

CONSUMERS' PARTICIPATION ORIENTATION
IN A SERVICE ENCOUNTER:
ANTECEDENTS AND
CONSEQUENCES

By

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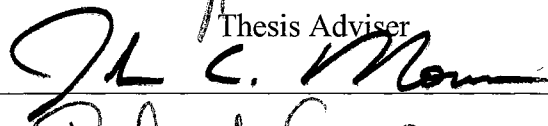
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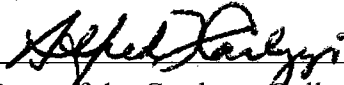


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PREFACE

This research was undertaken to explore the area of a consumer's preference for participation in a service encounter. The concept of consumer participation impacts many services including the areas of e-commerce, banking, investing, weight loss, health, grocery shopping, travel, and entertainment. It is generally assumed that a consumer prefers a self-service option and will be more satisfied because of his or her participation in the delivery of the service. This assumption does not account for individual differences among consumers regarding a participation orientation.

The first study develops a scale to measure participation orientation. Study 2 investigates the antecedents and effects of the personality traits of participation orientation within a hierarchical model. In the third study, an experiment manipulates perceived participation to examine whether participation orientation moderates the relationship between consumer participation and satisfaction.

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CHAPTER 1

INTRODUCTION

Encouraging customers to participate even more than usual in the delivery of a service is the latest trend for service providers (Brond 1997). This paradigm, which treats the customer as an active participant, is labeled customerization (Wind and Rangaswamy 2000). Unlike traditional marketing, customerization relies on the consumer to a greater degree during the exchange process.

Greater involvement of customers in the exchange process can have several advantages. One benefit of increased consumer participation is the ability to adjust service quality through the creation and delivery of the service (Brond 1997). Several researchers have suggested that a firm can cut costs and increase profitability by getting the customer to do more work (e.g. pump their own gas; bag their own groceries, carry their own bags on airplanes, use automatic teller machines; Lovelock and Young 1979, Bateson 1985a). For example, Booz, Allen, & Hamilton estimates a bank transaction conducted in a branch office costs banks \$1.08. while the same service provided in an online environment would only cost 13 cents (Jerome 2000). Performance improvements can also be realized when a service firm views a consumer as a “partial employee” (Mills, Chase and Margulies 1983).

Hollander and Rassuli (1999) proposed that firms which serve as consumer surrogates raise impediments, real or perceived, in order to promote the necessity of the services offered. However, the recent trend is to lower these barriers by providing services to the do-it-yourself consumer. The movement toward providing resources to

consumers in order for the consumer to create the service has led some to suggest that brands will be redefined as “enablers” for the consumer (Raymond 1999).

WHY THIS IS IMPORTANT

There are several fundamental questions raised by this trend to do-it-yourself services. If consumer participation can lower costs, increase productivity, and increase consumer satisfaction for a firm, then there seems to be little incentive for a firm to offer a full-service product. If so, then understanding consumer’s motivation to participate, or not, in a service encounter will help explain when and why a full-service option should be offered.

Although there are many reasons why a firm would offer a self-serve option to customers (e.g., lower costs), why a consumer would be interested is less clear. Ironically, self-service in many retail settings actually reduces the service to the customer (Mills, Chase and Margulies 1983). The service once performed by the service employee is now handled by the consumer. Because of this increased role of the consumer, we need to ask why, and under what conditions, self-service options should be offered. Most importantly, we need to understand consumer motivations to use or avoid self-service options. Understanding consumer motivation will better explain the managerial implications of self-service options. This proposal addresses the issue of consumer motivation.

An underlying assumption made by many service providers is that consumers want to participate in the creation and delivery of services. In fact, consumer opposition to participation could hinder acceptance of new productivity gains (Lovelock and Young 1979). At one time it was thought that self-service options were unattractive to consumers

and needed to be offered at a discount (e.g., pumping your own gas at a lower cost) (Bateson, 1983). Fortunately for service providers, some consumers do find the option of do-it-yourself services intrinsically appealing (Bateson 1985a). However, not all consumers want to participate in the service delivery process (Brond 1997). Because of consumer differences in participation orientation, a method to identify and segment participative and non-participative consumers is required.

Industry Trends

Greater consumer participation is required in many new services available. Some of these new services have been developed only to provide the tools necessary to perform the service. For example, several online investing services differentiate themselves from their traditional competitors by highlighting the tools they offer for the do-it-yourself investor. In this scenario, consumers conduct research and make decisions regarding their investment choices.

It is common for a service provider to differentiate services by the degree of required consumer participation. In many instances, the same firm can offer both a high consumer participation service and a low participation option. Services allowing increased consumer participation can be found in many different industries. A classic example is the gas station offering both full service and self-service lanes. Another example is when hotels offer a self-checkout service whereby guests avoid dealing with front-desk personnel. Car rental agencies provide similar service options during arrival and departure for consumers. Credit card companies offer automated account services bypassing account representatives. Grocery stores are now installing self-checkout lanes

for consumers. An interesting question is what impact does the increased popularity of these do-it-yourself services have on traditional services.

The health care industry is also seeing a growing trend in services designed for the participative consumer. One reason health self-care is growing is the availability of information. Web sites exist, such as www.familydoctor.org, which have flowcharts intended to suggest possible diagnoses and treatments for various ailments (Guttman 2000). In a study of users of online health and medical web sites, a surprising 90 percent felt that they could manage their own health. Furthermore, the web was seen to have better information than what is available from a doctor or pharmacist by 82 percent of the respondents. Over half of the respondents also had visited the web site of a pharmaceutical company within the last 6 months looking for information (Lach 1999c). According to a recent article in *USA Weekend*, the Internet has enabled consumers to participate more in medical decisions by providing better information and questions (Guttman 2000). Some in the medical field are accepting the consumer into the service encounter process as well. Many physicians are now using a procedure called Patient Controlled Analgesia which has the patient self-administer medication as needed up to predetermined levels (Brond 1997).

Active consumers are also prevalent in the travel industry. Uniglobe Travel, a franchisor of travel agencies, offers both traditional travel services and online services. Because of the relatively low margin in booking vacation travel, Uniglobe is hoping that upwards of 60 percent of such activity is done online (Jerome 2000). This shifting of the burden to the consumer should help Uniglobe raise its profit margins.

The trend in increased consumer participation is very evident in the field of personal investing. The popular press is filled with stories of consumers who are very active online stock traders. These “day traders” are consumers who prefer to direct their own investment strategy and choices. In a report by Jupiter Communications, it is estimated that \$3 trillion will be invested by American consumers with online brokerage firms by the end of 2003 (Raymond 1999). Companies have been created, or new services introduced, from existing companies for the primary purpose of serving these active traders. Instead of offering advice in the form a traditional financial advisor, these new services offer the tools (e.g., real-time quotes, research) to enable the individual to create his or her own product.

A financial services firm, such as Merrill Lynch, offers both high- and low-participation services via their web site. For consumers who prefer to use a financial advisor, the Merrill Lynch web site can provides current portfolio values and advertisements for products. For the Merrill Lynch consumer who prefers a more participatory role, the same web site provides research reports, the ability to interface with other investors, and the ability to conduct transactions directly without the assistance of a financial advisor.

American Express Financial Advisors has a series of advertisements which are intended to appeal to a range of consumer preferences along a continuum of the consumer’s preference for participation. The common theme in each advertisement of “helping you do more” is empowerment for the investor by stressing the tools available to assist the investor. Tools offered range from the research available for the self-service investor to financial advisors who can handle the accounts of the less participative-

oriented investor. Consumer empowerment can also be found in the message of the web travel site expedia.com. This online service proclaims that it can help you “travel right” because of the information it provides.

