; NS = Not significant

For the selected male model, only the mean of the muscular version was statistically significant from the midpoint at 10%. Nevertheless, this did not affect the study since the more recent analysis of the main study samples shows that all selected models and their thin/plus-size versions were statistically significant from the proposed population means ($\mu_{thin} = 1$ and $\mu_{plus-size} = 5$). The results of the one-sample t-tests could be found in Table 7. It should be noted that based on the preliminary and pilot studies analysis, the researcher eliminated the muscular version and made slight changes in the body size perceptions (e.g., using 5-point semantic scales with three items) for the purpose of the main study. These will be discussed in more detail later in the current chapter.

Table 7 – One-sample t-tests for the Main Study

	Female Model thin version	Female model plus-size version	Male Model thin version	male Model Plus-size version
Mean	2.89	2.42	2.12	2.34
SD	1.14	1.18	1.11	1.06
N	71	74	77	70
t-statistic	13.96	18.80	8.854	20.99
p-value	0.000***	0.000***	0.000***	0.000***

† = p<.1; * = p<.05; ** = p<.01; *** = p<.001; NS = Not significant

5.2.3 Correlation Tests for Thin and Muscular Male Models:

Another objective of the preliminary study was to compare the strengths of the correlations between idealness-and-thinness vs idealness-and-muscularity for males. This enables the researcher to see which one of the modified versions (thin or muscular) can act as a proxy for idealness. Before running the correlation tests, the researcher examined the normal distribution assumption (see Table 43 and Table 44 in the appendix). Since the population is less than 50, the Shapiro-Wilk test was conducted (Laerd, 2021c). The normality test results revealed that three variables had values below 0.05; thus, they were not normally distributed (Field, 2000, Laerd, 2021c). Since the normal distribution assumption was violated, a non-parametric test such as Spearman Correlation is required (Field, 2000, Laerd, 2021b). Laerd (2021b) suggests that it should be a monotonic relationship between two variables to conduct a Spearman Correlation test. In order to check the monotonic relationship, the researcher conducted linearity tests between every two variables. As all the relationships were linear (see Table 45 in the appendix), it can be concluded that they were monotonic as well (Minitab, 2021). Subsequently, the researcher conducted the

Spearman Correlation test between each thin model's perceived idealness and perceived thinness, as well as between each muscular model's perceived idealness and perceived muscularity. It is important to note that there are four distinct models, each of which has been altered to represent two different body shapes – thin and muscular. The following tables show the results from the Spearman Correlation tests.

Table 8 – The Spearman's Correlation Tests for Thin Male Models (between Perceived Idealness and Perceived Thinness)

		Correlation Coefficient	Sig. (2-tailed)	N
Model 1	**Perceived Idealness Perceived Thinness**	.510*	.052	15
Model 2	**Perceived Idealness Perceived Thinness**	.327	.235	15
Model 3	**Perceived Idealness Perceived Thinness**	.282	.309	15
Model 4	**Perceived Idealness Perceived Thinness**	.842**	.000	15

Table 9 – The Spearman's Correlation Tests for Muscular Male Models (between Perceived Idealness and Perceived Muscularity)

		Correlation Coefficient	Sig. (2-tailed)	N
Model 1	**Perceived Idealness** **Perceived Muscularity**	-.147	.616	14
Model 2	**Perceived Idealness** **Perceived Muscularity**	-.004	.990	14
Model 3	**Perceived Idealness** **Perceived Muscularity**	.074	.802	14
Model 4	**Perceived Idealness** **Perceived Muscularity**	.811**	.000	14

According to the above results, while two out of four correlations for the ideal-thin relationship were significant at 10% and 1% (model 1 and model 4), only one out of four correlations for the ideal-muscular relationship was significant at 1% (model 4). Also, all the correlations for the ideal-thin relationship were positive, whereases two correlations for ideal-muscular were negative.

It was apparent from the second table (ideal-muscular) that the results were inconsistent. In contrast to the second table, the first table (ideal-thin) showed similar results among all four models (all positive with two significance). Thus, the researcher concluded that the thin version would be used as a proxy for idealness in this research. This is in line with Gierl (2019), suggesting that the younger generations might have adopted thin-ideal rather than muscular-ideal, as a consequence of growing up in a period of gender equality. That being said, further analysis of correlation coefficients revealed no significant differences between each pair of correlations (ideal-thin and ideal-muscular) across all the models (1, 2, 3, and 4). The inconsistency in the second table and finding no significant differences between ideal-thin and ideal-muscular may be due to the limited number of participants. This study limitation will be discussed in the conclusion chapter (chapter 9).

5.2.4 Selecting Food Brands:

Another reason for conducting the preliminary study was to find suitable branded food products. This is important since purchase intention of these food/beverage brands will be used for the main study as dependent variables. As previous researchers (Chrysochou and Nikolakis, 2012) suggested, the current study aimed to use real

brands. According to the previous chapter (chapter 4), participants were asked to assign a number from 1 to 7 for the following statement: "Please rate how you perceive this product in terms of its healthiness". A total number of 24 sub-brands (12 Brands) were randomly presented to participants. Each participant had to answer the questions related to eight sub-brands. The following table shows the means and standard deviations calculated based on participants' perceptions.

Table 10 - Perceptions towards Branded Food Products' Healthiness

			Mean	N	Std. Deviation
1	H	Coca Cola Zero Sugar (No Calories)	3.85	41	1.892
	U	Coca Cola Original	2.56	41	1.689
2	H	McDonald's Vegetable Deluxe	3.93	41	1.752
	U	McDonald's Grand Big Mac	2.61	41	1.745
3	H	Snickers with Protein Less Sugar	3.93	41	1.679
	U	Snickers	2.85	41	1.590
4	H	Kellogg's Special K	5.00	41	1.628
	U	Kellogg's Corn Flakes	4.93	41	1.421
5	H	RedBull Sugar-Free	3.26	42	2.131
	U	RedBull	3.02	42	2.147
6	H	John West Tuna Chunks in Spring Water	5.00	42	1.900
	U	John West Tuna Chunks in Sunflower oil	5.17	42	1.513
7	H	Morrisons Low Fat Greek Style Yogurt	4.95	42	1.886
	U	Morrisons Greek Style Yogurt	4.95	42	1.592
8	H	BudLight Budweiser Light Beer	3.64	42	1.665
	U	Budweiser Beer	3.19	42	1.824
9	H	Lucozade Sport Low Calorie	4.71	41	1.553
	U	Lucozade Sport	4.20	41	1.721
10	H	Heinz Beanz No Added Sugar	5.59	41	1.095
	U	Heinz Beanz	5.20	41	1.229
11	H	Walkers 25% Less Salt	4.46	41	1.690
	U	Walkers Ready Salted	3.46	41	1.704

			Mean	N	Std. Deviation
12	H	Costa Latte/Cappuccino with Skimmed Milk (Low Fat)	4.63	41	1.685
	U	Costa Latte/Cappuccino	4.12	41	1.735

Acronyms: H = Healthier, **U** = Unhealthier

To select suitable branded food products, the researcher needed to examine if a healthier sub-brand is statistically different from its unhealthier pair. As suggested by Field (2017), conducting a paired sample t-test could reveal the significant difference between the means of two related groups. The researcher first checked the assumptions as follows: a) the variables should be continuous, b) the difference variable should be normally distributed, and c) the difference variable should have no significant outliers (Laerd, 2021a, Kent, 2021). After calculating the difference variables, the researcher found out that some of the difference variables were either not normally distributed or had normal/significant outliers. As a result of assumption violation, the researcher conducted a non-parametric test (Kent, 2021). The two-related-samples Wilcoxon Signed Ranked test was conducted. The results showed that the following pairs of branded food products had significantly different healthier and unhealthier sub-brands: Coca-Cola ($p < 0.01$), McDonalds ($p < 0.001$), Snickers ($p < 0.001$), Lucozade ($p < 0.05$), Walkers ($p < 0.001$), and Costa ($p < 0.05$). Therefore, they were selected for the pilot study. Table 11 shows the related-samples Wilcoxon Signed Ranked test results for the selected branded food products. Table 12 shows selected branded food products as they were presented in the pilot and main study.

Table 11 - The Related-samples Wilcoxon Signed Ranked Rest Results

			Asymptotic Sig.	Test statistics	Standardised t-statistics
1st Pair	**H**	**Coca Cola Zero Sugar (No Calories)**	**0.001**	**390.000**	**3.259**
	U	**Coca Cola Original**			
2nd Pair	**H**	**McDonald's Vegetable Deluxe**	**<0.001**	**412.500**	**4.284**
	U	**McDonald's Grand Big Mac**			
3rd Pair	**H**	**Snickers with Protein Less Sugar**	**<0.001**	**385.000**	**3.733**
	U	**Snickers**			
4th Pair	**H**	**Lucozade Sport Low Calorie**	**0.029**	**295.500**	**2.180**
	U	**Lucozade Sport**			
5th Pair	**H**	**Walkers 25% Less Salt**	**<0.001**	**391.500**	**3.878**
	U	**Walkers Ready Salted**			
6th Pair	**H**	**Costa Latte/Cappuccino with Skimmed Milk (Low Fat)**	**0.014**	**328.000**	**2.448**
	U	**Costa Latte/Cappuccino**			

Acronyms: H = Healthier, **U** = Unhealthier

Table 12 - Selected Branded Food Products

Healthier	Unhealthier
Coca Cola Zero Sugar (No Calories)	**Coca Cola Original**
McDonald's Vegetable Deluxe	**McDonald's Grand Big Mac**
Snickers with Protein Less Sugar	**Snickers**
Walkers 25% Less Salt	**Walkers Ready Salted**
Lucozade Sport Low Calorie	**Lucozade Sport**
Costa Latte/Cappuccino with Skimmed Milk (Low Fat)	**Costa Latte/Cappuccino**

5.2.5 Brand Familiarity:

The researcher aimed to ensure that participants were generally familiar with the branded food products used in this research. In this preliminary study, brand familiarity (Kent and Allen, 1994) was measured with a single item due to the length of the study. Participants needed to indicate the degree they agree with the following statement: "I feel very familiar with the following brand". In addition, they needed to rate on a 7-point Likert scale (1=Strongly Disagree, 7=Strongly Agree). According to this 7-point scale, value 4 represents the neutral point where participants do not agree/disagree with the statement. For all the unhealthier sub-brands, mean scores were above the neutral point. Surprisingly, for the healthier sub-brands (except for the Coca-Cola Zero Sugar), mean scores were below the mid-point. As suggested by Gerald (2018), the researcher conducted one-sample t-tests. Among the healthier sub-brands, only Snickers (with Protein Less Sugar) was statistically different from the mid-point values ($\mu = 4$) (see Table 14). A possible explanation might be that Snickers introduced this sub-brand in 2019 (Tatum, 2018), and the current study was conducted in 2021. Therefore, consumers might have less chance of becoming familiar with this new sub-brand, especially since half of this period (2019-2021) was affected by several lockdowns due to the Covid-19 pandemic (instituteforgovernment.org.uk, 2022). The following table shows brand familiarity mean scores for the six pairs of selected brands.

Table 13 - Brand Familiarity Means for Selected Branded Food Products

			Mean	SD	N
1st Pair	**H**	**Coca Cola Zero Sugar (No Calories)**	**4.34**	**2.117**	**41**
	U	**Coca Cola Original**	**5.10**	**2.131**	**41**
2nd Pair	**H**	**McDonald's Vegetable Deluxe**	**3.32**	**2.067**	**41**
	U	**McDonald's Grand Big Mac**	**4.24**	**2.245**	**41**
3rd Pair	**H**	**Snickers with Protein Less Sugar**	**3.15**	**1.931**	**41**
	U	**Snickers**	**4.76**	**1.947**	**41**
4th Pair	**H**	**Walker 25% Less Salt**	**3.63**	**1.771**	**41**
	U	**Walkers Ready Salted**	**4.93**	**1.794**	**41**
5th Pair	**H**	**Lucozade Sport Low Calorie**	**3.73**	**1.870**	**41**
	U	**Lucozade Sport**	**4.83**	**1.732**	**41**
6th Pair	**H**	**Costa Latte/Cappuccino with Skimmed Milk (Low Fat)**	**3.83**	**1.961**	**41**
	U	**Costa Latte/Cappuccino**	**4.54**	**2.026**	**41**

Acronyms: H = Healthier, **U** = Unhealthier

Table 14 - One-sample t-tests for the Healthier Sub-brands (below the mid-point)

	MCDONALD'S VEGETABLE DELUXE	SNICKERS WITH PROTEIN LESS SUGAR	WALKER 25% LESS SALT	LUCOZADE SPORT LOW CALORIE	COSTA LATTE/ CAPPUCCINO WITH SKIMMED MILK (LOW FAT)
MEAN	3.32	3.15	3.63	3.73	3.83
SD	2.067	1.931	1.771	1.870	1.961
N	41	41	41	41	41
T-STATISTIC	1.6308	2.8155	1.3378	0.9245	0.5551
P-VALUE	0.1108 NS	0.0075**	0.1885 NS	0.3608 NS	0.5819 NS

† = p<.1; * = p<.05; ** = p<.01; *** = p<.001; NS = Not significant

5.2.6 Conclusion and Implications for Pilot Study:

This section discussed the procedure of preliminary study data collection. It presented participants' demographics. Later on, it explained the results concerning the study's objectives. Based on the results provided above, the researcher selected two models

(one model per gender) for the pilot study. For the male model, the thin modified version will be used as a proxy for idealness rather than the muscular version. Finally, based on the results provided above, six pairs of branded food products were selected for the pilot study. The brands that will be used in the pilot study are as follows: Coca-Cola, McDonalds, Snickers, Lucozade, Walkers, and Costa.

5.3 Pilot Study:

This section represents the results of the pilot study. First, it explains the procedure and respondents' characteristics. Then it presents the results of the measurement and structural models. Next, it explains control variables and common method variance. Finally, it discusses the implications for the main study.

Following the preliminary study, the researcher conducted a pilot study. The preliminary study mainly helped the researcher in selecting models' pictures and healthier/unhealthier branded food products. Following previous researchers (Bissell and Zhou, 2004, Diedrichs and Lee, 2010), this pilot study was conducted to test the main study's statistical model with fewer samples (Kempf-Leonard, 2004). Before running the pilot study, as suggested by Saris and Gallhofer (2014), the researcher interviewed five individuals to identify issues regarding the survey (e.g., the length, grammar mistakes etc.). Then the researcher conducted the pilot study to generally test the research constructs.

5.3.2 Procedure, Demographics, and Data Cleaning/Transferring:

Similar to the preliminary study, respondents were recruited via Qualtrics online panel which is an online platform for survey design and data collection (Armstrong et al., 2021). Following the previous research (Aubrey, 2006, Liu et al., 2022), all respondents who completed the survey were paid small monetary incentives by the researcher. The payment was facilitated by Qualtrics based on the company's rates for successful participation in research studies. During the study, participants saw a picture of a model in accordance with their stated gender at the beginning of the study. The study's models were in three different body sizes (thin, medium, and plus-size), and each participant saw only one randomly assigned body size condition. In addition, participants of the pilot study saw three (out of six) branded food products (both healthy and unhealthy versions) in a randomised order.

The total number of participants that fully completed the survey and passed the attention/quality checks was 110 out of 245. In line with Oppenheimer et al. (2009), the researcher used an attention check. Therefore, participants who failed to answer the attention check question were automatically removed from continuing the study. One hundred ten (female= 55) participants successfully completed the study. In addition, Qualtrics applied some additional data quality checks (e.g., removing responses from those who finished the study very fast). The study participants were all aged 18 or above and living in/from the UK. In addition, the average age of the participants was 44 (min=18, max=76). Average response duration was 10 min 39 sec.

Following previous research (Aubrey, 2006, Bould et al., 2018, Gierl, 2019), participants were asked to indicate their weights and heights to calculate participants'

BMIs (Body Mass Index). Moreover, the average Body Mass Index of respondents was 25. According to the NHS (2021), different weight ranges classify as BMI<18.5 underweight, 18.5<BMI<24.9 healthy, 25<BMI<29.9 overweight, 30<BMI<39.9 obese and 40<BMI severely obese. Therefore, on average, the participants' BMIs fall on the edge of the healthy and overweight range. Reporting participants' BMIs is essential for future studies because depending on the research scope, researchers might want to limit the BMI range of participants (e.g. studying normal-weight or overweight adolescents) in a similar way to some previous research (Bould et al., 2018, Gierl, 2019). However, for the current research, the researcher considered having different ranges of BMI, which helps with greater generalisability.

In line with Bould et al. (2018)'s suggestion for future studies, the researcher asked respondents to answer ethnicity questions. The participant's ethnicities are as follows: 84.5%White or White British, 7.2%=Indian, Pakistani, and Bangladeshi or British Indian, Pakistani, and Bangladeshi, 2.7%=Asian or Asian British (Including Chinese and Other Asians), 1.8%=Mixed or Multiple, 2.7%=Black or Black British, .9%=Other Ethnic Group (table 15). This is similar to the UK's population estimates by ethnicity (Coates, 2021, Scotlandscensus.gov.uk, 2021). Therefore, the samples represent the UK's national population in terms of ethnicity.

