



RELATIONSHIP BETWEEN PERSONAL TRAITS, SOCIAL VALUES, NEEDS,
ATTITUDES AND CONSUMER PURCHASE DECISIONS RELATIVE TO
EYEGLASSES

By

ANNAPA THANAMONGKOLSAWAT

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Business Administration

Graduate School of Business
Assumption University
Bangkok Thailand

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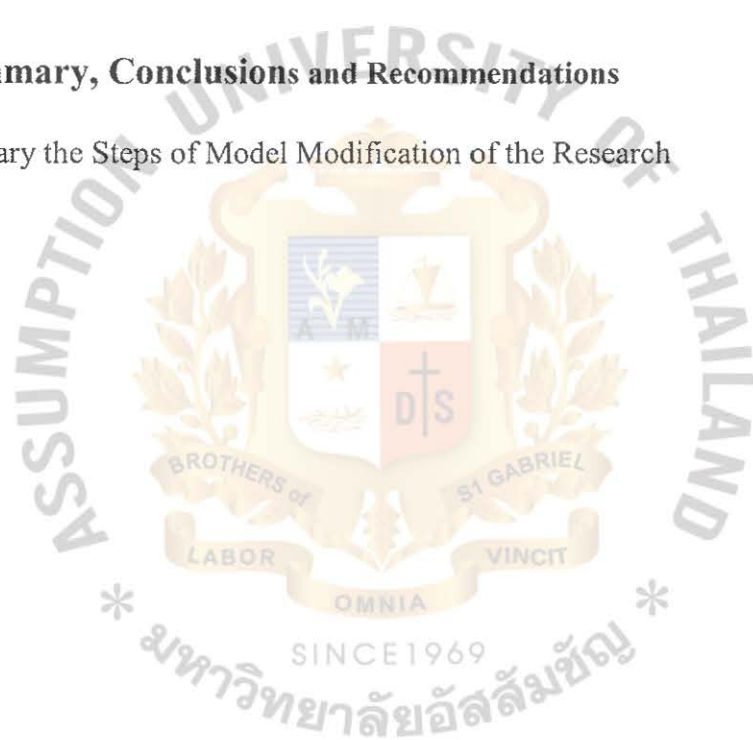
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ABSTRACT

The main purpose of this study is to explore structural intra-relationship. By examining the relevance eyeglasses' consumer lifestyle in term of personal trait, self-concept, and social value, through the linkage of needs and attitudes, which can contribute to the prediction of purchase decision and behavior influencing target group.

Information was gathered through the use of questionnaires distributed at department stores and around the area in Bangkok. The sample consists of 384 subjects who have worn eyeglasses for optical and non-optical purpose, the age between 16-55 years old. For statistical application, descriptive analysis and the structural equation modeling (SEM) method was applied. A model was developed and providing a good fit through software of AMOS 3.61 (Analysis of Moments).

The structural relationships revealed the intra-relationship of the model that there are the connections of 6 main variables, included personal trait, self-concept, needs, attitudes, price decision, and time decision. There were no effective independent variables that were deleted from modification of model, this might be caused by the type of eyeglasses itself that turn to be more fashionable, which not the same as others types of durable products. Moreover, a sampling bias occurred since the researcher distributed most of the questionnaire to teenager groups.

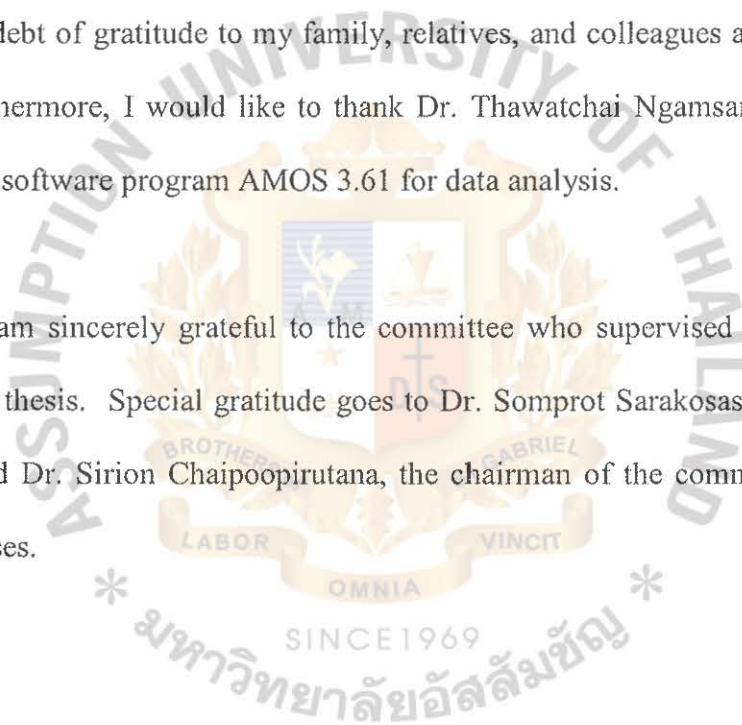
Benefits of this research will be dedicated to optical business. The verification of structural equation modeling (SEM) also provided the sequence of eyeglasses purchase decision process.

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CHAPTER 1

Generalities of the study

1.1 Introduction of the study

Eyeglasses (also called glasses or spectacles) are optical devices. The most common form is used to correct or improve many types of vision problems, usually consist of a pair of lenses in a frame. Eyeglasses are a part of everyday life. We rely on them for several of our critical activities; reading and learning, working, interacting with other people and operating vehicles. For educators, between 5 – 10% of student worldwide needs eyeglasses in order to learn effectively. Without proper eyeglasses, students learn critical skill at a slower rate. In the workplace, nearly all workers over 40 years old have problems with near vision. Those that do not have eyeglasses may be able to become fully productivity slower (Norton, 1995).

Although eyeglasses image as a medical device, they are acceptance into the world of fashion. Now eyeglasses are not only the healthcare product, they are also fashion accessories, which come in many shape, style, sizes, brand name and color to suit their thirst for fashion. These varieties of choices will be designed to meet the appearance and lifestyle needs of the person wearing them (Ocular times, 2002). As the various types of eyeglass frames and lenses that become confused as to what suits the wearers own style and lifestyle, to determine the different aspects of their own lifestyle are the useful information for selecting eyeglasses. Langmeyer and Shank (1994) mentioned that eyeglasses perceived as beautiful product, which directly or indirectly linked with the study of lifestyle.

People have the different lifestyle because they are different in pattern of living, which reflected in the way in which products are purchased and used of how they spend time and money. Different consumer lifestyle patterns due to the differences in culture, demographic, social class, reference groups, family, individual development, and individual characteristics.

In this research study the relationship among these individual components of consumer lifestyle by using only the lifestyle in relevance to eyeglasses. This relationship is interesting because it is the basic of distinguishes consumer behavior. People have their own distinctive style, personal coloring, face shape and age group, so the best route to finding the appropriate eyeglasses for yourself includes first knowing your lifestyle in deep.

Moreover, it's not only the lifestyle that reflects the purchase decision. Needs and attitudes are linked for selecting eyeglasses. Also, people have different needs and attitudes. Every eyeglass frames create a different look. Each of people may desire different types of eyeglasses to suit his or her needs. The important criterions needed for choosing eyeglasses depend on your lifestyle patterns. The attractive and fashionable design may be more important need for creative person such as an artist or writer, but it has less important for conservative people. Even the comfortable and lightweight eyeglasses are more concerned by active people and children (Morgan, 1999). From many previous empirical researches, they mentioned about attitudes toward eyeglasses that they reduce the physical appearance of wearers. On the other hand, they can reinforce the intellectual identity.

Hence, the sequence of selection the suitable eyeglasses have many factors involved. Only the consumer lifestyle cannot predict the purchase decision without linkage of need and attitude. Therefore, intra-relationship of these factors, which is the relationship existing among individual factor (Thornton, 2002), will be considered in structure the sequence of eyeglasses selection. In order to know, the sequence of making the purchase of consumers, the researcher would like to concentrate on the relationship inside the lifestyle components, whether need or attitude is more important for selecting eyeglasses.

Thus, in this research study, the researcher gathered information that relevance to the consumer lifestyle components of eyeglass wearers, consumer needs that influence consumption of eyeglasses, attitudes toward wearing eyeglasses, in order to predict the purchase decisions; when to purchase and the affordable price range.

1.2 Statement of the Problem

Nowadays eyeglasses are not only optical devices, but they are also the fashion accessories that reflect lifestyle of the wearers. Even, some people do not have the vision problem, they are wearing eyeglasses for enhance their personality and value of themselves. Both personality and value are also the parts of lifestyle. Because of differently lifestyle pattern of consumers, they have different attitude, and they need eyeglasses differently, which all of these influence in the purchasing eyeglasses.

Therefore, this research studies the relationship among the individual consumer lifestyle components and the eyeglasses purchase decision. The consumer lifestyle

cannot directly predict the purchase decision without some factor linkage. For this research the linkage is need and attitude.

Thus, the problem to be investigated in this research is to determine “what are the intra-relationship of consumer lifestyle and their linkage towards eyeglasses purchase decision?” From this research problem, it needs to know which factors should be included, and also their connections in the sequence of selection eyeglasses.

1.3 Objectives of the Study

The purpose of this research is to identify the factors influence consumer lifestyle on the selection of eyeglasses. The objectives of this study are stated as follows:

- 1) To identify the components of consumer lifestyle in relevance to eyeglasses selection.
- 2) To study the linkage between consumer lifestyle and needs in conjunction with attitudes.
- 3) To explore the intra-relationship of consumer lifestyle and its route.

1.4 Scope of the Study

This research is conducted to study the relationship among the individual components of consumer lifestyle on the selection of optical product by concentrating only on eyeglasses, which including both frame and lens.

The respondents can be people who have worn eyeglasses for optical and non-optical purpose, the age between 16-55 years old. By using the sample survey method through questionnaire that will be distributed at department stores in Bangkok area only.

1.5 Limitations of the Study

The research limitations are as follows:

- 1) The research is limited to the eyeglass wearer only.
- 2) The respondents are locating only in the Bangkok area, but not other areas of Thailand. Therefore, the result is limited to only this group of people, cannot be judged as the result of nationwide.
- 3) This research was limited to a particular time frame, so the results could not be generalized for all times.
- 4) This research study could not conduct random sampling, due to the unavailability of the sampling frame.

1.6 Significance of the Study

Lifestyle serves as a major factor that influences the consumer's purchase decision. It has become a popular tool in management decision making. The benefit and usefulness of this research are expected as follows:

- 1) This study will be helpful for optical business to explore consumer lifestyle, and their linkage towards eyeglass purchase decision.
- 2) To be useful for other researchers to conduct further investigation on consumer lifestyle toward purchase decision of fashion and health product, especially on eyeglasses, or other related issues.

1.7 Definition of Terms

Attitude: a lasting, general evaluation of people, objects, or issues. An individual's attitude towards an object or idea will lead him to certain evaluations, emotional feeling and behavior (Schütte and Ciarlante, 1998).

Eyeglasses: (also called glasses or spectacles) in this research are mentioned for both optical and non-optical purpose. Eyeglasses usually consist of a pair of lenses in a frame. Eyeglass lenses are mounted in frames worn on the face, sitting mostly on the ears, so that the lenses are positioned in front of the eyes (Norton, 1995).

Intra-relationship: the relationship exists among individual data; it is the technical term of path connection in Analysis of Structural Equation Model (Duits and Duivenvoorden, 1999).

Latent variable: a variable that cannot be observed directly and must be inferred from measured variables such as attitudes, intelligence (Sharma, 1996).

Lifestyle: the person's pattern of living, which reflects to patterns of consumption. Further, lifestyles assume as behavioral patterns that are structured by psychological states such as personality and value (Anderson and Golden, 1984).

Maximum likelihood:	Maximum likelihood estimation (MLE) method commonly employed in structural equation model. An alternative to ordinary least squares used in multiple regression, MLE is a procedure which iteratively improves parameter estimates to minimize a specified fit function (Hair, 1998).
Measured variable:	a variable that can be observed directly and is measurable. Measured variables are also known as observed variables, indicators or manifest variables (Sharma, 1996).
Need:	any human requirement. These terms include basic needs, wants, desires, and necessities. For this research will emphasis on consumer need that associated with product in the general characteristics of attributes desired in the product (Walters and Bergiel, 1989).
Path analysis:	method that employs simple bivariate correlations to estimate the relationships in a system of structural equations (Hair, 1998).
Personal trait:	any characteristic in which one person differs from another in a relatively permanent and consistent way (Mowen, 1993).
Price Decision:	Price point and price level that consumer intended to purchase (Alba, et.al, 1999).

Purchase decision: part of consumer purchasing process, defined as the intention to buy the product (Kotler, 2002).

Self-concept: the totality of the individual's thoughts and feelings having reference to himself as an object, also the attitudes one holds toward himself or herself and, as such, serves as the basis for one's lifestyle (Hawkins, et.al, 1983).

Social value value that affecting personal relevance, widely held beliefs that affirm what is desirable, originally defined as love of people (Anastasi, 1993).

Structural Equation Modeling(SEM): multivariate technique combining aspects of multiple regression (examining dependence relationships) and factor analysis to estimate a series of interrelated dependence relationships simultaneously (Hair, 1998).

Time Decision: Period of time that consumer making the purchase decision, which is the time intended to purchase the new one of product (Greenleaf and Lehmann, 1995).

CHAPTER 2

Review of Related Literatures and Studies

For this chapter, the researcher reviews all literatures relevant to the topic of the study to building up a research framework. It consists of, relevant theories, the brief information about eyeglass and its industry, finally is the previous empirical researches relating to the study. General concepts are utilized in order to provide the reader with an idea of the two variables, dependent and independent variables. In addition, all the relevant theories will support previous empirical researches to be more significantly.

2.1 Consumer Lifestyle

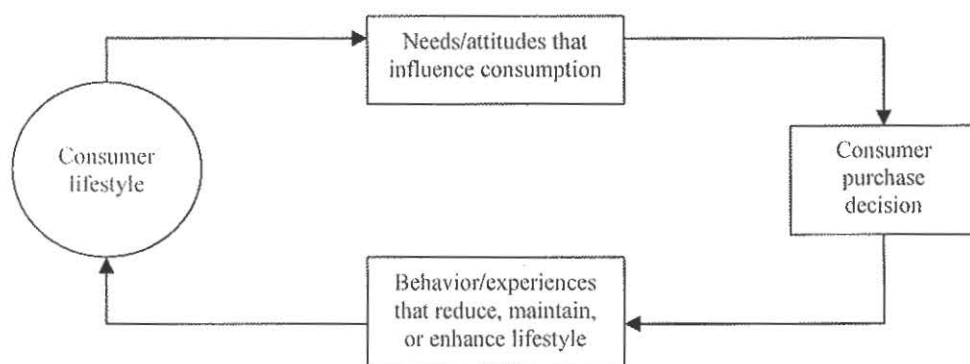
Lifestyle is the mode of living, which assert the self, status and identification with social groups and values (Caron, 1991). Walters (1997) stated that lifestyle is “the way of living”, which reflects to patterns of consumption. Lifestyles are conceptualized as shared consumption patterns spanning a variety of consumer categories (Wells, 1975). Further, lifestyles assume as behavioral patterns that are structured by psychological states such as personality traits and value (Anderson and Golden, 1984). The individual experiences different lifestyles. It is usually studied from a psychological perspective (Holt, 1997).

Quite simply lifestyle is a person’s pattern of living as reflected in the way in which products are purchased and used. Lifestyle has two important characteristics for marketers. First, it is a basic motivation for many purchase and use activities. Second, because of changing environments and the results of reinforced. Therefore, over time and

due to learning, lifestyles undergo change. It also serves as a major factor that influences the consumer decision-making process. Moreover, it refers to a pattern of consumption reflecting a person's choices of how he or she spends time and money, but in many cases also to the attitudes and values attached to these behavioral patterns. Both individuals and families exhibit distinct life styles. Maintaining or changing an individual or family lifestyle often requires the consumption of products. It is our contention that thinking about products in terms of their relationship to consumer lifestyle is a very useful approach. Therefore, understanding consumer lifestyles and the factors that influence them are needed (Mason and Mayer, 1981).

For the nature of consumption, a decision making unit (individual, family, or household) that takes information, processes that information in light of the existing situation, and take the action that will hopefully achieve satisfaction and enhance lifestyle. Problems arise for consumers in their attempts to develop, maintain, and/or change their as shown in Figure 2.1. Past decisions, time-related events such as aging, and external events such as an illness or job change lead to lifestyle changes that pose additional consumption problems and result in new purchases, new attitude and related changes that in turn bring about further lifestyle changes.

Figure 2.1: Consumer lifestyle and consumer decisions



Source: Hawkins, et.al, Consumer Behavior, 1983, p.14

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Lifestyle is a function of one's inherent individual characteristics that have been shaped and formed through social interaction as one move through one's life cycle. Lifestyle expresses a person's self-image or self-concept. The total images you have of yourself as a result of the culture you live in and the individual situations and experience that comprise your daily existence. It is the sum of your past decisions and future plans. Solomon, Bamossy, and Askegaard (1999) stated that many of the factors such as a person's self-concept, reference group and social class, are sued as 'raw ingredients' to fashion a unique lifestyle. The basic factors consumer lifestyle can influencing from both internal and external culture such as demographics, social class, reference groups, family, individual development, and individual characteristics (Walters and Bergiel, 1989).

2.1.1 External influences

In macro group influences, the nature of influence exerted by group will change from general guidelines to explicit expectations for certain behaviors (Hawkins, et.al,1983)

- Culture: One of the most important aspects of culture is a culture's basic value. Values vary across cultures that affect marketing management decisions.
- Demographics: are used to describe a population in terms of its size, structure, and distribution.
- Social class: The hierarchical division of a society into relatively permanent and homogeneous groups with respect to attitudes, values, and lifestyles. Social class

influences on consumer lifestyle and purchase decisions that represent underlying values that our culture holds to be worthwhile.

- Reference groups and group: Most consumers belong to a large number of groups- two or more people who have a purpose for interacting over some extended period of time.
- The family: is a very special and influential form of reference group and is the subject managers-the composition of the family unit, family decision-making roles, and the family life cycle.

2.1.2 Internal influences

Internal influences, which covers the perception and information processing, describes the means by which consumers incorporate information from group influences, the situational context, and marketing efforts into their lifestyle and purchase decisions (Walters & Bergiel, 1989).

- Information processing: Information consists of all facts, estimates, predictions, and generalized relationships that are used by consumers to recognize and solve problems. Information is the raw material for a decision.
- Individual Development: Consumer learning and consumer socialization reflect pattern of consumption and the behavior. Learning experiences are acquired from attitudes values, tastes, preferences, culture, social class, institution, family, friend, and so forth, which greatly influence the type of lifestyle and the products we consume.

- Individual characteristics: Those individual characteristics include consumer motivation and personality (such as personal trait and self-concept) that energize and direct pattern of purchase and consumption behavior.

Consumer lifestyles influence consumer behavior. Personality, motives, culture, social class, reference groups, family, and individual development influence consumers in adopting a particular lifestyle that represents what they think they are and want to be. This is an ongoing process and they're continual, but generally moderate, changes in that lifestyle (Hawkins, et.al, 1983).

In part of consumer lifestyle of this research will emphasis on social class, which concern about social value. Also, individual characteristic that concern about personal trait and self-concept, which the detail will mention further.

2.2 Personality

The word “personality” comes from the Latin term *persona*, which means “actor’s face mask.” In a sense, one’s personality is the “mask” worn as a person moves from situation to situation during a lifetime. “Personality is the individual characteristic, referred to the distinctive patterns of behavior, including thoughts and emotions, which characterize each individual’s adaptation to the situations of his or her life. Personality is the consistent response to environmental stimuli. These patterns are internal characteristics that we are born with or that result from the way we have been raised. The important point, however, is that a study of personality helps us understand why people behave differently in different situations (Gleitman, 1992).

Characteristics of personality

1. A person's behavior shows a consistency. Personality characteristics are relatively stable across time rather than short-term in nature.
2. The behaviors should distinguish the person from others.
3. The behavior interacts with the situation.
4. Personality cannot be expected to accurately predict an individual's behavior on one specific occasion from a single measure of personality.

The choice of a particular brand depends upon the interaction of personality, the situation, and the product. Thus, the consumer may be under time pressure, may be buying a gift to be given at a social occasion, or may be in a lousy mood. At the same time, the person may be very low in dogmatism but also very high in self-confidence. The complexity resulting from the potential interaction of all of these factors well illustrates the idea that consumers must be viewed as a dynamic whole. Simple stimulus-response connections between personality and purchase are unlikely to be found (Mowen, 1993). The five distinct approaches to personality have had an impact on consumer behavior. They are psychoanalytic theory, personal trait theory, social-psychological and cognitively based personality theories, phenomenological theories and self-concept theories. In this research will be mentioned in the personal trait theory and self-concept theories. Each of these will be discussed below:

2.2.1 Personal Trait

The personal trait theory approach to personality attempts to classify people according to their dominant characteristics or traits. A trait is "any characteristic in which one person differs from another in a relatively permanent and consistent way."

Trait theorists propose that personality be composed of characteristics that describe and differentiate individuals. For example, people might be described as aggressive, easygoing, quiet, moody, shy, or rigid (Hoyer and Macinnis, 1997).

