Chapter 3

Research Questions, Construct Conceptualizations, Propositions, and Hypotheses

3.1 Introduction

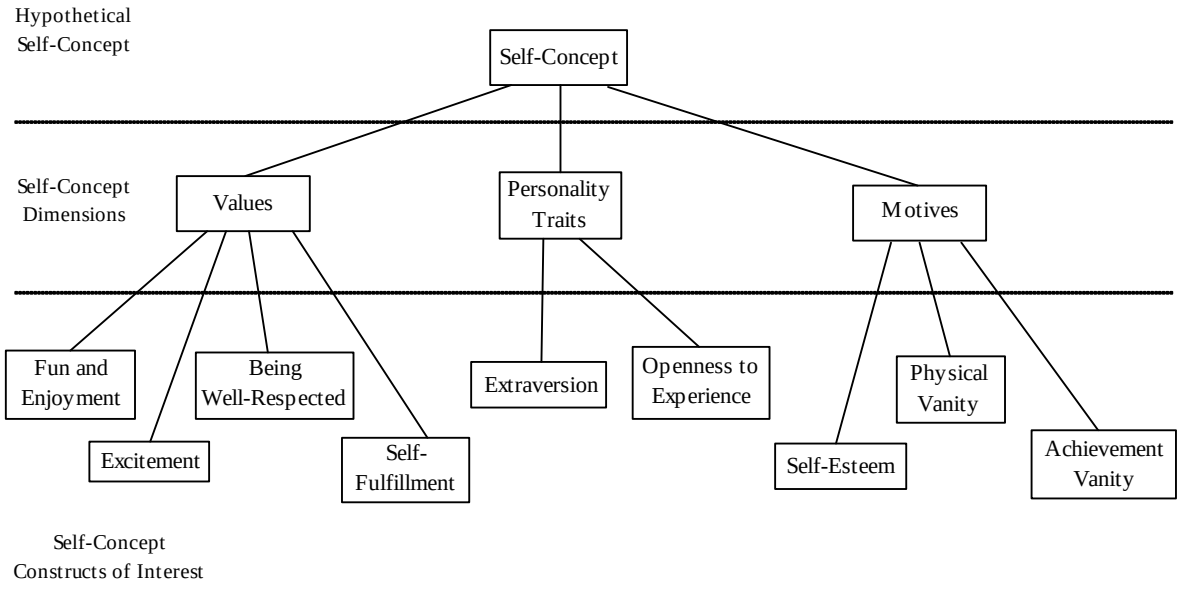
Based on discussions of self-concept, dimensions of self concept, and theoretical perspectives from Chapter 2, Chapter 3 describes research questions, construct conceptualizations, propositions, and hypotheses relevant to this study. Chapter 3 begins with statements and discussions of three research questions of interest based on the framework presented in Figure 3.1. It continues with conceptual definitions of constructs identified in the framework, used as independent and dependent variables in this study. Chapter 3 ends with statements of general propositions relevant to the study and statements of specific research hypotheses to be tested in Chapter 5.

3.2 Research Questions

Based on literature reviewed in Chapter 2, three research questions are stated and discussed in this section. The questions are set in the study's conceptual framework as shown in Figure 3.1 below.

Figure 3.1 shows a total of 13 constructs present in the study; 10 will be operationalized as variables. Self-concept occupies the highest level of the model, as the conceptual basis for linking all variables indicated beneath it. Two context dependent self-concept variables will be operationalized and used to form clusters of respondents as the independent variable in this study. Values, personality traits, and motives comprise the framework's second level, shown here only as labels to indicate breadth of the study and to group the nine dependent variables identified at the bottom of Figure 3.1. Specifically, nine (multi-item) measures will

Figure 3.1 Conceptual Framework for the Study



describe respondent segments in terms of fun and enjoyment, excitement, being well-respected, self-fulfillment, extraversion, openness to experience, self-esteem, physical vanity, and achievement vanity. Details on these measures and other aspects of research methodology are found in Chapter 4.

Literature reviewed in Chapter 2 supports the idea of distinguishable market segments for breast enlargement being present among female university students in Bangkok, the study's population of interest. The idea is expressed in the study's first research question:

> Q1: Can valid segments of female university students be formed on the basis of context dependent motivational variables directly related to self-concept?