Table 15 - Respondents' Ethnicities

	Ethnicity	Percentage
1	White or White British	84.5%
2	Indian, Pakistani, and Bangladeshi or British Indian, Pakistani, and Bangladeshi	7.2%
3	Asian or Asian British (Including Chinese and Other Asians)	2.7%
4	Mixed or Multiple	1.8%
5	Black or Black British	2.7%
6	Other Ethnic Group	9%

In addition, the researcher found no issues with missing data since participants needed to answer all questions before moving to the next page. The data were imported directly from Qualtrics; hence, the researcher did not find any issues with data input accuracy.

5.3.3 Measurement and Structural Models:

The researcher used Smart-PLS (v. 3.3.3) software (Ringle, 2022). Smart-PLS is a statistical software for running the PLS-SEM technique, which facilitates analysing/running complex models as well as mediation/moderation analyses (Hair Jr et al., 2021). The analyses have been conducted following the guidelines provided by Hair Jr et al. (2021) and Sarstedt et al. (2021). In line with the recommendations by Sarstedt et al. (2021), the researcher first tested the measurement model and then the structural model.

The researcher first examined the indicators loadings. The common threshold for loadings is 0.708; thus, indicators with loading values above this point should be kept (Hair Jr et al., 2021). As suggested by Sarstedt et al. (2021), loadings above the common threshold show a satisfactory degree of reliability. Table 16 shows the items eliminated due to low loadings. Two items from mood, one from body dissatisfaction, and four from time perspective were eliminated. Also, two items from time perspective with loadings of 0.691 and 0.700 were kept as they were very close to the satisfactory threshold (Sarstedt et al., 2021). As suggested by Hair Jr et al. (2021), obtaining values below < 0.70 is normal for social sciences and items very close to the threshold can be kept. Table 17 shows the loadings after deleting the stated items. It should be noted that the rest of the tables in this chapter show the calculations after the deletion of the above-stated items.

Table 16 - The Indicators Loadings

Variable Names	Indicator	BID	BD	Mood	PI_H	PI_U	PP	PT	TP
BID	BID	1.000							
Mood	M1			0.930					
	M2			0.892					
	M3			0.199					
	M4			0.868					
	M5			0.164					
Body Dissatisfaction	BD1		0.553						
	BD2		0.786						
	BD3		0.875						
Time Perspective	TP1								0.802
	TP2								0.819
	TP3								0.691
	TP4								0.586
	TP5								0.700
	TP6								0.572
	TP7								0.358
	TP8								0.280
PI_H	H_PI1				0.972				
	H_PI2				0.977				
	H_PI3				0.977				
Perceived Plus-sizeness	P_HEAVY						0.960		
	P_OVER						0.948		
	P_PLUS						0.943		
Perceived Thinness	P_SKIN							0.954	
	P_THIN							0.875	
	P_UNDER							0.892	
PI_U	U_PI1					0.975			
	U_PI2					0.987			
	U_PI3					0.975			

Acronyms: BID = Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Next, the researcher tested the constructs' internal consistency reliability by calculating the composite reliability and Cronbach's alpha (Sarstedt et al., 2021). As

it is shown in Table 17, all composite reliability and Cronbach's alpha numbers are above .7, which shows good reliability (Sarstedt et al., 2021).

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Table 17 - The New Indicators Loadings and Constructs' Validity and Reliability

Variables	Indicators	Factor Loadings	Cronbach's Alpha	Composite Reliability	AVE
BID	BID	1.000	1.000	1.000	1.000
BD	BD1	0.875	0.722	0.878	0.782
	BD2	0.894			
Mood	M1	0.915	0.913	0.944	0.849
	M2	0.934			
	M3	0.914			
PI_H	H_PI1	0.972	0.974	0.983	0.951
	H_PI2	0.977			
	H_PI3	0.977			
PI_U	U_PI1	0.974	0.978	0.986	0.958
	U_PI2	0.987			
	U_PI3	0.976			
PP	P_HEAVY	0.959	0.946	0.965	0.903
	P_OVER	0.947			
	P_PLUS	0.944			
PT	P_SKIN	0.954	0.893	0.933	0.824
	P_THIN	0.872			
	P_UNDER	0.895			
TP	TP1	0.869	0.784	0.861	0.611
	TP2	0.869			
	TP3	0.677			
	TP5	0.693			

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Further, the researcher examined convergent validity by calculating the average variance extracted (AVE). Scores equal/above .5 indicate that the construct explains more than 50% of the variance of its items (Sarstedt et al., 2021). According to Table

17, all scores are above .5. Later, the HTMT (hetero- trait-monotrait ratio) was calculated to test the discriminant validity. According to Table 18, all constructs scored below the expected threshold of .85 (Sarstedt et al., 2021). So, they are acceptable since only high values (.85 or .90) are problematic (Sarstedt et al., 2021).

Table 18 - Discriminant Validity (HTMT)

	BID	BD	Mood	PI_H	PI_U_	PP	PT	TP
BID								
BD	0.398							
Mood	0.114	0.166						
PI_H	0.107	0.353	0.384					
PI_U	0.121	0.403	0.185	0.756				
PP	0.065	0.132	0.150	0.271	0.147			
PT	0.078	0.053	0.261	0.197	0.229	0.335		
TP	0.100	0.329	0.342	0.567	0.369	0.398	0.082	

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Finally, the researcher examined the cross-loadings. This shows whether an indicator represents its own construct or other constructs (Hair Jr et al., 2021). The values of cross-loadings showed that all indicators represent their own construct better. Table 19 shows the cross-loadings.

Table 19 - Cross-loadings

Variables	Indicators	BD	Mood	PI_H	PI_U	PP	PT	TP
Mood	M1	-0.286	**0.920**	0.426	0.258	0.166	0.269	0.266
	M2	-0.095	**0.931**	0.311	0.133	0.090	0.212	0.289
	M3	-0.006	**0.910**	0.269	0.100	0.129	0.177	0.245
BD	BD2	**0.948**	-0.193	-0.380	-0.346	-0.149	0.027	-0.317
	BD1	**0.799**	-0.069	-0.144	-0.256	-0.027	-0.050	-0.119
TP	TP1	-0.202	0.183	0.433	0.283	0.371	0.040	**0.868**
	TP2	-0.280	0.315	0.410	0.259	0.349	0.029	**0.867**
	TP3	-0.198	0.166	0.331	0.240	0.159	0.129	**0.679**
	TP5	-0.186	0.243	0.378	0.225	0.191	0.012	**0.692**
PI_H	H_PI1	-0.356	0.364	**0.972**	0.716	0.289	0.158	0.487
	H_PI2	-0.306	0.348	**0.977**	0.715	0.224	0.171	0.443
	H_PI3	-0.310	0.397	**0.977**	0.731	0.252	0.214	0.522
PP	P_HEAVY	-0.106	0.129	0.280	0.163	**0.959**	-0.279	0.344
	P_OVER	-0.135	0.120	0.227	0.147	**0.947**	-0.253	0.318
	P_PLUS	-0.100	0.164	0.239	0.091	**0.944**	-0.319	0.354
PT	P_SKIN	0.019	0.235	0.189	0.209	-0.262	**0.954**	0.050
	P_THIN	-0.005	0.182	0.137	0.195	-0.426	**0.872**	0.055
	P_UNDER	-0.014	0.250	0.176	0.179	-0.152	**0.895**	0.065
PI_U	U_PI1	-0.316	0.146	0.713	**0.974**	0.148	0.184	0.316
	U_PI2	-0.324	0.193	0.723	**0.987**	0.159	0.227	0.318
	U_PI3	-0.387	0.226	0.734	**0.976**	0.108	0.216	0.312

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Following the measurement model, the structural model was measured via Smart-PLS (v. 3.3.3). The researcher first examined the collinearity by calculating VIFs (from the measurement model). The results show that all the predictor variables have values under the conservative threshold 3 (Sarstedt et al., 2021). This means there are no collinearities among the constructs (Sarstedt et al., 2021). The following table shows all the VIFs for predictor variables.

Table 20 - The Collinearity (Inner VIF)

Predictor Variables	Mood	BD	TP	PI_H	PI_U
Perceived Thinness	1.113	1.112	1.115	1.491	1.350
Perceived Plus-sizeness	1.152	1.150	1.152	1.382	1.263

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Later, the researcher examined R squared, and Q squared which are presented in the following tables.

Table 21- R^2 and Q^2 of the constructs

	R^2	Q^2
BD		0.084
Mood		0.069
TP		0.075
PI_H Key Endogenous Variable	0.392	0.347
PI_U Key Endogenous Variable	0.224	0.186

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

R squared values represent the coefficient of determination. This value shows the variance explained for each dependent variable. R squared values of this study are all above the threshold of .10 (Falk and Miller, 1992, Sarstedt et al., 2021, Fastoso et al., 2021, Hair Jr et al., 2021). While the values above .25 (less than .50) are generally considered as weak (Henseler, 2010, Hair Jr et al., 2021) for the consumer behaviour studies, R^2 values of .20 are considered high (Hair Jr et al., 2021). Q^2 values were measured by the blindfolding process and reviewing the cross-validity redundancy values (Henseler, 2010, Hussain et al., 2018). Similarly, all the Q squared values are

above the threshold zero (Sarstedt et al., 2021), which shows that the model has predictive relevance (Hussain et al., 2018).

5.3.4 Control Variables:

Gender was added as a control variable, and the results showed no significant relationships. Thus, gender does not affect the model.

Table 22 - Path Coefficient for Gender

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Gender-> BD	0.124	1.203	**0.229**
Gender -> Mood	0.126	1.364	**0.173**
Gender -> PI_H	0.049	0.620	**0.535**
Gender -> PI_U	-0.073	0.841	**0.400**
Gender-> TP	0.056	0.601	**0.548**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

During the study, participants were asked to rate how hungry/thirsty they were while answering the questions. The researcher added this measure to the model. The table of path coefficients shows a significant relationship between mood and hunger. Also, it shows a partially significant difference between hunger and purchase intention of unhealthier branded food products (t-value= 1.887). Adding hunger to the model did not change the other relationships.

Table 23 - Path Coefficient for Hunger

	Original Sample (O)	T Statistics	P Values
HUNGER -> BD	-0.130	1.284	**0.199**
HUNGER -> Mood	0.317	3.368	**0.001**
HUNGER -> PI_H	0.067	0.788	**0.431**
HUNGER -> PI_U	0.174	1.887	**0.059**
HUNGER -> TP	0.085	0.859	**0.390**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

5.3.5 Common Method Variance:

As suggested by various researchers, the researcher added a marker variable to avoid common method variance (MacKenzie and Podsakoff, 2012, Chin et al., 2013). Based on the suggestions, the marker variable should have the same scale type (e.g., 5 points Likert scale) (Spector et al., 2019). Also, this measure should not have any conceptual relation to other measures in the model and is better to be located at the end of the study to avoid participants' fatigue (Chin et al., 2013). A Mobile Transactions (Service Compatibility) scale has been selected and used as a marker variable (Kleijnen et al., 2007), since it does not have any relation to the other constructs.

The researcher examined the CMV via Smart-PLS (v. 3.3.3) by establishing collinearity (Kock, 2015, Ghasemy et al., 2020). The Inner VIF (collinearity) showed that CMV is not a matter of concern in this study. The following table shows the VIFs.

Table 24 - Marker Variable VIF

	MV VIF
BD	1.206
HUNGER	1.341
Mood	1.427
PI_H_AGG	2.907
PI_U_AGG	2.454
PP	1.430
PT	1.426
TP	1.475

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

5.3.6 Implications for Main Study:

The purpose of running the pilot study was to generally test the study's model with a smaller sample. According to the measurement and structural model analyses, the model showed a good reliability and validity scores, with no issues with common method variance. In addition, the researcher concluded that control variables are not the matter of concern for this model. Moreover, the model showed predictive relevance. However, in order to improve the questionnaire, the following changes was applied before conducting the main study. First, four items (out of eight) from the time perspective scale showed low indicators loading values. In line with De Vaus (2013)'s suggestion the researcher decided to improve the wordings and sentence structure of the items, to increase the clarity. Second, the researcher decided to change the scales' anchors used for measuring perceptions of thinness and plus-sizeness. The measures were 5-point Likert Agreement/Disagreement Scale, with "Neither Agree nor Disagree" as the mid-point. Accordingly, participants could quickly choose the mid-

point for most of the thinness and plus-sizness perception items. Participants could also get affected by acquiescence/dissent bias (De Vaus, 2013); thus agree/disagree with most of the items. This could make the interpretation of the results impossible. In order to prevent such issues for the main study, following De Vaus (2013)'s suggestion, the researcher changed the scales format. So, the researcher used 5-point semantic-style (De Vaus, 2013) that measures thinness and plus-sizeness perceptions by offering two opposite end anchors in a way that 1 represents medium-size, and 5 represents thin or plus-size. The details of these measure are presented in the methodology chapter (Chapter 4). Third, the researcher added a short section-introduction for the branded food products section in the survey design. The reason for this was to help with the questionnaire flow (De Vaus, 2013).

5.4 Conclusion:

The purposes of the preliminary and pilot studies were to select suitable model pictures, branded food products, testing correlation strengths between thin-ideal/muscular-ideal, testing brand familiarity, and to see if the study's model was valid and reliable before conducting the main study. This chapter presented the procedure, demographics, and objectives of the preliminary study. Later, it presented the procedure, demographics, measurement/structural models for pilot study as well as implications for the main study. The next chapters (chapter 6 and 7) present the results of the main study and hypotheses testing.

Chapter 6 – Results

Data Collection, Measurement and

Structural Models

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6.1 Introduction:

This chapter provides the results of the main study. It explains the data collection procedures and data analysis. This chapter is structured as follows: First, section 6.2 introduces the procedures and respondents' characteristics. Second, sections 6.3 and 6.4 provide the results of the measurement and structural models, respectively. Third, section 6.5 explains the effect of the control variables. Finally, section 6.6 presents the conclusion.[3]

6.2 Procedure, Demographics and Data Cleaning/Transferring:

As recommended by previous researchers (Kempf-Leonard, 2004, Bissell and Zhou, 2004, Diedrichs and Lee, 2010), first, a pilot study was conducted to test the main study's model with fewer participants. Analysing the pilot study data helped the researcher improve the main study's design. The researcher made the following changes to the study design: a) rewording time-perspective's scales, b) changing body

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[3] The results of hypotheses testing could be found in chapter 7.

size perceptions' scales, and c) adding a short description about the sub-brands that participants would see in the purchase intention part of the survey. For the purpose of the main study, as suggested by (Saris and Gallhofer, 2014), the researcher asked five individuals to identify issues regarding the survey (e.g., the length, grammar mistakes etc.) before running it.

Same as preliminary and pilot studies, respondents were recruited via Qualtrics which is an online platform that facilitates survey design and data collection and is commonly used by researchers (Armstrong et al., 2021). Similar to the preliminary and pilot studies, all respondents who completed the survey were paid small monetary incentives by the researcher through Qualtrics. This was in line with previous research (Aubrey, 2006, Liu et al., 2022).

The total number of participants who completed the survey and passed the attention/quality checks was 447 (female= 51%). Since the researcher used an attention check, as Oppenheimer et al. (2009) suggested, failed participants were automatically removed from continuing the study. In addition, Qualtrics applied an additional data quality check. According to Qualtrics data quality check, answers from respondents who finished the study very fast were removed. The study participants were all 18 or above and living in/from the UK. In addition, the average age of the participants was 44 (min=18, max=85). Also, the average response duration was 11 min 32 sec (for the pilot study, the duration was 10 min 39 sec). Due to the correlational nature of the study, the researcher opted not to place restrictions on participant age. This choice aimed to achieve multiple objectives: enhancing the generalisability of findings by including insights from a diverse population,

recognising that body image issues and their impact on food purchasing behaviour are not confined to specific age groups and aligning with the correlational method's principle. This approach allowed for less control over the data collection process, fostering a representation more akin to real-world conditions.

During the study, participants saw a picture of a model in accordance with their stated gender at the beginning of the study (Cho and Lee, 2013). Previous studies (Gierl, 2019, Carter and Vartanian, 2022, McComb and Mills, 2022b) primarily limited participants to viewing models of the same gender. One explanation for this restriction is the anticipation that participants exposed to models of the opposite gender may engage less in social comparison in the context of body image, thus making the study results less accurate. This is because while most females desire to be thinner, most males desire to become more muscular and larger, thus having different body image ideals (Quittkat et al., 2019, Hicks et al., 2022). It is worth noting that this is presented as a study's limitation; thus, it is suggested that future studies consider using models of the opposite gender as well non-binary individuals in the context of body image comparisons. Following previous research (Jung and Heo, 2020), the study's models were in three different body sizes (thin, medium, and plus-size). The researcher had selected these three sizes based on the preliminary study results (chapter 5). It should be stated that, the researcher used a cross-sectional design, in line with previous researchers (e.g. Fardouly and Vartanian (2015), Jung and Heo, (2020))[4]. Each participant was randomly exposed to one of the models. All participants answered to the same set of questions regarding the models. In addition, participants of the main

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[4] See the systematic review article by Saiphoo and Vahedi (2019), on cross-sectional design on body image related studies.

study saw three (out of six) branded food products (both healthier and unhealthier versions) in a randomised order. The rationale for not asking participants to answer questions for all six branded food products was to avoid participants' fatigue and careless answering (Bowling et al., 2021). All participants answered the same set of questions regarding branded food products. While answering the survey, participants saw a randomly selected body type, independent of the three random branded food products. To be more exact, the researcher did not assign respondents to certain groups with a pre-selected model body type linked to pre-selected branded food products. The branded food products used in this main study were as follows: Coca-Cola, McDonalds, Snickers, Lucozade, Walkers, and Costa (see chapter 5, section 5.2.4).