Sixteen personality traits identified by Cattell

Table 2.1: The 20 scales of the Sixteen Personality of Cattell

Scale Name	Low Scorer	High Scorer
Basic Scales		
Warmth (Factor A)	Reserved, detached, impersonal, cool, distant	Outgoing, warm hearted, easy-going, participating
Intelligence (Factor B)	Concrete thinking	Abstract thinking, more ability to learn, remembers and applies knowledge.
Emotional Stability (Factor C)	Emotionally less stable, changeable	Emotionally stable, mature, calm
Dominance (Factor E)	Humble, mild, submissive, conforming, cooperative	Dominant, assertive; aggressive, competitive
Implusivity (Factor F)	Sober, serious, prudent, taciturn	Enthusiastic, cheerful, heedless
Conformity (Factor G)	Expedient, disregards rules	Conforming, perservering, moralistic
Social Boldness (Factor H)	Shy, timid, threat-sensitive, restrained	Socially bold, venturesome, uninhibited, spontaneous
Sensitivity (Factor I)	Tough-minded, self-reliant	Tender-minded, sensitive
Suspiciousness (Factor L)	Trusting, acceptable	Suspicious, hard to fool, opinionated
Imagination (Factor M)	Practical, conventional	Impractical, absentminded, unconventional
Shrewdness (Factor N)	Forthright, unpretentious, genuine	Calculating, polished, socially alert
Insecurity (Factor O)	Confident, self-assured, secure,	Apprehensive; self-reproaching, insecure, worrying, troubled
Radicalism (Factor Q1)	Conservative, resisting change	Open to change, liberal, analytical, innovative
Self-Sufficiency (Factor Q2)	Group oriented, sociable	Self-sufficient, resourceful
Self-Discipline (Factor Q3)	Undisciplined, impulsive	Compulsive, socially
Tension (Factor Q4)	Relaxed; tranquil, low drive	Tense, frustrated, driven

Scale Name	Low Scorer	High Scorer
Second-Order Scales		
Extraversion (Factor QI)	Introversion, socially Inhibited	Extroversion, socially participating
Anxiety (Factor QII)	Low Anxiety	High anxiety
Touch Poise (Factor QIII)	Sensitivity, emotionalism	Tough poise
Independence (Factor QIV)	Dependence	Independence

Source: Rogers, The Psychological Testing Enterprise, 1995, pp.610-614

Trait theories attempt to describe people in terms of their predispositions on a series of adjectives. As such, a person's personality would be described in terms of a particular combination of traits. The Sixteen-Personality Factor (The 16PF) is a personality test intended for high school seniors and adults. It provides measures of the most central constructs identified by Catell's extensive factor analytic work. Additional, four indexes provide estimates of second-order factors that Cattell has identified. In total, the inventory provides 20 scores (Rogers, 1995). Table 2.1 gives a list of the 20 scales of the Sixteen-Personality Trait that could be used to describe a person.

However, many such lists have been developed by various authors. Indeed, one of the problems of trait theories is the huge number of traits that can be used to describe people. The criticism of the trait theories led to the realization that, for the approach to be useful to marketers, the consumer characteristics selected for measurement should be carefully identified in terms of their relevance to the specific buying behavior being investigated. The early studies had selected trait inventories used by psychologists for purposes that had nothing to do with buying behavior. In addition, researchers using a trait approach needed to recognize the importance of situational factors and assess the validity and reliability of their measures (Mowen, 1993).

2.2.2 Self-concept

Self-concept is an internal representation of lifestyle. It is basically the attitudes one holds toward oneself. The self-concept can be defined as the attitudes one holds toward himself or herself and, as such, serves as the basis for one's lifestyle. Self-concept represents the "totality of the individual's thoughts and feelings having reference to himself as an object." It is as though an individual "turns around" and evaluates in an objective fashion just who and what he or she is.

Because people have a need to behave consistently with their self-concept, this perception of themselves forms part of the basis for the personality. Such self-consistent behavior helps a person to maintain his or her self-esteem and gives the person predictability in interactions with others. It has been argued that the image people have about themselves may dictate their specific behavior patterns. Despite the importance of the self-concept to understanding behavior, however, some consumer researchers have argued that the concept's study has been neglected (Atkinson, et.al, 1993).

The central concept in "Rogers's theory of personality" is the self. The self, or self-concept (Rogers uses the terms interchangeably), became the cornerstone of his theory. The self consists of all the ideas, perceptions, and values that characterize "I" or "me"; it includes the awareness of "what I person's perception of the world and his or her behavior. The self-concept does not necessarily reflect reality: a person may be highly successful and respected but still view himself or herself as a failure.

An important finding is that people have more than one self-concept. The following are six types of self-concept that have been identified.

1. Actual self: How a person actually perceives himself or herself.
2. Ideal self: How a person would like to perceive himself or herself.
3. Social self: How a person thinks others perceive him or her.
4. Ideal social self: How a person would like others to perceive him or her.
5. Expected self: An image of self somewhere in between the actual and ideal self.
6. Situational self: A person's self-image in a specific situation.

Two versions of the self reoccur in the various conceptualizations-the actual and the ideal self-concepts. The actual self relates to how a person actually perceives himself or herself, whereas the ideal self denotes how a person would like to perceive himself or herself (Mowen, 1993). To the extent that marketers can tie products to the ideal concept, purchase of those products would be seen by consumers as a good way to help attain their ideal self-concept.

The self-concept and Product Symbolism

Self-concept was value to the individual, behavior would be direct towards protection and enhancement of an individual's self-concept. As the purchase, display and use of goods could communicate symbolic meaning, the consuming behavior of individuals would be directed towards enhancing self-concept and self-image through the consumption of goods as symbols (Hogg and Michell, 1996).

In fact, various studies have found a relationship between the self-image of a person and of certain products that he or she buys. The products consumers use to communicate them-selves to others act as symbols. Such communicative products have three characteristics. First, they must have visibility in use, such that their purchase,

consumption, and disposition are readily apparent to others. Second the product must show variability-that is, some consumers must have the resources to own the product, whereas others do not have the time or financial resources to possess it. If everyone, it could not be a symbol. Third the product should have personalizability. Personalizability refers to the extent to which a product denotes a stereotypical image of the average user.

2.3 Social Value

Values are enduring beliefs that a given behavior or outcome is desirable or good. S enduring beliefs, our values have several characteristics. They serve as standards that guide our behavior across situations and over time (Hoyer and MacInnis, 1997).

2.3.1 Rokeach Value Survey

Aiken (1994) mentioned that the values held by people are related the usefulness, importance, or worth attached to particular activities or objects. From Rokeach's theory, he conducted extensive international and cross-cultural research on the topic, defined a value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence". It is a complex proposition involving cognition, approval, selection and affect. Rokeach has added that values are sociologically based because society and its institutions socialize the individual for the common good to internalize shared conception of the desirable. Value may also arise out of cognitive expression, justification, and indeed exhortation in socially desirable terms. Rokeach also described values as "abstract ideals, positive or negative, not tied to any specific object or situation, representing a person's beliefs about modes of conduct and ideal terminal mode.

Table 2.2: Items on the Rokeach Value Survey

Instrumental values	Terminal values
Ambitious	A comfortable life
Broadminded	An existing file
Capable	A sense of accomplishment
Cheerful	A world at peace
Clean	A world of beauty
Courageous	Equality
Forgiving	Family security
Helpful	Freedom
Honest	Happiness
Imaginative	Inner harmony
Independent	Mature love
Intellectual	National security
Logical	Pleasure
Loving	Salvation
Obedient	Self-respect
Polite	Social recognition
Responsible	True friendship
Self-controlled	Wisdom

Source: Aiken, Psychological Testing and Assessment, 1994, pp.236-240

From the above, it implies that values are of two kinds, those concerned with modes of conduct (instrumental values) and those concerned with end-states (terminal values). Rokeach classified instrumental values as being of two kinds, moral values and competence values. The former category is concerned with interpersonal modes of conduct, which produce guilt feelings when violated. The latter category, competence values, has to do with intra-personal, self-actualization modes of conduct, the violation of which leads to feeling of inadequacy. Terminal values are also further subdivided into personal values and social values. Personal values, which include end states as peace of mind and salvation, are self-centered. Social values, which include end states such as

equality and world peace, are societally centered. The Rokeach value Survey Consulting Psychologists Press) consists of a series of 18 instrumental and 18 terminal value terms of phases for assessing the relative importance of these values to people as the Table 2.2. The respondent is directed to place the 18 items in each list in rank order according to their importance to him or her. People of different nationalities and in different walks of life rank the items on the Value Survey differently.

2.2.2 Study of Value

Over the past several decades, many different instruments have been constructed by social and vocational psychologists to measure values. Based on Eduard Sprager's classification of people into six value types, the study of values from Riverside Publishing Company, assesses the relative strength of an individual's values in six areas (Anastasi, 1993):

1. Theoretical: Characterized by a dominant interest in the discovery of truth and by an empirical, critical, rational, "intellectual" approach.
2. Economic: Emphasizing useful and practical values; conforming closely to the stereotype of the "Average American Businessman."
3. Aesthetic: Placing the highest value on form and harmony; judging and enjoying each unique experience from the standpoint of its grace, symmetry, or fitness.
4. Social: Originally defined as love of people, this category was more narrowly limited in later revisions of the test to cover only altruism and philanthropy.
5. Political: Primarily interested in personal power, influence, and renown; not necessarily limited to the field of politics.

6. Religious: Mystical concerned with the unity of all experience, and seeking to comprehend the cosmos as a whole.

2.2.3 Value and Interpersonal Relationship

Psychologists use several different models or perspectives in their efforts to better understand relationships between people. Initially, described on the model of social exchange. According to this model, interpersonal relationships are formed for the purpose of meeting people's needs. In another word, the social exchange model view that interpersonal relationship is governed by the rewards and costs to each of the persons involved (Anastasi, 1993).

Any positively valued consequence, which a person gains from a relationship, is a reward. The important reward in most personal relationships is social rewards such as affection, approval, support, respect, and acceptance. Any negative valued consequence is a cost, incurred by a person in a relationship, which may take a variety of forms such as conflict, anxiety, self devaluation, or any other deplete the individual's adaptive resources or have aversive consequences. Another model is social role model. It's viewed as the relationships between people who are governed by certain agreed upon roles. People are expected to act in certain ways depending on the social role they have adopted and violation of these expectations and demands are likely to lead to conflict, stress, and possibly the termination of the relationship.

However, values are useful in the present or in the future and enduring even though the needs and behavior derived from values can fluctuate widely over periods of

time. Finally, values are widely held by many people within a group and are derived from personal, social, and cultural learning, thus being very central to an individual.

2.4 Consumer Needs

The term “need” is used to refer to any human requirement. However, there are a variety of terms used when referring to particular kinds of requirements. These terms include basic needs, wants, desires, and necessities. A basic need can be described as any body requirement without which life cannot be sustained in the short run, which are sometimes referred to as necessities. Wants are requirements that one learns through experience that entail purchases of products above the subsistence level. A desire relates to the consumer’s market aspirations. Wants and desires also have the power to derive a consumer to purchase. We use need, want and desires interchangeably because, in practice, it is difficult to tell where one leaves off and the other begins (Walters and Bergiel, 1989).

Needs Associated with Product

To understand the consumer need is the basic concept of marketing. The marketing concept consists in determining the needs and wants of the consumer. This traditional view that focus on obtaining information from the customers about their needs and preferences, it goes far beyond customer research by emphasis on current as well as future needs of customers (Kohli and Jaworski, 1990).

Specific consumer needs are identified in products (goods and services). The consumer perceives the product as a bundle of features with the ability to satisfy some of

his or her specific needs. People satisfy their needs and wants with goods and services, so we will use the term products to cover both. The product will be defined as anything that can be offered to satisfy a need and want. The product will fail may cause the customer purchased the wrong product to fit his or her needs (Folkes and Kotsos, 1986). The consumers have not stated all of their needs. Distinguishing among five types of needs as below:

1. Stated needs: For example, the customer wants an inexpensive product.
2. Real needs: For example, the customer wants the product whose operating cost, not its initial price, is low.
3. Unstated needs: For example, the customer a good service from salesperson.
4. Secret needs: For example, the customer wants to be seen by friends as a value-oriented savvy consumer.

If the features of the product are changed, it appeals to a different market because different need satisfactions are involved. Customer-oriented thinking requires the company to define customer needs from the customer point of view. Thus, the buyer may prefer many needs at once. The general need characteristics such as a safety, attractiveness, reliability, durability, price and other attributes desired in the product. Customers' needs are the starting-point from which all other business activities should logically be planned. Experience many kinds of needs, an appreciation of the nature of need would after a valuable approach to the study of motivating influences in buying behavior (Chisnall, 2001).

Hagland (1997) stated that healthcare industry should also learn to behave like other service industries and give consumers what they needs and wants.

2.5 Attitudes

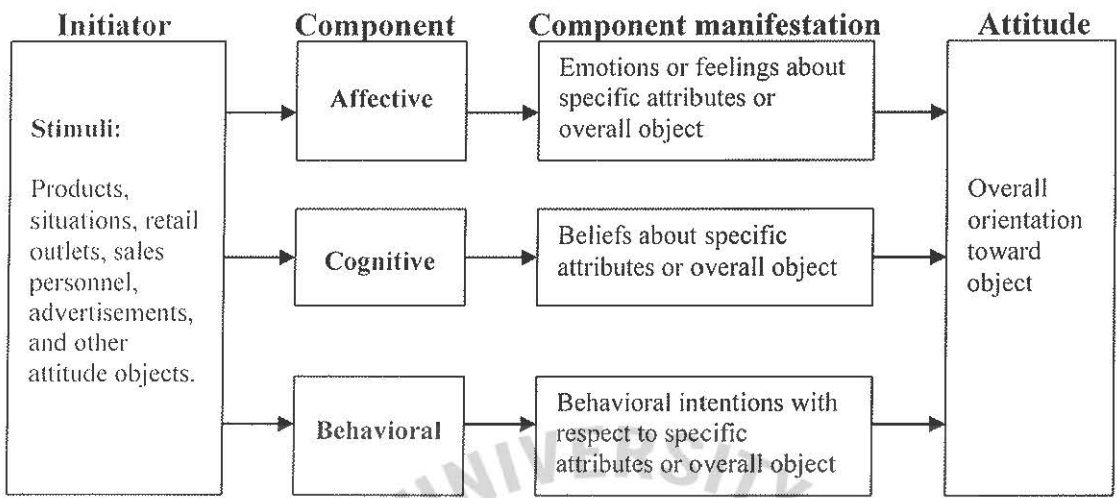
Attitudes are formed out of the interrelationship between personal experience and lifestyle and the factors discussed in the proceeding that help shape lifestyle. Attitudes learned predispositions to respond in a favorable or unfavorable manner to a particular person, behavior, belief, or thing (Feldman, 1996). An attitude is a lasting, general evaluation of people, objects, or issues. An individual's attitude towards an object or idea will lead him to certain evaluations, emotional feeling and behavior. People can form attitudes toward objects for very different reasons according to the purpose that the object serves for the individual as the following:

1. Utilitarian function: Pleasure or pain provided by attitude object.
2. Value-expressive function: Central concept or values expressed by attitude object.
3. Ego-defensive function: Protection provided from external threats or internal feelings provided by attitude object.
4. Knowledge function: Clarity needed in an ambiguous situation provided by attitude object (Schütte and Ciarlante, 1998).

2.5.1 Components of attitude

Social psychologists generally consider attitudes to follow the ABC model of attitudes, which suggests that attitudes have three components: affect, behavior, and cognition as illustrated in Figure 2.3.

Figure 2.2: Attitude Components and Manifestations



Source: Feldman, Understanding Psychology, 1996, pp.624-625

2.5.1.1 The affect component

It encompasses our positive or negative emotions about something-how we feel about it. The feelings or emotional reactions to an object represent the affective component of an attitude. The overall emotional or affection evaluation may be simply a vague, general feeling developed without cognitive information or belief about the product. Most beliefs about a product have associated with affective reactions or evaluations.

Due to unique motivations and personalities, past experiences, reference groups, and physical conditions, individuals may evaluate the same belief differently. Most individuals within a given culture react in a similar manner to belief that is closely associated with cultural values. While feelings are often the result of evaluating specific attributes of a product, they can precede and influence cognitions (Feldman, 1996).

2.5.1.2 The cognition component

It refers to the beliefs and thoughts we hold about the object of our attitude. The cognitive component consists of a consumer's beliefs and knowledge about an object. Each of beliefs reflects knowledge about an attribute of the brand. Beliefs need not be correct or true, they only need to exist. Many beliefs about attributes are evaluative in nature. That is, attractive styling, and reliable performance are generally viewed as positive beliefs. The more positive beliefs there are associated with a brand and the more positive each belief is, the more favorable the overall cognitive component it presumed to be. And, since all of the components of an attitude are generally consistent, the more favorable the overall attitude is. This logic underlies what is known as the multiattribute attitude model.

2.5.1.3 The behavior component

It consists of a predisposition or intention to act in a particular manner that is relevant to our attitude. The behavioral component of an attitude is one's tendencies to respond in a certain manner toward an object or activity. Since behavior is generally directed toward an entire object, it is less likely to be attribute specific than either beliefs or affect.

Every attitude has these three interrelated components, although they vary in terms of which element predominates and in the nature of their relationship. All attitudes, however, develop according to the general principles that social psychologists have discovered about their formation, maintenance, and change-principles (Feldman, 1996).

Terry, and Stockton (1993) stated that people, generally producing positive attitude on ratings of competence (intelligent). Adults tend to view people who wear eyeglasses as more intelligent. On the other hand, there are the negative attitudes towards people who wear eyeglasses that were less attractive than people who do not wear glasses. Regular eyeglasses can be used to view a person as intelligent or bookish. For example, lab scientists are commonly wearing glasses, perhaps as a tribute to their superior intelligence (Kolbe and Albanese, 1996). Eyeglasses created the negative attitude in decrease the physical attractiveness. However, it was influential extraneous variables of older (Wetsel, 1988).

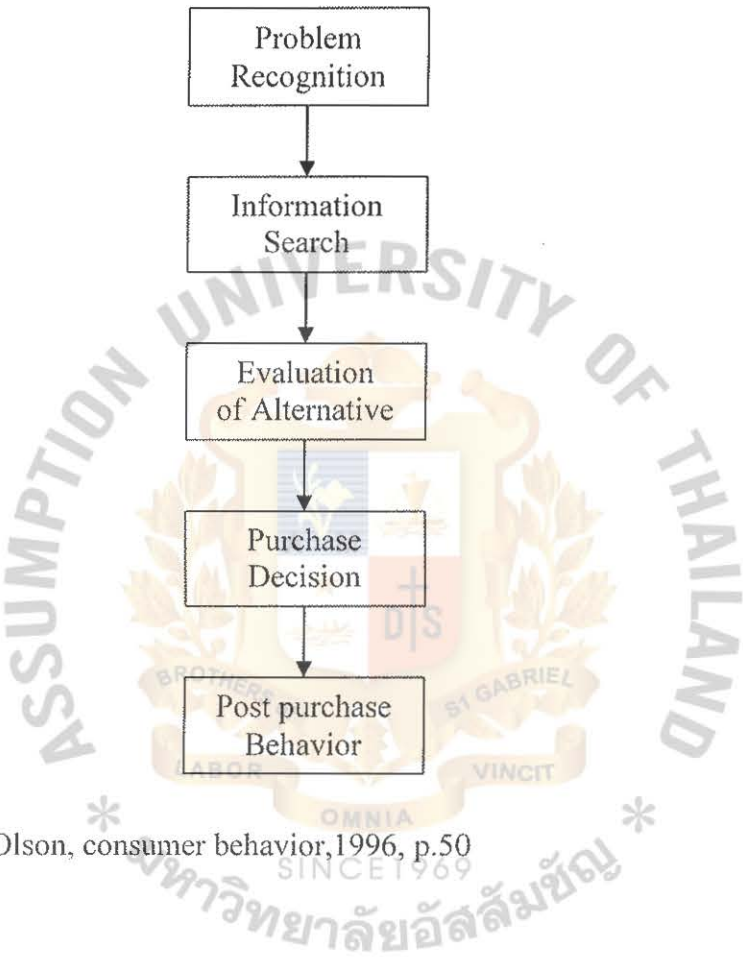
2.6 Purchase decision

Purchase decision is part of consumer decision process. Consumer decision making involves the analysis of how people choose between two or more alternative acquisitions and of the process that take place before and after the choice (Mowen, 1993). Consumers made purchase decisions that enhance their present or desired lifestyles. Influencing consumers to purchase their particular product or brand and to do this they must have a thorough understanding of the decision-making process that consumers go through.

As figure 2.4 below, it illustrates the basic elements in the consumer decision process. The consumer passes through five stages: problem recognition, information search, evaluation of alternatives, purchases decision, and post purchase behavior. Figure 2.4 implies that consumers pass sequentially through all five stages in buying a product.

The buying decision process as categorized into five recognizable steps can be explained as the following:

Figure 2.3: Consumer decision-making process



Source: Peter and Olson, consumer behavior, 1996, p.50

2.6.1 Problem recognition

The consumer decision process begins with the recognition that a problem exists. The buyer senses between his or her actual stage and desired stage. The need can be triggered by internal and external stimuli. Need or problem recognition also can be viewed as either simple or complex (Peter and Olson, 1996).