Charles Schwab, the discount brokerage firm, offers resources for the individual who desires to be highly participative. The current tag line of a “Smarter Kind of Investor” emphasizes the resources Schwab offers. A similar theme is found in the message of the discount broker Fidelity Investments which states “We help you invest responsibly.” At the other end of the spectrum, the advertisement promoting the asset management services of Neuberger Berman states “Money can always make money. It just needs to be shown how.” This is an example of a firm appealing to the consumer which does not want to participate as much in the investment process.

The advertisement for the online insurance broker esurance.com clearly is aimed for the consumer willing to be participative. Stating that “you can now add ‘insurance agent’ to you resume” is a direct appeal to a consumer not interested in using an insurance agent as a surrogate.

These different service offerings all promote consumer personalization. The difference is whether the service provider is personalizing the service on behalf of the consumer (e.g., Neuberger Berman) or the firm is providing the tools necessary for the consumer to make the personalization choices (e.g., Charles Schwab & Co.). Thus, there is evidence that a common area of competition among service providers is in providing personalized services.

What is uncertain is if all consumers want personalization in every service encounter and what benefits are derived (Surprenant and Solomon 1987). There is clear

evidence that less participative options are very popular among consumers. A recent survey conducted by Parade magazine found that over half of Americans want dinner to be ready in 15 to 30 minutes. Because of this, the \$44 billion market for ready-to-heat or ready-to-eat meals is expected to grow significantly in the next few years (Mogelonsky 1998).

Grocery shopping itself is a very participative consumer service encounter. However, two-thirds of adults dislike shopping for food (Cavanaugh 1997). Another survey found that only one third of respondents are more likely to shop at a grocery store that offers self-checkout. Only 6 percent of the respondents stated that they like to bag the purchases themselves (Lach 1999b).

Role of Technology

Although technology (e.g., ATM machines, web sites) is often involved with many self-service options, this is not always so. A consumer electing to hand wash a car may use less technology than using an automated car wash. Hiring a housekeeper rather than a consumer cleaning his or her own home does not include relevant differences in technology. In many ecommerce applications, a customer service representative can assist a customer over the phone rather than have the customer directly enter the information via a web site. Ironically, the CSR can be using the exact same web-based interface and application which is offered to the customer.

Using online services is not always a more participative option than using the traditional service. The computer mediated environment of the Web allows a firm to offer either a low participation or a high participation service. The web can be a resource for those looking for information (i.e., high participation). But ecommerce via the Web can

actually be low participation. As an example, the popular ecommerce retailer Amazon.com offers 1-click shopping which simplifies the transaction process. After initially entering billing and shipping information, the consumer can skip this step in the future. This requires less effort by the consumer than traditional bricks-and-mortar shopping.

Secondly, it is difficult to imagine that technology-based services will be so ubiquitous and desired by consumers as to replace traditional service providers. For example, a recent survey by the American Bankers Association found that only 28 percent of respondents stated that an ATM machine was the preferred form of banking (Lach 1999a). This is an extremely low number given the prevalence of ATM machines and their longevity in the marketplace.

CURRENT LITERATURE

The literature is sparse in addressing these issues. The necessary activities a consumer performs in a service encounter have received little attention in the existing literature (Mills and Morris 1986). While consumer participation in a service encounter has been recognized as an important element of the delivery process, most service encounter research typically has instead focused on the role of the employee (Kelley, Donnelly and Skinner 1990). This is especially surprising because consumers are considered “indispensable” to the production activities for a service firm because the production of services requires a direct involvement of the client (Mills and Morris 1986).

Consumer participation, as generally described in the marketing and consumer behavior literature (e.g., Bateson 1983), refers to the amount of effort and the information

supplied by the consumer during a service encounter. Effort refers to the energy expended engaged in activities necessary in a service encounter. This has usually been referenced as the consumer “doing it themselves” without the “usual incentives of price or convenience” (Bateson 1983, p.50). This means that for some consumers, a price discount is not necessary to entice consumer participation.

Kelley, Donnelly and Skinner (1990) defined what the service customer provides to the service encounter, such as labor performed or the information provided, as Customer Technical Quality (e.g., completing a loan application, or providing tax records for an accountant). Common examples of consumer participation in a service encounter include consumers pumping their own gas, carrying their own luggage at an airport, conducting their own research, following a diet program, serving themselves at a buffet, et cetera.

Until recently, the service encounter literature has overlooked the decision making role of the consumer. Hollander and Rassuli (1999) explored the concept of the surrogate shopper in a consumer setting. This is when a consumer delegates decision making to the surrogate. As a consumer representative, or agent, surrogates accept responsibility for the consumer. In this capacity as a fiduciary agent of the consumer, surrogates make decisions on behalf of the consumer.

Consumer participation is therefore defined in this proposal as the degree of consumer co-production provided in the service encounter along the dimensions of decision making responsibility and effort. Consumer decision making responsibility is the decision making role a consumer possesses in a service encounter. Effort refers to the mental and physical energy expended during a service encounter.

INDIVIDUAL DIFFERENCES

It has been proposed that there are individual differences among consumers on their "propensity to participate" (Bateson 1983). Bateson and others have suggested that doing more work without any additional incentives was intrinsically pleasing for some consumers. For these consumers, "doing it themselves" would be attractive even without monetary or time-saving incentives (Bateson 1983). This was supported by Lovelock and Young (1979) who felt that, for many people, performing an active role was preferable to a passive role. Kelly et al (1992) called for research to explore the impact of individual differences in the service delivery process and the customer perceptions of their contributions to service quality. Individual differences were also noted in a consumer's intention to use electronic shopping (Shim and Drake 1990)

There is indication that a bias to "do it yourself" may carry over from one service to another (Bateson, 1983, 1985). Similarly, it has been suggested that there are 'surrogate-prone' consumers (Hollander and Rassulli 1999). Dachler and Wilpert (1978) state that individual differences are the most important set of conditions affecting the outcomes of participative efforts (Doll and Torkzadeh 1989). Until recently, individual differences as a determinant of the level or efficacy of user participation has not been a primary focus (Doll and Torkzadeh 1989).

Individual differences among consumers regarding participation orientation suggests that identifying and segmenting these consumers into groups may be possible. Two common methods of segmenting consumers are demographic or personality factors. Langeard et al (1983) investigated demographic factors in determining a consumer's propensity to participate. Their research concluded that demographic variables were not a significant predictor of consumer preferences for participation.

Personality traits which can segment consumers on the basis of participation orientation thus need to be explored. Personality traits are commonly employed in marketing research to describe and predict individual differences. Traits are typically defined as general and enduring characteristics of an individual and function to act as a predisposition for behavioral tendencies generalized across situations (Endler and Rosenstein 1997). Becherer and Richard (1978) called for further investigation of the role of personality variables in consumer research. Indeed, “thousands” of studies (Endler and Rosenstein 1997) have explored traits such as materialism (e.g., Belk 1985, Richins and Dawson 1992, La Barbera and Gurhan 1997, Netemeyer, Burton and Lichtenstein 1995), vanity (e.g., Netemeyer, Burton and Lichtenstein 1995), self-monitoring (e.g., Becherer and Richard 1978, Darley and Lim 1992), competitiveness (e.g., Brown, Cron and John W. Slocum 1998, Mowen 2000), self-efficacy (e.g., Jayanti and Burns 1998, Brown, Cron and John W. Slocum 1998), innovativeness (e.g., Midgley and Dowling 1978, Goldsmith and Hofacker 1991), extraversion (e.g., Yellen, Winniford and Sanford 1995, Mooradian 1996, Mowen and Spears 1999), neuroticism (e.g., Mooradian 1996, Licata, Mowen and Brown 2000), and compulsive buying (e.g., Faber and O'Guinn 1992, O'Guinn and Faber 1989, Mowen and Spears 1999).