In line with previous research (Aubrey, 2006, Bould et al., 2018, Gierl, 2019), participants were asked to indicate their weight and height. Therefore, the researcher calculated the participants' BMIs (Body Mass Index). The average Body Mass Index of respondents was 20. This differs from the pilot study's average BMI, which was 25. According to the NHS (2021), different weight ranges classify as $BMI<18.5$ underweight, $18.5<BMI<24.9$ healthy, $25<BMI<29.9$ overweight, $30<BMI<39.9$ obese and $40<BMI$ severely obese. On average, the participants' BMIs were in the healthy range. In a similar way to previous research (Bould et al., 2018, Gierl, 2019), researchers might want to limit the BMI range of participants. Therefore, the author reports BMI as a reference for future studies. It should be noted that for the current research, the researcher considered having different ranges of BMI, which helps with greater generalisability.

Furthermore, in line with Bould et al. (2018)'s suggestion for future studies, the researcher asked respondents to answer ethnicity questions. This is important for ensuring the samples represent the UK's national population. The participant's ethnicities are as follows: 89%=White or White British, 3.8%=Indian, Pakistani, and Bangladeshi or British Indian, Pakistani, and Bangladeshi, 2.6%=Asian or Asian British (Including Chinese and Other Asians), 2%=Mixed or Multiple, 2.4%=Black or Black British, .2%=Other Ethnic Group. This is similar to the UK's population estimates by ethnicity (Coates, 2021, Scotlandscensus.gov.uk, 2021). Therefore, the samples represent the UK's national population in terms of ethnicity. Table 25 shows participants ethnicities per percentage.

Table 25 - Respondents' Ethnicities

	Ethnicity	Percentage
1	White or White British	89%
2	Indian, Pakistani, and Bangladeshi or British Indian, Pakistani, and Bangladeshi	3.8%
3	Asian or Asian British (Including Chinese and Other Asians)	2.6%
4	Mixed or Multiple	2%
5	Black or Black British	2.4%
6	Other Ethnic Group	2%

Moreover, the researcher found no issues with missing data since participants were required to answer all questions before moving to the next page. In addition, the data were imported directly from Qualtrics; hence, the researcher did not find any issues with data input accuracy.

6.3 Measurement Model:

The researcher used Smart-PLS (v. 3.3.9) software. Smart-PLS is a statistical software for running the PLS-SEM technique, which facilitates analysing/running complex models as well as mediation/moderation analyses (Hair Jr et al., 2021). The analyses have been conducted following the guidelines provided by Hair Jr et al. (2021) and Sarstedt et al. (2021). In line with the recommendations by Sarstedt et al. (2021), the researcher first tested the measurement model and then the structural model (section 6.4).

6.3.1 Reliability:

The researcher first examined the indicators loadings. The common threshold for loadings is 0.708; thus, indicators with loading values above this point should be kept (Hair Jr et al., 2021). As suggested by Sarstedt et al. (2021), loadings above the common threshold show a satisfactory degree of reliability. Table 26 shows the items eliminated due to low loadings. Two (out of five) items from mood and five (out of eight) items from time perspective were eliminated. Also, one item from body dissatisfaction with a loading of 0.697 was kept as it was very close to the satisfactory threshold (Sarstedt et al., 2021). As suggested by Hair Jr et al. (2021), obtaining values below < 0.70 is normal for social sciences and items very close to the threshold can be kept. Table 27 shows the loadings after deleting the stated items. It should be noted that the rest of the tables in this chapter show the calculations after the deletion of the above-stated items.

Table 26 - The Indicators Loadings

Variable Names	Indicator	BID	BD	Mood	PT	PI_U	PP	PI_H	TP
Body Image Discrepancy	BID	1.000							
Mood	M1			0.867					
	M2			0.910					
	M3			0.433					
	M4			0.485					
	M5			0.926					
Body Dissatisfaction	BD1		0.697						
	BD2		0.746						
	BD3		0.872						
Time Perspective	TP1								0.831
	TP2								0.764
	TP3								0.593
	TP4								0.572
	TP5								0.788
	TP6								0.456
	TP7								0.407
	TP8								-0.105
Perceived Thinness	PT1				0.875				
	PT2				0.900				
	PT3				0.923				
Perceived Plus-sizeness	PP1						0.950		
	PP2						0.956		
	PP3						0.960		
PI_H	H_PI1							0.975	
	H_PI2							0.969	
	H_P3							0.972	
PI_U	U_PI1					0.976			
	U_PI2					0.973			
	U_PI3					0.975			

Acronyms: BID = Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Next, the researcher tested the constructs' internal consistency reliability by calculating the composite reliability and Cronbach's alpha (Sarstedt et al., 2021) for

the retained items. As it is shown in Table 27, all composite reliability and Cronbach's alpha numbers are above .7 (except for one item from body dissatisfaction), which shows very good reliability in total (Sarstedt et al., 2021). For the body dissatisfaction item, Pallant (2020) suggests that it is acceptable for scales shorter than ten items to have lower Cronbach's alpha values (Daud et al., 2018). Therefore, one item from body dissatisfaction with a Cronbach's alpha value of .66 remained in the analysis.

Table 27 - The New Indicators Loadings and Constructs' Validity and Reliability

Variables	Indicators	Factor Loadings	Cronbach's Alpha	Composite Reliability
BID	BID	1.000	1.000	1.000
BD	BD1	0.697	0.664	0.817
	BD2	0.745		
	BD3	0.873		
Mood	M1	0.920	0.892	0.916
	M2	0.897		
	M3	0.900		
PI_H	H_PI1	0.975	0.971	0.975
	H_PI2	0.969		
	H_PI3	0.972		
PI_U	U_PI1	0.976	0.974	0.981
	U_PI2	0.973		
	U_PI3	0.975		
PP	PP1	0.948	0.952	0.969
	PP2	0.957		
	PP3	0.961		
PT	PT1	0.875	0.882	0.969
	PT2	0.900		
	PT3	0.923		
TP	TP1	0.865	0.779	0.872
	TP2	0.831		
	TP5	0.792		

Acronyms: BID = Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

6.3.2 Validity:

The researcher examined convergent validity by calculating the average variance extracted (AVE). Scores equal/above .5 indicate that the construct explains more than 50% of the variance of its items, which is an acceptable threshold (Sarstedt et al., 2021). According to Table 28, all scores are above .5.

Table 28 - Average Variance Extracted

Variables	AVE
BID	1.000
BD	0.601
Mood	0.821
PI_H	0.945
PI_U	0.945
PP	0.913
PT	0.913
TP	0.694

Acronyms: BID = Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Later, the HTMT (hetero- trait-monotrait ratio) was calculated to test the discriminant validity. According to Table 29, all constructs scored below the expected threshold of .85 (Sarstedt et al., 2021). So, they are acceptable since only high values (.85 or .90) are problematic (Sarstedt et al., 2021).

Table 29 - The Discriminant Validity (HTMT)

	BID	BD	Mood	PI_H	PI_U_	PP	PT	TP
BID								
BD	0.620							
Mood	0.099	0.288						
PI_H	0.005	0.155	0.292					
PI_U	0.033	0.082	0.309	0.658				
PP	0.050	0.085	0.069	0.015	0.025			
PT	0.055	0.177	0.189	0.226	0.171	0.316		
TP	0.023	0.176	0.305	0.358	0.362	0.027	0.216	

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Finally, the researcher examined the cross-loadings. This shows whether an indicator represents its own construct or other constructs (Hair Jr et al., 2021). The values of cross-loadings showed that all indicators represent their own construct better than other indicators. Table 30 shows cross-loadings.

Table 30 - Cross-loadings

Variables	Indicators	BID	BD	Mood	PI_H	PI_U	PP	PT	TP
BD	BD1	0.442	**0.697**	0.337	0.082	0.003	-0.033	0.104	0.029
	BD2	0.301	**0.745**	0.004	-0.129	-0.096	-0.070	-0.111	-0.164
	BD3	0.428	**0.873**	0.061	-0.079	-0.052	-0.054	-0.101	-0.102
BID	BID	**1.000**	0.513	0.085	0.004	-0.032	-0.049	0.051	0.021
PI_H	H_PI1	0.008	-0.041	0.284	**0.975**	0.627	0.000	0.234	0.320
	H_PI2	0.005	-0.051	0.272	**0.969**	0.628	-0.008	0.193	0.291
	H_PI3	-0.001	-0.046	0.257	**0.972**	0.609	0.020	0.182	0.297
Mood	MO1	0.131	0.225	**0.920**	0.207	0.223	0.049	0.146	0.200
	MO2	0.005	0.071	**0.897**	0.301	0.310	0.117	0.208	0.277
	MO3	0.118	0.230	**0.900**	0.233	0.252	0.007	0.103	0.214
PP	PP1	-0.040	-0.066	0.062	-0.008	-0.035	**0.948**	-0.265	-0.026
	PP2	-0.051	-0.056	0.074	0.019	-0.011	**0.957**	-0.273	-0.001
	PP3	-0.050	-0.067	0.067	0.001	-0.021	**0.961**	-0.281	-0.010
PT	PT1	0.051	0.001	0.133	0.191	0.131	-0.383	**0.875**	0.171
	PT2	0.039	-0.053	0.194	0.180	0.161	-0.129	**0.900**	0.140
	PT3	0.049	-0.058	0.141	0.196	0.137	-0.269	**0.923**	0.169
TP	TP1	0.047	-0.089	0.190	0.256	0.296	-0.015	0.132	**0.865**
	TP2	0.004	-0.055	0.226	0.254	0.219	-0.025	0.192	**0.841**
	TP5	-0.001	-0.091	0.235	0.270	0.273	0.007	0.122	**0.792**
PI_U	U_PI1	-0.017	-0.045	0.301	0.626	**0.976**	-0.014	0.175	0.319
	U_PI2	-0.032	-0.060	0.289	0.618	**0.973**	-0.029	0.144	0.301
	U_PI3	-0.046	-0.065	0.270	0.626	**0.975**	-0.027	0.146	0.305

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

6.3.3 Common Method Variance:

As suggested by various researchers, the researcher added a marker variable to avoid common method variance (MacKenzie and Podsakoff, 2012, Chin et al., 2013). Based on the suggestions, the marker variable should have the same scale type (e.g., 5 points scale) (Spector et al., 2019). Also, this measure should not have any theoretical relation to other measures in the model and is better to be located at the end of the

study to avoid participants' fatigue (Chin et al., 2013). Therefore, a Mobile Transactions (Service Compatibility) scale has been selected and used as a marker variable (Kleijnen et al., 2007) since it does not relate to the other constructs. The researcher examined the CMV via Smart-PLS (v. 3.3.9) by establishing collinearity (Kock, 2015, Ghasemy et al., 2020). The Inner VIF (collinearity) showed that CMV is not a matter of concern in this study. The following table shows the VIFs.

Table 31 - Marker Variable VIF

Variables	MV VIF
Body Image Discrepancy	**1.099**
Body Dissatisfaction	**1.221**
Gender	**1.029**
Hunger	**1.336**
Mood	**1.317**
PI_HBF	**1.811**
PI_UBF	**1.825**
Perceived Plus-sizeness	**1.175**
Perceived Thinness	**1.254**
Time Perspective	**1.231**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

6.4 Structural Model:

Following the measurement model, the structural model was measured via Smart-PLS (v. 3.3.9)[5]. The researcher first examined the collinearity by calculating VIFs (from the measurement model). The results show that all the predictor variables have values under the conservative threshold 3 (Sarstedt et al., 2021). This means there are no

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[5] The table of path coefficients is presented in the next chapter (chapter 7) where it used for hypotheses testing.

collinearities among the constructs (Sarstedt et al., 2021). The following table shows all the VIFs for predictor variables.

Table 32 - The Collinearity (Inner VIF)

Predictor Variables	Mood	BD	TP	PI_H	PI_U
Perceived Thinness	1.114	1.113	1.115	1.181	1.166
Perceived Plus-sizeness	1.090	1.091	1.090	1.23	1.120

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Later, the researcher examined R squared and Q squared, which are presented in the following table. R squared values represent the coefficient of determination. This value shows the variance explained for each dependent variable and defines the model's predictive power (Haier et al., 2021). R squared values of this study are all above the threshold of .10 (Falk and Miller, 1992, Sarstedt et al., 2021, Fastoso et al., 2021, Hair Jr et al., 2021). While the values below .25 are generally considered weak (Henseler, 2010, Hair Jr et al., 2021), for consumer behaviour studies, lower R^2 values are acceptable (Cohen, 2013, Hair Jr et al., 2021). This is because predicting human behaviour is more complicated than in other contexts (Frost, 2020). Although R squared values in this study seem to limit the model's explanatory power, they are acceptable due to the nature of the consumer behaviour study. Q2 values were measured by the blindfolding process and reviewing the cross-validity redundancy values (Henseler, 2010, Hussain et al., 2018). Similarly, all the Q squared values are above the threshold zero (Sarstedt et al., 2021), which shows that the model has predictive relevance (Hussain et al., 2018).

	R^2	Q^2
PI_H Key Endogenous Variable	0.193	0.139
PI_U Key Endogenous Variable	0.198	0.144
Mood		0.039
BD		0.157
TP		0.024

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Finally, the researcher calculated f squared. The f squared (effect size) represents values that show how much the endogenous variables in the model are affected by exogenous variables (Hair Jr et al., 2021). The values could be found in the table below. According to Sarstedt et al. (2021), the values below 0.02 show no effect. Based on Cohen (1988) guidelines, perceived thinness has a weak to moderate effect on purchase intention of healthier branded food products. In addition, mood and time perspective have substantial effects on both purchase intention variables (healthier and unhealthier branded food products).

Table 34 - f2 Values

Predictor Variables	**PI_H**	**PI_U**
Perceived Thinness	0.020	0.004
Perceived Plus-sizeness	0.001	0.001
Mood	0.037	0.059
Body Dissatisfaction	0.001	0.008
Time Perspective	0.054	0.058

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

6.5 Control Variables:

Following previous research in mood and body dissatisfaction studies (Cho and Lee, 2013, Parker and Brotchie, 2010, Fischetti et al., 2020), the researcher considered the potential impact of gender on the study's model. Moreover, following previous research in eating behaviour studies (Harris et al., 2009, Loeber et al., 2013, Forwood et al., 2015, Froehlich et al., 2021), participants' hunger/thirstiness was measured. These two measures were added to the model to reveal any potential significant effects on the study's model. Each control variable is explained in the following sub-sections (sub-section 6.5.1 and 6.5.2).

6.5.1 Gender:

The researcher added gender as a control variable; the results did not show any significant correlations between gender and endogenous variables. Therefore, gender is not a matter of concern in this model.

Table 35- Path Coefficient for Gender

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Gender-> BD	-0.114	1.412	**0.158**
Gender -> Mood	-0.081	0.893	**0.372**
Gender -> PI_H	-0.007	0.084	**0.933**
Gender -> PI_U	0.101	1.187	**0.235**
Gender-> TP	0.039	0.427	**0.669**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

6.5.2 Hunger:

During the study, participants were asked to rate how hungry/thirsty they were while answering the questions. The researcher added this measure to the model. The table of path coefficients shows that participants' hunger levels are significantly correlated with all endogenous variables ($t > 2.57$, two-tailed test). The more participants felt hungry, the higher they rated purchase intention of healthier and unhealthier branded food products. Also, the more they felt hungry, the higher they reported negative mood, higher body dissatisfaction and a present-focused time perspective. Across all the hypotheses, H10 became insignificant ($b = -0.058$, $p = 0.160$) when hunger is added to the model (the results of the hypotheses are presented in the next chapter). It means that body image discrepancy does not moderate the relationship between perceived thinness and mood anymore if participants' hunger levels are considered. The rest of the accepted hypotheses were not affected; thus, the effect of hunger is considered only minor.

Table 36 - Path Coefficient for Hunger

	Original Sample (O)	T Statistics	P Values
HUNGER -> BD	0.145	3.123	**0.001**
HUNGER -> Mood	0.332	7.104	**0.000**
HUNGER -> PI_H	0.206	4.033	**0.000**
HUNGER -> PI_U	0.211	4.063	**0.000**
HUNGER -> TP	0.305	6.242	**0.000**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

6.6. Conclusion:

The current chapter first explained the procedure of data collection. Further, it presented descriptive information regarding respondents' characteristics. In addition, it provided the measurement model including reliability, validity, and common method variance. Moreover, it presented the structural model. Finally, it examined the potential role of control variables. The next chapter (chapter 7), provides the results of hypotheses testing and corresponding analyses, including, t-tests, mediation, moderation, and slope analyses.