Motivations to consume frequently provide a basis for market segmentation in terms of kinds and degrees. To explain, compared to the population at large, segment members may or may not consume a certain product or service or may consume a product or service in larger or smaller quantities. Segment members also may have different propensities to consume, depending on motivations they possess. Always the motivations of segment members to

consume are context dependent. That is, motivations used to segment markets must be relevant to particular research phenomena under investigation. Thus, in the present study, a major research question concerns the possibility of finding meaningful and sizable consumer segments for breast enlargement on the basis of self-concept motivations. Discussions in Sections 3.3 (Conceptualization of Clustering Variables) and 3.4 (Variables to Examine External Validity of Cluster Segments) address Research Question 1. Relevant statistical analyses are discussed in Sections 5.5 (Cluster Analysis) and 5.6 (External Validity Test) of Chapter 5.

Generally, segmentation researchers choose one or more variables as a theoretical base to form segment clusters. Segments in the present study are formed using two motivational variables relevant to the present research context and related to self-concept as described in Section 3.3 (Conceptualization of Clustering Variables). Segmentation researchers then investigate to see if segment means differ on other background variables not used in the segmentation process itself as a segment validation process. That is, even though demand or demand intentions for a product category may differ among derived segments, academic studies must examine and understand segments in terms of other constructs and variables as drawn from one or more relevant theoretical frameworks. In more applied cases, segments must be examined and understood in terms of immediately actionable variables.

The framework in Figure 3.1 shows self-concept having three dimensions related to the psychological makeup of the self: values, personality traits, and motives. These dimensions are used to group the nine self-concept variables of interest in the present study. In the context of the present study, it is imperative to understand how each self-concept variable—

under the umbrella of its respective dimension—contributes to the identification of meaningful segments. The present study's second research question is the following:

> Q2: Given the existence of meaningful segments of female university students in the market for breast enlargement, can segments be differentiated in terms of the proposed set of self-concept variables?

A supportable answer to Research Question 1 permits investigation into the psychological characteristics of derived segments as Research Question 2. To explain, derived segments of female university students can be valid categorizations of individuals in the market for breast enlargement but may or may not be different on the nine self-concept variables identified earlier as dependent variables of interest. Of particular interest are characteristics of one or more derived segments identified as having high propensity to undertake breast enlargement relative to characteristics of segments identified as having lower propensities. Research Question 2 leads to two research propositions and nine hypotheses described later in this chapter. Analyses results in Sections 5.7 (Analyses and Interpretations of Derived Cluster Solution) and 5.8 (Two-Group Analyses) of Chapter 5 address Research Question 2.

Furthermore, in relation to Research Question 2, it would be worthwhile to identify specific self-concept variables that have substantive discriminating power in distinguishing a segment most likely to undertake breast enlargement from one or more other segments. In other words, an understanding of self-concept characteristics related to breast enlargement propensity is enhanced by contrasting characteristics that describe segments most likely and least likely to pursue enlargement. This discussion leads to Research Question 3.

> Q3: Given the existence of meaningful segments of female university students in the market for breast enlargement, what characteristics describe the segment most likely to pursue breast enlargement? Least likely?

Discussions in Section 3.6 (Research Propositions) and analyses results in Sections 5.7 (Analyses and Interpretations of Derived Cluster Solution) and 5.8 (Two-Group Analyses) of Chapter 5 address Research Question 3.

Following sections address and clarify issues concerning how the three research questions will be answered in this study. Discussion begins with conceptualizations of clustering variables used as segmentation bases relevant to answering Research Question 1. This is followed by a conceptualization of self-concept along with its proposed nine related variables. Finally, two sections conclude Chapter 3 in the form of research propositions and hypotheses that address Research Questions 2 and 3.

3.3 Conceptualization of Clustering Variables

This section briefly reviews relevant theories and literature used to conceptualize the two context dependent clustering variables used in this study. The two variables—ideal-actual discrepancy and self-oriented motivation—are described in terms of self-discrepancy theory, social comparison theory, and evidence from the literature relating to consumer motivations behind the pursuit of physical attractiveness.

Before proceeding to conceptualizations of the two clustering variables, a brief discussion is needed to understand the basis of physical attractiveness among young women as portrayed in mass media. Ideas of what is and what is not physically attractive begin with self-evaluation when young women are exposed to idealized images in mass media (Domzal and Kernan 1993). Young women often face negative body image created by influences of mass media (e.g., Milkie 1999) and often pursue physical attractiveness after exposure to mass media that are either editorial or commercial in terms of content (e.g., Harrison 2003;

Promsa-ard 2000; Richins 1991; Stephens, Hill, and Hanson 1994). That is, mass media intentionally and unintentionally spread a normative picture of elements that constitute physical attractiveness. Consumers form standards for physical appearance on the basis of images prevalent in mass media that constantly shape the public perception (Yalom 1997).