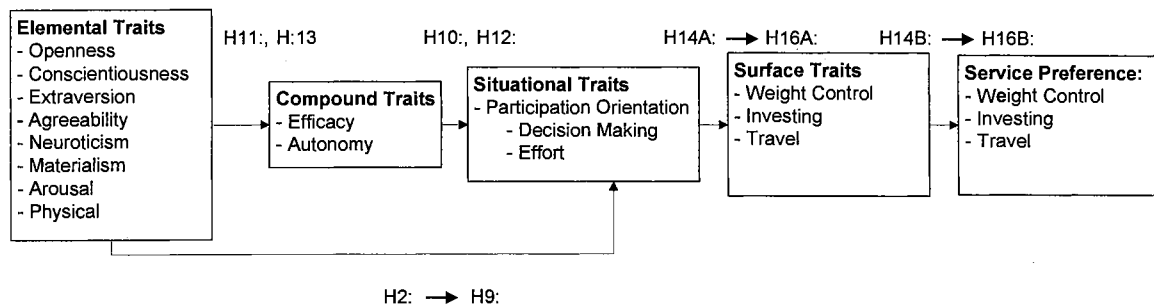
HIERARCHICAL PERSONALITY TRAIT MODEL

It is proposed that a hierarchical model of personality traits (see Figure 1) be used to examine participation orientation. The hierarchical model has levels of traits which vary from the abstract to the concrete. Including different levels of traits allow greater variance to be explained than would investigating a single trait.

It is common to use a hierarchical model in exploring personality traits (e.g., Mowen and Spears 1999). The basic hierarchical traits are the most abstract which in turn influence more concrete traits. These basic traits have been referenced as cardinal or elemental traits. As would be expected in a hierarchy, the elemental traits may explain and predict each successive level of traits. Elemental traits are an individual's underlying predispositions which are partly genetically innate and partly learned in the early stages of life (Mowen 2000). These fundamental personality traits include the five factors found in the five-factor model of personality (c.f., McCrae and Costa 1987) and three other traits.

The five-factor model of personality is well established and it is also commonly used as the basis for hierarchical models of personality (Mowen 2000). Originally developed by Cattell to describe personality, the five factor model of personality has evolved into a robust and generalizable personality measure (Goldberg 1990). The five factors are Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Figure 1 - Main Effects Hypotheses



While there is relatively strong consensus that the five-factor model captures considerable variance in personality, there is disagreement if there are fewer or more basic traits. Initially, McCrae and Costa proposed that only three traits were necessary to depict personality (Block 1995). Through subsequent research, they proposed the five-factor model (McCrae and Costa 1987). Others have argued that more than five basic traits are needed to reflect the depth of personality. In a series of research studies, Mowen and his colleagues propose that at least eight elemental personality traits exist (Mowen, Stone and Spears 1997, Brown et al. In Press). In addition to the five traits defined by McCrae and Costa and others, three additional traits were identified: materialism, arousal, and physicality. It is the confluence of these elemental traits, the culture of the individual, and the past experiences of the individual which predict the next level of traits. This second level of traits are the central, or compound traits representing unidimensional dispositions of an individual. The variance explained in a compound trait should result from two or more elemental traits (Mowen 2000). Several compound traits have been identified including the need for cognition, self-monitoring (Mowen and Spears 1999), need for activity, competitiveness, task orientation, need for learning, need for play, and self-efficacy (Mowen 2000). Lastly, compound traits can predict and explain situational and surface traits.

Situational traits are the enduring tendencies of an individual to show consistent patterns of behavior within a general situational context. This third level of traits is a mixture of the first two levels of traits and the situation. In sum, these traits are the result of person by situation interactions (Mowen 2000). Situational traits include job resourcefulness (Licata, Mowen and Brown 2000), health motivation, impulsiveness,

value consciousness, sports interest, and frugality (Mowen 2000). A consumer's *participation orientation* is a situation level trait implying that the disposition to behave is generalizable across similar situations.

The fourth, and most concrete level of traits, are surface traits. These are the most specific trait because they describe a category specific context for the disposition of enduring behavior (Mowen 2000). Surface traits are the individual differences found in a service encounter. Typically, surface traits account for significant amounts of variance which is understandable because of their specificity. As an example, *investing participation orientation* would be a surface trait.

Examples of published surface traits include coupon proneness, consumer ethnocentrism, consumer electronic innovativeness (Mowen and Spears 1999), customer orientation (Brown et al. In Press), compulsive buying, sports participation, bargaining propensity, modest living, and healthy diet lifestyles (Mowen 2000).

In the proposed model, the situational trait of participation orientation can be explained by the elemental traits and the compound traits of autonomy and efficacy. Autonomy is the desire to be self-determined. Efficacy is the belief that an individual has the ability to perform the necessary behaviors.

RELATIONSHIP OF PARTICIPATION AND SATISFACTION

In a service encounter, the quality of the service is influenced by the information provided by the consumer and effort put forth by the consumer (Kelley, Donnelly and Skinner 1990). But what effect does consumer participation have on satisfaction with the service when the consumer is the producer of the service? Increased consumer participation should increase satisfaction because the consumer is making internal

attributions of causality. It has been proposed that as a consumer's participation increases, they become more accountable for the results. This accountability should lead to greater consumer satisfaction. This was explained by expecting that active consumer participation should reduce observer bias toward the encounter (Mills, Chase and Margulies 1983).

As previously mentioned, Bateson (1983) suggested that participation is intrinsically motivated. This means that an individual participates because the activity itself is enjoyable. Satisfaction should therefore be greater for the consumer which does participate rather than if the individual did not participate. This would be an acceptable conclusion if all consumers had similar participation orientations.

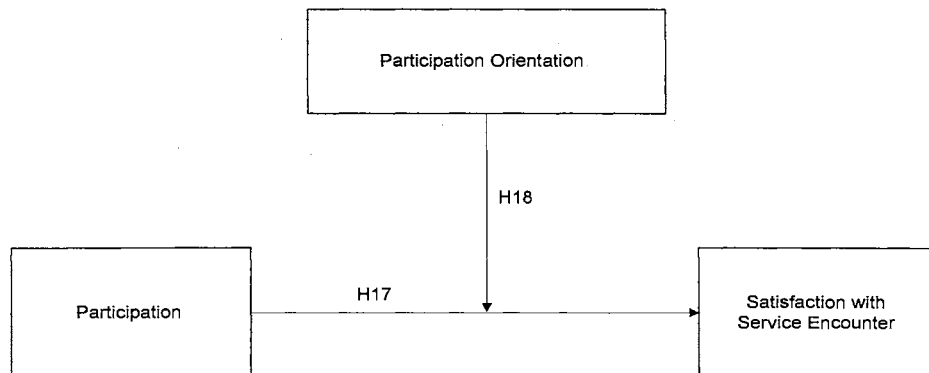
If individuals have varying degrees of participation orientation, and increased participation has been proposed to increase satisfaction, then what affect does increased participation have on individuals who do not participation orientation? An interaction may exist between consumer participation and a consumer's participation orientation (see Figure 2). Consumers who have a higher participation orientation should have greater levels of satisfaction when participation is an option than will consumers who do not have similar participation orientation for the same level of participation. If this is true then service firms need to identify each consumer segment and tailor services for each segment.