Chapter 7 – Results

Examination of Hypotheses and

Corresponding Analyses:

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7.1 Introduction:

This chapter illustrates the table of path coefficients and a path diagram. In addition, it explains the results of hypotheses testing, leading to an overview of hypotheses testing results and chapter conclusion. In brief, five out of twelve hypotheses were supported, including a main relationship, one mediation, and three moderation effects. Taken together, the results confirm the positive association between perceived thinness and purchase intention of healthier branded food products. According to the analysis, this relationship is mediated by mood. In addition, the results showed the moderation effect of body image discrepancy on the relationships between perceived thinness and mood, body-dissatisfaction, and time-perspective, respectively.

7.2 Path Coefficients and Path Diagram:

As part of the structural model, the path coefficient was calculated. This was facilitated by using Smart-PLS (v. 3.3.9). The following table shows path coefficients before and after, including control variables (Hunger and Gender). While Model 1 represents the

study's main model, Model 2 represents the model with added control variables[6]. The researcher used the values presented in this table as well as tables (37, 39, 40, and 41 for mediation and moderation tables) to test the study's hypotheses. In addition, the following section (Section 7.3) explains the hypotheses testing results in detail.

As shown in the table 37 below (Model 1), the results indicate that nine paths (out of 16) are significant. Among the nine significant paths, eight paths are significant at 1% (t > 2.57), and one path is significant at 10% (t > 1.65).

Table 37 - Path Coefficients

|		Model 1			Model 2		
		Path Coefficients	T Statistics	P Values	Path Coefficients	T Statistics	P Values
1	BD -> PI_H	-0.030	0.473	**0.644**	-0.053	0.833	**0.405**
2	BD -> PI_U	-0.084	1.776	**0.076**	-0.090	1.871	**0.059**
3	Mood -> PI_H	0.197	4.243	**0.000**	0.144	2.866	**0.003**
4	Mood -> PI_U	0.244	5.132	**0.000**	0.185	3.832	**0.000**
5	PP -> BD	-0.051	1.149	**0.318**	-0.061	1.369	**0.213**
6	PP -> Mood	0.128	2.666	**0.009**	0.091	2.051	**0.045**
7	PP -> PI_H	0.029	0.607	**0.550**	0.017	0.347	**0.728**
8	PP -> PI_U	-0.025	0.540	**0.597**	-0.039	0.843	**0.398**
9	PP -> TP	0.032	0.627	**0.533**	0.001	0.027	**0.983**
10	PT -> BD	0.003	0.074	**0.908**	-0.025	0.522	**0.632**
11	PT -> Mood	0.221	4.247	**0.000**	0.145	2.872	**0.004**
12	PT -> PI_H	0.142	3.202	**0.001**	0.123	2.715	**0.006**
13	PT -> PI_U	0.066	1.478	**0.144**	0.053	1.169	**0.246**
14	PT -> TP	0.199	4.026	**0.000**	0.139	2.879	**0.004**
15	TP -> PI_H	0.228	4.589	**0.000**	0.177	3.434	**0.001**
16	TP -> PI_U	0.234	4.917	**0.000**	0.178	3.594	**0.000**

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[6] The role of control variables in this study are explained in section 6.5. In brief, despite the small changes caused by "Hunger", the researcher does not consider control variables to significantly affect the study's model.

		Model 1		Model 2		
17	Gender -> BD			-0.114	1.412	**0.158**
18	Gender -> Mood			-0.081	0.893	**0.372**
19	Gender -> PI_H			-0.007	0.084	**0.933**
20	Gender -> PI_U			0.101	1.187	**0.235**
21	Gender -> TP			0.039	0.427	**0.669**
22	Hunger -> BD			0.145	3.123	**0.001**
23	Hunger -> Mood			0.332	7.104	**0.000**
24	Hunger -> PI_H			0.206	4.033	**0.000**
25	Hunger -> PI_U			0.211	4.063	**0.000**
26	Hunger -> TP			0.305	6.242	**0.000**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

In addition, the following diagram shows the results of structural model calculation. The diagram is exported from Smart-PLS (v. 4.0.6.7). Regarding the figure, the values illustrated on the lines between the variables are p values. Studies' dependent (PI-H, and PI-U) and independent (PT and PP) variables are portrayed as squares and octagons. Also, the mediator variables (Mood, BD, and TP) are portrayed as circles and the moderator variables (BID) is illustrated as hexagon.

Figure 6 - Path Diagram
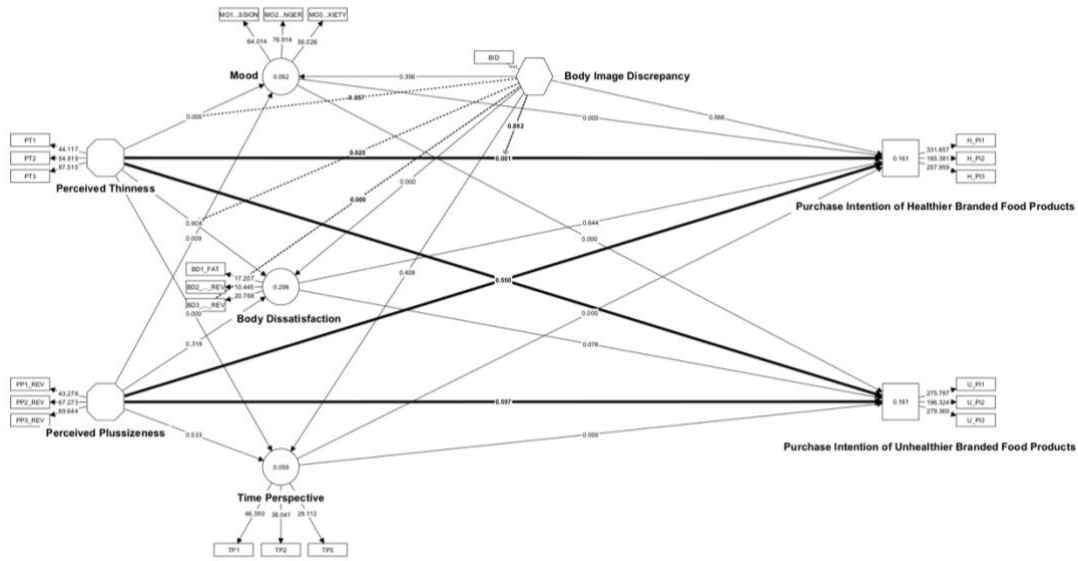
Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

7.3 Hypotheses Testing and Mediation/Moderation Analyses:

The following sections (7.3.1, 7.3.2, and 7.3.3) consist of hypotheses testing based on the results of the path coefficient (Table 37), mediation (Table 38), moderation (Table 39, Table 40, and Table 41), and slope analyses (Figure 7, Figure 8, and Figure 9). In addition, the mediation and moderation analyses are detailed in subsections (7.3.2 and 7.3.3).

7.3.1 Main Hypotheses H1 and H2:

H1 posits a positive association between perceived thinness and purchase intention of healthier branded food products (Perceived Thinness – PI of Healthier Branded Food Products). The results, as shown in the Table 37, supports H1 (b = 0.142, p = 0.001).

As perceived thinness increases, the participants' tendency to purchase healthier branded food products increases significantly.

H2 proposes a positive association between perceived plus-sizeness and purchase intention of unhealthier branded food products (Perceived Plus-sizeness – PI of Unhealthier Branded Food Products). However, the results do not support H2 (b = -0.025, p = 0.597), as the effect on purchase intention of unhealthier branded food products is not statistically significant.

7.3.2 Mediation Analyses for Hypotheses H3 to H8:

Mediation Test Overview:

The mediation analyses were conducted using Smart-PLS (v. 4.0.6.7) (Ringle, 2022). The table below illustrates all mediation hypotheses as indirect (specified) paths. In line with Hair Jr. et al. (2021) suggestion for multiple mediation analysis, three (out of six hypotheses) significant hypothesised indirect paths were selected for further examinations (H3, H5, and H7). Thus, the other three hypothesised indirect paths (H4, H6, and H8) that were insignificant were rejected as they showed no mediation effect. In line with Hair Jr et al. (2021), further analysis showed that two hypothesised paths (H3 and H7) have complementary (partial) mediation (see table 39). Complementary mediation happens when the indirect and direct effects are both significant and in the same direction (Hair Jr et al., 2021). For the relationship between perceived thinness and purchase intention of healthier branded food products, mood and time perspective serve as complementary mediators (H3 and H7). Higher levels of perceived thinness directly increase purchase intention of healthier branded food products but also

increase negative mood and present-focused time perspective, which in turn leads to purchase intention of healthier branded food products, again (H3 and H7).

Moreover, further analysis showed that one hypothesised path (H5) has indirect-only (full) mediation. H5 posits that that mood negatively mediates the effect of perceived plus-sizeness on purchase intention of unhealthier branded food products. The reason for having an indirect-only full mediation is that the indirect path is significant while the direct path is not significant. Mood serves as a full mediator for the relationship between perceived plus-sizeness and purchase intention of unhealthier branded food products. More specifically, perceived plus-sizeness leads to negative mood, and negative mood, in turn, leads to purchase intention of unhealthier branded food products.

Following Hair Jr et al. (2021), when an indirect effect is significant, but the direct effect is not, there is a full mediation (indirect only). This is against Baron and Kenny (1986), who recommended that there is no mediation for a non-significant relationship. In contrast to Baron and Kennedy (1986), some researchers suggest that even without a significant direct relationship, there might be a mediation (Shrout and Bolger (2002) as cited in (Kim, 2016)). This type of mediation has been previously reported in a body image and consumer behaviour study by Hendrickse et al. (2017).

Table 38 - Indirect (specified effect) and direct effects (path coefficient)

			Original Sample	T Statistic	P Value	
1	*H3*	**Perceived Thinness -> Mood -> PI-H**	0.044	3.032	**0.001**	**Complementary (Partial Mediation)**
		Direct Effect: PT->PI_H	0.142	3.202	**0.001**	
2	*H4*	**Perceived Thinness -> Body Dissatisfaction -> PI-H**	0.000	0.031	**0.961**	**No Mediation**
		Direct Effect: PT->PI_H	0.142	3.202	**0.001**	
3	*H5*	**Perceived Plus-sizeness -> Mood -> PI-U**	0.031	2.321	**0.024**	**Indirect-only (Full Mediation)**
		Direct Effect: PP->PI-U	-0.025	0.540	**0.597**	
4	*H6*	**Perceived Plus-sizeness -> Body Dissatisfaction -> PI-U**	0.004	0.894	**0.428**	**No Mediation**
		Direct Effect: PP->PI-U	-0.025	0.540	**0.597**	
5	*H7*	**Perceived Thinness -> TP -> PI-H**	0.045	3.114	**0.002**	**Complementary (Partial Mediation)**
		Direct Effect: PT->PI_H	0.142	3.202	**0.001**	
6	*H8*	**Perceived Plus-sizeness -> TP -> PI-U**	0.008	0.608	**0.542**	**No Mediation**
		Direct Effect: PP->PI-U	-0.025	0.540	**0.597**	

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

H3 posits that mood positively mediates the effect of perceived thinness on purchase intention of healthier branded food products. Analysing the indirect effect (see Table 38) shows that the indirect effect between perceived thinness and purchase intention of healthier branded food products (Perceived Thinness -> Mood -> PI of Healthier Branded Food Products) is significant (b = 0.044, p = 0.001). Also, the direct effect (see Table 38) between perceived thinness and purchase intention of healthier branded food products (Perceived Thinness – PI of Healthier Branded Food Products) is significant (b = 0.142, p = 0.001), and the sum of direct and indirect effects (total effect) is positive. Therefore, the results show a partial mediation according to the criteria established by Hair Jr et al. (2021). H3 is supported as mood positively

mediates the relationship between perceived thinness and purchase intention of healthier branded food products. In brief, perceived thinness positively affects mood (b = 0.145, p < 0.5) and mood, in turn, positively affects purchase intention of healthier branded food products (b = 0.144, p < 0.5).

H4 suggests that body dissatisfaction positively mediates the effect of perceived thinness on purchase intention of healthier branded food products. However, the analysis showed that the indirect effect (Perceived Thinness -> Body Dissatisfaction -> PI of Healthier Branded Food Products) (see Table 38) is not significant (b = 0.000, p = 0.961). Following Hair Jr et al. (2021)'s guidelines, there is no mediation effect here, and hypothesis 4 is not supported.

H5 posits that mood negatively mediates the effect of perceived plus-sizeness on purchase intention of unhealthier branded food products. The mediation analysis shows that the indirect effect (Perceived Plus-sizeness -> Mood -> PI of Unhealthier Branded Food Products) is significant (see Table 38) (b = 0.031, p = 0.024). Also, the direct effect between perceived plus-sizeness and purchase intention of unhealthier branded food products (Perceived Plus-sizeness – PI of Unhealthier Branded Food Products) is not significant (b = -0.025, p =0.597). Therefore, the results show a full mediation according to the criteria established by Hair Jr et al. (2021). However, the direction of this mediation effect is the opposite of the hypothesised mediation effect (H5). According to each path's analysis in this mediation path (Perceived Plus-sizeness – Mood and Mood – PI of Unhealthier Branded Food Products), perceived plus-sizeness has a positive relationship with mood (b = 0.128, p = 0.009), and mood also has a positive relationship with purchase intention of unhealthier branded food

products (b = 0.244, p < 0.001). These findings contrast with the proposed theory behind this hypothesis. Therefore, H5 is not supported. This surprising finding will be discussed in more detail in the discussion part.

H6 proposes that body dissatisfaction negatively mediates the effect of perceived plus-sizeness on purchase intention of unhealthier branded food products. The mediation analysis (see Table 38) shows that the indirect effect (Perceived Plus-sizeness -> Body Dissatisfaction -> PI of Unhealthier Branded Food Products) is not significant (b = 0.004, p = 0.428). Following Hair Jr et al. (2021)'s guidelines, this relationship has no mediation effect. H6 is not supported.

H7 posits that time perspective negatively mediates the effect of perceived thinness on purchase intention of healthier branded food products. The indirect effect (Perceived Thinness -> Time-Perspective -> PI of Healthier Branded Food Products) is significant (b = .045 p = 0.002). The direct effect (Perceived Thinness – PI of Healthier Branded Food Products) is also significant (b = 0.142, p = 0.001) and sum of direct and indirect effect (total effect) is positive. Therefore, the results (see Table 38) show a partial mediation for this path. However, H7 cannot be supported as the direction of the indirect effect is not negative. Time perspective positively (present-focused) mediates the relationship between perceived thinness and purchase intention of healthier branded food products. This is against what the researcher hypothesised initially, specifically that time perspective (future-focused) would be the mediator. It should be noted that time perspective is calculated in a way that higher ratings of participants show present-focused and lower ratings show future-focused. These findings contrast with the proposed theory behind this hypothesis. Following Hair Jr

et al. (2021)'s guidelines, H7 is not supported. This finding will be discussed in more detail in the discussion chapter (Chapter 8).

H8 posits that time perspective positively mediates the effect of perceived plus-sizeness on purchase intention of unhealthier branded food products. Based on the results (see Table 38), the indirect effect (Perceived Plus-sizeness -> Time-Perspective -> PI of Unhealthier Branded Food Products) is not significant (b = .008, p = 0.542). Following Hair Jr et al. (2021)'s guidelines, this relationship has no mediation effect. H8 is not supported.

7.3.3 Moderation Analyses for Hypotheses H9 to H12:

Moderation Test Overview:

Both mediator and moderator variables affect the strength of a relationship between an independent and dependent variable. According to Hair Jr et al. (2021), the difference between mediator and moderator is that the moderator variable is not dependent on the independent variable itself. The results of this study show that body image discrepancy is not affected by perceived thinness (see latent variable correlations Table 46 in the appendix: b = -0.049, p = 0.390).

As stated in the previous section, the moderation analyses were conducted using Smart-PLS (v.4.0.6.7). The moderation analyses were run using the product indicator approach suggested for reflective measures (Hair Jr et al., 2021). According to the table below (Table 39), the first path is insignificant; thus, H9 is not supported. On the other hand, the three moderation paths (H10, H11, and H12) are significant at 5% and

1%. Therefore, further analysis was performed on H10, H11 and H12. According to Hair Jr et al. (2021), a conditional direct effect bootstrapping was performed. The bootstrapping divides the effects into three categories (mean, mean + 1SD and mean - 1SD). These values can be found in Table 40. Later, the researcher used the highest (+1SD), and lowest (-1SD) splits' values across all three relationships to make the comparisons. Table 41 shows the results of the t-tests. According to the tables, the three hypotheses, H10, H11, and H12, are accepted. Figure 7, Figure 8, and Figure 9 illustrate simple slope analyses for two-way interactions.

It should be noted that the researcher used Sanchez et al. (2018)'s approach in categorising the body image discrepancy levels. According to Sanchez et al. (2018), the values of body image discrepancy (ideal-actual) could be interpreted in a way that 0 means no discrepancy, negative values mean desiring to be thinner, and positive values mean desiring to become heavier. Below are the detailed findings of each moderation hypothesis.