With the city of Bangkok being the study's location, the pursuit of physical attractiveness must be considered in the context of an urban society where consumers are surrounded by images provided by mass media. For a woman to conduct a self-evaluation of her physical appearance, she must compare herself to available standards or to others. This process always involves social comparison. Although social comparison theory originally limited its domain to human abilities, subsequent studies extended the theory's scope to include physical attractiveness (e.g., Martin and Kennedy 1993, 1994; Richins 1991). These studies provide strong evidence that consumers make upward comparisons with regard to physical attractiveness when exposed to idealized images in mass media. Given their pervasiveness in today's urban society, idealized images serve as a pervasive social environment for comparison and are the dominant basis for standards of comparison of physical attractiveness among young, urban Thai women, with or without their conscious effort.

3.3.1 Self-Discrepancy Theory and Motivation as a Clustering Basis

The essence of self-discrepancy theory (discussed in Chapter 2) is that different types of self-state representations produce different types of negative psychological situations associated with different kinds of emotional discomfort. Emotional discomfort depends on discrepancies between the ideal self-state and the actual self-state within an individual's own perceptions and leads individuals to undertake or avoid certain activities (Higgins 1987).

Self-discrepancy theory suggests that desired end-states create a gap between a person's ideal self and actual self. Such a gap often creates unstable states of mind—negative and perhaps dejection-related emotions—in such a way that actions must be taken to recover psychological well-being. A woman's evaluation of self as less than desirable will motivate her to behave in such a way as to recover and maintain psychological well-being. While self-evaluation of a specific aspect of self can be either positive or negative, only negative self-evaluations have important motivational consequences (Wicklund 1979). For the present study, ideal-actual discrepancy is defined as respondents' desirable incremental cup sizes compared with their current cup sizes. It is predicted that Thai women who state that their ideal breast size is larger than their current cup size would have inclinations toward enlarging their breasts. Furthermore, it is expected that the greater ideal-actual discrepancy, the greater the tendencies of respondents to have had past augmentation experience that was unsuccessful and for them to state behavioral intentions to undergo surgery.

In conceptualizing ideal-actual discrepancy, the first clustering variable, two assumptions must be made. First, it is assumed that all respondents in this study have moderate to high levels of exposure to mass media portraying physical attractiveness. Second, as the study was conducted anonymously under strict confidentiality, it is assumed that respondents make comparisons with their motives for self-evaluation or self-improvement and not for self-enhancement. In other words, it is assumed that respondents would either strive to be accurate in their views about themselves (self-evaluation), or attempt to improve themselves by making upward comparisons (self-improvement), but would not harbor unrealistically positive views of themselves and bias information in a self-serving manner (self-enhancement) when making a comparison. Based on these two assumptions, it is expected

that the greater the ideal-actual discrepancy, the greater the tendency for respondents to pursue breast enlargement activities.

3.3.2 Social Comparison Theory and Self-Oriented Motivation as a Clustering Basis

The essence of social comparison theory (discussed in Chapter 2) is that comparisons of selves to peers, dissimilar others, and idealized images as found in mass media are innate, goal-oriented, human activities. When evaluating themselves in a social environment where idealized images in mass media prevail, individuals engage in upward social comparisons by comparing themselves to ideal others. Such comparisons are motivational, leading individuals to take or to avoid certain activities.

Self-oriented motivation to pursue physical attractiveness can be categorized as self-driven or social-driven in orientation. However, as described in Chapter 2, the categorization is somewhat ambiguous. For example, while the motivation for a woman pursuing physical attractiveness serves personal purposes (self-driven), bodily norms considered desirable for a woman within a society (social-driven) determine how such physical attractiveness should be achieved. Nevertheless, self-drive always is the ultimate motivation that influences the pursuit of physical attractiveness. Self-drive may originate the formation of a motivation by itself; otherwise, self-drive may be working in the guise of social-drive. The present study limits its focus to self-oriented motivation and self-drive for two reasons. First, in compliance with the objective to study self-concept as a *post hoc* profiling approach, it is appropriate to focus only on self-drive. Second, as discussed in Chapter 2, self is the ultimate drive and, thus, it is fair to include all motivations for the pursuit of physical attractiveness under a single umbrella of self-drive.