This concept was found in a study of MIS users involved in a software development project (Doll and Torkzadeh 1990). Users who wanted to participate but could not were the least satisfied. This suggests that a consumer's participation orientation moderates the relationship between participation and satisfaction. Increasing

consumer participation leads to increased satisfaction when the consumer desires to participate. Not providing a service which matches the consumer's participation orientation may actually decrease satisfaction.

The quality of the service is influenced by the consumer because they provide information and effort (Kelley, Donnelly and Skinner 1990) and should thus be assessed (Mills, Chase and Margulies 1983). Because of this direct involvement, consumers must accept partial responsibility on how satisfying the results of a service encounter were (Mills, Chase and Margulies 1983). The consumer's satisfaction derived from their participation (i.e., customer technical quality) outside any external or actual reward is intrinsic satisfaction (Ellen, Bearden and Sharma 1991). This implies that a consumer can distinguish between satisfaction with their own participation, satisfaction with the service provider, and satisfaction with the outcome of the service encounter.

Figure 2 - Moderated Hypotheses



RESEARCH QUESTIONS

This paper addresses three primary research questions. First, the personality antecedents of participation orientation will be explored in a hierarchical model. Secondly, how individual differences among consumers regarding participation orientation (i.e. without the “usual incentives”) affect service preferences. Third, the relationship between a consumer’s participation orientation and the consumer’s satisfaction with a service encounter will be examined through an experiment which manipulates participation. Lastly, managerial implications and future research will be discussed.

METHODOLOGY

Two studies are proposed to test the questions raised. The first study will develop and validate new scales which measure a consumer’s participation orientation. Measures of the elemental personality traits, autonomy, and efficacy are included for construct validity.

The second study consists of two parts. Subjects will first complete the personality measures outlined in the full hierarchical model (Figure 1). Secondly, subjects will be randomly assigned to one of two experimental conditions. The required level of participation is manipulated in order to test for possible interaction effects (Figure 2). Measures of satisfaction with self-participation, service provider, and outcome are included.

CHAPTER 2 – LITERATURE REVIEW

CONSUMER PARTICIPATION

The marketing literature is missing a fully explicated definition of consumer participation. The review of the literature suggests that participation is a two-dimensional construct of consumer contribution to the service encounter. The consumer can contribute by the degree of decision-making responsibility and the effort put forth in the service encounter. Responsibility is the extent consumers make their own service-related decisions rather than delegate the responsibility to a surrogate. Effort is the exertion of mental and physical energy on service-related activities.

In service encounters, it is frequently necessary for a consumer to be an active participant. The consumer is typically involved in the production process sometimes doing the work themselves (Loveloock and Young 1979). It is this participation by the consumer which in part make services unique (Kelley, Donnelly and Skinner 1990). Bettencourt (1997) labeled these helpful, discretionary customer behaviors as Customer Voluntary Performance. This is the consumer taking a more or less active role in their co-production responsibilities. It has further been advocated that service organizations view consumers as “partial employees” (Mills and Morris 1986). These partial employees participate on a temporary basis in the service delivery process (Kelley, Donnelly and Skinner 1990).

The consumer provides vital information which is the raw material input necessary in a service encounter (Mills, Chase and Margulies 1983), (Mills and Morris 1986). Resources provided by employees and by customers are similar inputs to the service encounter (Kelley, Skinner and Donnelly 1992). The service organization itself can be organized to encourage the service customer to become an active participant in the

service provision process, and therefore contribute to the process of service delivery (Kelley, Skinner and Donnelly 1992). This view was supported by Mills et al (1986) who stated that service organizations need to expand their boundaries to incorporate consumers into the process. In short, the consumer should be accepted as an integral part of the process (Bateson 1985b).

Hollander and Rassuli (1999) introduced the element of decision making into the consumer participation literature. Their perspective was on why a consumer would delegate decision making to a surrogate. According to Hollander and Rassuli (1999), surrogate shoppers are involved in a significant proportion of consumer decisions. This is typically because a surrogate has an information advantage over a consumer. In fact, information overload is a common reason to use a surrogate. The researchers cite using financial advisors to overcome the overabundant choices available to consumers.

Surrogacy is vulnerable if impediments are removed which would allow consumers to 'do-it-themselves'. This, according to Hollander and Rassuli (1999), is why surrogates have erected barriers such as complicated knowledge requirements. Online services which offer access to previously restricted services (e.g., airline reservations) may be viewed as a possible threat to surrogates. However, it is also possible for "electronic surrogacy" to occur (Hollander and Rassuli 1999). Using a surrogate is externalizing some of their decision-making and shopping activities by the consumer. Consumers evaluate surrogates by comparing results with expectations, results which peers obtained, and results with possible 'do-it-yourself' solutions.

Another view of participation is found in the Management/Organizational Behavior and MIS literature. A wealth of extant literature exploring participation (e.g.,

Locke and Schweiger 1979, Barki and Hartwick 1994, etc.) can be found. Most commonly investigated is Participative Decision Making (PDM) by employees in a workplace situation.

Employee participation can be viewed, in general, as either joint manager-employee decision making or at least involving employees in the decision making process (Chisholm and Vansina 1993). It is a process in which influence is shared among individuals who otherwise are hierarchical unequals (Wagner 1994). Participation also includes hands-on activity behaviors (Hunton and Price 1997). Participation, in a very broad sense, is conceptualized as having taken part in or having done things. This includes the assignments, activities, behaviors and responsibilities that employees or their representatives perform (Barki and Hartwick 1994).

Mills and Morris (1986) proposed a taxonomy of services which varied by the degree and type of client participation, by the type of service, the task requirements of the service, and the customer's skills and motivation level. In effect, a continuum of participation (i.e., demands on clients) which ranged from Low (Maintenance Interactive) to Moderate (Task Interactive) to High (Personal Interactive).

Degree and Type of Participation

The degree and depth of participation can take several forms. The degree of participation ranges from self involvement to using a surrogate. Direct participation is the immediate personal involvement of members whereas indirect participation involves some form of representation. Depth of participation refers to its quality (Cotton et al. 1988).

The distinct facets of consumer participation, effort and responsibility, will vary along the lines of degree (i.e. amount) and type (i.e., responsibility and/or effort). The depth (i.e., quality) of participation can also vary. The scope of participation can also vary, occurring during one or several stages of problem-solving process (i.e., problem identification, evaluation, solution generation, choice, and implementation) (Barki and Hartwick 1994).