Table 39 - Path Coefficient for Moderation Analyses

	Path Coefficients	T Statistics	P Values
1. Moderating Effect of PT on PI_H - *(H9)*	-0.006	0.136	**0.893**
2. Moderating Effect of PT on Mood - *(H10)*	-0.088	1.903	**0.057**
3. Moderating Effect of PT on BD - *(H11)*	-0.087	2.238	**0.025**
4. Moderating Effect of PT on TP - *(H12)*	-0.125	3.533	**0.000**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Table 40 - Conditional Direct Effects

Moderating Effect of BID	H10: PT -> Mood	H11: PT -> BD	H12: PT -> TP
Mean	0.477	-0.002	0.186
-1 SD	0.719	0.160	0.308
+1 SD	0.235	-0.164	0.064

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Table 41 - T-Tests for Moderation Effects

|	H10: PT -> Mood	H11: PT -> BD	H12: PT -> TP
t-statistic	40.239	41.530	86.346
p-value (two-tailed)	0.000	0.000	0.000

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

H9 suggests that body image discrepancy moderates the effect of perceived thinness on purchase intention of healthier branded food products. The moderation analysis (Table 39) reveals that the moderation effect of body image discrepancy on the stated relationship is insignificant (b = -.006, p = 0.893). This suggests that body image discrepancy does not significantly change the nature of the relationships between perceived thinness and PI of healthier branded food products. Thus, H9 is not supported.

H10 posits that body image discrepancy moderates the effect of perceived thinness on mood. The relationship for people who desire a thinner body is significantly different from those who desire a heavier body. The moderation analysis (Table 39) shows that

there is a significant moderation effect (b = -0.088, p = 0.057). Based on Hair Jr et al. (2021)'s guidelines, body image discrepancy significantly changes the nature of the relationships between perceived thinness and mood. Next, following Hair Jr et al. (2021), a t-test was conducted. The t-test was based on the values obtained by the conditional direct effect bootstrapping (b+1SD = 0.235 and b-1SD= 0.719) (Table 40). The results of a t-test (Table 41) show a significant difference between the two groups (t = 40.239, p = 0.000). Thus, H10 is supported.

Figure 7 - Simple Slope Analysis for BID on PT-Mood
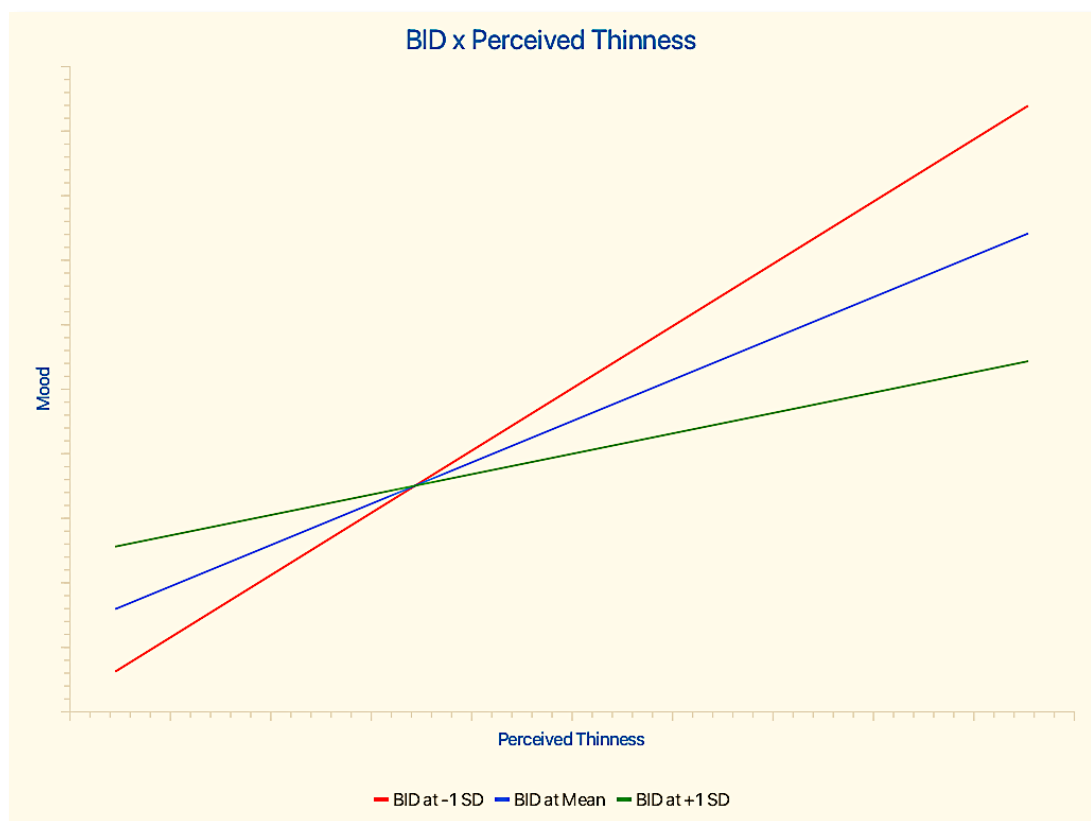
Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Following Hair Jr et al. (2021)'s recommendation on illustrating the moderation analysis, the researcher created the above graph based on the slope analysis. As the

above (Figure 7) demonstrates, BID $_{-1SD}$ (Red line) increases sharply while BID$_{+1SD}$ (Green line) increases gradually. This means that the relationship between perceived thinness and mood is different for those who desire to be thinner vs those who desire to be heavier. Specifically, the relationship between perceived thinness and mood is stronger for those who desire to be thinner.

H11 suggests that body image discrepancy moderates the effect of perceived thinness on body dissatisfaction. The relationship for people who desire a thinner body is significantly different from those who desire a heavier body. According to the moderation analysis (Table 39), there is a significant moderation effect (b = -0.087, p < 0.05). Therefore, based upon Hair Jr et al. (2021)'s guidelines body image discrepancy significantly changes the nature of the relationships between perceived thinness and body dissatisfaction. In addition, following Hair Jr et al. (2021), the researcher used the values obtained by a conditional direct effect bootstrapping (b+1SD = - -0.164 and b-1SD= 0.160) (Table 40), to run a t-test. The results of a t-test (Table 41) show a significant difference between the two groups (t = 41.530, p = 0.000). Thus, H11 is supported.

Figure 8 - Simple Slope Analysis for BID on PT-BD

BID x Perceived Thinness

Body Dissatisfaction

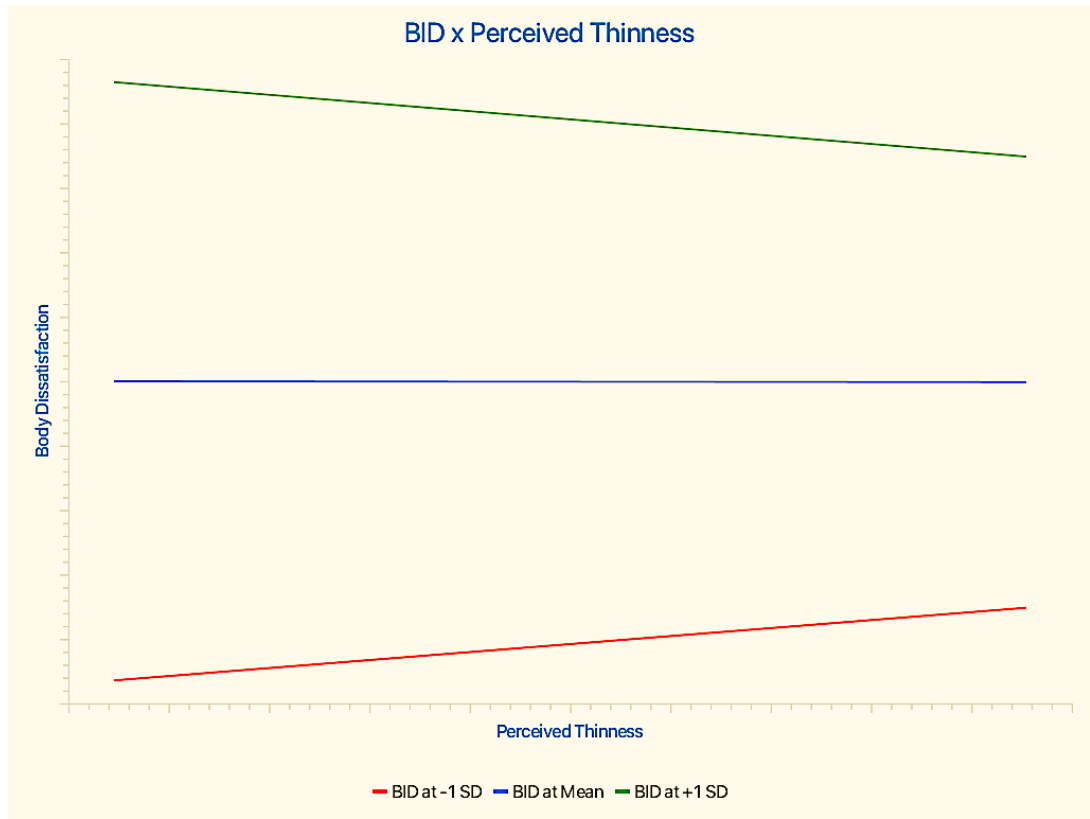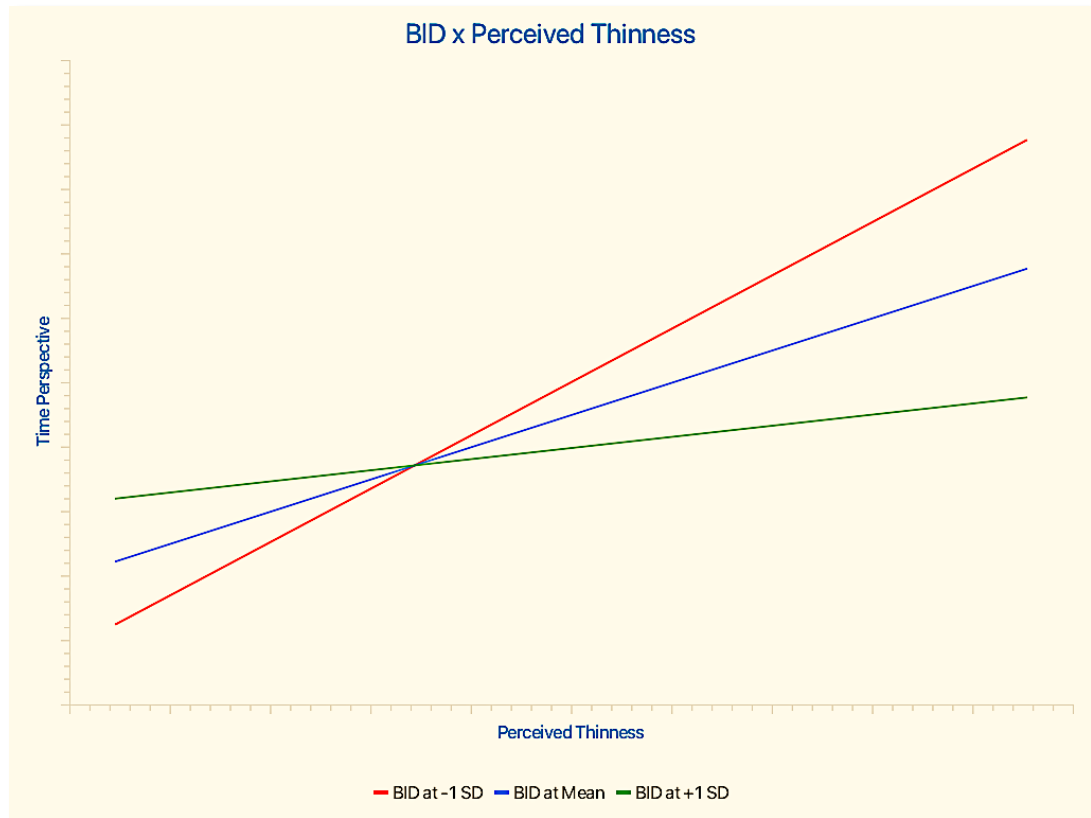Perceived Thinness

— BID at −1 SD — BID at Mean — BID at +1 SD

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Similar to H10, based on Hair Jr et al. (2021)'s recommendation on illustrating the moderation analysis, the researcher created the above graph based on the slope analysis. As the above (Figure 8) demonstrates, BID_{+1SD} (Green line) has a negative slope. In contrast, BID_{-1SD} (Red line) inclines upwards. This means that the relationship between perceived thinness and body dissatisfaction is different for those who desire to be thinner vs those who desire to be heavier. Specifically, the relationship between perceived thinness and body dissatisfaction is stronger for those who desire to be thinner.

H12 posits that body image discrepancy moderates the effect of perceived thinness on time-perspective. The relationship for people who desire a thinner body is significantly different from those who desire a heavier body. The moderation analysis (Table 39) shows that there is a significant moderation effect (b = -0.125, $p < 0.001$). It means, based on Hair Jr et al. (2021)'s guidelines, body image discrepancy significantly changes the nature of the relationships between perceived thinness and time perspective. Next, following Hair Jr et al. (2021), a t-test was conducted based on the values obtained by the conditional direct effect bootstrapping (b+1SD = 0.064 and b-1SD= 0.308) (Table 40). The results of a t-test (Table 41) show a significant difference between the two groups (t = 86.346, p = 0.000). Thus, H12 is supported.

Figure 9 - Simple Slope Analysis for BID on PT-TP

BID x Perceived Thinness

Time Perspective

Perceived Thinness

BID at -1 SD — BID at Mean — BID at +1 SD

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

Like H10 and H11, based on Hair Jr et al. (2021)'s recommendation on illustrating the moderation analysis, the above figure was created by running slope analysis for H12. As the above (Figure 9) demonstrates, BID $_{-1SD}$ (Red line) increases sharply while BID$_{+1SD}$ (Green line) increases gradually. This means that the relationship between perceived thinness and time perspective is different for those who desire to be thinner vs those who desire to be heavier. Specifically, the relationship between perceived thinness and time perspective is stronger for those who desire to be thinner.

7.4 Overview of Hypotheses Results:

According to the analyses in previous sections, five hypotheses received support. In brief, one of the main hypotheses (PT – PI-H)[7] from the main effects were supported. Moreover, one (out of six) mediation hypothesis (PT – Mood – PI-H) from the mediation effects was supported. In addition, three (out of four) hypotheses (BID× PT – Mood, BID× PT – BD, and BID× PT – TP) from the moderation effects were supported. The next chapter (Chapter 8) discusses the findings and implications of these results. The below table represents an overview of the hypotheses results.

Table 42 - An Overview of Hypotheses Results

	Hypotheses	Results
H1	*Perceived thinness is associated (positive) with the purchase intention of healthier branded food products.*	**Supported**
H2	*Perceived plus-sizeness is associated (positive) with the purchase intention of unhealthier branded food products.*	**Not Supported**
H3	*Mood is expected to positively mediate the association between perceived thinness and purchase intention of healthier branded food products.*	**Supported**
H4	*Body dissatisfaction is expected to positively mediate the association between perceived thinness and purchase intention of healthier branded food products.*	**Not Supported**
H5	*Mood is expected to negatively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.*	**Not Supported**
H6	*Body dissatisfaction is expected to negatively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.*	**Not Supported**
H7	*Time perspective is expected to negatively mediate the association between perceived thinness and purchase intention of healthier branded food products.*	**Not Supported**

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[7] **Acronyms: BID**= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **PP** = Perceived Plus-sizeness, **PT** = Perceived Thinness, **TP** = Time Perspective

	Hypotheses	Results
H8	*Time perspective is expected to positively mediate the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.*	**Not Supported**
H9	*Body-image discrepancy moderates the association between perceived thinness and purchase intention of healthier branded food products. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.*	**Not Supported**
H10	*Body-image discrepancy moderates the relationship between perceived thinness and mood. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.*	**Supported**
H11	*Body-image discrepancy moderates the relationship between perceived thinness and body dissatisfaction. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.*	**Supported**
H12	*Body-image discrepancy moderates the relationship between perceived thinness and time perspective. The relationship for those who desire a thinner body is significantly different from the relationship for those who desire a heavier body.*	**Supported**

7.5 Conclusion:

The current chapter presented brief explanations for each hypothesis. In addition, it provided the path coefficient results with a path diagram. Later, it discussed the results of hypotheses examinations with additional analysis provided. The additional data analyses included t-tests, mediation, moderation, and slope analyses. Finally, it showed a table of an overview of Hs testing. The next chapter (Chapter 8) outlines the research discussion and findings.

Chapter 8 – Discussion

8.1 Introduction:

This chapter presents the findings of the study based on the results of the data analyses (provided in results chapters 5, 6, and 7). The chapter proceeds by drawing conclusions in regard to the research questions pertaining to this thesis. The research questions are as follows:

RQ1: Do perceived thinness/plus-sizeness lead to an increase in purchase intention of branded food products when rating for the pairs of healthier and unhealthier ones?