Self-drive to pursue physical attractiveness can be traced to two sources. First, self-drive can be attributed to discrepancies between consumers' ideal end-states and their actual states, as described in the preceding section. Second, self-drive also can be attributed to the degree of importance that individuals place on the pursuit of physical attractiveness as a way to please oneself. This relies on the degree to which the self is represented by the body, coined as "corporal experiencing" (Domzal and Kernan 1993). People who value and are eager to pursue physical attractiveness are inclined to have a high corporal experiencing or sense that they are represented by their bodies. The pursuit of physical attractiveness is stimulated by high corporal experiencing in the form of fantasies that physical attractiveness can bring about. To be likable, to command more power and status, or to preen narcissistically are examples of "rational" fantasies that stimulate demands for physical attractiveness. To be likable and to command more power and status involve fantasies associated with social interaction and thus constitute social-drive, while to preen narcissistically is a fantasy associated with the self and thus constitutes self-drive.

The present study used the degree of importance that women place on the pursuit of breast enlargement as a way to please oneself to measure self-oriented motivation in the form of its second clustering variable. It is expected that the greater the degree of self-oriented motivation, the greater the tendency for respondents to pursue physical attractiveness.

In sum, the present study focuses on self-drive arising from self-discrepancy theory and social comparison theory as the ultimate motivation to undergo breast enlargement. Self-drive is conceptualized as having two elements that serve as clustering variables—ideal-actual discrepancy and self-oriented motivation. It is posited that the pursuit of physical attractiveness is motivated by discrepancies between the desired ideal state and actual state

(ideal-actual discrepancy) on the one hand and by the degree to which one desires to perform a bodily task as a way to please oneself (self-oriented motivation) on the other. The literature suggests that consumers differ in their underlying motivations behind the pursuit of physical attractiveness. These differences partly reflect differing degrees to which bodies constitute a sense of self.

Depending on intensity of their motivations, women's past behavioral experiences with breast enlargement activities as well as their behavioral intentions to undergo breast enlargement will vary considerably. It is predicted that women seeking breast enlargement will have a high level of self-driven motivation for physical attractiveness. The level of this motivation is represented by the two clustering variables identified above. A *combination* of these two elements of self-drive, defined as combined self-driven motivation, is posited as bases for clustering consumers into sizable and meaningful groups (Research Question 1) and is described in the following section.

3.4 Variables to Examine External Validity of Cluster Segments

External validity of segments derived from cluster analysis is regularly an issue of concern in market segmentation studies. Derived segments can be considered theoretically valid only to the extent that they exhibit anticipated results when tested against actual behaviors or other criterion variables identified on the basis of relevant theory (Punj and Stewart 1983; Singh 1990). Such external validity tests are regularly conducted to verify the true existence of final cluster solutions, using a set of variables external to the clustering procedure itself.

Tests of external validity in the present study will be conducted using an actual behavior variable and a behavioral intention variable relevant to the context of breast enlargement as

criterion test variables. Past behaviors and behavioral intentions have been used by many studies for testing external validity (e.g., Singh 1990). Since the ultimate goal of any segmentation procedure is to develop mutually exclusive groups of individuals that demonstrate internal cohesion and external isolation (Cormack 1971), past behavioral experience and behavioral intention are expected to differ across segments derived using the two clustering variables.

To facilitate predictions of past behavioral experience and behavioral intentions as external validity test variables for derived segments, the present study used a multiplicative approach for information contained in the two clustering variables. The approach was based on a similar multiplicative approach used extensively in research studies based on expectancy-value theory (Fishbein 1967; Rosenberg 1956). In the present study, a combined self-drive measure of motivation to pursue breast enlargement is identified as *IADPO* and measured as a multiplicative function of the two clustering variables as found in each derived segment—discrepancies between ideal state and actual state in terms of breast cup sizes (ideal-actual discrepancy) and the importance of enlargement as a way to please oneself (self-oriented motivation). The cluster having the highest value of combined self-drive or *IADPO* is expected to have the highest proportions of respondents with past behavioral experience and behavioral intentions to pursue breast enlargment, followed by the cluster with the next highest value of combined self-drive, and so on. Details on *IADPO* calculations and accompanying tests of external validity are found in Chapter 5.