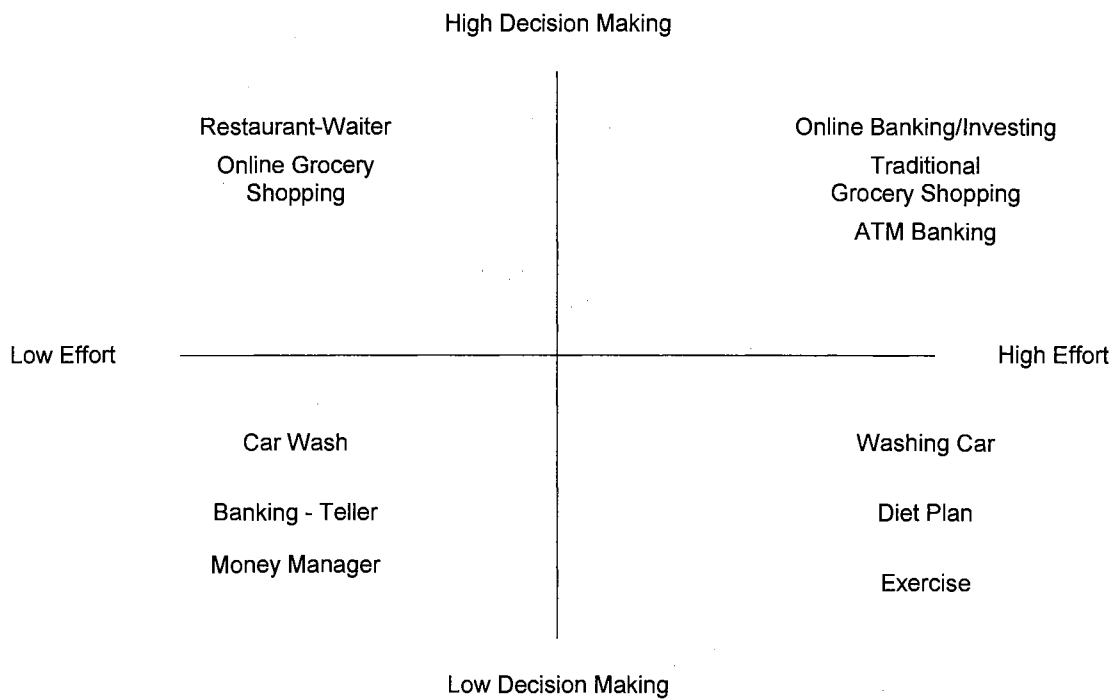
Degree

(Hunton and Price 1997) proposed that participation can be viewed along a continuum of control ranging from no participation (e.g., mute condition) which reflects the absence of control, participation via voice which is an uncertain degree of control (i.e. influence) over the development process, and the highest level of control reflects certainty. A mute condition is typically not found in a service encounter due to the volitional nature of services. An example, however, of a mute condition would be a consumer being unconscious and receiving emergency medical treatment. The options and subsequent decisions a consumer would normally make are not present in this scenario. Therefore service encounters which are mute conditions are not examined in this research. It is the volitional nature of typical service encounters which are being explored.

The degree of participation, therefore, is a continuum of influence from direct to indirect. Direct participation is when the consumer is very active and directly influences the service encounter. The consumer provides high levels of effort and makes the necessary decisions. At the other end of the influence continuum is indirect participation

whereby the consumer delegates to a surrogate the decisions making responsibilities and required effort.

Figure 3 - Positioning Map of Services



Type

The type of participation varies on the two dimensions of responsibility and effort. As evident in Figure 3, services can be classified and positioned using these dimensions.

INDIVIDUAL DIFFERENCES AMONG CONSUMERS IN PARTICIPATION ORIENTATION

Why consumers seek or avoid certain service encounters which require differing levels of participation needs to be explored. This is especially true in light of the fact that there may be no difference in the cost or outcome of the service regardless of who is the producer of the service. If a consumer is willing to participate without an incentive, then why does the consumer want to participate? For example, withdrawing money from an ATM versus using a bank teller may involve the same amount of time, fees, et cetera. As noted earlier, many consumers have a clear preference for one type of service over another. Although firms may realize productivity gains by motivating the consumer to do more work (Mills, Chase and Margulies 1983), it can occur only if the consumer does not resist the greater participation required (Langeard et al. 1981). This underscores the necessity of identifying the personality traits which predict participation.

Because individual differences in a consumer's participation orientation are important, it is necessary to understand a consumer's desired level of participation. A discrepancy between perceived and desired levels of participation can impact the consumer's evaluation of the outcome (Doll and Torkzadeh 1989). As such, services need to be offered to match the consumer's desired level of participation with their perceived level of participation (Langeard et al. 1981).

It has been suggested that consumers are willing to participate because it is intrinsically motivating (Bateson 1985a, Bateson 1985b, Lovelock 1983). The reward for the individual is the activity itself (Deci and Ryan 1991). By definition, intrinsically motivated behavior is self-determined (Deci and Ryan 1987). The individual has a full sense of choice, without feeling coerced, and can spontaneously pursue interesting activities (Deci and Ryan 1991).

Conversely, consumers may elect to use the services of a surrogate because of perceived impediments (e.g., low self-confidence, perceived complexity of the service process; Hollander and Rassuli 1999). A surrogate may be chosen because the individual is not capable of control, believes that the surrogate is more capable than they perceive their own abilities, or simply because the individual does not want the responsibilities associated with control (Bandura 1997). Another reason consumers elect to use a surrogate is convenience. In effect, the consumer is exchanging autonomy for perceived gains in time and information (Hollander and Rassuli 1999).

If a participation orientation is generalizable across services, then a profile of these participative and non-participative groups needs to be developed (Bateson, 1983, 1985). The development of a scale to measure a participation orientation is therefore necessary (Bateson, 1983). This is especially true if segmentation of these distinct groups is a goal.

Perceived Control

(Bateson 1985a) explored perceived control as a motivator for consumer participation. He proposed that perceived control was important in a service encounter because it may affect the behavior of a consumer. Control could also impact the consumer's satisfaction with the service (Bateson 1985b) because consumers prefer to feel in control while receiving a service (Bateson 1985a). A loss of control itself may even be disconcerting (Lovelock 1983). However, perceived control itself is intrinsically motivating which should increase a consumer's participation orientation (Bateson 1985b).

Langeard et al (1981) stated that control was an important determinant which distinguishes the participative group from the non-participative group. Their conclusion was reached by asking subjects how important control was for specific scenarios (e.g., pumping gas, using an ATM, etc.). This study, which is what Bateson (1983, 1985) is based, did measure control using the Need for Clarity scale (Miles and Petty, 1975) as a proxy. Results showed that there was no significant differences between participators and nonparticipators. The Compliance, Aggression, and Detached scale (CAD) developed by Cohen (1967) was also measured. A small but nonetheless significant difference was found only on the detached dimension.

Proxy Control

Most researchers, including Bateson, have assumed that only if the consumer has direct control will they then be motivated to participate. This concept is flawed because a consumer can maintain perceived control after delegating responsibility to a legitimate proxy. If a surrogate is acting on behalf of the consumer and are responsive to the consumer, than the consumer's perceived control can actually increase (Skinner 1996).

An individual may be willing to delegate control over events that effect their lives in exchange for the freedom from the demands of performance and the potential hazards which might accompany the exercise of control. In effect, well-being and security can be found in proxy control (Bandura 1997). Low self-efficacy can promote a spiraling reliance on proxy control because the individual does not develop the necessary capabilities to have a high sense of efficacy (Bandura 1997).

Because perceived control can be maintained by using a surrogate, it is evident that a need for perceived control is not a significant determinant of a generalizable trait of

a consumer's participation orientation. Thus, other personality traits which do explain participation orientation need to be investigated.

Although age has been shown to explain some differences in a consumer's intention to use computer-mediated shopping (Shim and Drake 1990), demographic factors do not generally differentiate between groups of consumers with varying degrees of participative bias (Bateson 1983). Therefore a hierarchical model of personality is proposed to investigate the antecedents of participation orientation. The hierarchical approach to personality is well established (c.f., Mowen 2000). According to Mowen (2000), the hierarchical personality trait model has been used by many researchers including Eysenck (1947), Allport (1961), Buss (1989) and Lastovicka (1982).