2.6.2 Information search

Information search begins when a consumer perceives need that might be satisfied by the purchase and consumption of a product. A consumer who senses a need for information on which to base a choice is in this stage. Consumer information sources fall into four groups, which are personal source, commercial sources, public sources and experiential sources. The relative amount and influence of these information sources vary with the product category and the buyer's characteristics. Each information source performs a different function in influencing the buying decision (Schiffman and Kanuk, 1994).

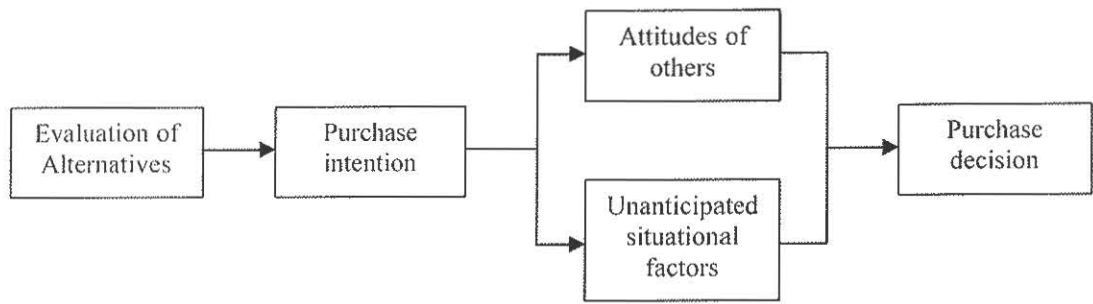
2.6.3 Evaluation of alternatives and Selection

Alternative evaluation represents the buying process in which consumers evaluate alternatives to make a choice. During this stage consumers must (1) determine the evaluative criteria to use for judging alternatives, (2) decide which alternatives to consider, (3) assess the performance of considered alternatives and, (4) select and apply rule to make the final choice (Greenleaf and Lehmann, 1995).

2.6.4 Purchase decision

The outlet selection and decision Implementation are mention in this stage. The store's image and the type and amount of advertising expert importance influence as evaluative criteria. The major dimensions of store image are merchandise, service, clientele, physical, physical facilities, convenience, promotion, store atmosphere, institutional, and post-transaction factors. Outlet location and size of store is important attributes for many consumers to make a purchase.

Figure 2.4: Steps between evaluation of alternatives and a purchase decision



Source: Kotler, Marketing Management, The millennium ed., 2000, p.182

In the evaluation stage, the consumer forms preference among the brands in the choice set. The consumer may also form an intention to buy the most preferred brand. However, two factors can intervene between the purchase intention and the purchase decision as shown in the Figure 2.5.

The first factor is the attitudes of others. The extent to which another's person attitude reduces one's preferred alternative depends on: the intensity of the others person's negative attitude toward the consumer's preferred alternative and the consumer's motivation to comply with the other person wishes. The more intense the other person's negativism and the closer the other person to the consumer, the more consumer will adjust his or her purchase intention. The second factor is unanticipated situational factor. These may erupt to change the purchase intention. The consumer forms a purchase intention based on such factors as expected family income, price, and expected benefits from the product. When the purchase intention. Thus, preference and even purchase intentions are not completely reliable predictors of purchase behavior; they may direct purchase but may not fully determine the outcome (Kotler, 2000).

In executing a purchase intention, the consumer may make up to five purchase subdecisions: a brand decision, vendor decision, quantity decision, timing decision, and payment-method decision. Purchases of everyday products involve fewer decisions and less deliberation.

2.6.5 Post Purchase

After a purchase, an individual sometimes experience doubt or worry about the wisdom of the purchase. This is known as post purchase dissonance. It is most likely to occur (1) among individuals with a tendency to experience anxiety, (2) after an irrevocable purchase, (3) when it was important to the consumer, and (4) when it involved a difficult choice (Hawkins, et.al, 1983). The buy's expectation is a function between the buyer's product expectations and its perceived performance. If the product performance falls short of customer expectations, the customer is disappointed. If it meets expectations, the customer is satisfied. If it exceeds expectations, the customer buys the product again and talks favorably about the product to others (Kotler, 2000).

2.7. Introduction to Eyeglasses

2.7.1 History of Eyeglasses

Around 1000 A.D. the reading stone, what we know as a magnifying glass, was developed. It was a segment of a glass sphere that could be laid against reading material to magnify the letters. It enabled presbyopia monks to read and was probably the first reading aid (Drewry, 2001).

In 1268 Roger Bacon, Englishman, was mentioned the use of lenses for optical purposes. However, most evidence points to the fact that eyeglasses were invented in Pisa of Italy during 1268-1289. The name of the inventor is not known. From the radical changes in eyewear, in the past hundred years, people have gone from wearing monocle, scissors-glass, lorgnette, pince-nez to be the currently eyeglasses look, which depend too much upon the nose and ears.

2.7.2 Components of Eyeglasses

Eyeglasses are health products used to correct visual defects, which become the part into the world of fashion. When a person uses the term eyeglasses, they are referring to frames and the lenses, the detail of each as the following (Danbury Connecticut, 1991):

1. Frames: Frame can make from metal and plastic. There are almost unlimited variety of shapes, color and side. Therefore, we can classify the different types of eyeglass frames in many ways such as material, style, shape, gender, and age:

- Material: The hot materials today in the eyeglass frame market such as titanium, beryllium, stainless steel, aluminum, plastic, monel, flexon and nylon.
- Styles: The 3 common styles of frames are full, half, and rimless or frameless.
- Shape: There are various shapes of eyeglass frame. The basic eyeglass frames shapes such as oval, rectangular, aviator, round, cat eye and wraparound.
- Gender: Eyeglass frames can be classified into women, men, and unisex frames based on the gender of the wearers.
- Age: Frames are also classified as adult and children frame.

2. Lenses: Lens, in optic, is a piece of transparent material shaped to form an image by bending light rays (Danbury Connecticut, 1991). The lens materials vary as below:

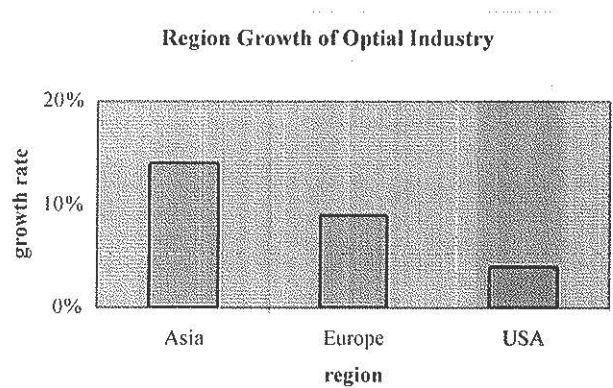
- Polycarbonate: This material allows for the highest level of impact resistance as well as creating a thinner lens than regular ophthalmic plastic lenses.
- Standard plastic: It is available in the largest amount of lens styles and has become the most common material used since its inception.
- Crown Glass: This material has been utilized in prescription eyewear for the longest period of time. The surface is very scratch resistance.
- High Index Plastic: Having the lens materials designed with a higher index of refraction creates light rays to focus more effectively, which results in thinner.
- Aspheric lens design: An aspheric design allows for a flatter lens surface. This improves the vision quality toward the edges of the lens.

Moreover, lens can be enhanced by the special technique to add more benefit and attractiveness such as anti-reflective coating, tints, ultraviolet coating and Photo-chromatic lenses.

2.7.3 Thai Optical Industry

Eyeglasses belong to the optical industry that is growing more rapidly in Asia than anywhere else. Eyewear sales in Asian countries are growing by 10-15% annually, compared with 8-10% in Europe and 3-5% in the United States. Optical industry of the global market worth about \$4.2 billion, Asia makes up \$1.2 billion, the United \$2 billion, and Europe \$1 billion.

Figure 2.5: Region growth rate (%) of optical industry



Source: Kittikanya, Bangkokpost, April 22, 1999

In Thailand, there are 35 million people have the vision problem, with more than 2,000 optical retail stores. The Thai Farmers Bank’s research division has estimated the value created from these retail optical stores at three billion bahts, with 10% average growth annually (Thansettakij, 1999). The market leader is the optical chains store that known as Top Chareon Optical. Total optical chain stores have 30% market share and the others 70% are the independent retailers. The domestics market absorbs 5 million optical lenses a year. Hoya was the largest optical lenses producer, claims to have 50% of the optical lenses market, and Thai Optics 40%.

2.8 Empirical studies and relevant

2.8.1. Personal trait

Carlin (1981) has done the research to investigate and compare the personality characteristics of: male and female myopes, younger and older myopes, who wear spectacles. The result shown those older eyeglass wearers manifested more defensiveness, self-control and greater needs for achievement, endurance, and order, while younger myopes were innovative. Males were more self-confidence, endurance,

order, self-control, intraception, autonomy, and deference. Females demonstrated higher needs for succorance and abasement, and a greater readiness for counseling.

Lusnar (1999) investigated the effects of the eyeglasses stereotype and occupational stereotypes on evaluations of applicant personal traits and hiring. The result shown that person wearing glasses is perceived as more intelligent, industrious, and dependable, but less attractive and outgoing.

Terry and Krantz (1993) indicated about traits attributed of people who wear eyeglasses. People with glasses on tend to be more fearful, timid, dependent, and gentle. The research result shown that glasses effect on ratings of mental competence or cognitive ability, encompassing aptitude (related traits as intelligence, authority, industry, dependability, and honesty) and control (maturity, rationality, and stability). A person who wears glasses, is seen as mentally competent and alert, but lacking in social forcefulness or power, dominated by assertiveness (aggressiveness, courage) and social presence (dominance, extroversion, sociability).

Terry and Stockton (1993) performed a research about the personal traits. The result of research showed personal traits of people who wear eyeglasses as more, anxiety, authoritative, and industrious.

2.8.2 Self concept

Kolbe and Albanese (1996) mentioned that glasses are another form of self-image enhancing adornment.

Terry, and Stockton (1993) indicated children's acquisition of social schemata is the development of children's self-schemata or self-concept. People who received their first pair of glasses in childhood reportedly have lower self-esteem and self-fulfillment. The result shown that wearing eyeglasses people have low self-confidence of attractiveness in adults. Self-concept is changeable, which is affected by social feedback.

2.8.3 Social value

Thompson and Haytko (1997) indicated in their research that fashion product present appearance of a whole person with affect the social value and acceptability.

Terry and Krantz (1993) investigated dimension of "Social Value" or acceptability with strong elements of interpersonal value (affection, compassion, sensitivity, friendliness, appeal) and social worth (attractiveness, character, honesty). There was the "negative" results mentioned that eyeglasses did not detract from social value or acceptability. This might have been due to the fact that glasses had disparate effects on the composite traits, increasing ratings of character, compassion, honesty, and sensitivity, while decreasing ratings of attractiveness.

2.8.4 Consumer Needs

Thompson and Kaminski (1993) study about the service quality of health care. It concluded that the marketers could learn much more about a service consumer by identifying the importance of need. For the innovative people, they need and always seek out new products.

Doremus (1992) performed a research about safety, which mentioned that employee needs more attractive product. The safety glasses are replaced by a more fashionable. The younger generation tends to prefer these modern-looking glasses, while the older sticks to what is more familiar. However, comfort is the greater important than style.

Morgan (2002) mentioned that people want in eyeglasses to suit his or her needs, which has lightweight, flexibility, and strength.

Ocular times (1999) indicated that optical shops have also become savvy to the needs of this important customer. Men are concerned with style, many indicate that the comfort, fit and durability of their eyeglasses are much more relevant to all wearers when choosing eyewear.

2.8.5 Attitudes

Lusnar (1999) indicated people normally believe that the presence of glasses significantly reduced attractiveness ratings. Moreover, they have a minimal impact on ratings of intelligence. Persons wearing glasses be evaluated as more intelligent.

Stratton (1999) studied the attitude of college students towards eyeglasses and their social identity vis-à-vis appearance. Females exhibiting higher body image orientation scores than males. Females' interest in wearing eyeglasses less than males because of motivated by aesthetic or cosmetic concerns. Eyeglasses destroy a sociable identity but reinforce an intellectual identity.

Better Vision Co.,Ltd.(2002) mentioned about the attitude on style of frame. People have least favorable on rimless eyeglass style. Although they are lightweight, they tend to not be as sturdy as frames with rims, so that are not a good choice for people who frequently remove glasses and put them on again.

2.8.6 Purchase Decision

Greenleaf and Lehmann (1995) have done the research about decision delay time. They indicated that the amount of time that consumers spend in different stages of the decision making process are vary. Some may purchase quickly while the other is delayed for months.

Alba, Mela, Shimp, and Urbany (1999) stated that consumer price judgment is important to the purchase decision. Therefore, price point and price level should be considered carefully because the consumer can compare it easily with the competitor.

2.8.7 Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) is only one technique that can estimate a series of interrelated dependence relationships simultaneously. (Hair, 1998). It is a comprehensive, flexible statistical approach to research design, testing hypothesis and data analysis about relation among observe and latent variables (Hoyle, 1995).

Duits and Duivenvoorden (1999) explore structural relationships between anxiety, depression, personality, and background factors. The structural equation

modeling (SEM) method was applied to find out the intra-relationship among these variables.

MacCallum and Austin (2000) mentioned that SEM is a powerful tool that is being used to great benefit in psychological test in marketing research. It is also clear that the applied SEM analysis is appropriate to predict personality, trait, and performance of consumers.



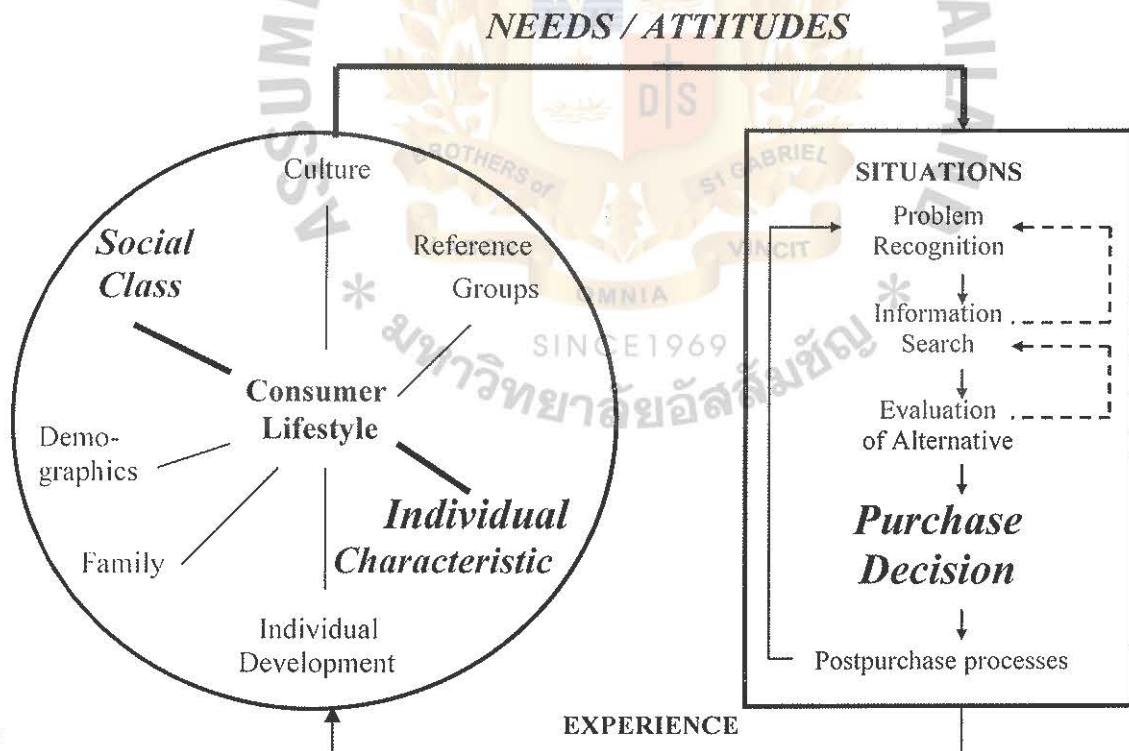
CHAPTER 3

Research Framework

This chapter will apply the theoretical concept of model of consumer behavior and structural equation model in order to come up with a conceptual model of the research. Furthermore, the hypothesis will be developed based on the framework and the characteristics of variables will be discussed later.

3.1 Theoretical Framework

Figure 3.1: Theoretical framework for overall model of consumer behavior



Source: Hawkins, et.al, Consumer Behavior, 1983, p.23

This consumer behavior model illustrates the relationship of consumer lifestyle and consumer decision process. People have different lifestyle depend on their pattern of

living. There are seven basic factors influencing consumer lifestyle: culture, demographics, social class, reference groups, family, individual development, and individual characteristics. In broadest sense possible, the culture, by way of its values, norms, and traditions, is the major influence on our style of life. Within any culture, social class distinctions create differing consumer lifestyle. However, specific groups and household influences. Each of these influences (culture, social class, reference groups, and household) are external influences that contribute to a particular consumer lifestyle.

Those factors that influence consumer lifestyle but are unique to the individual consumer include individual development and individual characteristics. Individual development takes place through perception, learning, and memory, which contribute to the resulting lifestyle and patterns of behavior. Individual characteristics represent those motivation, personality features, and emotions that make each individual unique. The combination of these external and internal influences is manifested in consumer lifestyles and the products and services individuals consume to maintain and/or change that lifestyle.

Because of lifestyle, and indirectly all those factors that influence lifestyle, consumers establish certain attitudes toward consumption of products in various situations. The combination of a particular lifestyle, attitudes, and needs activates the consumer's decision process. The consumer's decision process involves some or all of the following steps, depending on the level of purchase involvement: problem recognition, information search, alternative evaluation, store choice, purchase decision, and post purchase processes.

The conceptual model of this research is based on the above theoretical framework. In this research will use only the components of consumer lifestyle in relevance to eyeglasses, which is “individual characteristic” and “social class”. The individual characteristic includes personal trait and self-concept. For social class, it emphasizes on social value that direct pattern of purchase and consumption. The combination of these lifestyle, attitudes, and needs will activate the purchase decision process.

3.2 Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) is multivariate technique combining aspects of multiple regression (examining dependence relationships) and factor analysis (representing unmeasured concepts – factors – with multiple variables) to estimate a series of interrelated dependence relationships simultaneously. Path analysis is method that employs simple bivariate correlations to estimate the relationships in a system of structural equations (Hair, 1998).

Path analysis is a subset of Structural Equation Modeling (SEM), allows examination of a set of relationships between one or more independent variables, either continuous or discrete, and one or more dependent variables, either continuous or discrete.

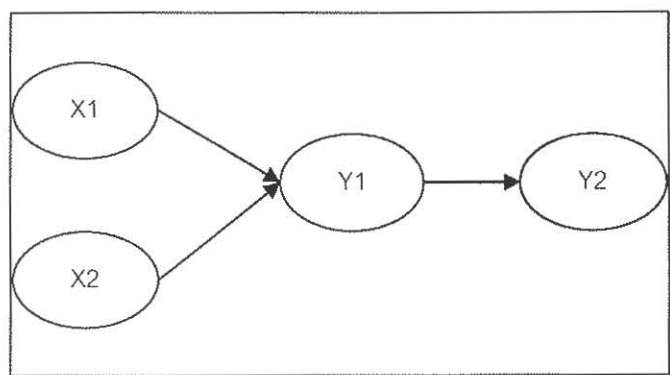
SEM deals with measured and latent variables. A measured variable is a variable that can be observed directly and is measurable. Measured variables are also known as observed variables, indicators or manifest variables. A latent variable is a variable that cannot be observed directly and must be inferred from measured variables such as

attitudes, intelligence that cannot be observed and measured directly. Latent variables are implied by the covariances among two or more measured variables. They are also known as factors, constructs or unobserved variables. SEM is a combination of multiple regression and factor analysis. Path analysis deals only with measured variables (Sharma, 1996).

For this research focused on structural equation models with latent constructs because the variables cannot be observed directly like the consumer lifestyle factors. It consists of the exogenous variables or constructs that is the construct that is not affected by any other construct in the model. And endogenous constructs are affected by other construct in the mode (exogenous variables).

Moreover, Structural equation models are most often represented graphically. It is more powerful tool for predicting the series of variables 2 (Ngamsantiwong, 2000). The dependent variables can be the independent variables in the same model, and these variables are ready to predict another dependent variable in simultaneously as figure3.2.