3.5 Conceptualization of Self-Concept

The aim of this section is to conceptualize self-concept based on discussions presented in Chapter 2. This section begins by reviewing theoretical positions of self-concept prevalent in

the literature and indicating three unresolved issues. The section then defines and positions self-concept in such a way as to address these issues. The section ends by discussing three dimensions that constitute the defined self-concept for this study.

Critical reviews of the literature in Chapter 2 show that consumer research studies using self-concept are quite limited in number. Reviews identify three issues related to the study of self-concept: whether to treat self-concept as self-as-object or self-as-subject; whether to treat self-concept as unidimensional or multidimensional; and, if self-concept is considered to be multidimensional, what dimensions should be included in the construct's measurement?

As discussed in Chapter 2, self-concept can be considered as both an accusative, self-as-object ("me") and as a nominative, self-as-subject ("I"). Although self-as-subject has been alluded to alongside self-as-object (e.g., Hall and Lindzey 1957; James 1890; Symonds 1951; Wylie 1974), research studies in the literature overwhelmingly have chosen the self-as-object perspective (e.g., Harter 1996; James 1890; Markus 1977; Rosenberg 1979). Illustrating this point is the fact that studies on self-concept often have equated the construct with self-esteem (Wells and Marwell 1976), which represents only the evaluative, self-as-object aspect of self-concept. The overemphasis of the self-as-object perspective also is found in research on physical attractiveness. Traditionally, studies of physical attractiveness assume that one's psychological being is a function of one's physical appearance (e.g., I am happy because I am attractive). All such studies adopt a self-as-object approach, treating the individual as an object whose beauty, traits, cognitions, motivations, and behaviors, must be assessed (e.g., Adams 1977; Aronson 1972; Eagly *et al.* 1991; Furnham, Dias, and McClelland 1998; Hatfield and Sprecher 1986). Research on physical attractiveness rarely considers individuals

as sentient subjects (self-as-subject), capable of manipulating their endowed attractiveness or lack thereof.

Given that a distinctive characteristic of an individual is the person's ability to serve as both subject and object simultaneously, the neglect of self-as-subject aspect makes the current understanding of self-concept less than complete. Calls for a significant move beyond self-esteem (e.g., Rosenberg 1979) indicate that it is essential for research on self-concept to transcend the self-evaluation aspect. Thus, research on self-concept could contribute to an understanding of consumer behavior by not limiting its focus to the evaluative aspect of the self and by studying the action-influencing aspect of the self (self-as-subject) as well.

Self-concept was studied for many decades as if it were a single-dimension construct (Baumeister 1998). However, today the multidimensional approach is favored because it provides a more detailed and comprehensive understanding of self-concept (e.g., Hattie 1992; Marsh 1990). The multidimensional approach includes aspects of self-concept that reflect a more detailed and comprehensive representation of what the construct should be (Byrne 1996). However, the multidimensional approach raises the question of identifying what aspects or dimensions should be included in conceptualizing self-concept. As discussed earlier, past research on self-concept placed emphasis on evaluative aspect of the self that at best can only capture part of the holistic view of self-concept. Dimensions to be included in a multidimensional approach, therefore, must transcend this limitation. The present study's proposed definition of self-concept including its dimensions is discussed next.

3.5.1 Definition of Self-Concept and Its Dimensions

The present study defines self-concept as a hypothetical construct representing an organization of cognitive entities that, through its three dimensions (values, personality traits, and motives) not only organize and evaluate the processing of self-relevant information (self-as-object) but also motivate and influence actions (self-as-subject). Research has shown that the evaluative aspect is indispensable to self-concept. When faced with situations in which decisions have to be made or actions must be taken, the self exercises reflexive consciousness by making self-evaluations, reflecting back to itself in search of self-relevant information before embarking on decision making or action taking. Therefore, the evaluative aspect is an indispensable part of self-concept. However, in addition to the evaluative aspect of the construct, self-concept is conceptualized as having a decision-influencing and action-influencing aspect, through which the self acts as agent or origin of its actions.