RQ2: Do mood and body dissatisfaction play mediation roles in the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products?

RQ3: Does time perspective play a mediation role in the relationships between perceived thinness/plus-sizeness and purchase intention of healthier/unhealthier branded food products?

RQ4: Does body image discrepancy moderate the relationships between perceived thinness and purchase intention of healthier branded food products as well as mediators (mood, body dissatisfaction and time perspective)?

8.2 Discussion:

First, the findings of this study show a positive association between perceived thinness and purchase intention of healthier branded food products. In fact, this study empirically confirms that using thinner models (that is if they lead to thinness perception) is beneficial for increasing the purchase intention of healthier food/beverages. In the context of compensatory consumption behaviour (Mandel et al., 2017), the findings of this study support the direct resolution strategy.

In brief, the compensatory consumption dilemma suggests two strategies of direct resolution and escapism for predicting human behaviour. Compensatory consumption behaviour is the consumption/use/purchase of any products/services that help an individual to feel satisfied after having a psychological discomfort (such as self-esteem threat) (Xiaoying and Siqing, 2014, Mandel et al., 2017). For example, an ad viewer's self-esteem could be reduced after seeing thin images (Richins, 1991). This could be compensated in two ways (direct resolution vs escapism): (a) the viewer would either consume products that could help them address the source of threat to their self-esteem (e.g., eating healthy to become thinner) (Bagozzi and Dholakia, 1999, Schouten, 1991, Mandel et al., 2017) or (b) shift their thoughts elsewhere (e.g., eating delicious but unhealthy food to distract their thoughts known as binge eating) (Heatherton and Baumeister, 1991, Atalay and Meloy, 2011, Troisi and Gabriel, 2011, Cornil and Chandon, 2013, Mandel et al., 2017). Accordingly, the first and the second behaviours mentioned above are called direct resolution and escapism, respectively. The findings of this study confirm the direct resolution strategy. In addition, these findings are in line with Tesser et al. (2000), Lisjak et al. (2014a), and Lisjak et al. (2014b), who suggest that engaging in compensatory consumption (escapism) does

not work when the consumption reminds the consumer of their psychological discomfort. In this scenario, consuming less healthy food might not serve as a distraction from concerns about not being thin, as unhealthy eating could be a contributing factor to the issue of not achieving a thin physique. Hence, consumers will prefer eating healthy over unhealthy food when facing a threat to their body-related self-esteem.

Second, as expected, the results find support for the mediating effect of mood on the association between perceived thinness and purchase intention of healthier branded food products. Mood (negative mood) positively mediates this association. This means that perceived thinness increases the negative mood, leading to the purchase intention of healthier branded food products. As discussed in the hypotheses testing chapter (Chapter 7), this effect is a partial mediation. Therefore, the negative mood could explain at least part of the underlying mechanism for the correlation between perceived thinness and purchase intention of healthier branded food products. Delving further into details, the results show a significant correlation between perceived thinness and mood and a significant correlation between mood and purchase intention of healthier branded food products. The first finding (correlation between perceived thinness and mood) confirms previous works (Harper and Tiggemann, 2008, Tiggemann and Zaccardo, 2015, Hendrickse et al., 2017, McComb and Mills, 2020). The negative mood associated with thinness perception serves as an indicator for upward comparison, thus further supporting the theory of social comparison (Festinger, 1954). However, the second finding (correlation between mood and purchase intention of healthier branded food products) differs from studies that suggest negative mood results in choosing unhealthy foods (Labroo and

Mukhopadhyay, 2009, Gardner et al., 2014). According to Labroo and Mukhopadhyay (2009), individuals who suffer from negative mood would engage in activities that could immediately regulate their mood (such as binge eating). Having said that, this study's results suggest that the source of the negative mood is essential for anticipating the behaviour (healthy or unhealthy). For example, suppose an individual has a negative mood due to exposure to thin images (healthy-looking models). In that case, the person will likely engage in healthy eating behaviour (purchasing healthier branded food products) rather than unhealthy ones. Because purchasing healthier branded food products, at least, could improve the person's mood if they feel they are progressing toward achieving a thin, healthy-looking body. Therefore, this further supports the direct resolution strategy within the context of compensatory consumption behaviour. One of the reasons for this could be symbolic self-completion. The symbolic self-completion theory (Wicklund and Gollwitzer, 1981, Wicklund and Gollwitzer, 2013) proposes that individuals use signs/symbols that present them as they progress toward their desired self-definition. For example, a music student who does not have high grades buys expensive musical instruments. This symbolic purchase helps the student to either show others that they are a good musician or to increase "commitment to self-defining goals" (Wicklund and Gollwitzer, 1981). Similarly, a person whose negative mood is derived from a thinness perception buys healthier branded food products (such as Coca-Cola Zero Sugar), so they could feel that they are progressing toward achieving a thin body. In addition, the study finds another indicator for upward social comparison by finding an association between perceived thinness and body dissatisfaction only after applying two statistical techniques[8]. As previous research suggested, body dissatisfaction results from social

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[8] By applying two statistical techniques, the relationship becomes significant: first, to eliminate one item from the body dissatisfaction measure (see Chapter 6 low loading factors) due to marginal indicator loading (indicator loading = 0.697 and the

comparison (Vuong et al., 2021, Eck et al., 2022). The above finding demonstrates how thin models in advertisements could impact audiences'/customers' eating behaviour by triggering their moods and body dissatisfaction. The implications for policymakers and marketing practitioners will be discussed in the next chapter (Chapter 9).

Third, surprisingly, the findings show that both thin and plus-size perceptions are correlated with negative mood in the same direction. This could mean that even merely asking participants to see models and rate the model's body sizes could affect their mood. According to social comparison theory, if upward comparison results in a negative mood, theoretically, it is expected to see the opposite effect for the downward comparison (Festinger, 1954, Wills, 1981, Bourn et al., 2015). However, according to Bourn et al. (2015), the literature consists of mixed results regarding the effect of exposure to plus-size images on mood. For example, Wills (1991) explains a reason for not seeing the positive effect of downward comparison on mood. They suggest that the likelihood of becoming similar to the comparison target (in this case, a plus-size person) could also affect one's mood negatively if they found the plus-size model unattractive. In line with the findings of this study, Bourn et al. (2015) suggest that watching larger bodies in media could prime the audience to start thinking of their own body weight (recall for fatness (Baker et al., 1995)), thus resulting in negative emotions and more food intake. Based on the above explanations, the current study extends the literature by finding evidence for the association between perceived plus-sizeness and negative mood. In addition, the result of a t-test shows that the relationship between perceived thinness and mood is stronger than the relationship

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threshold = 0.708) (Hair Jr et al., 2021), second, to use more statistical power (Bruin, 2006) by applying the two above, the relationship between perceived thinness and body dissatisfaction becomes significant at 10% (b = 0.062, p < 0.1, one-tailed.

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between perceived plus-sizeness and mood (one-tailed test). Therefore, still thinness perception has a more damaging effect on one's mood than plus-size perception. While the findings of this study find indicators of upward social comparison, they only find very limited evidence[9] of downward social comparison, and the underlying reasons may guide the fourth finding in this research.

Fourth, the current study finds signs of a potential link between perceived plus-sizeness and unhealthy eating; however, the rationale for not finding a significant direct association in some studies (including the current one) is explained as follows. First, researchers who study plus-size images sometimes interchangeably use average-sized and plus-size terms. This could result in methodological variation, thus receiving different results (Simon and Hurst, 2021). One strength of this study is that the researcher used pictures of models of three body sizes (thin, medium, and plus-size). Participants had to rate their perceptions on two different sets of scales from medium-to-thin and from medium-to-plus-size. Therefore, in the current work, the researcher distinguished between average-sized and plus-size by presenting both sizes and having both anchors on the body size scales. It is recommended that future studies should clearly differentiate the use of average-sized models from the plus-size ones. Second, society also has different perceptions/definitions of what is normal, average, and acceptable. According to the visual normalisation theory (Kahneman and Miller, 1986), since larger body sizes are now more common, the visual threshold for what is considered plus-size has shifted (Robinson, 2017). Therefore, because of this 'visual adaptation' (Webster and MacLeod, 2011), people will visually accept the plus-size

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[9] Downward social comparison: It should be noted that the association between perceived plus-sizeness and body dissatisfaction becomes significant at 10% (b = -0.061, p < 0.1, one-tailed test) only after adding hunger as a control variable and using more power to detect the effect BRUIN, J. 2006. Newtest: command to compute new test. *UCLA: Statistical Consulting Group.*.

models as normal. Thus, according to the match-up hypothesis (Kamins, 1990, Till and Busler, 2000), this new normal does not envisage unhealthy eating. To put it simply, if being overweight is equal to eating unhealthy foods, the new normal (previously known as fat) is not equivalent to unhealthy eating anymore. As mentioned earlier, participants and researchers could have different views on plus-sizeness. Thus, these variations/fluctuations in defining plus-sizeness may weaken the strengths of the association between perceived plus-sizeness and purchase intention of unhealthier branded food products.

Fifth, this study finds that body dissatisfaction is negatively associated with the purchase intention of unhealthier branded food products. This confirms previous works by Heinberg et al. (2001), De Giuseppe et al. (2019), which note that there is a positive aspect of body dissatisfaction which results in engaging in healthy behaviours and restricting unhealthy food intake. This finding once again finds support for a direct resolution strategy within the context of compensatory consumption behaviour (Mandel et al., 2017), which states that individuals suffering from a gap between their actual and ideal states of self will consume/buy products/services that could help them eliminate the source of discomfort. The significant negative relationship between body dissatisfaction and purchase intention of unhealthier branded food products further confirms that the drive for thinness (if activated by greater body dissatisfaction) is associated with dieting behaviour (Chernyak and Lowe, 2010, Eck et al., 2022).

Sixth, contrary to expectations, the results reveal that the present-focused time perspective mediates the relationship between thinness perception and purchase intention of healthier branded food products. An explanation for this unexpected

mediation effect could be linked to negative mood. The researcher conducted a post-hoc analysis with perceived thinness (as an exogenous variable), time perspective (as an endogenous variable) and mood (as a mediator). The results showed that perceived thinness is significantly associated with time perspective through negative mood (b = 0.042, p = 0.004). This means that perceived thinness increases the negative mood, which in return increases the time perspective (present-focused). Accordingly, a previous study suggests that negative mood is associated with self-awareness. Therefore, a combination of negative mood and self-awareness might be responsible for drawing one's attention to the present. This self-awareness could sometimes prevent unhealthy eating (Duval and Wicklund, 1972, Higgins, 1987, Heatherton and Baumeister, 1991), like choosing food options cautiously. Hence, it could be said that other complex mechanisms could explain the mediating effect of time perspective (present-focused) in this relationship. For example, future studies could investigate the role of situational factors (feeling of guilt, feeling of being judged by others, etc.) that make someone maintain self-awareness in the context of thin/plus-size exposure and eating behaviour studies. This finding is in contrast to the studies (Rothspan and Read, 1996, Keough et al., 1999, Boyd and Zimbardo, 2006, Crockett et al., 2009, Zimbardo and Boyd, 2015) that suggest present-focused time perspective is linked to indulgent behaviour and unhealthy eating. In fact, as opposed to the theory of temporal construal (Trope and Liberman, 2003), the activation of low-level construal is not always associated with hedonic behaviour.

Seventh, the researcher expected to find evidence for the moderating role of body image discrepancy in the relationship between perceived thinness and purchase intention of healthier branded food products. However, this was not supported. That

being said, the reason for not finding the moderation effect is that this relationship (i.e., perceived thinness – purchase intention of healthier branded food products) is significant for both groups who wish to become thinner and desire to become heavier (see Chapter 7 subsection 7.3.3). Regarding the first group who desire to be thinner, the result confirms the direct resolution strategy. The direct resolution strategy (within the context of compensatory consumption behaviour) posits that individuals who suffer from self-discrepancy would consume/buy products that could address their discrepancies directly (Bagozzi and Dholakia, 1999, Schouten, 1991, Mandel et al., 2017). For the second group (desire to be heavier), surprisingly, the relationship between perceived thinness and purchase intention of healthier branded food products remains significant. The reasons could be that even those who wish to become heavier may prefer healthier options and do not want to risk their health by eating too many calorie-dense snacks. This could be due to the fact that these types of food only increase body fat instead of lean body mass, and they are associated with an increase in the risk of developing high cholesterol and other food-related chronic diseases (NHS, 2022). This may offer a valuable opportunity for future studies to investigate why individuals desiring to be heavier might prefer healthy food options.

Finally, this study wanted to investigate whether certain individuals are more vulnerable to the effects of thin images. The study finds that body image discrepancy moderates the three relationships between perceived thinness (independent variable), mood (dependent variable), body dissatisfaction (dependent variable) and time perspective (dependent variable). In fact, for those who desire to be thinner, thinness perception is associated with a more negative mood, increased body dissatisfaction and a more present-focused time perspective. For example, previous studies found that

individuals with higher appearance-based self-discrepancy are more likely to manipulate their photos (Yu and Kim, 2020, Beos et al., 2021, Stewart and Clayton, 2022), which indicates how these individuals may experience vulnerability concerning their actual-selves. Hence, this finding first highlights that thin images in media could have a more severe impact on certain individuals who want to lose weight. Second, this study demonstrated the importance of measuring self-discrepancy in studies related to body image, as individuals with different levels of self-gap would respond differently to survey questions.

8.3 Conclusion:

This chapter presented the findings of the study. Overall, this chapter provided grounds for the association between perceived thinness and purchase intention of healthier branded food products, explicitly considering the mediating role of mood. In addition, it explained the potential contributing factors to the absence of a significant association between perceived plus-sizeness and purchase intention of unhealthier branded food products. Moreover, this chapter discussed how the research links to the key theories of social comparison and compensatory consumption behaviour. Finally, it presented findings on the moderating role of body image discrepancy, specifically how certain group of individuals are affected by thinness perception. In this chapter, the researcher briefly offered future research directions; however, this will be discussed in more detail in the next chapter. In addition, the following chapter provides theoretical contributions and implications for managers and policymakers.

Chapter 9 – Conclusion

9.1 Introduction:

This chapter presents the contribution to theory and knowledge (Section 9.2). Moreover, it suggests several implications for policymakers and managers (Section 9.3 and Section 9.4). In addition, it suggests directions for future research while discussing the thesis's limitations (Section 9.5).

9.2 Contribution to Theory and Knowledge:

The researcher examined the association between perceived thinness and purchase intention of healthier branded food products. The results show that these two variables are associated with each other through mood. These findings as well as the results of other paths analyses advance our understanding in regard to theory of social comparison (Festinger, 1954) and compensatory consumption behaviour (Mandel et al., 2017). First, based on the findings, perceived thinness is associated with negative mood and enhanced body dissatisfaction. This validates the upward social comparison, which states that individuals comparing themselves to superior others could experience negative affect (Fardouly et al., 2015, Tiggemann and Zaccardo, 2015). Concurrently, based on the findings, this effect is stronger among those individuals who desire to be thinner. In addition, the current research finds that perceived plus-sizeness is associated with negative mood, thus concluding that

exposure to plus-size models may not necessarily trigger a downward comparison, and even if such a comparison does occur, it may not lead to a better mood. Second, this study contributes to our understanding of compensatory consumption behaviour by providing conceptual evidence for a direct resolution strategy. Building on previous works (Tesser et al., 2000, Lisjak et al., 2014a, Lisjak et al., 2014b), this thesis extends our knowledge of compensatory consumption behaviour by showing that individuals would choose direct resolution strategy over escapism when the stimuli and consumption are both related to each other (such as model's body size and food healthiness).

In addition, the current study further validates the theory of self-congruity and the match-up hypothesis. The theory postulates that the match between a brand's image (personality) and one's actual/ideal selves increases the motivation to purchase through an increase in a positive attitude towards that brand (Sirgy, 1985, Sirgy et al., 1991, Malär et al., 2011). This thesis validates self-congruity theory by showing that the purchase intention of healthier branded food products (e.g., Diet Coke) is associated with thinness perception of a model. Also, this thesis validates the match-up hypothesis. The Match-up hypothesis suggests that a fit between an endorser and the endorsed product will increase purchase intention (Kamins, 1990, Till and Busler, 2000, Chrysochou and Nikolakis, 2012). This research offers empirical evidence on the mediation role of mood on the relationship between perceived thinness and purchase intention of healthier branded food products. The findings reported here shed new light on the source of negative mood in a mood-food relationship. Contrary to studies (Labroo and Mukhopadhyay, 2009, Gardner et al., 2014) that suggest individuals with negative mood would engage in activities that regulate their mood

(such as binge eating), this study shows that the source of this negative mood is essential for anticipating individual's behaviour. To this end, the negative mood, which is linked to perceived thinness, is associated with the purchase intention of healthier branded food products and not the unhealthier ones.