Figure 3.2: Example of Graphical Structrual Modeling

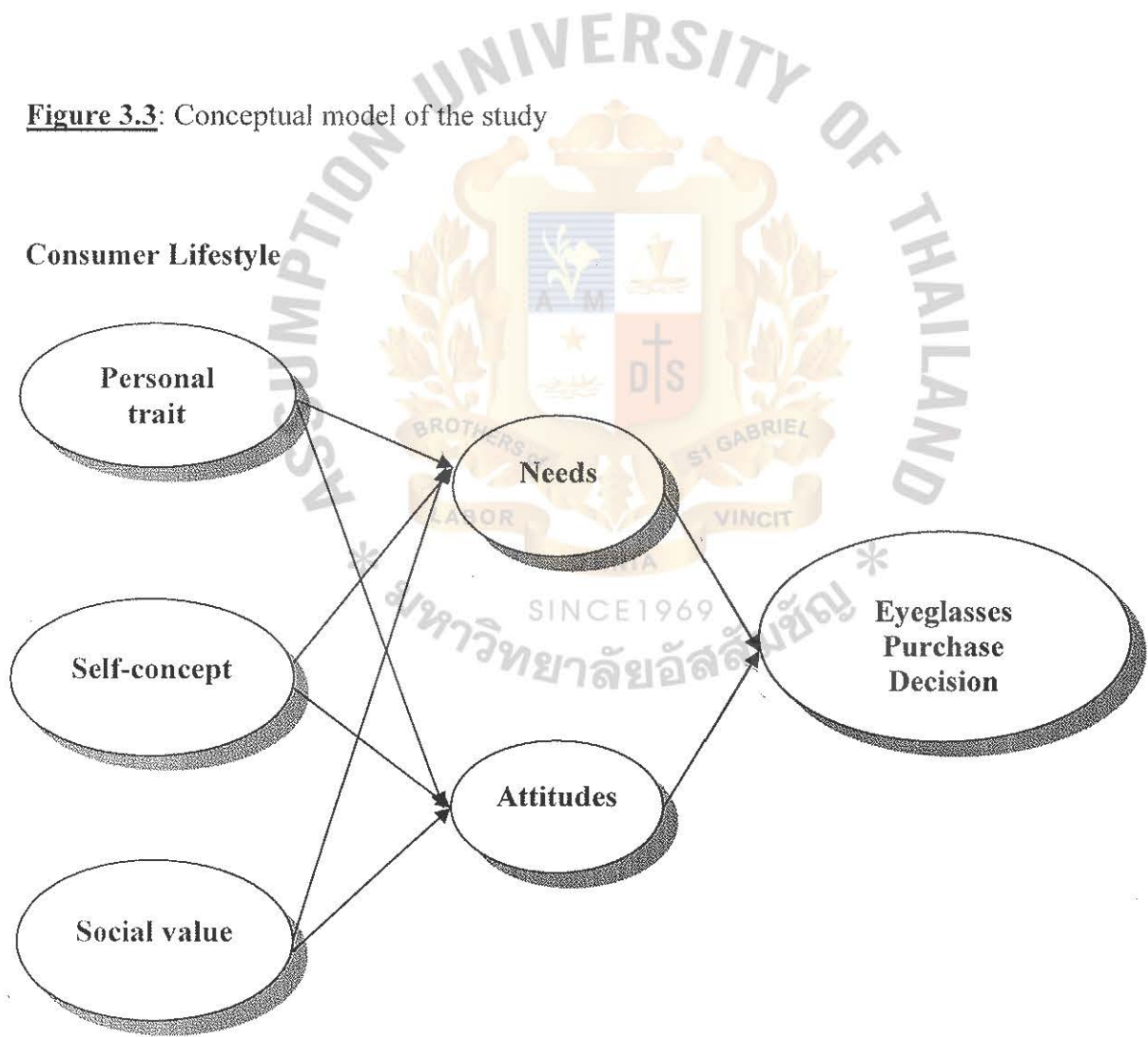


Source: Macias, Journal of Interactive Advertising, Vol. 3: No: 2, 2003, pp.14

3.3 Conceptual Model

The adaptation of “Consumer Behavior Model” of Hawkins, et.al associated with the basis of path analysis in the structural equation model, will be come up with a conceptual model of this study as shown in Figure 3.3. The research employs 3 components of consumer lifestyle that is “Personal trait”, “Self-concept”, and “Social value”. These lifestyle components link with needs in conjunction with attitudes towards the purchase decision.

Figure 3.3: Conceptual model of the study



3.4 Research Hypothesis

Hypothesis is an assumption or guess that a researcher makes about some characteristics of the population under study (McDaniel and Roger, 1996). The hypothesis of this research are as the following:

H₀ : Intra-relationship among personal trait, self-concept, social value and needs in conjunction with attitudes are not linked to the explanation of purchase decision.

H₁ : Intra-relationship among personal trait, self-concept, social value and needs in conjunction with attitudes are linked to the explanation of purchase decision.

3.5 Operationalization of the Independent and Dependent Variables

The various independent and dependent variables as derived from the literature and modified into the research framework are operationalized as explained below. The variables and level of measurement formed the basis for the formulation of questionnaire.

Table 3.1: Operationalization Table

Concept	Concept Definition	Operational Component	Level of Measurement
Personal trait	Any characteristic in which one person differs From another in a relatively permanent and consistent Way.	<ul style="list-style-type: none"> • Innovativeness • Intelligence • Anxiety • Timid ness • Rationality • Stabiliity • Assertiveness • Extroversion 	Ratio

Concept	Concept Definition	Operational Component	Level of Measurement
Self-concept	The totality of the individual's thoughts and feelings having reference to himself as an object and, as such, serves as the basis for one's lifestyle.	<ul style="list-style-type: none"> • Self-confidence • Self-esteem • Self-fulfillment 	Ratio
Social value	Value that affecting personal relevance, widely held beliefs that affirm what is desirable, originally defined as love of people.	<ul style="list-style-type: none"> • Affection • Friendliness • Appeal 	Ratio
Need	Any human requirement, emphasis on consumer need that associated with product in the general characteristics of attributes desired in the product	<ul style="list-style-type: none"> • New models • Attractive style • Light weight • Durability 	Ratio
Attitude	An individual's attitude towards an object or idea will lead him to certain evaluations, emotional feeling and behavior.	<ul style="list-style-type: none"> • Full style • Half style • Rimless Style 	Ratio
Purchase Decision	Intention to purchase the product.	<ul style="list-style-type: none"> • Price decision • Time decision 	Interval

The above operationalization table will be employ to design questionnaire of this research. The questionnaire will start with Part 1, the scanning question in no.1 and 2, in order to know the basic information of respondents. For question no.3 and 4, will be asked for the eyeglasses purchase decision. For consumer lifestyle, included personal trait, self-concept, and social value, in this test is designed in Part2 of questionnaire, which consists of 14 sub-questions ask the lifestyle of individual respondent. This part

of questionnaire was developed from Vichayudth (1995) and Kitcharoen (1999) as the following:

Personal trait: (Question no.1.1 - 1.8)

- *Innovativeness*: mean open to change and adopt the new interesting things..
(Question no.1.1)
- *Intelligence*: more ability to learn, remembers and applies knowledge in the real situation. (Question no.1.2)
- *Anxiety*: are the characteristics of people who always feel frustrated and worry.
(Question no.1.3)
- *Timidness*: are the characteristics of people who have more shy and fearful than most people. (Question no.1.4)
- *Rationality*: are the characteristics of people who always think systematically and carefully in making a decision. (Question no.1.5)
- *Stability*: are the characteristics of people who have always up and down in their mood. (Question no.1.6)
- *Assertiveness*: are the characteristics of people who dare to express their feelings, desires and insist in their own opinions. (Question no.1.7)
- *Extroversion*: the characteristics of these group of people are usually enjoy being in social events or parties. (Question no.1.8)

Self-concept: (Question no. 1.9 - 1.11)

- *Self-confidence*: are the characteristics of people who are confidence of themselves when doing anything. (Question no.1.9)

- *Self-esteem*: These people want to achieve, be competent, and gain approval and recognition. (Question no.1.10)
- *Self-fulfillment*: These people accept themselves for what they are.(Question no.1.11)

Social value: (Question no: 1.12 – 1.14)

- *Affection*: is care for others, willing to listen and understand other people's problems. (Question no:1.12)
- *Frienliness*: is always friendly with other people. (Question no:1.13)
- *Appeal*: is outstanding than others people, there are many others people around them. (Question no:1.14)

Question no.2 and 3 in Part 2, will be asked to needs for products and attitude toward three eyeglasses styles respectively. Finally, Part 3 that is the part of personal data used to analyze the target respondents in term of gender, age, education and income.

CHAPTER 4

Research Methodology

4.1 Research Technique

The research is going to use the survey method to gather the data from a sample of people by use of a questionnaire. The survey research is defined as a method of primary data collection in which information is gathered by communicating with a representative sample of people. Survey provides a quick, inexpensive, and accurate means for obtaining information for a variety of objectives. Moreover, survey is used because a survey is expected to obtain a representative sample of target population (Zikmund, 1997). The researcher will interview the respondents according to the questionnaire, which have been prepared previously.

4.2 Research Instrument

This research has been conducted by the self-administrated questionnaire. The questionnaire is more appropriate and can be collected in a complete form within a short period of time, can be obtained from target respondent after immediate completion and level of error can be optimized. Moreover, the researcher has the opportunity to provide explanations about the questions used in the questionnaire to the respondents that benefit to avoid the misunderstanding and confusion about the questions, in order to get the accurate result. The wordings of the questionnaire have been used in and understandable form for the respondents. Since, this method helps the researcher to wait for the respondents to complete the questionnaire, and can collect it in the short time.

4.3 Research Design

4.3.1 Type of investigation

In this research study, it is non-causal research that it is not conducted to identify cause and effect relationship among the variables. The research typically seeks to describe the intra-relationship among consumer lifestyle components of eyeglass wearers and its route in order to see the sequence of their selection.

4.3.2 Purpose of the study

The purpose of this research is to test the hypothesis in order to describe the intra-relationship between consumer lifestyle and their linkage towards purchase decision.. Moreover, the research can identify whether need or attitude is more important for selecting eyeglasses, in order to determine the position of need and attitude in making the purchase of eyeglasses.

4.3.3 Extent of the researcher interference

In this research, the questionnaire is employed through personal interview in order to gather data from the respondents. The research process will be non-interference. The researcher will not interfere the respondents when asking the questions.

4.3.4 Study setting

The researcher will go to department store, shopping areas, and nearby to seek for the convenient respondents, so the respondents will non-contrived by the interviewer.

4.3.5 Unit of analysis

In this research, the researcher will gather data from individual eyeglass wearer in Bangkok, who is most convenient available.

4.3.6 Time horizon of the study

This research is the cross-sectional study. The data will be collected in various segments of a population at a single point in time.

4.4 Sampling Design

4.4.1 Target population

Population is defined as any complete group of entities that share some common set of characteristics (Zikmund, 1997). The target population that relates to this research will be people who wear eyeglasses in Bangkok.

4.4.2 Sampling unit

As mention above in the unit analysis, the researcher will gather data from individual eyeglass wearer aged between 16-55 years old in Bangkok, who is most convenient available.

This range of age will be the major group of eyeglass wearers and usually can make decision to purchase with higher frequency, and also have the ability to understand the questionnaire.

4.4.3 Sampling frame

In this research, there is no sampling frame. Since, there is no list of the target population available from where the target respondents are chosen and the target population is the individual where there are selected is unknown.

4.4.4 Sampling mode

In this research, the sampling mode is the “Non-Probability” because the unit of the sample or respondents is unknown. It is selected on the basis of personal judgment or convenience, which can be called convenience sampling or haphazard or accidental sampling. It refers to the procedure of obtaining units or people who are most conveniently available.

4.4.5 Sampling Plan

The sample will be selected and the data will be collected in the following manner.

1. According to the Convenience sampling used and the numbers of sample are chosen from the Furnished Table, according to Gary Anderson (1996). The needed sample size of respondents will be selected.
2. The necessary data will be collected by questionnaires survey of the eyeglass wearers, which will distributed at department stores, shopping areas, and the areas around them that located in Bangkok because the respondents are vary in term of demographic and lifestyle.

According to the sample mode, quota sampling was used. The researcher found and interviewed a prescribed number of people in each area and nearby. The collected

data will spread throughout Bangkok in 6 areas, in order to avoid bias. These areas are Central Chidlom, Central Pinklao, Central Silom, Maboonkhong, Siam Square, and Lotus Bangkae. It's because they are the major department stores and shopping areas in Bangkok, where most people are well recognized. The questionnaires will be distributed equally in these 6 areas and nearby.

4.5 Determining sample size

The sample size of this research is determined from the convenience sampling by estimating from the theoretical sample size of Gary Anderson. For this research, the population is calculated by the proportion of people who wear eyeglasses and the whole population of Bangkok.

An estimated 10 millions of people who wear eyeglasses in Thailand (Jitpleecheep, 2001), comparing with 62.6 millions of whole population in Thailand (Thongthai, 2002), the proportion of people who wear eyeglasses will be 15.97 %, calculated as follows:

$$\begin{aligned} \text{Proportion} &= \frac{\text{People who wear eyeglasses in Thailand}}{\text{Whole population in Thailand}} \\ &= \frac{10.0}{62.6} \\ &= 15.97 \% \end{aligned}$$

There are 7.6 million of whole population in Bangkok (Thongthai, 2002), when multiplying with the proportion of 15.97 % will get the population of people who wear eyeglasses in Bangkok that is “1.2 million” and this number would be used to calculate the amount of sample size. The level of confidence is set at 95% with the allowable error

is 0.05 (or 5%). This approximately 1.2 million of eyeglass wearers in Bangkok will be included in the category of 1 million population and the size of the sample respondents are aimed at 384 samples. The number of sample size ($N=384$) could be found in the table below:

Table 4.1: Theoretical sample sizes for different sizes of population and a 95 percent level of certainty

Population	Required Sample for Tolerable Error of			
	5%	4%	3%	2%
100	79	85	91	96
500	217	272	340	413
1,000	277	375	516	705
5,000	356	535	879	1,622
50,000	381	593	1,044	2,290
100,000	382	596	1,055	2,344
1,000,000	384	599	1,065	2,344
25,000,000	384	600	1,067	2,400

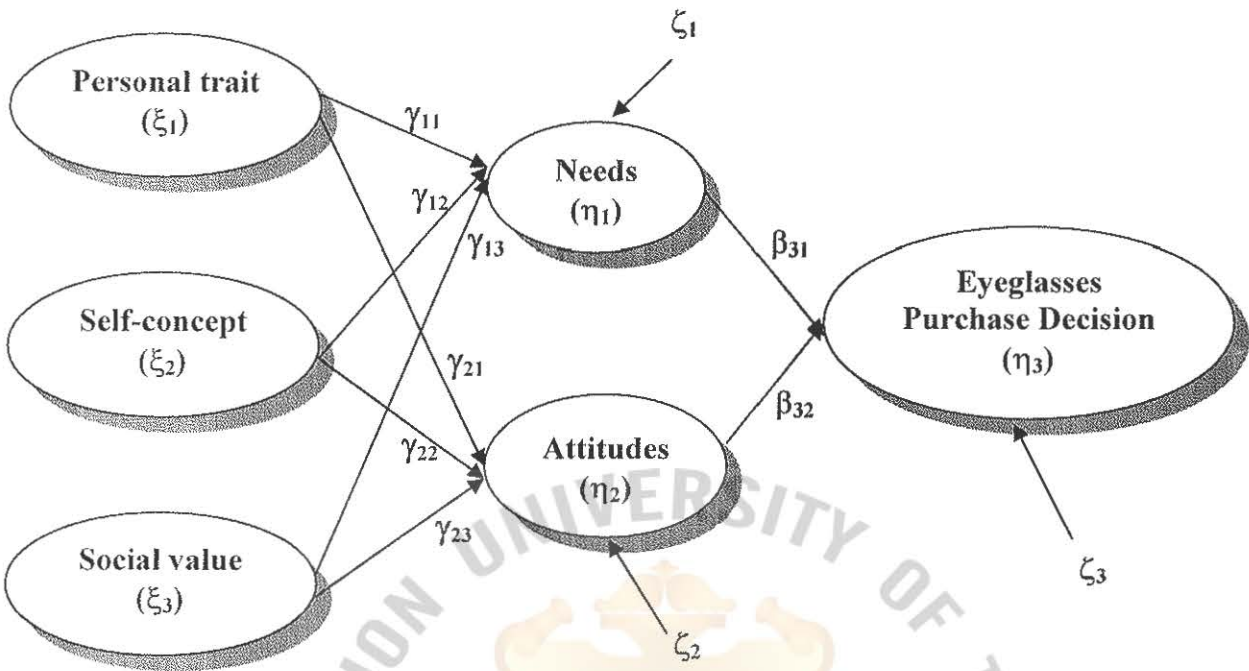
Source: Anderson, Fundamentals of Educational Research, 1996, pp.202

The sample size of this research will be 384 respondents, which plan to distribute the questionnaires to sampling units at the department stores, shopping areas, and nearby in Bangkok as mention above.

4.6 Statistical Treatment of Data

In this research, structural equation model (SEM) is applied to analyze the data, to find the path of the model. The primary structural model of this research as below (Ngamsantiwong, 2000):

Figure 4.1: Structural or path model



The structural or path model of this research depicted in Figure 4.1 can be represented by the following equations:

$$\eta_1 = \gamma_{11}\xi_1 + \gamma_{12}\xi_2 + \gamma_{13}\xi_3 + \zeta_1 \quad (4.1)$$

$$\eta_2 = \gamma_{21}\xi_1 + \gamma_{22}\xi_2 + \gamma_{23}\xi_3 + \zeta_2 \quad (4.2)$$

$$\eta_3 = \beta_{31}\eta_1 + \beta_{32}\eta_2 + \zeta_3 \quad (4.3)$$

These are referred to as path or structural equations, as they depict the structural relationships among the constructs.

- **Equation 4.1** gives the relationship between *Personal trait (ξ₁)*, *Self-concept (ξ₂)*, *Social value (ξ₃)* and *Need (η₁)*.
- **Equation 4.2** gives the relationship between *Personal trait (ξ₁)*, *Self-concept (ξ₂)*, *Social value (ξ₃)* and *Attitude (η₂)*.
- **Equation 4.3** gives the relationship between *Need (η₁)*, *Attitude (η₂)* and *Eyeglasses Purchase Decision (η₃)*

According to Hair, et al. (1998), Personal trait, Self-concept, and Social value are referred to as the exogenous variables or constructs because it is not affected by any other construct in the model. All exogenous variables are represented by “ξ”(ksi). Constructs Need, Attitude and Eyeglasses Purchase Decision are known as endogenous constructs because they are affected by other constructs. All endogenous constructs are represented by “η” (eta). T

The arrows between the constructs represent how the constructs are related to each other and are known as structural paths. The structural paths are quantified by the structural coefficients (Everitt and Dunn, 2002). Structural coefficients between endogenous and exogenous constructs are represented by “γ”(gamma) and those among endogenous constructs are represented by “β”(beta). The first subscript of the structural coefficient refers to the construct that is being affected and the second refers to causal construct. The amount of unexplained relationship in each equation is referred to as error in equation and is denoted by “ζ”(zeta).

From the above 3 equations, the matrices are used to form the basic equations for the structural model is:

$$\eta = \Gamma \xi + \beta \eta + \zeta$$

To estimate the value of parameters in the structural model can be done using AMOS packages (Analysis of Moments). Representation of the parameter matrices is given in the following table:

Table 4.2: Representation of Parameter Matrices of the Structural Model

Parameter Matrix	Description	Element
B (Beta)	Relationship of endogenous to endogenous constructs	β_{mn}
Γ (Gamma)	Relationship of exogenous to endogenous constructs	γ_{mn}
Φ (Phi)	Correlation among exogenous constructs	ϕ_{mn}
Ψ (Psi)	Correlation among endogenous constructs	ψ_{mn}

4.6.3 Structural Equation Model Construction

The goal in building a path diagram or other structural equation model, is to find a model that fits the data well enough to serve as a useful representation of reality and a parsimonious explanation of the data. There are five steps involved in SEM construction:

- 1. Model Specification
- 2. Model Identification
- 3. Model Estimation
- 4. Testing Model Fit
- 5. Model Manipulation

Model Specification

Model Specification is the exercise of formally stating a model. It is the step in which parameters are determined to be fixed or free. Determining which parameters are fixed and which are free in a SEM will be used to compare the hypothesized diagram with the sample population variance and covariance matrix in testing the fit of the model. This choice represents the researcher’s a priori hypothesis about which pathways in a system are important in the generation of the observed system’s relational structure (Ullman, 1996).

Model Identification

Model Identification concerns whether a unique value for each and every free parameter can be obtained from the observed data. A parameter is constrained when it is set equal to another parameter. Models need to be overidentified in order to be estimated and in order to test hypotheses about relationships among variables. A necessary condition for overidentification is that the number of variances and covariances is less than the number of observed variables in the model. Degree of freedom for the model also is a practical criteria of model identification as below:

$$\text{Degree of freedom (df)} = \frac{1}{2} [(p+q)(p+q)] - t$$

Where:

- p = The number of endogenous indicators
- q = The number of exogenous indicators
- t = The number of estimated coefficient in the proposed model

If degree of freedom of the model is less than zero, the model is underidentified. An overidentified model has a positive degrees of freedom. In case the degree of freedom equals to zero, the model is just-identified, which is perfectly fits to the given data, the solution is uninteresting because it has no generalizability (Ullman, 1996).

Parameter Estimation

The parameters of a SEM are the variances, regression coefficients and covariances among variables. A variance can be indicated by a two-headed arrow, both ends of which point at the same variable. Regression coefficients are represented along single-headed arrows that indicate a hypothesized pathway between two variables. Covariances are associated with double-headed, curved arrows between two variables or error terms and indicate no directionality. The data for a SEM are the sample variances and covariances taken from a population. Various methods can be used to estimate the

parameter such as Unweighted Least Squares (ULS), Generalized Least Squares (GLS), Maximum Likelihood (ML), Generally Weighted Least Squares (WLS), Diagonally Weighted Least Squares (DWLS) and Asymptotically Distribution Free (ADF).