Self-concept is conceptualized as a hypothetical construct and not directly measurable (Shavelson, Hubner, and Stanton 1976). Instead, self-concept is measured in terms of its conceptualized dimensions. The conceptual framework in Figure 3.1 proposes values, personality traits, and motives as three relevant dimensions to this study. Thus, a self-concept variable in this study is defined as a multi-item operationalization of constructs that belong to any one of the proposed three dimensions. As can be seen in Figure 3.1, self-esteem, physical vanity, and achievement vanity are self-concept variables belonging to motives as a self-concept dimension. Extraversion and openness to experience are self-concept variables belonging to personality traits, while fun and enjoyment, excitement, being well-respected, and self-fulfillment belong to values. The nine self-concept variables identified in Figure 3.1 are main targets for investigation in the present study.

The three dimensions of self concept share three common characteristics. First, they are conceptually tied closely to self-concept. Second, the dimensions are cognitive entities that have both evaluative and action-influencing aspects. Third, the dimensions are shown empirically to be related to behaviors. This last characteristic is particularly relevant to this study, as individuals can be grouped based on any combinations of the nine self-concept variables. In this sense, the three dimensions are qualified for acting as profiling variables.

In sum, this section has conceptualized self-concept as a hypothetical, multidimensional construct that has both evaluative (self-as-object) and action-influencing (self-as-subject) aspects. The conceptualized self-concept uses values, personality traits, and motives as its three dimensions and is applied throughout the whole study.

3.6 Research Propositions and Hypotheses

Aimed to address Research Questions 2 and 3, this section proposes two statements of research propositions that will be developed into testable research hypotheses. However, before discussing propositions and hypotheses, a brief overview of the study's anaylsis procedures is in order. To explore the existence of segments (Research Question 1), a cluster analysis using combined self-drive motivation (combination of ideal-actual discrepancy and self-oriented motivation) will be conducted that identifies mutually exclusive groups of consumers that demonstrate internal cohesion and external isolation on the two clustering variables. Once segments are identified and validated, analyses then focus on whether or not segments are different in terms of the nine self-concept variables (Research Questions 2 and 3). Examination of segment differences on these variables can be made from two alternative perspectives.

In the first alternative, tests can be performed on all derived segments; analyses based on this alternative are discussed in Chapter 5, Subsection 5.7.2 (Interpretations of the Derived Cluster Solution). Alternatively, tests can be performed on selected segments of interest. The present study examines the segment identified as most likely to undertake breast enlargement relevant to other segment(s) in two different cases. In case "a" in the present study, the most likely segment (the segment having the largest *IADPO* score) is compared to all other segments combined, taking advantage of statistical power available in the entire sample. In case "b" in the present study, the most likely segment is compared to the least likely segment (the segment having the smallest, *IADPO* score), taking advantage of extreme characteristics possessed by the two groups.

Determination of self-concept variables that have substantive discriminating power among segments will be performed using multiple discriminant analysis (MDA). In MDA, independent variables are used to calculate a discriminant function that maximally discriminates between identified groups. In the present study, identified groups are the derived segments from cluster analyses. Independent variables that are significant predictors of group membership of derived clusters then are identified as substantive discriminating variables.

The preceding discussion leads to the present study's two research propositions:

P1: Valid segments can be found in the research population of interest based on ideal-actual discrepancy and self-oriented motivation with regard to breast enlargement activities.

P2: Segment group membership is associated with the nine self concept variables.

Based on these two propositions, the following discussion proposes nine testable hypotheses based on discussions (in Chapter 2) of relevant theoretical bases and empirical evidence related to the self-concept variables of interest. Discussion here begins with brief reviews of the corporal theory of the body, the literature related to the body and physical capital, and relevant motivations, all made with the attempt to understand underlying psychological states involving each self-concept variable. The nature of the context under study also is included in discussions for each hypothesis. Proposed hypotheses will be tested in Chapter 5, based on a research design described in Chapter 4.

The major objective for hypothesis testing here is to identify self-concept variables that have substantive discriminating power in the two cases of two-cluster analyses using the most likely segment (having the largest *IADPO* score) as a major focus. In other words, the major objective for hypothesis testing involves identification of self-concept variables that are good at assigning respondents to this segment and to the other segments being compared. Hypotheses are stated in the form of relationships between independent and dependent variables that are in agreement with conventional statements of hypotheses in MDA. Substantive discriminating power of any self-concept variable is assessed in terms of the degree of its association with the MDA function *Z* scores.