Additionally, this study expands our knowledge regarding men in the context of media exposure, body size perceptions and their food purchasing behaviour. The majority of previous works have considered only women in their studies (Irving, 1990, Baker et al., 1995, Bissell and Zhou, 2004, Clayton et al., 2017, Hendrickse et al., 2017, Stewart and Ogden, 2021, Cornil et al., 2022). However, the current study has included men as well as women. According to the findings of this thesis, men do not significantly differ from women in terms of the link between food purchasing behaviour and body size perceptions. Also, this study adds to the growing body of literature by expanding our knowledge of plus-size images. This area of literature has received less attention compared to thin images. The majority of previous works have considered only thin images in their studies (Tiggemann and Pickering, 1996, Harrison, 2000, Groesz et al., 2002, Tiggemann and Slater, 2004, Harper and Tiggemann, 2008, Tiggemann and Miller, 2010). Building on a few recent studies (Bissell and Rask, 2010, Bould et al., 2018, Moreno-Domínguez et al., 2019), this thesis has considered plus-size images. Although the current study did not find a direct relationship between perceived plus-sizeness and food purchasing behaviour, the links to body dissatisfaction and mood serve as a base for future studies.

Finally, this study validates a relatively new approach for measuring body image discrepancy. Previously, studies used to measure body image discrepancy (the gap

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between an individual's current and ideal body state) (Higgins, 1987, Thompson and Gray, 1995, Bissell and Rask, 2010, Vartanian, 2012), by calculating absolute values (Anton et al., 2000). Using absolute values does not distinguish between those who wish to lose weight and those who desire to add weight. However, by accepting integer values, the numbers could be defined into three different categories of no discrepancy (zero values), desiring to become thinner (negative values), and desiring to become heavier (positive values) (Sánchez et al., 2018, Hendrickse et al., 2021). Accordingly, using the second approach enables researchers to consider three different levels of body image discrepancy rather than merely assessing its presence or absence in participants.

9.3 Implications for Policy Makers:

The findings of this thesis suggest several implications for policymakers to help increase the well-being of society. Firstly, as demonstrated previously (Harper and Tiggemann, 2008, Tiggemann and Zaccardo, 2015, Hendrickse et al., 2017, McComb and Mills, 2020), exposure to thin images results in a negative mood. This is important as the use of thin models in advertisements, movies, reality shows, etc. has become essential for attracting more audiences. This, in general, has the potential to negatively impact the well-being of society by triggering their mood and mental health. But more importantly, the findings of this study show that perceived plus-sizeness is also associated with negative mood. The reason for this unexpected association could be that watching plus-size models in media could remind the audience about their own fatness (Baker et al., 1995) or could bring up a fear of becoming similar to the comparison target (in this case, a plus-size person) (Wills, 1991). Therefore, both thin

and plus-size images will harm an individual's mood, thus resulting in mental health issues. The challenge now is to regulate rules to protect individuals' mood. One suggestion could be using non-human advertisements for products/services linked to body and body image (such as food products). For example, instead of showing the iconic supermodel Kate Moss alongside a branded food product (such as Diet Coke) (Coca-cola.co.uk, 2022), advertisers should emphasise on other audio-visual attractions. A good example of this could be the famous scene that shows pouring a drink (Coca-Cola) in a glass full of ice cubes (Ogilvy, 2019). The second suggestion could be using models that do not have special body features that could remind the audience about their own unideal body standards or the need to be thin. For example, brands can use "Skinny fat" models instead of thin/plus-size. Skinny fat people (medically known as normal weight obese) are those who have normal BMI but less muscle mass and more body fat (Franco et al., 2016, Yetman, 2021, Castañon, 2022). These models could have more thin-like shoulders/arms with abdominal fat. Thus, while they do not remind of very skinny models, they do not remind of extremely overweight models either. This way the audience's mood is not likely to be triggered.

Secondly, according to the findings, perceived plus-sizeness is associated with less body dissatisfaction. And less body dissatisfaction is associated with more tendency to purchase unhealthier branded food products. Thus, it could be said that using plus-size models is better for individuals' body image as it shows slight improvements in body satisfaction. But more importantly, the further effect on individuals' lifestyles seems negative. More extraordinary efforts are needed to ensure that the use of plus-size models does not lead to having a tendency toward an unhealthy lifestyle. A key policy goal should therefore be to consider the long-term impact of using plus-size

models on society. This should come before encouraging all media creators to merely increase the use of body diversity in their programs, ads etc.

Thirdly, policymakers should introduce a clear definition of healthy plus-size models. Similar to what was later called anorexic models (too skinny), plus-size models should be classified into healthy and unhealthy categories. Currently, the use of anorexic models is banned in France, Spain and Italy (BBC, 2017b). Accordingly, very thin models need a doctor's certificate regarding their physical health. A key policy should be to define a standard definition of healthy plus-size models for marketing and advertising agencies. According to the NHS (2021), a person with a BMI of 40 or above is considered severely obese, while a person with a BMI of 25 to 29.9 is only considered overweight. While the latter could be a partially-healthy plus-size person/model, the first could be a seriously ill plus-size person/model. Therefore, policymakers should establish regulations on using plus-size models in a similar way to the use of anorexic models. In addition, a well-known plus-size model has recently revealed that she is also suffering from anorexia and is receiving medical treatment (Elan, 2021). Hence, marketing campaigns that want to promote body diversity should cautiously use models (either thin or plus-size) who are believed to suffer from serious eating disorders. And policymakers should closely monitor marketing campaigns. Finally, policymakers should encourage media creators to use plus-size models in order to reduce fat shaming and stigma while making sure that media creators are not promoting dangerous, unhealthy lifestyles.

9.4 Managerial Implications:

The main research objective of this thesis was to understand which body size perception (thinness or plus-sizeness) is associated with purchase intention of which branded food products (healthier or unhealthier). The reason for choosing the mentioned objective was to understand how food and beverage producing companies should run their marketing/advertising campaigns to promote the right product with the right model in terms of the link between the healthiness of the products and with models' body types. In order to profoundly investigate the issue, the researcher examined if there are significant relationships between body size perceptions of models and purchase intention of branded food products. According to the findings, thinness perception is associated with purchase intention of healthier branded food products, but it is not associated with purchase intention of unhealthier ones. In addition, the researcher did not find evidence for the direct relationship between plus-size perception and purchase intention of unhealthier branded food products. But the findings suggest a potential indirect relationship through body dissatisfaction. Moreover, as expected, the researcher found no evidence for the relationship between plus-size perception and purchase intention of healthier branded food products. Taken together, a practical implication of these findings for managers is not to use thin and plus-size models interchangeably. Managers are advised to consider if their product and its healthiness match the ad's model's body size. Back to the example in the implications for policy makers' section (Section 9.3), using an iconic supermodel (Coca-cola.co.uk, 2022) seems to be the right choice for promoting healthier sub-brands (e.g., Diet Coke) compared to unhealthier sub-brands (Coco-Cola Original). In contrast, using a plus-size model for promoting healthier branded food products by ModelMeals (Brysha, 2019) is not a good decision as plus-size perception is not

associated with the purchase intention of healthier branded food products. That being said, having a plus-size model as a promoter of a healthy food-producing company might help with their brand attitude (Jung and Heo, 2018), because using diverse body sizes helps with brand performance (Joo and Wu, 2021). Therefore, the challenge for managers now is to ensure that while maintaining a satisfactory brand attitude level between the company and its customers, they also enhance sales by using the right model for their products.

It should be noted that the use of plus-size models is necessary for other industries such as the fashion industry, as it promotes larger clothes sizes and fights against body shaming. For the food/beverage industry however, it seems not to be the right choice.

In addition, as stated in the previous section (Section 9.3), both thinness and plus-size perceptions are associated with negative mood. Thus, managers should be aware of the potential harm they could cause by emphasising one's body size in their ads and marketing campaigns. According to static affect evaluation theory (Andrade, 2005), individuals with negative mood process and judge the surrounding information negatively. As a consequence of negative judging, the audience might unconsciously form a negative attitude toward the product being promoted in the ad. As suggested in the previous section, managers could work on other audio-visual stimuli in advertisements instead of using humans such as a cinematic footage of pouring a drink into a glass with enhanced sounds. For marketing campaigns, managers should be cautious when selecting a brand face. Previously, the researcher suggested that using the iconic supermodel Kate Moss is a better choice for promoting a healthier sub-brand (e.g., Diet Coke). However, choosing a model whose name is also associated with the term "Heroin Chic" and anorexia in the 1990s (Arnold, 1999, Britannica,

2022), might not be a good idea, at least for older generations. The rumours regarding a model's very thin body and its link to misusage of drugs/ anorexia (Selinger-Moris, 2022) damage a campaign's objective of promoting a healthier product. Therefore, a key policy priority for managers should be using the right model in terms of their healthy behaviour and body size in accordance with the healthiness of the product/service they promote.

9.5 Limitations and Future Research Directions:

One strength of this research is that it increases the generalisability of the findings by expanding the population, using more diverse body types to measure body size perceptions, and using real food brands with real healthier/unhealthier sub-brands. Previous studies have mainly examined student samples and particular age groups related to student participants (Tiggemann and McGill, 2004, Tiggemann and Slater, 2004, Aubrey, 2006, Martin et al., 2007), either women participants (Irving, 1990, Baker et al., 1995, Bissell and Zhou, 2004, Clayton et al., 2017, Hendrickse et al., 2017, Stewart and Ogden, 2021, Cornil et al., 2022) or men participants (Hargreaves and Tiggemann, 2009, Pickett and Brison, 2019), participants with specific BMI range (Bould et al., 2018, Gierl, 2019), thin images (Tiggemann and Pickering, 1996, Harrison, 2000, Groesz et al., 2002, Tiggemann and Slater, 2004, Harper and Tiggemann, 2008, Tiggemann and Miller, 2010), non-branded foods (e.g., salad) or fictious branded food products (Martin et al., 2007, Martin and Xavier, 2010, Chrysochou and Nikolakis, 2012, Gardner et al., 2014, Forwood et al., 2015, Melbye et al., 2015, Simon and Hurst, 2021), and fictional healthier vs. unhealthier sub-brands (Westover and Randle, 2009). This study provides more comprehensive results by

considering all the following items together: a) including both women and men, b) not limiting the study to student/college samples, c) not limiting the age of participants except from under eighteens d) including all ranges of BMIs e) using thin, medium, and plus-size images f) using real food brands and g) using healthier vs unhealthier sub-brands of branded food products together. However, this thesis is not without limitations.

First, although the results of this thesis could be generalised due to the expansion of the study's population, the results are only valid for same genders. Similar to the literature (Irving, 1990, Baker et al., 1995, Bissell and Zhou, 2004, Clayton et al., 2017, Hendrickse et al., 2017, Stewart and Ogden, 2021, Cornil et al., 2022), the current thesis only studied the effect of female models on female participants and male models on male participants. This decreases the generalisability of the findings, as in the real-world different genders will also see the models of the opposite sex. In addition, non-binary genders would also see binary and non-binary models. For example, a non-binary audience might feel less sympathy or empathy with a binary model in an advertisement. This in return could have an inverse impact on a person's attitude towards the brand (Escalas and Stern, 2003). Therefore, future studies should consider the effects of models' body size perceptions on opposite-gender participants as well as the impact of binary and non-binary models' body size perceptions on binary and non-binary participants.

Second, similar to the literature (Westover and Randle, 2009, Bourn et al., 2015, Clayton et al., 2017, Stewart and Ogden, 2021), the current thesis lacks data on the effect of body size perceptions from ethnically diverse models on ethnically diverse

participants that are equally distributed for answering the survey. According to the current thesis, all the models' images that are used are from white ethnic backgrounds. Also, the majority of participants described themselves as white. Although this makes the findings more realistic in terms of the similarity to the actual population in western countries, it restricts the generalisability of the findings for ethnic minorities. For example, a study shows that American women with African background have more body appreciation compared to white background (Winter et al., 2019). One explanation could be that perhaps black women less internalise the thinness ideal portrayed in media that show thin white models. Therefore, it is fruitful for future research to study the current model with ethnically diverse models on an ethnically diverse population.

Third, the current thesis investigated which male models' body type (muscular vs thin) will serve as a proxy for idealness. The results supported thin models. Therefore, the researcher only included thin images. The study's findings cannot be expanded to muscular models and their potential effects on consumers' food buying behaviour. Hence, future research could also consider muscular images of men and women in their study model. Future research could examine different types of muscularity, for example, by categorising muscular models into two categories of muscular-and-big vs muscular-and-fit. The difference between the two is that for the first one, an average-weight person needs to gain weight (mostly muscle), and the latter needs to lose weight (mostly fat). Thus, it is likely that a muscular-and-fit model should theoretically lead consumers to diet-related foods such as Lucozade Zero Sugar, while a muscular-and-big model should lead consumers to functional foods such as Snicker with Protein.

Fourth, from a methodological perspective, the researcher detected a suppression effect within the study's model. According to Krus and Wilkinson (1986), a suppression effect occurs when a mediator variable suppresses the effect of the other mediator variable, thus, it appears that there is no association between the independent and dependent variables. For example, a student's creativity increases problem-solving skills, which in turn increases their productivity. Also, a student's creativity decreases their attention and focus on the task, making them less productive. Thus, problem-solving and attention deficiency offset each other's effects. And a researcher may conclude that there is no association between a student's creativity and productivity. In the current study, mood (mediation variable) suppresses body dissatisfaction (another mediation variable) for the relationship between perceived plus-sizeness and purchase intention of unhealthier branded food products. This suppression effect resulted in a) not having a significant association between perceived plus-sizeness and purchase intention of unhealthier branded food products, and b) weakening the mediation effect of body dissatisfaction in the relationship between perceived plus-sizeness and purchase intention of unhealthier branded food products. Accordingly, future studies should mainly focus on body dissatisfaction and its relation to both perceived plus-sizeness and purchase intention of unhealthier branded food products as well as its possible mediation role.

Fifth, as explained in the methodology chapter, while some previous researchers (Hendrickse et al., 2017, Duan et al., 2022) provided support for the thin image associations with other variables by conducting correlational studies, experimental design could help researchers establish causation. The current thesis benefited from the correlational design; however, this limited the researcher's ability to make

comparisons between two different groups. For example, while the results indicate an association between thinness perception and purchase intention of healthier branded food products, it does not show an association between thinness perception and purchase intention of unhealthier branded food products. Therefore, the researcher could not draw a conclusion based on comparing participants who chose healthier food brands rather than unhealthier ones. Future studies could benefit from experimental design, or alternatively, in combination with a correlational one.

Finally, the researcher measured participants' hunger levels to test it as a control variable. While hunger level is an important factor to consider in studies involving food choices, participants' dietary restrained states is also essential (Polivy et al., 2020). The current study did not measure the restrained states of participants; however, future studies should also consider this variable as it could influence the studies that involve thin images, mood, and food choices (McComb and Mills, 2022a).