Maximum likelihood (ML) is estimation method commonly employed in structural equation model. An alternative to ordinary least squares used in multiple regression, ML is a procedure which iteratively improves parameter estimates to minimize a specified fit function (Hair, 1998). ML and GLS are useful for normally distributed data when factors and errors are independent. ADF is useful for non-normally distributed data, but is shown only to work well with sample sizes above 2,500. The best estimator for non-normally distributed data and/or dependence among factors and errors is the Scaled ML because more consistent and effective (Ngamsantiwong, 2000).

Whatever function is chosen, the desired result of the estimation process is to obtain a fitting function that is close to 0. A fitting function score of 0 implies that the model's estimated covariance matrix and the original sample covariance matrix are equal. For parameter estimation, SEM computer programs such as AMOS, LISREL and EQS offer several kinds of these estimations.

Assessing Fit of the Model

Fit of the model is used to assess how well the parameters estimated and the model fits by measuring the correspondence of the covariance or correlation matrix with that predicted from the proposed model (Everitt, and Dunn, 2002). Among the absolute fit measures commonly used to evaluate SEM are chi-square statistic (χ^2):

Chi-square statistic (χ^2) is one of the commonly used as a fit index in SEM. As stated in the last section, a fitting function value of close to 0 is desired for good model fit. In SEM, chi-square is used to test the hypothesis that the covariance/variance matrix that the model presents and that of actually observed is identical. If the given p value is greater than a certain (0.05), it is considered that the hypothesis cannot be rejected (means that the two matrixes are identical) at 0.05 level of significant. The likelihood statistic given by:

$$\chi^2 = (N-1) F_{\min}$$

Where: N = The sample size
 F_{\min} = The minimum value of the fitting function

If the fitted model is correct and the sample size sufficiently large then this statistic has a chi-squared distribution and may be used to test null hypothesis that the population covariance matrix equals that implied by the model against the alternative that the covariance matrix in model is unconstrained.

This statistic has limited practical, the results of chi-squared test only indicate that the model and the data cannot be considered different at a certain significance level. It does not really say that the model and the data are the same. Further problems, it highly depends on the sample size. The result of chi-squared test tends to fail to reject the null hypothesis. If the same model is tested with a large sample, the results of data and model will be more different. The chi-square statistic is appropriate only for middle size sample with several hundred cases (Everitt, and Dunn, 2002). Others fit indices can be used to cope the above problems of chi-square statistic such as:

- **Goodness-of-fit statistic (GFI)** ranges 0 to 1 and the model with GFI value exceeding 0.9 is considered to fit well to the data. GFI is affected by the degrees of freedom in the model and **adjusted goodness-of-fit index (AGFI)** adjusts GFI for this.
- **The root mean square residual index (RMR)** is the square root of the mean of the squared differences between the observed-variance/ covariance matrix and that indicated by the model. The smaller is good, usually the value less than 0.1 is considered to be a good fit.
- **The root mean square error of approximation (RMSEA)** is the value that indicates the discrepancy between true population distributions in the model. RMSEA less than 0.05 are considered as a good fit (Hoyle, 1995).

Model Modification

If the covariance/variance matrix estimated by the model does not adequately reproduce the sample covariance/variance matrix, hypotheses can be adjusted and the model retested. To adjust a model, new pathways are added or original ones are removed. The common procedures used for model modification are the Lagrange Multiplier Index (LM) and the Wald test. Both of these tests report the change in χ^2 value when pathways are adjusted. The LM asks whether addition of free parameters increases model fitness. The Wald test asks whether deletion of free parameters increases model fitness. Ullman (1996) recommends using a low probability value ($p < 0.01$) when adding or removing parameters

Final Presentation of Model

Once the model has attained an acceptable fit, individual estimates of free parameters are assessed. Free parameters are compared to a null value, using a z-distributed statistic, which is obtained by dividing the parameter estimate by the standard error of that estimate. The ratio of this test must exceed ± 1.96 in order for the relationship to be significantly influential within the model at 0.05 levels, which should delete that path. After the individual relationships within the model are assessed, parameter estimates are standardized for final model presentation. When parameter estimates are standardized, they can be interpreted with reference to other parameters in the model and relative strength of pathways within the model can be compared.



CHAPTER 5

Data Analysis

This chapter presents the results from data analysis, interpretation, summary and also conclusion of all gathered data. The study was a survey research, which the data was collected from 384 questionnaires to the respondents, who are wearing eyeglasses aged between 16-55 years old, which were distributed at the department stores, shopping areas, and nearby in Bangkok. These areas are Central Chidlom, Central Pinklao, Central Silom, Maboonkhong, Siam Square, and Lotus Bangkae. The questionnaires will be distributed equally in these places during a period from 20 January to 10 February 2003.

After all raw data gathered, it was inputted into SPSS 11.0 for window (Statistical Package for the Social Sciences) to analyze the descriptive statistic of respondents. The analysis of SEM (Structural Equation Model) was computed by using program AMOS 3.61 (Analysis of Moments) to develop model by the graphical form, which could view the source of data from SPSS data file.

In the following session, the researcher will mention about the analysis results of descriptive statistic, inferential statistics that includes model development for SEM analysis, which can be beneficial to answer the hypothesis testing between independent and dependent variables.

Finally, descriptive and inferential data will be beneficial for answer the research problem and the objective of the study later.

5.1 Descriptive Analysis

Descriptive analysis refers to the transformation of raw data into a form that will make them easy to understand and interpret in properly the various features of that set of data. To summarize the research result, descriptive statistics will be used to explain the respondents' demographic profiles, their characteristics, period of usage and purchase decision as follows:

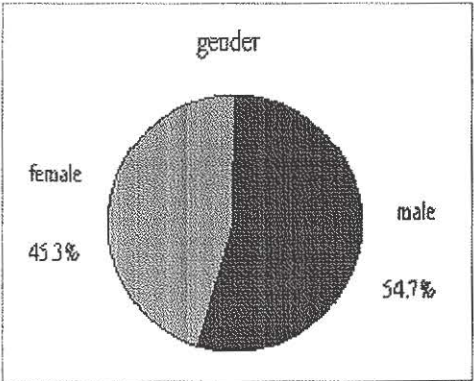
5.1.1. Demographic Profile

As 384 questionnaires were distributed, the genders of respondents in this research shown as table 5.1. It composes of 210 male respondents and 174 female respondents or computed as percentage 54.7% and 45.3% respectively.

Table 5.1: Frequency Distribution of Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	210	54.7	54.7	54.7
female	174	45.3	45.3	100.0
Total	384	100.0	100.0	

Figure 5.1: Gender



From the following table present the frequency of age, which the respondents are ages between 16-55 years old. The largest percentage of respondents' age is 16-25 years old, which accounted for 38%. For the age 26-35 years old is 29%. Following with the age between 36-45years old is 21%, and the age between 46-55 years old is 12%.

Table 5.2: Frequency Distribution of Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-25	144	37.5	37.5	37.5
	26-35	113	29.4	29.4	66.9
	36-45	81	21.1	21.1	88.0
	46-55	46	12.0	12.0	100.0
	Total	384	100.0	100.0	

Figure 5.2: Age

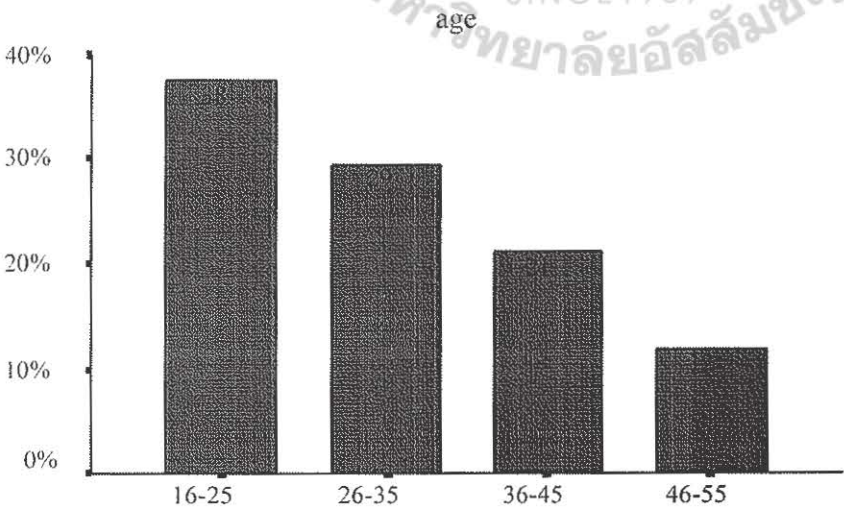


Table 5.3: Frequency Distribution of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary and below	19	4.9	4.9	4.9
	High school	50	13.0	13.0	18.0
	College	60	15.6	15.6	33.6
	Bachelor	198	51.6	51.6	85.2
	Master	43	11.2	11.2	96.4
	Doctorate	14	3.6	3.6	100.0
	Total	384	100.0	100.0	

Figure 5.3: Education

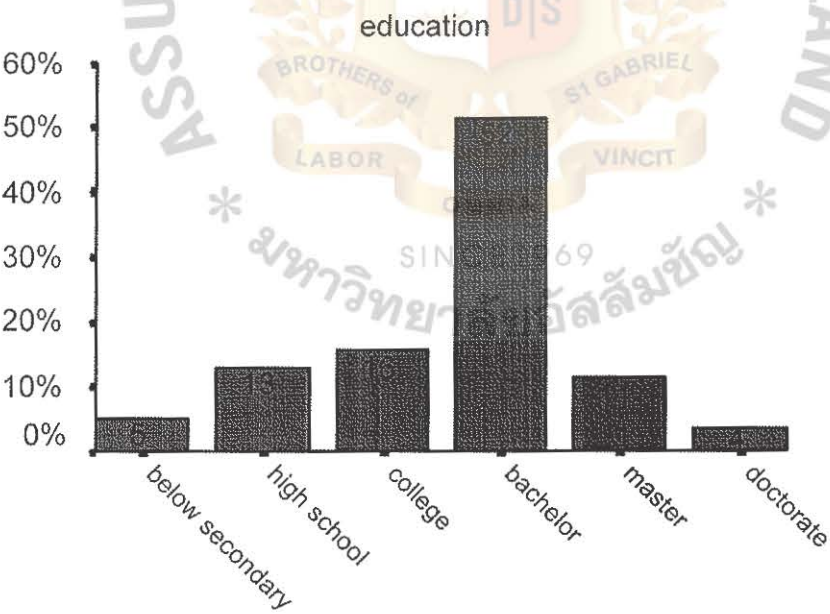


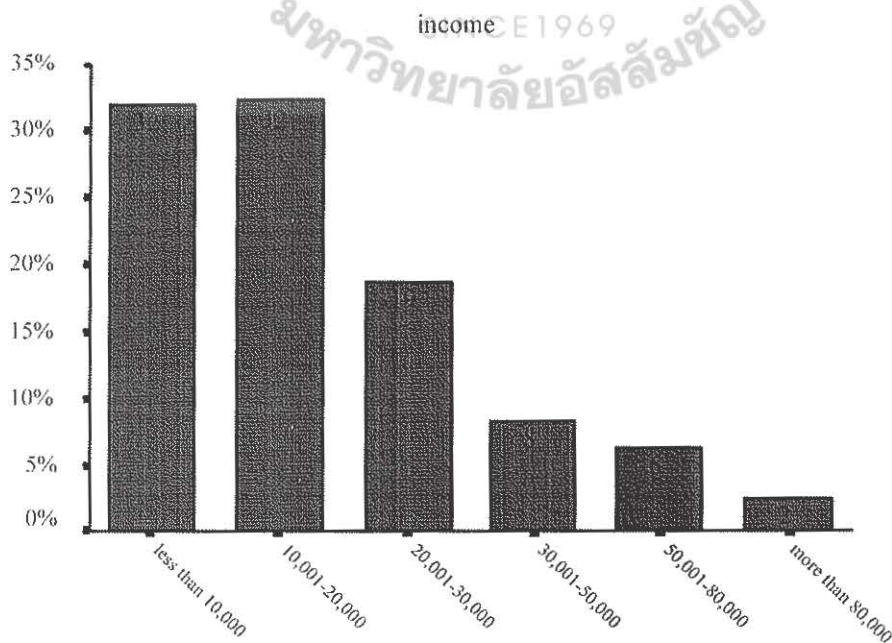
Figure 5.3 represent the education level of respondents. Most are 198 Bachelor degree respondents, which computed as 52%.

Since the largest size of respondents is Bachelor degree, the most income of respondents is below 20,000 baht as presented below in Table 5.4. Income ranged between 10,000-20,000 baht is the largest size at 32.3%, which almost equal to income less than 10,000 baht that is 32%.

Table 5.4: Frequency Distribution of Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than 10,000	123	32.0	32.0	32.0
10,001-20,000	124	32.3	32.3	64.3
20,001-30,000	72	18.8	18.8	83.1
30,001-50,000	32	8.3	8.3	91.4
50,001-80,000	24	6.3	6.3	97.7
more than 80,000	9	2.3	2.3	100.0
Total	384	100.0	100.0	

Figure 5.4: Income

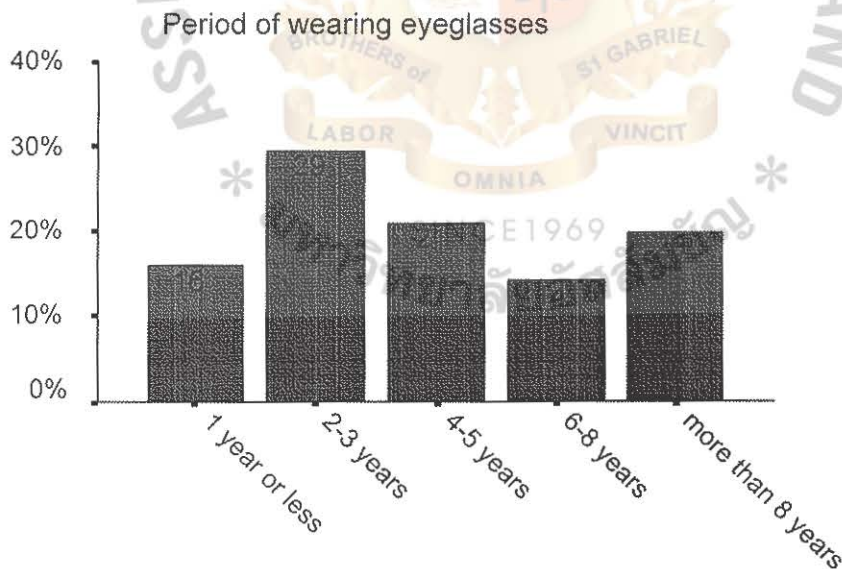


5.1.2. Period of usage and Purchase decision

Table 5.5: Frequency Distribution of Period of usage

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 year or less	61	15.9	15.9	15.9
2-3 years	113	29.4	29.4	45.3
4-5 years	80	20.8	20.8	66.1
6-8 years	54	14.1	14.1	80.2
more than 8 years	76	19.8	19.8	100.0
Total	384	100.0	100.0	

Figure 5.5: Period of Usage



As represented on figure 5.5, the majority of respondents have worn eyeglasses for more than 1 year. Mostly are 2-3 years at 29% and 4-5 years at 21% respectively. Therefore, the answers have more reliability about eyeglasses purchasing decision.

Table 5.6: Frequency Distribution of Price Decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1,000 baht	67	17.4	17.4	17.4
	1,001-2,000 baht	122	31.8	31.8	49.2
	2,001-3,000 baht	105	27.3	27.3	76.6
	3,001-5,000 baht	58	15.1	15.1	91.7
	5,001-8,000 baht	28	7.3	7.3	99.0
	more than 8,000 baht	4	1.0	1.0	100.0
	Total	384	100.0	100.0	

Figure 5.6: Price decision

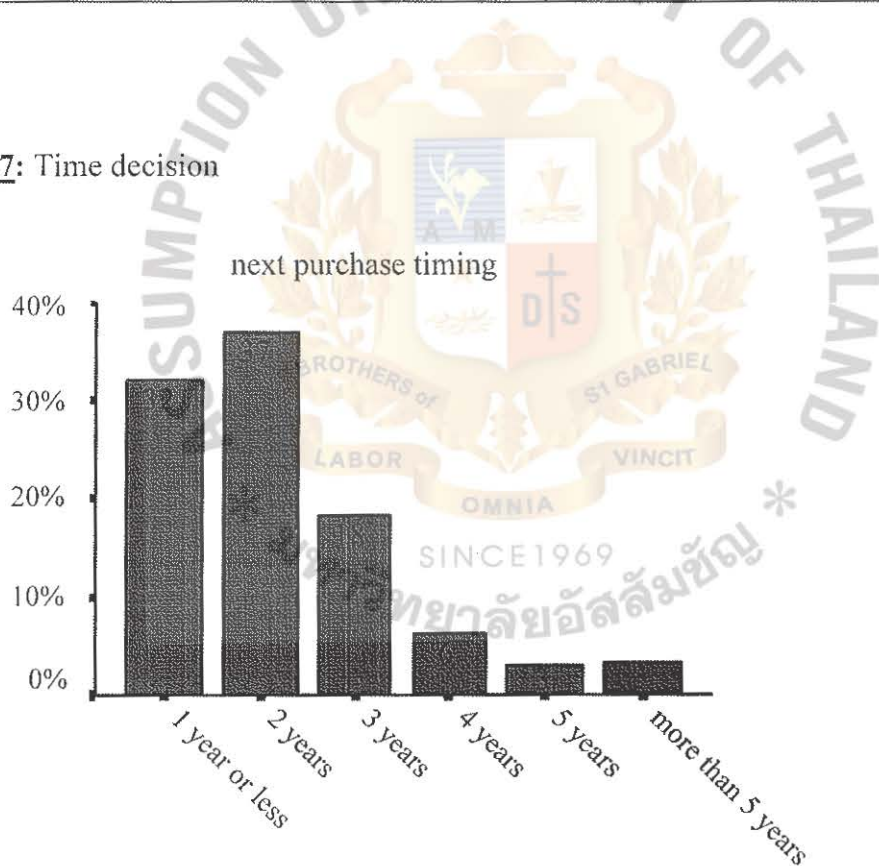


For table 5.6 shown that most respondents intended to purchase 1,001-2,000 baht of eyeglasses at 32%, following with the price between 2,001-3,000 baht at 27%. As shown from the previous figure that most respondents are undergraduate people with 16-25 years old and income bellowed 20,000 baht, so price that most respondents intended to buy will be less.

Table 5.7: Frequency Distribution of Time Decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 year or less	123	32.0	32.0	32.0
	2 years	142	37.0	37.0	69.0
	3 years	70	18.2	18.2	87.2
	4 years	24	6.3	6.3	93.5
	5 years	12	3.1	3.1	96.6
	more than 5 years	13	3.4	3.4	100.0
Total		384	100.0	100.0	

Figure 5.7: Time decision



Next period of time that most respondents intended to buy is within 2 years at 37% or 142 respondents as table 5.7. Moreover, 32% of respondents are willing to purchase the new one of eyeglasses within 1 year or less.

Table 5.8: Frequency Distribution for individual source of data

	Chidlom	Pinklao	Silom	MBK	Siam	Bangkae	Total
Gender							384
male	36	33	34	38	37	32	210
female	28	31	30	26	27	32	174
Age							384
16-25	16	26	25	28	26	23	144
26-35	23	17	18	16	19	20	113
36-45	15	13	12	14	12	15	81
46-55	10	8	9	6	7	6	46
Education							384
Secondary and below	2	5	4	2	2	4	19
High school	7	5	8	9	9	12	50
College	7	11	9	10	7	16	60
Bachelor	32	36	32	35	35	28	198
Master	10	6	8	7	9	3	43
Doctorate	6	1	3	1	2	1	14
Income							384
less than 10,000 baht	9	22	23	22	19	28	123
10,001-20,000 baht	23	21	18	20	22	20	124
20,001-30,000 baht	13	12	10	12	14	11	72
30,001-50,000 baht	9	5	6	5	4	3	32
50,001-80,000 baht	6	3	5	4	4	2	24
more than 80,000 baht	4	1	2	1	1	0	9
Period of usage							384
1 year or less	8	7	12	13	12	9	61
2-3 years	15	19	20	19	18	22	113
4-5 years	16	13	12	12	14	13	80
6-8 years	10	9	11	7	9	8	54
more than 8 years	15	16	9	13	11	12	76
Intended Price							384
less than 1,000 baht	4	13	15	12	9	14	67
1,001-2,000 baht	15	18	17	20	22	30	122
2,001-3,000 baht	20	19	18	17	17	14	105
3,001-5,000 baht	15	10	9	10	9	5	58
5,001-8,000 baht	8	4	4	5	6	1	28
more than 8,000 baht	2	0	1	0	1	0	4
Next Purchase Timing							384
1 year or less	18	20	21	22	23	19	123
2 years	27	22	21	25	21	26	142
3 years	11	14	15	10	12	8	70
4 years	3	4	5	3	4	5	24
5 years	3	2	1	1	2	3	12
more than 5 years	2	2	1	3	2	3	13

The above table shown the detail of frequency distribution for individual source of data, which this data was collected from 6 areas that questionnaires would be distributed to 64 sample units.