The concept of the body as physical capital (Bourdieu 1984) is helpful in stating these hypotheses. The concept of the body as physical capital views the body as a form of physical capital expended in maximizing material and symbolic profit. The concept holds that people who value the body as physical capital actively manage their physical appearances because ultimately they want to acquire status and distinction. People who value the body as physical capital do not perceive physical capital as an end in itself but rather as a medium for

conversion into other forms of capital (e.g., money, recognition, or approval). As a form of physical capital, physical attractiveness helps convert physical capital such as power and status into economic capital such as money and into social capital such as recognition and approval. People in the most likely segment will view their bodies as vehicles to convey their success and as part of their material selves. People in this extreme segment who value their bodies as physical capital will be more likely to associate their bodies with self-representation than will other segments. Such an association bends toward gaining benefits from self-representation of their bodies.

Statements of hypotheses begin with fun and enjoyment as a value. Fun and enjoyment value holders believe that life is to be enjoyed and are concerned with achieving a high degree of subjective satisfaction. They take the time to enjoy the simple and the complex pleasures of life. They hate routinization and conformity. Fun and enjoyment value holders like to get involved in fantasized activities because such activities meet the demand driven by this value. Getting involved in breast enlargement to make themselves attractive could be one of the creative and unconventional ways to make their lives out of the ordinary. Therefore, people in this extreme segment are expected to value fun and enjoyment much more than other segments: fun and enjoyment should discriminate the extreme segment well from other segments. This discussion leads to Hypothesis 1, stated in "a" and "b" forms for the case of the extreme segment compared to all other segments combined and compared to the segment least likely to pursue breast enlargement, respectively.

H1a, H1b: Fun and enjoyment is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

It should be noted that the hypothesized positive association indicates that the hypothesis is directional and that a one-tail test should be applied. That is, it is hypothesized that the mean value of fun and enjoyment of the extreme segment is greater than that of any other segment being compared.

Excitement value holders look for varied and novel sensations and experiences. They are willing to take physical and social risks for the sake of such experience (Zuckerman 1979). As noted in Chapter 2, empirical evidence found positive correlations between excitement and extraversion and between excitement and fun and enjoyment. Thus, similar to what is expected for fun and enjoyment, excitement should discriminate the extreme segment well from other segments. This leads to Hypothesis 2.

H2a, H2b: Excitement is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

People who have a high level of being well-respected care about opinions of others. They are more likely to possess a sense of concern and sensitivity to feelings and perceptions of others toward themselves. Such concerns occur because they want to win respect from others. Individuals in the extreme segment value the body as physical capital. They are the most likely group of people to have breast enlargement experience. They are expected to have a higher degree of being well-respected than other segments because people in the extreme segment are more likely than other segments to care about opinions of others when it comes to their appearance. Therefore, people in this extreme segment are expected to have a higher degree of being well-respected than other segments and being well-respected should discriminate the extreme segment well from other segments. The idea is stated formally in Hypothesis 3.

H3a, H3b: Being well-respected is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

People who have a high degree of self-fulfillment are likely to look for challenges in life and likely to strive to achieve a high degree of subjective satisfaction. They are likely to attain a level of personal satisfaction that goes beyond the tangible or observable. Individuals in the extreme segment value the body as physical capital and are the most likely group of people to have breast enlargement experience. They are expected to have a higher degree of self-fulfillment than other segments for two reasons. First, people in the extreme segment are more likely than other segments to look for challenges through something new and aesthetically pleasing to them such as breast enlargement experience. Second, people in the extreme segment are more likely than other segments to strive to achieve a degree of subjective satisfaction through unique consumption activities such as breast enlargement experience. Therefore, people in this extreme segment are expected to have a higher degree of self-fulfillment than other segments and self-fulfillment should discriminate the extreme segment well from other segments, as stated formally in Hypothesis 4.

H4a, H4b: Self-fulfillment is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

People who score high in extraversion are gregarious and sociable and more likely to be outgoing. Individuals in the extreme segment value the body as physical capital and are the most likely group of people to have breast enlargement experience. They are expected to be more extraverted than other segments for two reasons. First, given their outgoing, gregarious, and sociable nature, they often are surrounded by a lot of people; therefore, the benefit of

being physically attractive is more rewarding to them. Second, being surrounded by a lot of people, they may feel more social pressure to make themselves physically attractive. Therefore, people in this extreme segment are expected to be more extraverted than other segments. In other words, extraversion should discriminate the extreme segment well from other segments, as stated formally in Hypothesis 5.