Appendices:

Appendix 1:

Table 43 - Normality Tests for Thin Male Models (Perceived Idealness and Perceived Thinness)

	Shapiro-Wilk		
	Statistics	**df**	**Sig.**
Model 1 - Perceived Idealness	.865	15	.029**
Model 1 - Perceived Thinness	.952	15	.560
Model 2 - Perceived Idealness	.941	15	.389
Model 2 - Perceived Thinness	.892	15	.071
Model 3 - Perceived Idealness	.814	15	.006**
Model 3 - Perceived Thinness	.892	15	.071
Model 4 - Perceived Idealness	.928	15	.251
Model 4 - Perceived Thinness	.889	15	.065

**Sig <0.05 (not normally distributed)

Table 44 - Normality Tests for Muscular Male Models (Perceived Idealness and Perceived Muscularity)

	Shapiro-Wilk		
	Statistics	df	Sig.
Model 1 - Perceived Idealness	.882	14	.063
Model 1 – Perceived Muscularity	.906	14	.139
Model 2 - Perceived Idealness	.792	14	.004**
Model 2 – Perceived Muscularity	.900	14	.113
Model 3 - Perceived Idealness	.881	14	.059
Model 3 – Perceived Muscularity	.883	14	.065
Model 4 - Perceived Idealness	.918	14	.204
Model 4 – Perceived Muscularity	.933	14	.335

**Sig <0.05 (not normally distributed)

Table 45 - Linearity Tests for Male Models

		Sig.
Model 1 - Perceived Idealness		
Model 1 - Perceived Thinness	**Deviation from Linearity**	.743
		Sig.
Model 2 - Perceived Idealness		
Model 2 - Perceived Thinness	**Deviation from Linearity**	.726
		Sig.
Model 3 - Perceived Idealness		
Model 3 - Perceived Thinness	**Deviation from Linearity**	.363
		Sig.
Model 4 - Perceived Idealness		
Model 4 - Perceived Thinness	**Deviation from Linearity**	.105

		Sig.
		Sig.
Model 1 - Perceived Idealness		
Model 1 – Perceived Muscularity	**Deviation from Linearity**	.804
		Sig.
Model 2 - Perceived Idealness		
Model 2 – Perceived Muscularity	**Deviation from Linearity**	.733
		Sig.
Model 3 - Perceived Idealness		
Model 3 – Perceived Muscularity	**Deviation from Linearity**	.062
		Sig.
Model 4 - Perceived Idealness		
Model 4 – Perceived Muscularity	**Deviation from Linearity**	.700

Table 46 - Latent Variable Correlations

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Body Dissatisfaction -> BID	0.536	0.029	18.739	**0.000**
Mood -> BID	-0.076	0.050	1.510	**0.129**
Mood -> Body Dissatisfaction	0.215	0.051	4.236	**0.000**
PI_HBF -> BID	-0.090	0.047	1.927	**0.058**
PI_HBF -> Body Dissatisfaction	-0.025	0.060	0.419	**0.660**
PI_HBF -> Mood	0.282	0.042	6.743	**0.000**
PI_UBF -> BID	-0.147	0.047	3.136	**0.002**
PI_UBF -> Body Dissatisfaction	-0.049	0.053	0.919	**0.349**
PI_UBF -> Mood	0.297	0.042	7.108	**0.000**
PI_UBF -> PI_HBF	0.640	0.039	16.532	**0.000**
Perceived_Plussizeness -> BID	-0.041	0.045	0.914	**0.370**
Perceived_Plussizeness -> Body Dissatisfaction	-0.063	0.051	1.244	**0.225**
Perceived_Plussizeness -> Mood	0.073	0.047	1.567	**0.175**
Perceived_Plussizeness -> PI_HBF	0.004	0.050	0.075	**0.942**
Perceived_Plussizeness -> PI_UBF	-0.023	0.049	0.480	**0.636**
Perceived_Thinness -> BID	-0.049	0.057	0.857	**0.390**

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Perceived_Thinness -> Body Dissatisfaction	-0.016	0.055	0.293	**0.761**
Perceived_Thinness -> Mood	0.177	0.051	3.490	**0.000**
Perceived_Thinness -> PI_HBF	0.210	0.046	4.517	**0.000**
Perceived_Thinness -> PI_UBF	0.159	0.046	3.489	**0.000**
Perceived_Thinness -> Perceived_Plussizeness	-0.286	0.040	7.127	**0.000**
Time Perspective -> BID	-0.076	0.049	1.548	**0.121**
Time Perspective -> Body Dissatisfaction	-0.075	0.054	1.387	**0.157**
Time Perspective -> Mood	0.262	0.045	5.898	**0.000**
Time Perspective -> PI_HBF	0.312	0.046	6.821	**0.000**
Time Perspective -> PI_UBF	0.316	0.045	6.984	**0.000**
Time Perspective -> Perceived_Plussizeness	-0.013	0.050	0.266	**0.792**
Time Perspective -> Perceived_Thinness	0.178	0.050	3.586	**0.000**

Acronyms: BID= Body Image Discrepancy, **BD** = Body Dissatisfaction, **PI_H** = Purchase Intention of Healthier Branded Food Products, **PI_U** = Purchase Intention of Unhealthier Branded Food Products, **P.P** = Perceived Plus-sizeness, **P.T** = Perceived Thinness, **TP** = Time Perspective

Appendix 2:

The following images are the main study's online questionnaire. These images show questions that a random female participant could see. Each participant only saw one body size (out of three). In addition, for the branded food products, each participant randomly saw three brands (out of six). Only one of the branded food products is illustrated in the images provided below. During the survey, participants also answered a few other questions (e.g., brand impression) for post-hoc analyses purposes.

Welcome to this online survey and thank you for your participation

Before agreeing to take part, please read this information sheet and consent form carefully and then tick the "Agree" button if you wish to participate in the study.

My name is Sahand Moradi and I am a PhD researcher from the University of York Management School. This survey is being conducted as part of my thesis. The research aims to collect information about consumer behaviour and advertisement.

What will the survey be asking you as a participant to do?

You will see a few images of fashion models and food products and will be asked to answer some questions about the images. You might be asked to answer some follow-up questions about your current state of mind. Also, you are required to answer demographics questions (e.g. gender, age, education level, and etc).

In terms of anonymity and confidentiality, the researcher is not able to know the participants and their identity/answers would be anonymous. Information will be treated with confidentiality and shared on a need-to-know basis only. The University is committed to the principle of data protection by design and default and will collect the minimum amount of data necessary for the project. The data provided by you will be accessible to the project team at the University of York only.

Participating in the study is completely voluntary. You can withdraw from the survey at any point during the study, or within three months after finishing it by contacting Qualtrics directly. Not finishing the survey means I cannot use your responses for my research. You can contact me before/after completing this survey if you think you need to talk about your participation by sending an email to **sm2236@york.ac.uk**. If you are still worried, please contact the University's Acting Data Protection Officer at **dataprotection@york.ac.uk** or Tony Royle the Chair of ELMPS at **elmps-ethics-group@york.ac.uk.**

If you are unhappy with the way in which the University has handled your personal data, you have a right to complain to the Information Commissioner's Office. For information on reporting a concern to the Information Commissioner's Office, see www.ico.org.uk/concerns.

What rights do I have in relation to my data?

Under the GDPR, you have a general right of access to your data, a right to rectification, erasure, restriction, objection or portability. You also have a right to withdraw. Please note, not all rights apply where data is processed purely for research purposes. For further information see, https://www.york.ac.uk/records-management/generaldataprotectionregulation/individualsrights/.

What will happen to the information?

Data will only be used in aggregated form and processed for the purpose outlined on this page. This study complies with ethics and data protection rights by the University of York.

Your answers might be used for future research. I would like to ask you to complete the survey with your honest answers, please. This will greatly help me with fulfilling my research purposes. The survey should take no more than 15 minutes.

Consent Form:

By clicking on the "Agree" button left below, you mean that you have read and understood the given information and agree to take part in the survey. You have understood what this research is about and what taking part involves. Also, you have understood that your participation is voluntary, and your data may be used in future research. You have understood that you can withdraw from the study at any point during the study, or within three months after finishing it by contacting Qualtrics directly.

○ Yes, I agree

Age

Please type your age number in the box below:

[   ]

Gender

Please state your gender: (select the option that fits you)

- ◯ Female
- ◯ Male
- ◯ Non-binary / third gender
- ◯ Prefer not to say

In this section, you will see a picture of a model.
Then you need to answer to 5 questions related to this model.

Question 1:

1. Please indicate to what extent you agree with each statement by ticking the box that best describes your opinion.

Note: You can answer the questions in this section rating from 1 to 5.

	1 = Medium Sized	2	3	4	5 = Thin
1. "I think the model in the picture is ..."	O	O	O	O	O

	1 = Normal Weight	2	3	4	5 = Underweight
2. "I think the model in the picture is ..."	O	O	O	O	O

	1 = Average Weight	2	3	4	5 = Skinny
3. "I think the model in the picture is ..."	O	O	O	O	O

2. On a scale from 1 to 5, how would you rate the **Muscularity** of the model?"
(1= Not Muscular, 5=Very Muscular)

	1 = Not Muscular	2	3	4	5 = Very Muscular
Muscularity	O	O	O	O	O

3. Please indicate to what extent you agree with each statement by ticking the box that best describes your opinion.

Note: You can answer the questions in this section rating from 1 to 5.

	1 = Plus-size	2	3	4	5 = Medium Sized
1. "I think the model in the picture is ..."	O	O	O	O	O

	1 = Overweight	2	3	4	5 = Normal Weight
2. "I think the model in the picture is ..."	O	O	O	O	O

	1 = Heavy	2	3	4	5 = Average Weight
3. "I think the model in the picture is ..."	O	O	O	O	O

4. On a scale of 1 to 5, please indicate to what extent you agree/disagree with each statement below: (1=Strongly Disagree, 5=Strongly Agree)

	1 = Strongly Disagree	2	3 = Neither Agree nor Disagree	4	5 = Strongly Agree
1. I consider the model in the picture very attractive	O	O	O	O	O
2. I consider the model in the picture very stylish	O	O	O	O	O
3. I think the model in the picture is good looking	O	O	O	O	O
4. I think the model in the picture is sexy	O	O	O	O	O

5. On a scale of 1 to 5, please indicate to what extent you agree/disagree with each statement below: (1=Strongly Disagree, 5=Strongly Agree)

	1 = Strongly Disagree	2	3 = Neither Agree nor Disagree	4	5 = Strongly Agree
1. The model in the picture and I have a lot in common	O	O	O	O	O
2. The model in the picture and I are a lot alike	O	O	O	O	O
3. I can easily identify with the model in the picture	O	O	O	O	O

Please move the sliders below to the points that most accurately show the **degree** to which **you are experiencing that feeling at the moment**:

(0= Not at All, 10= Very Much)

	0	1	2	3	4	5	6	7	8	9	10
1. Depression											
2. Anger											
3. Anxiety											

Please move the sliders below to the points that most accurately show the **degree** to which **you are experiencing that feeling at the moment**:

(0= Not at All, 10= Very Much)

	0	1	2	3	4	5	6	7	8	9	10
4. Happiness											
5. Confidence											

	0	1	2	3	4	5	6	7	8	9	10
1. Being Fat											
2. Being Physically Attractive											
3. Being Satisfied with Body Size and Shape											

Please read each statement and answer the following question as honestly as you can:

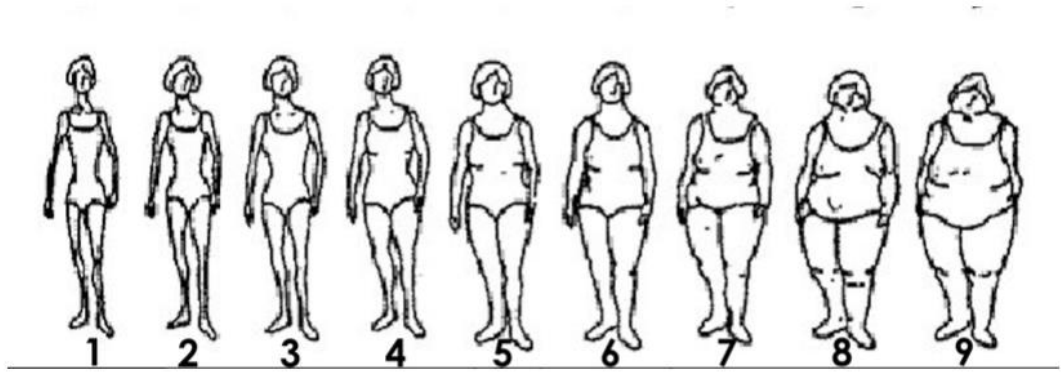**How characteristic or true is this of you?**

(1 = very uncharacteristic, 2 = uncharacteristic, 3 = neutral, 4 = characteristic, **5 = very characteristic)**

	1= Very uncharacteristic	2 = Uncharactersitic	3 = Neutral	4 = Characterestic	5= Very Charactersitic
1. I do things impulsively.	○	○	○	○	○
2. I make decisions without planning in advance.	○	○	○	○	○
3. I feel that it's more important to enjoy what I am doing than to get work done on time.	○	○	○	○	○
4. It takes joy out of the process and flow of my activities, if I have to think about goals, outcomes, and products.	○	○	○	○	○
5. Spending what I earn on pleasures today is better than saving for tomorrow's security.	○	○	○	○	○
6. I try to live my life as fully as possible and to deal with each day's problems as they come instead of worrying about the future.	○	○	○	○	○
7. It is more important for me to enjoy life's journey than to focus only on the destination.	○	○	○	○	○
8. It is more important to me to meet tomorrow's deadlines and to do other necessary work than to have fun tonight.	○	○	○	○	○

I hope this survey is interesting and I still have your attention. To show me that I still have your attention, please select "C" below.

- ○ A
- ○ B
- ○ C
- ○ D
- ○ E

Please select the figure that most closely resembles **your own body size**. Select the number from the scale below.

	1	2	3	4	5	6	7	8	9
Your own Body Size	○	○	○	○	○	○	○	○	○

Please select the figure that most closely resembles **your ideal body size**. Select the number from the scale below.

	1	2	3	4	5	6	7	8	9
Your Ideal Body Size	○	○	○	○	○	○	○	○	○

Please assign a number from 1 to 5 for the following statement:

	1=Very slightly/not at all	2	3	4	5= Extremely
How hungry/thirsty do you feel right now, at this present moment?	○	○	○	○	○

In this section, you will be asked to answer a few questions regarding three pairs of branded food products.

An example of a pair of branded food products:
Coca Cola Zero Sugar vs Coca Cola Original

Here in the example, first, you will be asked a few questions regarding Coca Cola Zero Sugar, and then you will be asked the same questions regarding Coca Cola Original.

Coca Cola Zero Sugar (No Calories)

1. Please indicate your **intention to purchase** this branded product by ticking the box of each of the following options that best describes your opinion:

1.1

1 = Unlikely	2	3 = Neutral	4	5 = Likely
O	O	O	O	O

1.2

1 = Improbable	2	3 = Neutral	4	5 = Probable
O	O	O	O	O

1.3

1 = Definitely Will Not	2	3 = Neutral	4	5 = Definitely Will
O	O	O	O	O

2. Please rate your overall **impression** regarding this branded product by ticking the box of each of the following options that best describes your opinion:

2.1

1 = Bad	2	3 = Neutral	4	5 = Good
O	O	O	O	O

2.2

1 =Unfavourable	2	3 = Neutral	4	5 = Favourable
O	O	O	O	O

2.3

1 = Unsatisfactory	2	3 = Neutral	4	5 = Satisfactory
O	O	O	O	O

Coca Cola Zero Sugar (No Calories)

3. Please indicate your level of **agreement/disagreement** with the following statements by ticking the box of each of the following statements: (**1 = Very Strongly Disagree, 5 = Very Strongly Agree**)

	1 = Very Strongly Disagree	2 = Disagree	3 = Neither agree nor disagree	4 = Agree	5 = Very Strongly Agree
3.1 I feel good when I use this branded product	O	O	O	O	O
3.2 This branded product makes me happy	O	O	O	O	O
3.3 This branded product gives me pleasure	O	O	O	O	O

1. Please indicate your **intention to purchase** this branded product by ticking the box of each of the following options that best describes your opinion:

1.1

1 = Unlikely	2	3 = Neutral	4	5 = Likely
O	O	O	O	O

1.2

1 = Improbable	2	3 = Neutral	4	5 = Probable
O	O	O	O	O

1.3

1 = Definitely Will Not	2	3 = Neutral	4	5 = Definitely Will
O	O	O	O	O

2. Please rate your overall **impression** regarding this branded product by ticking the box of each of the following options that best describes your opinion:

2.1

1 = Bad	2	3 = Neutral	4	5 = Good
O	O	O	O	O

2.2

1 =Unfavourable	2	3 = Neutral	4	5 = Favourable
O	O	O	O	O

2.3

1 = Unsatisfactory	2	3 = Neutral	4	5 = Satisfactory
O	O	O	O	O

3. Please indicate your level of **agreement/disagreement** with the following statements by ticking the box of each of the following statements: (**1 = Very Strongly Disagree, 5 = Very Strongly Agree**)

	1 = Very Strongly Disagree	2 = Disagree	3 = Neither agree nor disagree	4 = Agree	5 = Very Strongly Agree
3.1 I feel good when I use this branded product	O	O	O	O	O
3.2 This branded product makes me happy	O	O	O	O	O
3.3 This branded product gives me pleasure	O	O	O	O	O

On a scale of 1 to 5, please rate your **agreement/disagreement** with each statement below. (**1= Strongly Disagree, 5= Strongly Agree**)

	1= Strongly Disagree	2 = Disagree	3 = Neither Agree nor disagree	4 = Agree	5= Strongly Agree
1. Using the mobile channel for transactions fits my service needs.	O	O	O	O	O
2. Using the mobile channel is compatible with the way I normally perform my service transactions.	O	O	O	O	O
3. The use of mobile transaction services is in line with my service preferences.	O	O	O	O	O

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Please answer to a set of questions regarding your demographic information:

Please select the option which best describes your ethnicity:

○ White or White British

○ Indian, Pakistani and Bangladeshi or British Indian, Pakistani and Bangladeshi

○ Asian or Asian British (including Chinese and other Asians)

○ Black or Black British

○ Mixed or Multiple

○ Other Ethnic Group

Please state the highest education level that you have achieved:

○ High School
○ College
○ University Undergradute
○ University Masters
○ University Doctorate
○ Other please specify below: [_____]

Please select your personal income level from the options below without tax reduction: (£= British Pound)

○ Less than £15000 Annually
○ £15000-£30000 Annually
○ £30000-£45000 Annually
○ £45000-£60000 Annually
○ £60000-£75000 Annually
○ Above £75000 Annually

Please state your nationality:

[_____]

Please state the country where you currently live:

[_____]

What is your work status:

☐ Employed
☐ Self-employed / Freelancer
☐ Intern
☐ Part-time
☐ Unemployed
☐ Homemaker
☐ Not able to work
☐ Full time student
☐ Other

What's your **height**?

First select the right measurements that you think you are happy with (**Metric** or **Imperial**).

[_____ ▾]

Now, please select your **height** from one of the dropdown list (**Metric**): Numbers are in Centimetre

[____ ▾]

Now, please select your **height** from one of the dropdown list (**Imperial**)

[_____ ▾]

What's your **weight**?

First select the right measurements that you think you are happy with (**Metric** or **Imperial**).

[⌄]

Now, please select your **weight** from one of the dropdown list (**Metric**)

[⌄]

Now, please select your **weight** from one of the dropdown list (**Imperial**)

[⌄]

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