The area of Central Chidlom and Silom are surrounding with many office building, so most respondents are office workers that usually are well education, high income and high standard of living. For the area of Central Silom, is quite similar with Chidlom and Silom because close with office building, but it still varies in education, age, and income. The well known shopping areas likes Maboonkhong and Siam Square, most respondents are teenagers. However, The education and income are also varying. For Lotus Bangkhae, the education and income of most respondents are quite low when comparing with the others one.

5.1.3 Descriptive Statistics of Observed Variables

The observed variables are supposed to indicate latent variables in the conceptual model. From the model, there are 5 latent variables, consisting of Trait, Self-Concept, Social Value, Needs, Attitudes and Purchase Decision. Degree of kurtosis is the important to evaluate observed variables that should be near zero is important for obtaining accurate results with SEM. In the modeling process those variables with kurtosis value more than 2.0 are excluded from the analysis (Everitt and Dunn, 2002).

From the table 5.9, Means of consumer lifestyle variables (Trait, Self-concept, and Social value) and their linkage (Need and Attitude) are between 41.4 – 80.1, based on ratio scale (0-100%) in questionnaire. Purchase decision variables (Price and Time) are designed as 6-interval scale, which their means are nearly around 2.

Table 5.9: Descriptive statistics of observed variables

Latent Variables	Observed Variables	Mean	Std. Deviation	Kurtosis
Trait	Innovativeness	68.7	1.929	0.419
	Intelligence	67.0	3.27	198.931
	Anxiety	46.6	2.441	-0.788
	Timid	41.4	2.384	-0.49
	Rationality	70.1	1.597	-0.427
	Stability	60.6	2.222	-0.116
	Aggressive	67.0	1.754	-0.515
	Extroversion	68.3	2.104	-0.15
Self-concept	Self-confidence	68.5	1.805	-0.28
	Self-esteem	78.3	1.593	0.103
	Self-fulfillment	80.1	1.432	0.326
Social value	Affection	73.4	1.601	-0.283
	Friendliness	76.0	1.509	-0.389
	Appeal	59.8	1.707	-0.167
Need	New model	57.8	2.414	-0.357
	Attractive style	69.6	2.111	0.544
	Light weight	75.4	1.786	1.326
	Durability	77.2	1.746	1.713
Attitude	Attitude toward full style	68.5	2.304	0.626
	Attitude toward half style	48.2	2.695	-1.006
	Attitude toward rimless style	54.3	2.941	-0.893
Purchase Decision	Price	2.66	1.201	-0.399
	Next purchase	2.22	1.238	1.406

There is only one variable has kurtosis degree more than 2 that is “Intelligence” with very high standard deviation. Therefore, Intelligence should not be used in the modeling process to indicate Trait variable. And others variables are fully used in the analysis for model building.

5.2 Inferential Statistic: Model Development (SEM Analysis)

This section developed basic model according to the conceptual model that mentioned in chapter3 by using program AMOS 3.61 to analyze Structural Equation Model (SEM). Since AMOS will be error in computing if there is any missing value, so the research distributed additional ones to be collected the complete 384 questionnaires without any missing value.

List of variable names used throughout the forthcoming model for analyses as follows:

Latent variable 1: trait => Trait (Consumer Lifestyle Factors)

- Indicator 1: Innovat = Innovativeness
- Indicator 2: Intellig = Intelligence
- Indicator 3: anxiety = Anxiety
- Indicator 4: timid = Timid
- Indicator 5: rationality = Rationality
- Indicator 6: stable = Stability
- Indicator 7: agg = Aggressive
- Indicator 8: extro = Extroversion

Latent variable 2: Selt => Self-concept (Consumer Lifestyle Factors)

- Indicator 1: s_con = Self-confidence
- Indicator 2: s_esteem = Self-esteem
- Indicator 3: s_fulfil = Self-fulfillment

Latent variable 3: social value => Social value (Consumer Lifestyle Factors)

- Indicator 1: affect = Affection
- Indicator 2: friend = Friendliness
- Indicator 3: appeal = Appeal

Latent variable 4: needs =>Needs Factors (The linkage)

- Indicator 1: new = New model
- Indicator 2: att = Attractive style
- Indicator 3: weight = Light weight
- Indicator 4: durable = Durability

Latent variable 5: attitudes => Attitudes Factors (The linkage)

- Indicator 1: full = Attitude toward full style
- Indicator 2: half = Attitude toward half style
- Indicator 3: rimless = Attitude toward rimless style

Latent variable 6: pur_decision => Purchase Decision Factor

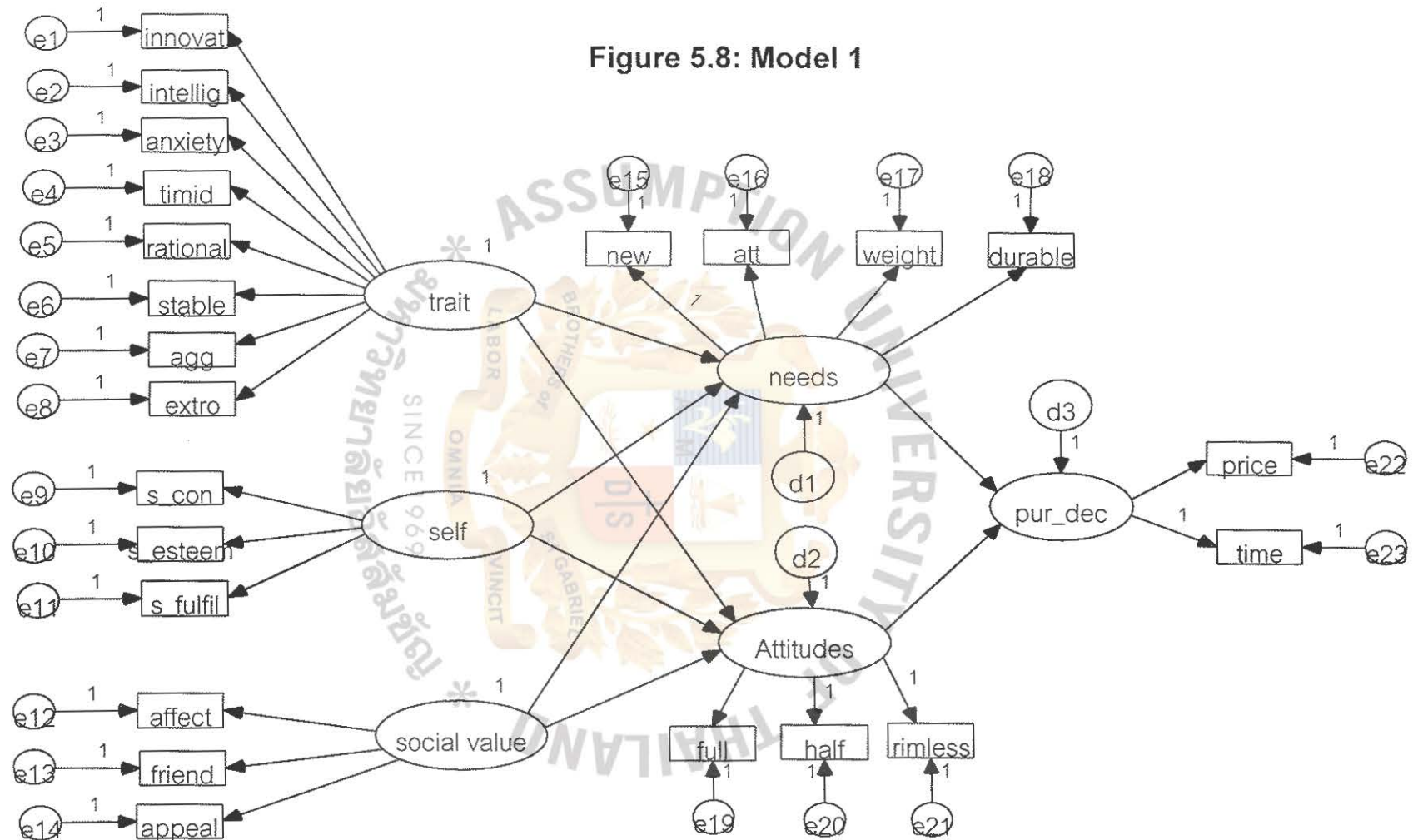
- Indicator 1: price = Price
- Indicator 2: time = Next purchase timing

Error: e = error of indicator variables
d = error of latent variables

The basic model shown as figure 5.8 (Model 1) based on the conceptual; model in Chapter 3. Consumer lifestyle factors (Trait, Self-concept, and Social value) that are the exogenous variables influenced Purchase decision (Price and Time), which have Need and Attitude to be their linkages.

Firstly, model identification is necessary by estimating whether parameters are fixed or free. Path coefficients concerning error variables are fixed to 1. The variances of exogenous variables (Trait, Self-concept, and Social value) are also fixed to 1. Furthermore, to avoid identification problem, some variables that have high error (e15, e20, e21, and e23) were also fixed to 1.

Figure 5.8: Model 1



The results from the basic model (Figure 5.8: Model 1) have low path coefficients and very high Chi-square statistic with low goodness of fit indices as detail below:

Model 1: - Chi-square statistics = 633.38

- GFI = 0.867
- AGFI = 0.835
- RMR = 0.358
- RMSEA = 0.069

As the above result, the model should be modified. Initially, the model is modified according to the descriptive statistic that should delete “Intelligence variable” in the modeling process to indicate “Trait variable” because there are high kurtosis level and high standard deviation.

Therefore, Model 1 was modified to be Model 2 as below. From the results of figure 5.9 (Model 2: Delete Intelligence variable with high kurtosis level), even Chi-square statistic are lower but others goodness of fit indices are still poor as follows:

Model 2: - Chi-square statistics = 614.87

- GFI = 0.865
- AGFI = 0.830
- RMR = 0.363
- RMSEA = 0.073

Figure 5.9: Model 2

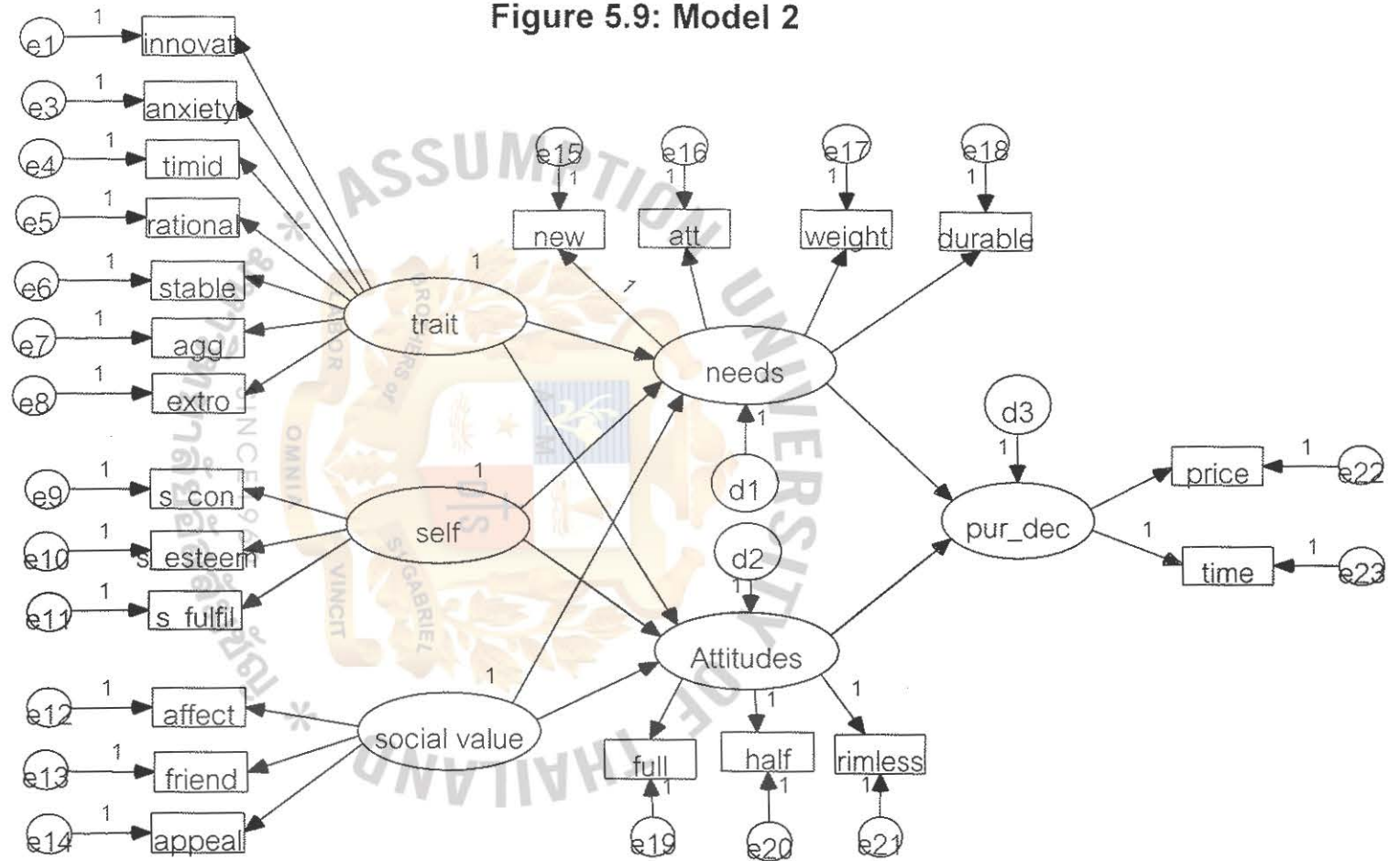
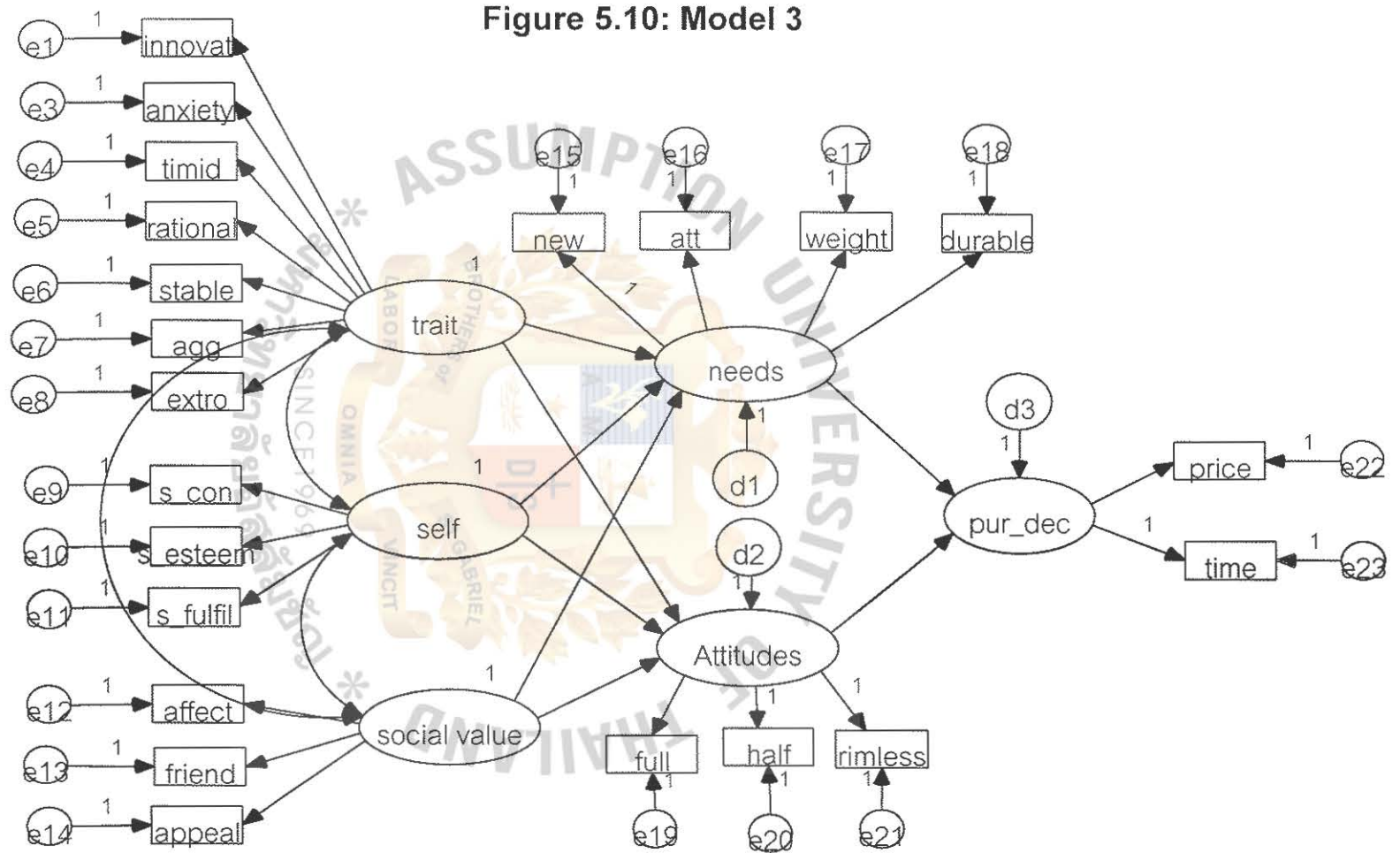


Figure 5.10 (Model 3), covariance paths are added among the exogenous variables because AMOS required the correlation among them. Table 5.10 has shown the result of Model 3 after added covariance among exogenous variables.

Table 5.10: Result of Model 3 (added covariance among exogenous variables)

Goodness of fit index	
• Chi-square	467.552
• Degree of freedom	199
• GFI	0.897
• AGFI	0.869
• RMR	0.312
• RMSEA	0.059
Paths with significantly low critical value (0.05 level of significant)	
• pur_decision <-- attitude	-0.003
• pur_decision <-- need	0.003
• price <-- pur_decision	-0.078
• full <-- attitude	0.159
• need <-- social value	1.031
• attitude <-- social value	1.046
• stable <-- trait	1.051
• durable <-- need	1.251
• need <-- self	-1.322
• need <-- trait	1.343
Potential paths with significantly high modification indices (M.I. > 10)	
• e4 <----> e3	40.014
• e12 <----> e11	27.175
• e21 <----> e19	20.383
• e14 <----> e8	19.645
• e3 <----> e1	12.120
• e11 <----> e8	11.516

Figure 5.10: Model 3



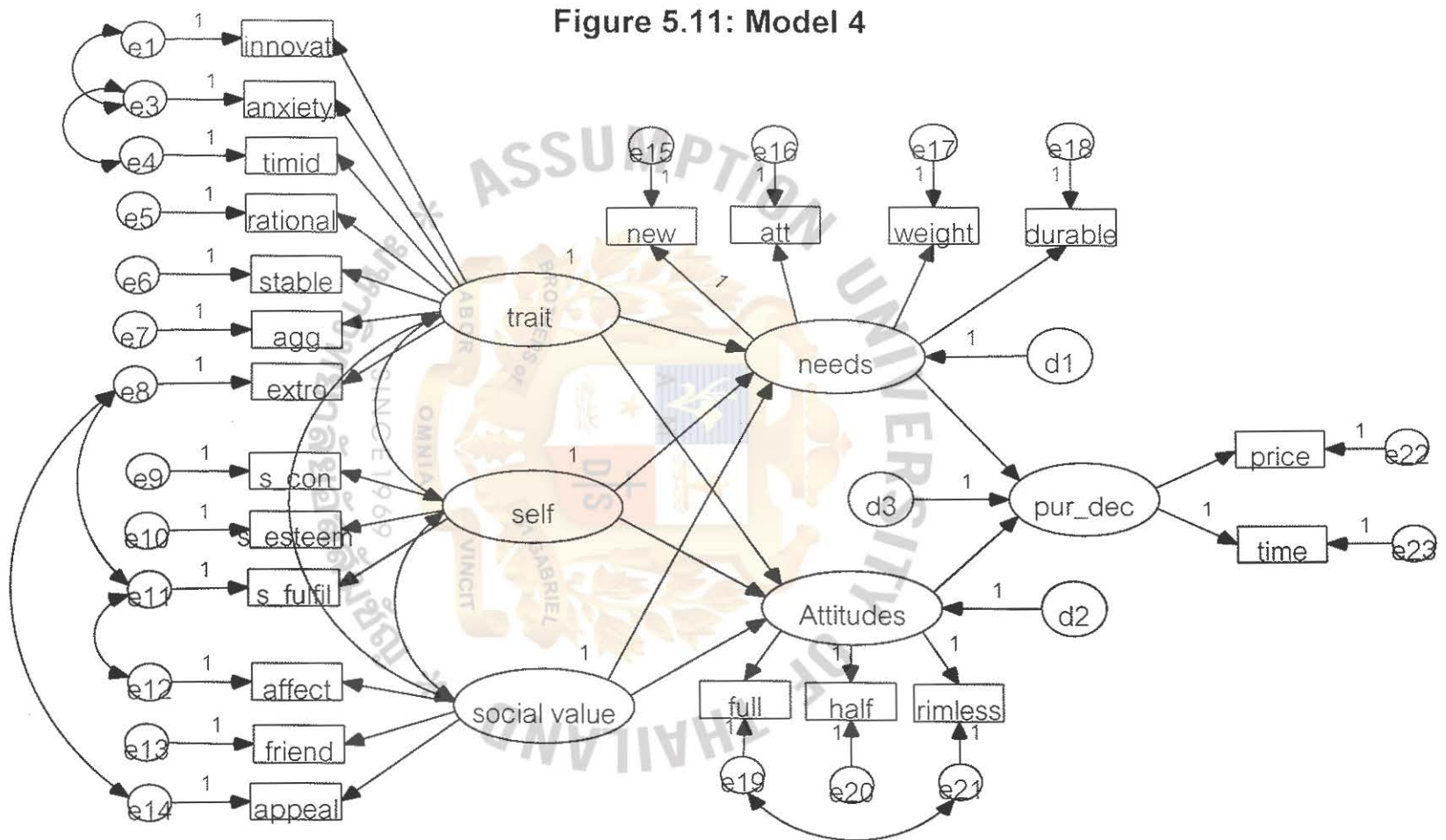
Although the goodness of fit indices of figure 5.10 (Model 3) is better with the lower Chi – square statistic, the model should be further modified to get the better model. Moreover, there are some paths that have very low critical value (0.05 level of significant). In order to maintain the conceptual model, the researcher added six covariance to the potential paths that have high significantly modification indices instead of delete of some paths as shown in figure 5.11 (Model 4).