H5a, H5b: Extraversion is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

Compared to others, people who are high on openness to experience are more likely to be steadfast, have more active imagination, and more willing to be open to new ideas that help them keep abreast with the ever changing environment. They are more likely to appreciate beauty and nature and are more willing to experience the new and unconventional, especially when the body or beauty is involved. Individuals in the extreme segment value the body as physical capital and are the most likely group of people to have breast enlargement experience. They are expected to be more open to experience than members of other segments for two reasons. First, people in the extreme segment are expected to be more open to new ideas that would provide them with opportunities to convert physical capital into other forms of capital. Second, they are expected to be more imaginative in figuring out how to pursue novelty and change in ways that their physical appearance is valued. As noted in Chapter 2, empirical evidence shows that openness to experience is highly correlated with the appreciation of beauty. Therefore, people in this extreme segment are expected to be more open to experience than other segments. In other words, openness to experience should discriminate the extreme segment well from other segments, as stated formally in Hypothesis 6.

H6a, H6b: Openness to experience is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

Compared to others, people with a low degree of self-esteem are less likely to hold a positive perception of themselves. Individuals in the extreme segment value the body as physical capital and are more likely to consider the body as representing the self. They are the most likely group of people to have breast enlargement experience. People in the extreme segment are expected to have a lower degree of self-esteem than other segments because they are less likely than other segments to hold a sense of personal worth because they are less likely to be satisfied with their corporal bodies (as indicated by their ideal-actual cup size discrepancies). Therefore, people in this extreme segment are expected to have a lower degree of self-esteem than other segments. In other words, self-esteem should discriminate the extreme segment well from other segments, as stated formally in Hypothesis 7.

H7a, H7b: Self-esteem is negatively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

Compared to others, people with a high degree of physical vanity are more likely to be concerned about their physical appearance and are more likely to have an inflated view of their physical attributes. Individuals in the extreme segment value the body as physical capital and undoubtedly are more concerned about their physical appearance. They perceive their bodies to be more than representative of the self. They are the most likely group of people to have breast enlargement experience. People in the extreme segment are expected to have higher physical vanity than other segments because their excessive concern for physical appearance is the primary reason for them to engage in practices that would increase their physical capital. Supporting this argument, empirical evidence shows that physical vanity

correlates positively with public body consciousness, consideration for cosmetic surgery, cosmetics use, clothing concern, and money spent on clothing (Netemeyer, Burton, and Lichtenstein 1995). Therefore, people in this extreme segment are expected to have higher physical vanity than other segments. In other words, physical vanity should discriminate the extreme segment well from other segments, as stated formally in Hypothesis 8.

H8a, H8b: Physical Vanity is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

Compared to others, people with a high degree of achievement vanity are more likely to be concerned about their achievement. They are more likely to engage in conspicuous consumption either to demonstrate or to pursue achievement. They tend to be more materialistic. Individuals in the extreme segment value the body as physical capital and are the most likely group of people to have breast enlargement experience. They are expected to have higher achievement vanity than other segments for two reasons. First, people in the extreme segment may engage in conspicuous consumption such as breast enlargement based on their drive for achievement. That is, they may use conspicuous consumption as a vehicle to pursue achievement. Second, they may engage in conspicuous consumption such as breast enlargement because they think it can raise their physical capital—and, thus, other forms of capital—that would lead them to their goal of personal achievement. Therefore, people in this extreme segment are expected to have higher achievement vanity than other segments. In other words, achievement vanity should discriminate the extreme segment well from other segments, as stated formally in Hypothesis 9.

H9a, H9b: Achievement vanity is positively associated with discriminant function *Z* scores that classify female university students into segments based on ideal-actual discrepancy and self-oriented motivation.

Analysis results of the hypothesis testing are presented in Subsection 5.8 (Two-Cluster Analyses) of Chapter 5.

3.7 Chapter Summary

This chapter discusses three research questions of concern to the present study. A major construct of interest, self-concept, is conceptualized based on discussions and supporting evidence presented in Chapter 2. The self-concept ties together its three main dimensions: values, personality traits, and motives. As bases for determining segments, two clustering variables also are conceptualized based on discussions of self-discrepancy theory and social comparison theory presented in Chapter 2. Two research propositions that guide the development of eighteen testable hypotheses are proposed. Based on corporal theory of the body and literature on the body as physical capital, eighteen hypotheses that evaluate relationships between self-concept variables and group membership in two cases are developed. The next chapter describes a research methodology to test these hypotheses.