Situational Trait of Participation Orientation

Consumer contributions are a combination of decision-making responsibility and the effort put forth in the service encounter. Decision making is the first dimension of participation orientation which is the extent a consumer makes their own service-related decisions rather than delegate the responsibility to a surrogate. The second dimension is effort which is the exertion of mental and physical energy on service-related activities. Because participation orientation is proposed to be generalizable across situations (Bateson, 1983, 1985), it is defined as a situational trait in the hierarchical personality model.

Responsibility/Decision-Making

Consumer Participative Responsibility on a continuum of influence anchored by total influence (i.e., consumer makes the decision) to no influence (i.e., a surrogate makes the decision). The latter would be considered a mute condition (Hunton and Price 1997).

An example of total influence is when a consumer decides on a health care option. A surrogate decision is when a surgeon makes a decision during an operation.

Effort

Consumer Participative Effort is the energy expended during a service encounter. This includes the physical and mental activities required or appropriate for a service encounter. Examples include when consumers pump their own gas, research investment opportunities, and provide information to their tax accountant.

Therefore,

H₁: Participation is a two-dimensional construct of consumer contribution to the service encounter.

As a situational trait, the variance in an individual's participation orientation should be explained by elemental and compound traits. Similarly, participation orientation should account for significant variance in related surface traits.

The Elemental Traits

Openness

The first elemental trait, openness to experience, represents the qualities of being original, imaginative, having broad interests, and being daring (Goldberg 1990).

Openness has been found to predict task orientation, need for learning, need for activity, need for play, and self-efficacy (Mowen 2000). Many of these characteristics imply a willingness to tolerate higher levels of perceived risk than consumers with lower levels of openness might tolerate. Delegating responsibility to a surrogate rather than using a self-

service option, is a method of reducing a consumer's perceived risk (Hollander and Rassuli 1999).

Therefore, it is proposed that a positive relationship exists between openness and participation orientation,

H₂: Individuals with a Higher Level of Openness will have a Greater Participation Orientation than will Individuals with a Lower Level of Openness.

Conscientiousness

Conscientiousness refers to an individual being well-organized, careful, hard-working, ambitious, energetic, persevering, self-disciplined, dutiful, scrupulous, and possibly even moralistic (McCrae and Costa 1987). It has been shown that conscientiousness influences task orientation, need for learning, competitiveness, need for activity, self-efficacy (Mowen 2000), and compulsive buying (Mowen and Spears 1999).

It would seem that individuals who are conscientious may be more willing to utilize a self-service option because it would fit their desire to be orderly and precise. They may follow the axiom that if you want something done right, then you must do it yourself.

Therefore, a positive relationship between conscientiousness and participation orientation is proposed,

H₃: Individuals with a Higher Level of Conscientiousness will have a Greater Participation Orientation than will Individuals with a Lower Level of Conscientiousness.

Extraversion

Extraversion defines an individual as sociable, fun-loving, affectionate, friendly, and talkative (McCrae and Costa 1987). Extraversion has been found to be related to positive ad-evoked feelings (Mooradian 1996), need for activity, need for play, self-efficacy (Mowen 2000), customer orientation (Brown et al. In Press) , and participation in meetings (Yellen, Winniford and Sanford 1995). Extraverts preferred to be in a face-to-face meeting environment whereas introverts did not. This less controlled environment allowed extroverts to more freely express themselves with gestures and body expressions and in general, be more flexible (Yellen, Winniford and Sanford 1995).

However, higher extraverted individuals may not view a surrogate-based service as being uncomfortable. Therefore, a moderate positive relationship between extraversion and participation is proposed. Because extraversion will be measured using the scale developed by Mowen (2000) that actually is a measure of introversion, the proposed hypothesis is:

H₄: Individuals with a Lower Level of Introversion will have a Greater Participation Orientation than will Individuals with a Higher Level of Introversion.

Agreeability

The need to express kindness and sympathy to others defines agreeableness (Mowen 2000). Adjectives used to describe agreeability include courteous, helpful, generous, trusting, gullible, and selfless. Component traits of agreeableness include trust and, in a negative sense, Machiavellianism (McCrae and Costa 1987). Agreeability has been positively linked to compulsive buying (Mowen and Spears 1999) task orientation,

competitiveness, need for activity, need for play, efficacy (Mowen and Spears 1999), and customer orientation (Brown et al. In Press).

Because of a desire to be trusting and generous, agreeable people may be more willing to accept surrogate options than would less agreeable individuals. Therefore, a negative relationship between agreeability and participation orientation is proposed,

H₅: Individuals with a Lower Level of Agreeability will have a Greater Participation Orientation than will Individuals with a Higher Level of Agreeability.

Neuroticism

Commonly referred to as emotional instability, neuroticism represents consumer worrying, insecurity, self-consciousness, and temperamental tendencies (McCrae and Costa 1987). Impulsive behaviors such as overeating, smoking, excessive drinking (McCrae and Costa 1987, Mowen 2000) have been linked to neuroticism. Negative relationships between emotional instability and customer orientation (Brown et al. In Press), and compulsive buying (Mowen and Spears 1999) have also been supported.

Because participation requires a degree of self-confidence and discipline, neurotics are less likely to prefer participatory options. Therefore, it is proposed that a negative relationship exists,

H₆: Individuals with a Higher Level of Neuroticism will have a Lower Participation Orientation than will Individuals with a Greater Level of Neuroticism.

Materialism

Material needs represent the drive to collect and possess material goods. Initially in the evolution of humans, materialism was necessary for survival. Tools, weapons, and shelter were accumulated by individuals as means for survival (Mowen 2000). Since then, considerable research has been done on materialism and its importance to individuals. For example, in 1890, (James 1890) recognized that an individual's self-concept could be partly attributed to the value they placed on material goods.

A negative relationship has been found between materialism and happiness in life (Belk 1985, Richins and Dawson 1992). Materialistic people were also found to be less generous, place a high value on financial security, less likely to have warm relationships with others (Richins and Dawson 1992), tended to be compulsive buyers (Faber and O'Guinn 1992), low religiosity consumers (La Barbera and Gurhan 1997), and vain (Netemeyer, Burton and Lichtenstein 1995).

For some individuals, self-service options may be viewed as form of competition with oneself. Therefore, a moderate positive relationship between materialism and participation orientation exists,

H₇: Individuals with a Higher Level of Materialism will have a Higher Participation Orientation than will Individuals with a Lower Level of Materialism.

Arousal

A tendency for variety seeking and risk taking can be found among consumers with high needs for arousal (Steenkamp and Baumgartner 1992). Arousal has also been shown to influence an individual's willingness to buy (Baker, Levy and Grewal 1992),

compete, play, and learn (Mowen 2000). Furthermore, activity and spontaneity are intrinsically motivated (Deci and Ryan 1991).

Therefore it is proposed that a positive relationship exists between arousal and participation orientation,

H₈: Individuals with a Higher Level of Arousal will have a Greater Participation Orientation than will Individuals with a Lower Level of Arousal.

Physical

Similar to possessing material goods, it is proposed that individuals have varying degrees of strength, agility, health, et cetera which need to be protected and enhanced (Bristow and Mowen 1998). As such, this physiological need is viewed as an important elemental trait (Mowen 2000). Individuals with a high need to be physical have been shown to be competitive, active, playful, and efficacious (Mowen 2000).

Therefore, it is proposed that a positive relationship exists,

H₉: Individuals with a Higher Level of Physical Needs will have a Greater Participation Orientation than will Individuals with a Lower Level of Physical Needs.

Compound Traits

From a compound trait perspective, two possible explanations are proposed for why a consumer would chose either a high participation service encounter or a low participation service encounter when the outcomes are comparable for each alternative. First, for some consumers, participation is preferred because the consumer believes in their ability to perform the requisite behaviors or actions needed to produce the desired outcome. In contrast, a consumer is not likely to participate in a service encounter in

which they do not believe they have the necessary capabilities. Hence, perceived self-efficacy is proposed as a significant motivator of participation.