Table 5.11: Result of Model 4 (added covariance in high modification index paths).

Goodness of fit index	
• Chi-square	333.872
• Degree of freedom	193
• GFI	0.928
• AGFI	0.905
• RMR	0.265
• RMSEA	0.044
Paths with significantly low critical value (0.05 level of significant)	
• pur_decision <-- attitude	-0.003
• pur_decision <-- need	0.003
• price <-- pur_decision	-0.057
• attitude <-- social value	0.763
• need <-- social value	0.768
• full <-- attitude	0.863
• stable <-- trait	1.142
• durable <-- need	1.218
• need <-- self	-1.370
• need <-- trait	1.402

By adding six covariance paths to the model, goodness of fit of the model 4 is dramatically increase, no modification index more than 10, the result as shown in table 5.11. However, some paths in the model are still significantly low critical value that unacceptable in SEM analysis, which should be deleted. As the conceptual model that aims to find the purchase decision of eyeglass wearers, so the variable of “pur_decision” cannot be removed. Their two indicators (Price and Time) are analyzed separately and added the covariance path among them. Others paths, which significantly low critical value, are also removed.

Figure 5.11: Model 4



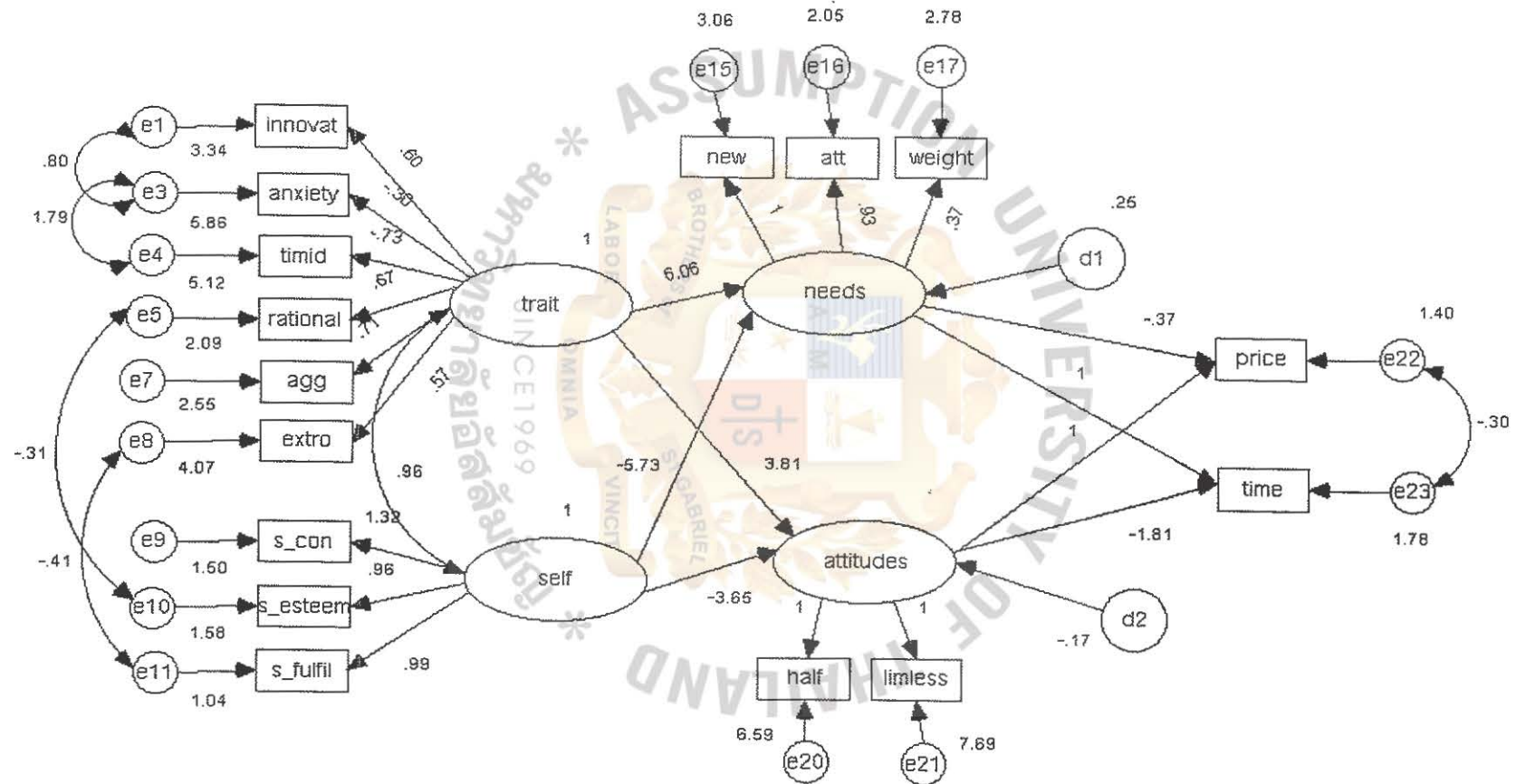
Moreover, the latent variable of “social value” cannot be included in this model because there are no relationship between social value and the linkage (Need and Attitude). Thus, the final modification model with the paths coefficient and covariances are presented as figure 5.12 (Model 5), which the result of analyses as follows:

Table 5.12: Result of Model 5 (delete low significantly paths).

Goodness of fit index	
• Chi-square	178.754
• Degree of freedom	95
• GFI	0.947
• AGFI	0.923
• RMR	0.296
• RMSEA	0.048
Regression paths with modification indices (M.I.) less than 10	
• trait --- weight	6.490
• self --- weight	7.448
• innovat --- att	4.759
• anxiety --- half	6.236
• anxiety --- time	4.611
• timid --- half	5.389
• timid --- rimless	6.015
• rational --- weight	3.231
• rational --- half	3.795
• agg --- price	4.109
• extro --- half	4.186
• extro --- price	5.208
• extro --- time	4.451
• s-con --- weight	7.190
• s_esteem --- weight	6.078
• s_esteem --- half	8.967
• s_esteem --- rimless	4.175
• s_fulfil --- weight	4.194
• s_fulfil --- new	6.555

There is no any path that has critical value less than 1.96. It implied that all paths could be acceptable for the model analyses. The possible modification indices in this model are less than 10. If these regression paths are added, the goodness of fit indices will be a little bit better.

Figure 5.12: Model 5



But in this case, the researcher did not added these paths anymore because they are very small value that could not be judged as the critical index, which make the model to be more confuse from many complicated of path's connections.

Table 5.13: Comparison goodness of fit indices between basic model and final model

Goodness of fit index	Model: 1	Model: 5	Improvement
Chi-square statistic	633.380	178.754	Decreased 454.626
RMR	0.358	0.296	Decreased 0.062
RMSEA	0.069	0.048	Decreased 0.021
GFI	0.867	0.947	Increased 0.080
AGFI	0.835	0.923	Increased 0.088

In comparison to Model 1 as shown in Table 5.13, Chi-square statistic decreased to be 178.7. RMR and RMSEA also decreased to be 0.296 and 0.048, respectively, which consider as a good fit. On the other hand, GFI and AGFI also increased to be 0.947 and 0.923, which both are more than 0.9, considered as the good fit. Although Chi-square statistic cannot be modified until the good fit, the others 4 indices (RMR, RMSEA, GFI, and AGFI) indicate that this model is already good fit. Thus, the modification process of this model will be finalized at model 5.

As a result of final model (figure 5.12: model 5), it could answer the hypothesis statement, which mentioned in chapter3. The hypothesis of this research as the followed:

- H₀** : Intra-relationship among personal trait, self-concept, social value and needs in conjunction with attitudes are not linked to the explanation of purchase decision.
- H₁** : Intra-relationship among personal trait, self-concept, social value and needs in conjunction with attitudes are linked to the explanation of purchase decision.

For the hypothesis testing of this research, the researcher could conclude that “null hypothesis was accepted”, which meant that there was only partial of intra-relationship among consumer lifestyle factors (only Personal Trait and Self-concept) and needs in conjunction with attitudes that could be linked to the eyeglasses purchase decision. The results could be seen from the adjusted model (figure 5.12: model 5), which already deleted irrelevant path with significantly low critical value (0.05 level of significant) according to the SEM results. Because all paths in the basic model could not be completely linked, so the best model was the final model (model 5), which all paths could be used with better fit indices that could be notice from the best Chi-square statistic in table 5.13.



CHAPTER 6

Summary, Conclusions and Recommendations

From the research results and conclusions as the previous chapter will be beneficial for recommendation in this chapter. It provided three main sections. The first section is summary and conclusion the result from collected data. Next will be the implications and recommendations, which included both managerial and academic implications. And the last section is the suggestions for further research study.

6.1 Summary and Conclusion

6.1.1 Summary of Finding

Descriptive Analysis

From the descriptive analysis part, the researcher can conclude that 384 questionnaires were distributed to 54.7% of female (59.2%) and 45.3 % of males. Most are undergraduate respondents, aged between 16-25 years old (37.5%). This reflects to their income, which quite low. For this reason, they also expected to purchase the lower price of eyeglasses that less than 2,000 baht. More than half (85%) of respondents have worn eyeglasses more than 2 years. And most respondents (37%) intended to purchase in next 2 years.

Inferential Analysis

As the basic model (figure 5.8: model 1) cannot fully apply, therefore the model had to modify. The following are steps to modify the model in this study:

Table 6.1: Summary the Steps of Model Modification of the Research

Model	Add / Delete Paths	Reasons of modification
Model 1	The basic model	As the conceptual model
Model 1 ----> Model 2	Delete: "Intelligent variables"	Kurtosis > 2 (as table 5.9)
Model 2 ----> Model 3	Add: "Covariance among Exogenous variables"	To remain the basic model and make the goodness of fit of model be better. (AMOS required the correlation among Exogenous variables)
Model 3 ----> Model 4	Add: "Covariance among variables that have high modification "	To remain the basic model and make the goodness of fit of model be better.
Model 4 ----> Model 5	Delete: "Paths with low critical value"	Based on the structural equation model (SEM) regulation because too high error.

After the basic model (figure 5.8: model 1) was developed, some variables and indicator factors were deleted because kurtosis value more than 2, which could not be applicable in model development. Initially, the researcher added covariance to the potential paths that have high significantly modification indices in order to maintain the conceptual model (basic model), to get the best goodness of fit indices. Moreover, Paths with significantly low critical value (0.05 level of significant) were deleted based on the rule of SEM analyses because too high error.

And some variables with too high regression weight than others variables in its group such as "durability" and "attitude toward full style frame" were also deleted.

Finally, the modified model indicated those only 5 latent variables are relevant in this research that is “Personal Trait”, “Social Value”, “Need”, “Attitude”, and “Eyeglasses Purchase Decision”. From SEM verification as in figure 5.12 (model 5) and the suggestion of modification indices in table 5.12, the finding of the study as follows:

- Most respondents need more lightweights of eyeglasses, especially rational and self-confident people.
- Innovative people prefer attractive eyeglasses.
- From attitude of anxiety people, they are more favorable the half style of eyeglasses. And the next periods of time that they intended to purchase are quite long.
- For timid people, they are more favorable the rimless style of eyeglasses.
- From attitude of rational people, they prefer eyeglasses in half style.
- Aggressive people are willing to purchase the high price of eyeglasses.
- For attitude of people who are extrovert, they prefer eyeglasses in half style. Moreover, they are willing to purchase the high price of eyeglasses and not often to purchase the new one.
- Self-esteem people, they are more favorable the half style of eyeglasses.
- People who are more self-fulfillment, they especially need the new style of eyeglasses.

6.1.2 Conclusion of Research Problem

By utilizing Structural Equation Model (SEM), the researcher can answer the question from the statement of problem of this research. The problem of this study that is

to determine “what are the intra-relationship of consumer lifestyle and their linkage towards eyeglasses purchase decision?” and results from the analysis are shown below:

- The intra-relationship in this research was study about the connection of path in the model.
- The SEM analyses verified that there was only partial intra-relationship among consumer lifestyle factors and their linkage that directly affect to eyeglasses purchasing.
- Thus, the connection paths in the model were linked among the variables of “Personal Trait”, “Social Value”, “Need”, “Attitude”, “Price Decision”, and “Time Decision”.

Besides, the answers of research problem could also be used to support objective of the study and hypothesis testing, which will be mentioned later.

6.1.3 Conclusion of Research Objective

Three main objectives of this research could be answer from the result of SEM analysis. The research objectives and their result as follow:

1) To identify the components of consumer lifestyle in relevance to eyeglasses selection.

- From the first objective, the researcher concluded that there were only 2 main components of consumer lifestyle in relevance to eyeglass selection, and those were “Personal Trait” and “Self-concept”.

- The result from SEM analysis concluded that personal trait of most eyeglass wearers were innovative, anxiety, timid, rational, aggressive, and extrovert. For self-concept components in relevance to eyeglass selection were self-confident, self-esteem, and self-fulfillment.

2) To study the linkage between consumer lifestyle and needs in conjunction with attitudes.

- The second objective, the researcher found that there was the relationship between consumer lifestyle and their linkage (Needs and Attitudes). It implied that consumer lifestyle factors affect directly with needs and attitudes. Moreover, eyeglasses purchase decision cannot be formulated without needs and attitudes toward products.
- There was no correlation between needs and attitudes. Either needs or attitudes could change the decision to buy eyeglasses. It implied that needs and attitudes affect directly with eyeglasses purchase decision.

3) To explore the intra-relationship of consumer lifestyle and its route.

- Final objective, the researcher concluded that the route (path) of the model shown as figure 5.12 (model 5), which was already modified by added covariance to the potential paths or even deleted some variables and indicator factors because too high error and low critical value.
- As presented in figure 5.12 (model 5), it showed the overall route of the model, which implied that both paths of "Personal Trait" and "Self-Concept" are connected to "Need", and both paths also linked to "Attitude".
- Moreover, "Need" is connected to both paths of "Price and Time Decision". "Attitude" is also similarly, which connected to both paths of purchase decision.

6.2 Implications and Recommendations

6.2.1 Managerial Implications

This research is beneficial in predicting the behavior of different consumers. It is more useful for the retailers, wholesalers, and also the producers or even any company in optical business, in order to plan several aspects of the marketing strategies such as defining target, designing product feature, setting price, and planning promotion.

As the largest proportion of the respondents is undergraduate people, and more than 60% are aged between 16-35 years old, it implied that these are target markets for eyeglasses business. According to Thansettakij (1999), the rate of people who needed eyeglasses is increasing. Because the changing of people's lifestyle and also the effect from the environment that make people have to wear eyeglasses earlier. The past, most eyeglasses were needed for only the groups of older people as the reading purposed. But for the present, the younger people are also the potential target for this eyeglasses business. Therefore, much marketing effort must be concentrated on this segment of consumers.

Moreover, the covariance of final result as figure 5.12 can provide more useful information about eyeglasses purchase decision. Both price and time decisions are strongly recommended as the important factors that eyeglass consumers will consider. Even though, consumers will not consider both two factors at the same time, but both price and time cannot lack in making a purchase eyeglasses. Therefore, the appropriate price and time are needed that will mention further.

The study found price and period of time those consumers willing to purchase are very important. According to the education background of respondents and their income, more than 50% are willing to pay at the price below 2,000 baht. Therefore, the optical business should be concentrate on this price range with the variety styles of eyeglasses to offer the different consumers. Based on researcher's suggestion, even though people trend to buy low price of eyeglasses, optical stores should not use only discount promotion to be the main promotional strategies to stimulate purchasing. Because it will effective in only short term, but it cannot make these group of customers to be your loyalty customers in long term. Therefore, quality of product and also the best service are required for this business, and also good in long run (Prachukthum, 2001).

Research also indicated that most people purchase the new eyeglasses in the next 2 years. Actually lenses of eyeglasses should be changed every year. But to activate the consumers to purchase the new one earlier (changes once a year), promotion strategies should be launched. As retail optical stores, the data of existing customers should be recorded, which will be more beneficial by sending the card via mail to remind their existing customers that it's the right time to change the new eyeglasses with some compliment for them. The customers will appreciate and more loyalty with your optical stores, and also might increase the frequency of purchase, which is the similar idea of Phadungkeitsakul, 2000.

The finding indicated about factors that most people needed on eyeglasses, which are more beneficial for planning the product strategy. The durability and lightweight of eyeglasses are more important factor that consumers will consider initially. Therefore, rimless and half style of frames will be used increasingly. As lightweight is more

considerable, so “Titanium” will be the best alternative material for eyeglass frames. Besides lightweight, it is also more durable (Prachukthum, 2000).

However, the lifestyle and personality of consumers are the very important factors that make them purchase the products differently. Eyeglasses should be designed to serve different lifestyle of consumers (Wankijvit, 2001).

6.2.2 Academic Implications

As this research was analyzed by Structural Equation Model (SEM), the developed model showed the sequence of eyeglasses purchase decision process. The sequence of dependent relationship began with personal trait and self-concept, which belonged to consumer lifestyle factors. These factors directly linked towards needs and attitudes, which affect price and time decision of consumers (consumer lifestyle factors → needs/attitudes → purchase decision).

The result of this study reveals that personal trait and self-concept have the potential to influence purchase decision of consumer. Personal trait related to innovative (open to change), anxiety, timid, rational, aggressive, and extrovert, were accounted as especially influential. For self-concept, it related to self-confident, self-esteem, and self-fulfillment.

Since some variables were deleted from the verification of SEM analyses, it implied that the overall consumer behavior model of Hawkins, Best, & Coney (basic model) was not fully applicable to this research. For consumer lifestyle factors, the main variable that could not be accounted in this model analysis was “Social Variable” because

there was very low path coefficient among its indicators, which their values were not enough to utilize in developing the structural model. Moreover, some of personal trait's sub-variables, which were "intelligent" and "stable", also could not be used because too high error of data.

High error of data causes from the product feature of eyeglasses itself and also the bias of data as seen in the group of respondents from the descriptive analysis. Eyeglasses have noticed as optical device, which is the health product to correct the vision problem. But nowadays, eyeglasses become the fashion accessories in the new century as mentioned from many previous literatures. From the result of descriptive analysis, it showed that most respondents are aged below 25 years old, which categorized as teenagers. Therefore, mostly they wear eyeglasses for fashion, which cannot judge them as the intelligent and stable people. Also, this new generation of respondents is more independent and freely to live that don't care for others too much. Thus the variable of "social value" is invalid for develop the model in this research.

Thus, the data that is more applicable for developing the structural model should disperse for many groups of respondents in order to avoid data bias. However, as the descriptive analysis in previous chapter, the durability was the highest factor that the respondent needs but it could not be utilized for this structural equation model. Because of higher mean than other indicators in their groups (need factors), which against the concept of SEM that based on the regression analysis. In case of the attitude toward full style frame was also similar.

6.3 Further Study

The results of the current study provide some understanding of intra-relationship among consumer lifestyle components (personal trait, self-concept, and social value) and their linkage (needs and attitudes) on purchase decision of eyeglasses. Further research should study on another products that related to fashion such as apparel. Besides, health product also can be applied, in order to know whether the result will be alike.

Moreover, this research was analyzed by Structural Equation Model (SEM), and the final model of this study could be applied for the next research.