Secondly, consumers may also choose a high participation service over a low participation service simply because the consumer is driven to be self-directed regardless of their perceived capabilities. Individuals with an autonomy orientation tend to seek opportunities for self-determination and choice (Deci and Ryan 1985). Therefore, autonomy is proposed to be another compound trait which predicts a consumer's participation orientation.

Ability

As previously stated, a surrogate may be retained because the consumer perceives an impediment to a goal. The perceived impediment may be the consumer's doubt about his or her own abilities. An individual's belief that they are capable, or incapable, of the necessary actions required to obtain a desired outcome is self-efficacy (Bandura 1977), (Bandura 1989). These beliefs determine how much effort the individual will put forth, the duration of such an effort when faced with obstacles, and is a major factor in the choice of activities (Bandura 1977).

The role of self-efficacy has been explored in several studies which examined an individuals' motivation. With regards to employees, performance can occur only when the individual perceives that they have the requisite abilities, skills, and training, as well as a thorough understanding of what the job entails and what is expected (Mills, Chase and Margulies 1983). Increased customer satisfaction could also result from increasing a customer service employee's perceived self-efficacy (Hartline and Ferrell 1996).

A consumer's weight loss progress was also deemed to be better when the subjects had higher self-efficacy (Bagozzi and Warshaw 1990). Self-efficacy also was a major determinant of a consumer's acceptance to using technological innovations (Ellen, Bearden and Sharma 1991).

An individual's beliefs about their ability to control events has been deemed the most central of all personal agency mechanisms (Bandura 1989). Likewise, self-efficacy is important to self-directed behavior (Sherer and Adams 1983). Self-efficacy is such a strong belief that individuals with high self-efficacy do not like outcomes being controlled by others even when it is beneficial for them to do so (Bandura 1997). If a consumer perceives an environment as threatening and anxiety producing, they are likely to avoid it if they have low self-efficacy beliefs. In contrast, positive self-efficacy enables an individual to create beneficial environments in which they can exercise control (Bandura 1989).

Separate, but related to self-efficacy, are outcome expectations. Outcome expectancies are an individual's estimate that a given behavior will produce the desired outcome. This contrasts with the estimate by the individual that they themselves are capable of producing the necessary behavior (Bandura 1977). This study focused on efficacy itself and not efficacy outcome expectations.

Self-efficacy beliefs can be generalized across a wide array of activities on several dimensions (Bandura 1977). This includes the similarities between activities, the behavioral, cognitive, or affective capabilities expressed, and the qualitative situational characteristics. Hence, a pattern of self-efficacy across domains and situations can be determined (Bandura 1997). This pattern can also be measured by creating an index by

summing self-efficacy scores across different domains (Bandura 1997). Sherer et al (1982) and Mowen (2000) have created scales to measure generalized self-efficacy.

Therefore, it is proposed that a positive relationship exists between self-efficacy and participation orientation,

H₁₀: Individuals with a Higher Level of Self-Efficacy will have a Greater Participation Orientation than will Individuals with a Lower Level of Self-Efficacy.

A meta-analysis done by Mowen (2000), found that self-efficacy was predicted by seven of the eight elemental traits. Only materialism was determined not to be a significant predictor. Unlike the other traits, Neuroticism was found to have a negative effect on self-efficacy. This finding is not surprising because emotionally unstable individuals would tend to doubt their capabilities.

Therefore,

H_{11A}: The elemental traits of Openness, Conscientiousness, Extraversion, Agreeability, Arousal, and Physical Needs are proposed to be significant positive predictors of self-efficacy.

H_{11B}: The elemental trait of Neuroticism is proposed to be significant negative predictor of self-efficacy.

Autonomy

An individual may believe they are capable of participation but this does not guarantee intentionality (Deci and Ryan 1987). Instead, an individual may be driven by a need for autonomy. This is the need to be self-directed.

Defining autonomy has been elusive (Lifton 1983) because there are two distinct definitions of autonomy in the literature. The first view was proposed by Murray in 1938

stating that autonomy was the rejection of outside influences by individuals. He defined autonomous individuals as rejecting organized athletics, viewing marriage akin to bondage, and looking for adventure and variety. Murray's idea of autonomy is clearly similar to dominance and independence (Koestner and Losier 1996). The concept of resisting coercion and being independent is found in other research as well (e.g., Roman et al. 1995).

The second viewpoint posits that autonomy is an individual's urge to obtain an internal perceived locus of causality concerning one's actions (Deci and Ryan 1985). Autonomous individuals perceive themselves as the initiators of their own behavior and they will select desired outcomes and the course of action necessary to achieve them (Skinner 1996, Deci and Ryan 1987).

The difference in these two definitions of autonomy is that Murray is concerned with the rejection of interpersonal influences whereas the Deci and Ryan viewpoint centers on the intrapersonal nature of the self. Hence, the Murray point of view is termed *reactive* autonomy whereas the Deci and Ryan definition is *reflexive* autonomy (Koestner and Losier 1996). Reacting against outside influences is not postulated to influence an individual's desire to engage in self-service behaviors. Using a measure of independence, (Abdel Halim and Rowland 1976) found only weak correlations with participative decision making. It is conceivable that a highly reactive autonomously oriented individual might even prefer full-service options because it provided the opportunity to be dominant. Reactive autonomy can be conceptualized as the freedom from governance by others whereas reflective autonomy expresses an individual's desire for freedom to

self-govern (Koestner and Losier 1996). From this point forward, references to autonomy will employ the notion of reflexive autonomy as defined by Deci and Ryan (1985).

Reflexive autonomy is positively associated with initiative, persistence, optimism, psychological adjustment, and consistent behaviors (Koestner and Losier 1996).

Participating by choosing an alternative is deterministic control because the extent that the choice impacts the outcome is known in advance (Hunton and Price 1997).

As defined by Deci and Ryan, there are two types of autonomy: intrinsic and identified. Identified autonomy motivates an individual to act due to a personal conviction. This means that the activity may not be enjoyable, but the individual deems it to be necessary (e.g., housework). Intrinsic autonomy results from an individual's interests and is enjoyable and integrated. Both forms of autonomy can predict intended and actual behavior (Sheldon and Elliot 1998). It is proposed that either form of autonomy motivates an individual to prefer direct participation (i.e., self-service option) over a comparable full-service alternative.

It has been suggested that autonomy oriented individuals will prefer jobs that allow greater initiative, interpret situations as promoting autonomy, and use their personal goals and interests as the basis to organize their actions (Deci and Ryan 1985). Goals are more likely to be obtained when they are autonomously motivated (Sheldon and Elliot 1998). Self-esteem, ego development, and self-actualization have been positively correlated with the autonomy orientation (Deci and Ryan 1985). Individuals can also develop a sense of worth and efficacy from the importance ascribed to their independent achievements (Cappeliez 1993). Deci and Ryan (1985) found that autonomy

was positively correlated with an internal locus of causality, intrinsic rewards, self-determination, ego development, and self-esteem.

Autonomy was found to not only predict attendance at weekly meetings of a weight loss program, but also predicted the amount of weight lost during the program and continued weight loss almost two years later (Williams et al. 1996). Interestingly, in the same study, a measure for health locus of control was not a predictor (Williams et al. 1996).