BIBLIOGRAPHY

- Aiken, L.R. (1994). Psychological Testing and Assessment, Boston: Allyn and Bacon, pp.236-240.
- Alba, J.W., Mela, C.F., Shimp, T.A., and Urbany J.E. (1999). "The effect of Discount Frequency and Depth on Consumer Price Judgments". Journal of Consumer Research, Vol.26: September, pp.100-113.
- Anastasi, A. (1993). Psychological Testing, New York: Macmillan, pp.580-583.
- Anderson, G. (1996). Fundamentals of Educational Research, First ed., London: Falmer, pp.202.
- Anderson, T.W. and Golden, L.L. (1984). "Lifestyle and Psychographics: A Critical Review and Recommendation", Advances in Consumer Research, Vol.11, pp.405-411.
- Atkinson, R.L., Atkinson, R.C., Smith, E.E., Bem, D.J., and Nolen-Hoeksema, S., (1993). Introduction to psychology, Eleventh ed., Orlando: Harcourt Brace College, pp.546.
- Bagozzi, R.P. (2000). "On the Concept of Intentional Social Action in Consumer Behavior", Journal of Consumer Research, Vol.27: December, pp.388-396.
- Carlin, E.S. (1981). Myopia and Personality: A Comparative Analysis of Myopic Subgroups. Abstract of Doctoral dissertation, University of Georgia. (From Dissertation Abstracts International, 1981, 77, AAI8201525).
- Caron, B.A. (1991). Understanding of Lifestyle and Meaning: A Case Study of Library. Abstract of Doctoral dissertation, University of Minnesota. (From Dissertation Abstracts International, 1991, 250, AAI9134500).
- Carlson, N.R. and Buskist, W. (1997). Psychology: the science of behavior, Fifth ed., Boston: Allyn and Bacon, pp.453.
- Chisnall, P.M. (2001). Consumer behavior, Third ed., London: McGraw-Hill, pp.40-56.
- Connecticut, D. (1991). Grolier Encyclopedia of Knowledge, Grolier, Vol.7, pp.192-193
- Doremus, A. (1992). "Innovations in Design, Material Augment Safety-Eyewear Comfort", Occupational Health and Safety, Vol. 61: No.7, pp.27-51.
- Drewry, R.D. (2001). "What man devised that he might see", University of Tennessee Health Science Center Ophthalmology Department, <http://www.eye.utmc.edu/history/glass.html>

- Duits, A.A. and Duivenvoorden, H.J. (1999). "A structural modeling analysis of anxiety and depression in patients undergoing coronary artery bypass graft surgery", *Journal of Psychosomatic Research*, Vol. 46; No.2, Feb, pp. 187-200.
- Everitt, B.S. and Dunn, G. (2002). *Applied Multivariate Data Analysis*, Second ed., New York: Arnold, pp. 292.
- Feldman, R.S. (1996). *Understanding Psychology*, Forth ed., New York: McGraw-Hill, pp.605, 624-625.
- Folkes V.S. and Kotsos B. (1986). "Buyers' and Sellers' Explanations for Product Failure: Who Done It?", *Journal of Marketing*, Vol.50: April, pp.74-80.
- Gleitman, H. (1992), *Basic Psychology*, Third ed., New York: Norton and Company, pp. 449-462.
- Greenleaf, E.A. and Lehmann, D.R. (1995). "Reasons for Substantial Delay in Consumer Decision Making". *Journal of Consumer Research*, Vol.22: September, pp.186-199.
- Hagland, M. (1997). "Focused Factories: Giving Consumers What They Want", *Healthcare Forum Journal*, Vol.40: No.5, pp.22-26.
- Hair, J.F., et al. (1998). *Multivariate Data Analysis*, Fifth ed., Upper Saddle River, NJ: Prentice-Hall. pp.577-645.
- Hawkins, D.I., Best, R.J., and Coney, K.A. (1983). *Consumer Behavior*, Texas: Business Publications, pp.14-23, 365, 379-405.
- Hawkins, D.I., Best, R.J., and Coney, K.A. (1992). *Consumer Behavior: Implications for marketing strategy*, Fifth ed., Boston: Irwin, pp.349-353.
- Hogg, M.K. and Michell P.C. (1996). "Identity, Self and Consumption", *Journal of Marketing Management*, Vol.12, pp.629-644.
- Holt, D.B. (1997). "Poststructuralist Lifestyle Analysis: Conceptualizing the social Patterning of Consumption in Postmodernity", *Journal of Consumer Research*, Vol.23: March, pp.326-350.
- Hoyer, W.D. and MacInnis, D.J. (1997). *Consumer behavior*, Boston: Houghton Mifflin, pp.424-426, 453-454.
- Hoyle, R.H. (1995). *Structural Equation Modeling*, California: SAGE Publications, pp.326-333.
- Jitpleechep, S. (October 05, 2001). "Better Vision eyes China's Optical Market", *Bangkokpost*.
- Kitcharoen, V. (1999). *A Study of Personality Traits Associated with Motivation of Managers Working for Japanese Firms in Thailand*, Bangkok: Assumption University.

- Kittikanya, C. (April 22, 1999). "Eyewear/ Asia-Pacific Region Leads Growth in Turnover", Bangkokpost.
- Kohli A.K. and Jaworski B.J. (1990). "Market Orientation: The Construct, Research propositions, and Managerial Implications", Journal of Marketing, Vol.54: April, pp.1-5.
- Kolbe, R.H. and Albanese, P.J. (1996). "Man to man: A content analysis of sole-male images in male-audience magazines", Journal of Advertising, Vol.25: No.4, pp.1-20.
- Kotler, P. (2000). Marketing Management, The millennium ed., New Jersey: Prentice-Hall, pp.178-183.
- Langmeyer, L. and Shank, M. (1994), "Managing beauty - Products and people", Journal of Product and Brand Management, Vol.3: No.3, pp. 27-38.
- Lusnar, M.P. (1999). Job Applicant Stereotypes: Effects of Eyeglasses and Job Type in a Simulated Interview. Abstract of Doctoral dissertation, Loyola University of Chicago. (From Dissertation Abstracts International, 1999, 89, AAI9917788).
- MacCallum, R.C. and Austin, J.T. (2000). "Applications of structural equation modeling in psychological research", Annual Review of Psychology, Vol.51, pp.201-26.
- Macias, W. (2003). . "A Preliminary Structural Equation Model of Comprehension and Persuasion of Interactive Advertising Brand Web Sites", Journal of Interactive Advertising, Vol. 3: No: 2, 2003, pp.14
- Mason, B.J., and Mayer, M.L. (1981). Foundations of Retailing, Texas: Business Publications, pp.32, 44-57.
- McDaniel, C.J. and Roger, G. (1996). Contemporary Marketing Research, Third ed., West Publishing, pp.618-623.
- Morgan, E. (1999). "Tips for choosing the best eyeglass frames to match your wardrobe and lifestyle", Accessorizing with Eyewear.
- Mowen, J.C. (1993). Consumer behavior, Third ed., New York: Macmillan, pp.219-228, 229-230.
- Ngamsantiwong, T. (2000). Completely SPSS for Windows, Forth ed., Bangkok: WTOO, pp.657-680.
- Norton, P.B. (1995). The New Encyclopedia Britannica, Encyclopedia Britannica, Vol.4, pp.642.
- Ocular times (1999). Eye and Eyeglasses, Sunday, July 7, 1999,
- Peter P.J. and Olson C. (1996), Consumer Behavior, Forth ed., Boston: Irwin, p.50.

- Phadungkeitsakul, T. (2000), "Better Service", *Thai Optometric Association*, Vol.25: July, pp.64-65.
- Prachukthum, S. (2000), "Titanium Eyeglass Frame", *Thai Optometric Association*, Vol.25: July, pp.42-43.
- Prachukthum, S. (2001), "Eyeglasses Chain Stores Management", *Journal of Optometrist Election Day*, June, pp.57-59.
- Rafaeli, A., Dutton, J., Harquail, C.V, and Mackie-Lewis, S. (1997). "Navigating by attire: The use of dress by female administrative employees", *Academy of Management Journal*, Vol. 40: No 1: February, pp. 9-45, 37.
- Rogers, T.B. (1995). *The Psychological Testing Enterprise: An Introduction*, California: Brooks/ Cole, pp.610-614.
- Schiffman, L.G., and Kanuk, L.L. (1994). *Consumer Behavior*, Fifth ed., London: Prentice Hall International, pp.536.
- Schütte, H. and Ciarlante, D. (1998). *Consumer behavior in Asia*, London: Macmillan, pp.83.
- Sharma, S. (1996). *Applied Multivariate Techniques*, New York: John Wiley, pp.419-445.
- Solomon M., Bamossy G., and Askegaard S. (1999). *Consumer Behavior: A European Perspective*, New Jersey: Prentice Hall, pp.401-415.
- Stratton, T.D. (1999). *Identity, Appearance, and Corrective Lenswear: Predictors of college students' interest in vision correcting myopia surgery*. Abstract of Doctoral dissertation, University of Kentucky. (From Dissertation Abstracts International, 1999, 268, AAI9957056).
- Terry, R.L. and Krantz, J.H. (1993). "Dimensions of Trait Attributions Associated with Eyeglasses, Men's Facial Hair, and Women's Hair Length", *Journal of Applied Social Psychology*, Vol.23: No.21, pp. 1757-1769.
- Terry, R.L. and Stockton L.A. (1993). "Eyeglasses and Children's Schemata", *Journal of Social Psychology*, Vol.133: No.4: August, pp. 425-438.
- Thansettakij (1999). *Better Vision Penetrates to Open New Shop in America*, Bangkok, section 2, Vol. 402, July 22-24.
- Thompson, A.M. and Kaminski, P.F. (1993). "Psychographic and Lifestyle antecedents of Service Quality Expectations: A Segmentation Approach" *Journal of Services Marketing*, Vol.7: No.4, pp.53-61.
- Thompson, C.J. and Haytko, D.L. (1997). "Speaking of Fashion: Consumers' Uses of Fashion Discourses and the Appropriation of Countervailing Cultural Meaning", *Journal of Consumer Research*, Vol.24: June, pp.15-42.

- Thongthai, V. (2002). Mahidol Population Gazette, Bangkok: Institute for population and Social Research.
- Thornton, C. (2002). Relational Regularities. (From <http://www.cogs.susx.ac.uk/users/christ/crs/dm/lec13.html>), Sep 24, 2002.
- Ullman, J.B. (1996). Structural Equation Modeling, Third edition, New York: HarperCollins, pp. 709-819.
- Vichavudth, C. (1995). Personality test. Psychological Faculty of Chulalongkorn University: Bangkok.
- Wankijvit, (2001), "Eyeglasses Selling Technique", Thai Optometrist Journal, Vol.13, January, pp.39-40.
- Walters, C.G., and Bergiel, B.J. (1989), Consumer Behavior: A Decision Making Approach, Cincinnati: South-Western, pp. 9-11, 23, 58-62.
- Walters, P.G. (1997). "Global Market Segmentation: Methodologies and Challenges", Journal of Marketing Management, Vol.13, pp.165-177.
- Wells, W. (1975). "Psychographics: A critical Review", Journal of Marketing Research, Vol.12: May, pp.196-213.
- Wetsel, M.A. (1988). Description of Eye Gaze, Facial Affect, Illustrators, Silent Pauses and Physical Attractiveness in a Gerontic Population. Abstract of Doctoral dissertation, The University of Mississippi. (From Dissertation Abstracts International, 1983, 117, AAI8323333)
- Zikmund, W.G. (1997). Exploring Marketing Research, Sixth ed., Florida: Dryden Press.



QUESTIONNAIRE

Dear Respondents,

This questionnaire is conducted as a major requirement of a thesis for the fulfillment of MBA Degree of the Assumption University (ABAC) for the research of “Intra-relationship of consumer lifestyle and the linkage towards eyeglasses purchase decision.” Please take a few minutes to answer the following questions. Your participation is truly appreciated.

Direction: Please chooses the only one appropriate answer for the following questions.

Part 1: Purchase Behavior

1. Do you wear eyeglasses?

_____ Yes

_____ No (End of question)

2. How long have you worn eyeglasses?

_____ 1 year or less

_____ 2-3 years

_____ 4-5 years

_____ 6-8 years

_____ More than 8 years

3. What is the price you expect to spend on a new pair of eyeglasses?

_____ Less than 1,000 Baht

_____ 1,001 – 2,000 Baht

_____ 2,001 – 3,000 Baht

_____ 3,001 – 5,000 Baht

_____ 5,001 – 8,000 Baht

_____ More than 8,000 Baht

4. Do you think when you will buy a new pair of eyeglasses next time?

_____ Within 1 year or less

_____ 2 years

_____ 3 years

_____ 4 years

_____ 5 years

_____ More than 5 years

Part 2: Consumer Lifestyles, Needs, and Attitudes




1. From the following statement, please indicate the extent to which best describes you.

Description	It's not me	It's me
1.1 I open to change and adopt the new interesting things.	0 10 20 30 40 50 60 70 80 90 100%	
1.2 I have more ability to learn, remember and apply knowledge for the real situation.	0 10 20 30 40 50 60 70 80 90 100%	
1.3 I often feel frustrated and worry	0 10 20 30 40 50 60 70 80 90 100%	
1.4 I have more shy and fearful than most people	0 10 20 30 40 50 60 70 80 90 100%	
1.5 In making a decision, I always think systematically and carefully.	0 10 20 30 40 50 60 70 80 90 100%	
1.6 My mood is always up and down.	0 10 20 30 40 50 60 70 80 90 100%	
1.7 I dare to express my feelings, desires and insist in my own opinion	0 10 20 30 40 50 60 70 80 90 100%	
1.8 I usually enjoy being in social events or parties	0 10 20 30 40 50 60 70 80 90 100%	
1.9 I'm confidence of my self when doing anything	0 10 20 30 40 50 60 70 80 90 100%	
1.10 I want to achieve, be competent, and gain approval and recognition	0 10 20 30 40 50 60 70 80 90 100%	
1.11 I can accept myself for what I am.	0 10 20 30 40 50 60 70 80 90 100%	
1.12 I care for others, willing to listen and understand other people's problems.	0 10 20 30 40 50 60 70 80 90 100%	
1.13 I'm always friendly with other people.	0 10 20 30 40 50 60 70 80 90 100%	
1.14 I have more appeal and outstanding than others people	0 10 20 30 40 50 60 70 80 90 100%	

2. Please weight the important of the following factors needed in selection eyeglasses.

Factors	Least importance									Most importance			
2.1 New model	0	10	20	30	40	50	60	70	80	90	100%		
2.2 Attractive style	0	10	20	30	40	50	60	70	80	90	100%		
2.3 Light weight	0	10	20	30	40	50	60	70	80	90	100%		
2.4 Durability	0	10	20	30	40	50	60	70	80	90	100%		

3. According to your attitude, please weight your favorable of the following style of eyeglasses.

Factors	Least favorable									Most favorable			
3.1  Full style	0	10	20	30	40	50	60	70	80	90	100%		
3.2  Half style	0	10	20	30	40	50	60	70	80	90	100%		
3.3  Frameless style	0	10	20	30	40	50	60	70	80	90	100%		

Part 3: Personal Data

1. Gender:

Male

Female

2. Age:

16-25

26-40

41-50

51-55

3. Education:

Secondary School and below

High School

College

Bachelor Degree

Master Degree

Doctorate Degree

4. Income:

Less than 10,000

10,001-20,000

20,001-30,000

30,001-50,000

50,001-80,000

More than 80,000

Thank You



Appendix B: Questionnaire (Thai)

แบบสอบถาม

เรียน ท่านผู้กรอกแบบสอบถาม

แบบสอบถามนี้เป็นส่วนหนึ่งของวิทยานิพนธ์ ปริญญาโท สาขาบริหารธุรกิจ มหาวิทยาลัยอัสสัมชัญ (ABAC)

แบบสอบถามฉบับนี้ ได้ถูกออกแบบมาเพื่อเก็บรวบรวมข้อมูล และนำข้อมูลที่ได้ไปดำเนินการทางสถิติ ขอขอบคุณที่ให้ความร่วมมือ

กรุณาเลือกคำตอบที่เหมาะสมที่สุดเพียงคำตอบเดียว

ส่วนที่1:

1. คุณใส่แว่นหรือไม่?

___ ใช่

___ ไม่ใช่ (จบคำถาม)

2. คุณใส่แว่นมากี่ปีแล้ว?

___ 1 ปี หรือ น้อยกว่า

___ 2 - 3 ปี

___ 4 - 5 ปี

___ 6 - 8 ปี

___ มากกว่า 8 ปี

3. ราคาเท่าไรที่เหมาะสมที่สุดที่คุณคาดว่าจะจ่ายสำหรับการซื้อแว่นอันใหม่?

___ น้อยกว่า 1,000 บาท

___ 1,001 - 2,000 บาท

___ 2,001 - 3,000 บาท

___ 3,001 - 5,000 บาท

___ 5,001 - 8,000 บาท

___ มากกว่า 8,000 บาท

4. คุณคิดว่า คุณจะซื้อแว่นตาอันใหม่ ในครั้งต่อไปเมื่อใด?

___ ภายใน 1 ปี หรือ น้อยกว่า

___ 2 ปี

___ 3 ปี

___ 4 ปี

___ 5 ปี

___ 5 ปีขึ้นไป

ส่วนที่2:

1. กรุณาเลือกระดับความคิดเห็นของคุณ จากประโยคข้างล่างนี้ ระดับใดสามารถแสดงถึงลักษณะที่เป็นอยู่ของคุณได้
ดีที่สุด

ลักษณะ	ตรงกับตัวฉัน น้อยที่สุด	ตรงกับตัวฉัน มากที่สุด
1.1 ฉันพร้อมที่จะเปลี่ยนแปลง และเปิดรับสิ่ง ใหม่ ๆ ที่น่าสนใจ	0 10 20 30 40 50 60 70 80 90 100%	
1.2 ฉันมีความสามารถในการเรียนรู้ จดจำ และนำความรู้มาให้ได้เป็นอย่างดี	0 10 20 30 40 50 60 70 80 90 100%	
1.3 บ่อยครั้งฉันรู้สึกสับสน และกังวลใจ	0 10 20 30 40 50 60 70 80 90 100%	
1.4 ฉันขี้อาย และหวาดกลัวเสมอๆ	0 10 20 30 40 50 60 70 80 90 100%	
1.5 ในการตัดสินใจ ฉันจะคิดอย่างรอบคอบ และมีเหตุผล	0 10 20 30 40 50 60 70 80 90 100%	
1.6 อารมณ์ของฉันมักจะขึ้นๆ ลงๆ เสมอ	0 10 20 30 40 50 60 70 80 90 100%	
1.7 ฉันกล้าที่จะแสดงความรู้สึก และยื่นกราน ความคิดของฉัน	0 10 20 30 40 50 60 70 80 90 100%	
1.8 ฉันชอบใช้เวลาในการพบปะสังสรรค์ อยู่ เสมอ	0 10 20 30 40 50 60 70 80 90 100%	
1.9 ฉันมั่นใจ และเชื่อมั่นในตัวฉันเองเสมอ	0 10 20 30 40 50 60 70 80 90 100%	
1.10 ฉันต้องการประสบความสำเร็จ และเป็นที่ย ยอมรับของสังคม	0 10 20 30 40 50 60 70 80 90 100%	
1.11 ฉันสามารถยอมรับตัวเอง ในแบบที่ตัวฉัน เป็นได้	0 10 20 30 40 50 60 70 80 90 100%	
1.12 ฉันใส่ใจ พร้อมที่จะรับฟังและเข้าใจปัญหา ของผู้อื่น	0 10 20 30 40 50 60 70 80 90 100%	
1.13 ฉันมีมนุษยสัมพันธ์ที่ดี และพร้อมที่เป็น มิตรกับทุกคน	0 10 20 30 40 50 60 70 80 90 100%	
1.14 ฉันจะโดดเด่นกว่าผู้อื่น และ มักจะ มีผู้คน มาห้อมล้อมมากมาย	0 10 20 30 40 50 60 70 80 90 100%	

2. กรุณาเลือกระดับความสำคัญที่คุณต้องการในการเลือกซื้อแว่น จากปัจจัยข้างล่างนี้:

ปัจจัย	สำคัญน้อยที่สุด	สำคัญมากที่สุด
2.1 กรอบแว่นรุ่นใหม่	0 10 20 30 40 50 60 70 80 90 100%	
2.2 รูปแบบน่าดึงดูดใจ	0 10 20 30 40 50 60 70 80 90 100%	
2.3 น้ำหนักเบา	0 10 20 30 40 50 60 70 80 90 100%	
2.4 ความทนทาน	0 10 20 30 40 50 60 70 80 90 100%	

3. ตามทัศนคติของคุณ กรุณาเลือกระดับความชอบของคุณต่อแว่นทั้ง 3 รูปแบบข้างล่างนี้:

รูปแบบ	ชอบน้อยที่สุด	ชอบมากที่สุด
3.1  แว่นมีกรอบ	0 10 20 30 40 50 60 70 80 90 100%	
3.2  แว่นครึ่งกรอบ	0 10 20 30 40 50 60 70 80 90 100%	
3.3  แว่นไม่มีกรอบ	0 10 20 30 40 50 60 70 80 90 100%	

ส่วนที่ 2: ข้อมูลส่วนตัว

1. เพศ :

ชาย

หญิง

2. อายุ:

16 – 25 ปี

26 – 40 ปี

41 – 50 ปี

51 – 65 ปี

3. การศึกษา:

มัธยมต้น หรือ ต่ำกว่า

มัธยมปลาย

วิทยาลัย

ปริญญาตรี

ปริญญาโท

ปริญญาเอก

4. รายได้:

น้อยกว่า 10,000

10,001 - 20,000

20,001 - 30,000

30,001 - 50,000

50,001 - 80,000

มากกว่า 80,000

ขอบคุณค่ะ