Therefore it is proposed that autonomous individuals will be more likely to have a participation orientation,

H₁₂: Individuals with a Higher Level of Autonomy will have a Greater Participation Orientation than will Individuals with a Lower Level of Autonomy.

It has been suggested that autonomy may result from the combination of several personality characteristics (Lifton 1983). The elemental traits of Conscientiousness, Neuroticism, and Arousal are predicted to have a positive affect on autonomy,

H_{13A}: The elemental traits of Conscientiousness, Neuroticism, and Arousal are proposed to be significant positive predictors of autonomy.

Conversely, Openness, Extraversion, and Agreeability are proposed to have a negative relationship with autonomy,

H_{13B}: The elemental traits of Openness, Extraversion, and Agreeability are proposed to be significant negative predictors of autonomy.

Surface Traits

In a hierarchical model of personality, the surface traits are most predictive of behavior. These traits are category-specific situations and serve to further delineate situation traits. For example, the surface trait of a healthy diet lifestyle is predicted by the situational trait of health motivation. The motivation for health can manifest itself in several areas including diet, exercise, and avoidance of aversive habits such as smoking. Hence surface traits for each category of health (e.g., diet, exercise) could be developed. The variance in each of these surface traits would be primarily explained by situation traits. In short, a surface trait is the result of a person by situation by product-category interaction (Mowen 2000).

The situation trait of participation orientation will thus predict surface traits of participation orientation. Surface traits of participation orientation can include job search, banking, grocery shopping, investing, and weight loss. All of these traits are reflected in typical service encounter preferences. For each of these service encounters, a high participation service and a low participation alternative are available.

Diet Participation Orientation

Weight control for many consumers is difficult and, as such, is commonly researched (e.g., Hubbert, Bitner and Kleine 1996, Williams et al. 1996). There is a well-established industry of weight loss products (e.g., *Slim Fast*) and services (e.g., *Weight Watchers*). Books, magazines, newsletters, and web sites promote weight loss programs. In 1998, over \$530 million was spent on diet products such as *Slim Fast* (Weissman 1999). According to the *Weight Watchers* web site, over 25 million people worldwide have benefited from the program since it started in 1937. Because of the popularity of

weight control and the size of the industry, it is managerially important to know which consumers prefer to use a weight loss service versus using weight loss products.

The personality surface trait of *diet participation orientation* is the individual predisposition to use weight control products as opposed to enrolling in a weight control service. The use of weight loss products, commercially available or self-created, requires a higher level of participation by the consumer. Unlike a weight loss program which prescribes menus, eating habits, and possibly even exercise routines, the use of weight loss products by the consumer is less regimented. This lack of a well-defined program places the decision-making responsibility and effort onto the consumer. The consumer must decide which products to use, how often they are used, and in what quantities they will be used. The consumer must also put forth greater effort in researching the products, creating their own weight loss program, and persisting with the program.

Because of the required level of participation, it is proposed that the situational trait of a person's participation orientation will predict the individual's surface trait of diet participation orientation. Therefore,

H_{14A}: An Individual's Level of Participation Orientation will be positively related to the Individual's Diet Participation Orientation.

H_{14B}: An Individual's Level of Diet Participation Orientation will be positively related to the Individual's preference for making their own weight loss program as opposed to choosing an formal weight loss program.

Travel Participation Orientation

Travel is a multi-billion dollar industry where consumers can elect to use travel agents to make their travel arrangements or consumers can create their own travel itinerary. Using a surrogate (i.e., travel agent) is preferred by many consumers. However,

as noted earlier, the introduction of online reservation systems is projected to decrease sales through travel agents from 90% to 40% of all travel sales (Hollander and Rassuli 1999). The availability of the reservation system to the consumer removes an impediment which had been protecting the travel service provider. Before the introduction of the system, 10% of the population was not using a travel agent. It can be proposed that these consumers either did not have access to a travel agent or they simply preferred not to use an agent. The segment of consumers who previously had used an agent and are now projected to stop using an agent (i.e., the 50% of all travelers representing the decline from the existing 90% to the projected 40%) will be undertaking greater decision making responsibility for their travel arrangements and will need to exert more effort than when they had been using an agent. It is proposed that this segment can be identified through high levels of the *travel participation orientation* surface trait. The 40% of the population that is not projected to switch from using an agent would have low levels of the same surface trait. Therefore,

H_{15A}: An Individual's Level of Participation orientation will be positively related to the Individual's Travel Participation Orientation.

H_{15B}: An Individual's Level of Travel Participation Orientation will be positively related to the Individual's preference for making his or her own travel arrangements as opposed to preferring the services of a travel agent.

Investing Participation Orientation

Financial investing is another multi-billion dollar industry where consumers can decide between using a surrogate (e.g., stockbroker) or creating their own investment strategy. Recently many traditional brokerage firms, such as Merrill Lynch, have created new service offerings to meet the needs of the self-directed investor. Providing online

research, stock quotes, and web-enabled trading are the most commonly offered services. Similar to the travel industry, however, there appears to be a sizable segment of investors who have clear preferences for using either a surrogate or investing on their own. Because of this segmentation of consumer preferences, it is necessary to be able to identify each consumer segment.

An individual's preference to manage their investments can be captured in the surface trait of the *investing participation orientation*. This trait can in turn be predicted by a consumer's participation orientation. The desire for investing participation orientation reflects the consumer's preference to conduct their own research concerning investment opportunities, place their own trades, monitor their performance, and make their own investment decisions. Therefore,

H_{16A}: An Individual's Level of Participation Orientation will be positively related to the Individual's Investing Participation Orientation.

H_{16B}: An Individual's Level of Investing Participation Orientation will be positively related to the Individual's preference for making his or her own investments as opposed to choosing a financial advisor.

WHAT IS THE RELATIONSHIP BETWEEN A CONSUMER'S PARTICIPATION ORIENTATION AND THE CONSUMER'S SATISFACTION WITH A SERVICE ENCOUNTER?

Level of Participation (i.e., Direct Relationship)

As stated earlier, it has been suggested that a direct positive relationship exists between consumer participation and satisfaction. Attribution theory provides an explanation for why this relationship should exist. In research exploring attribution of investment decisions, it was found that consumers had greater satisfaction, all else being equal, when the decision was attributed to the consumer than when it was an external

attribution (Oliver and DeSarbo 1988). When consumers attributed product failures to internal causes they were less angry than when the attribution was directed at either the manufacturer or seller (Folkes 1984).

It has generally been proposed that including an employee into the decision making process would increase the employee's satisfaction (Abdel Halim 1983). McKeen and Guimaraes 1997) found that user participation, regardless of the situation, positively impacted satisfaction. Studies in MIS have shown that the user perception of representation is the most significant influence on user satisfaction (Lawrence and Low 1993). Drawing on the work of Festinger's cognitive dissonance theory and Bem's self-perception theory, Hunton and Price (1997) proposed that an individual who participates will have greater satisfaction because the individual's attitudes are reorganized to be consistent with their behaviors.

There is also a difference between actual and perceived participation. Research indicates that decision satisfaction is more closely related to perceived participation whereas decision quality is more closely related to actual participation (Barki and Hartwick 1994).

Based on this previous research, it is proposed that a positive relationship exists between a consumer's perceived level of participation and satisfaction,

H₁₇: An Individual's Level of Participation is Positively Related to The Individual's Satisfaction with the Service Encounter.

MODERATED RELATIONSHIP

The influence of participation on satisfaction is not straightforward. Participation may weaken job satisfaction (Fry and Hellriegel 1987) and actually be counterproductive if the users feel that on previous occasions their input was ignored (McKeen and Guimaraes 1997). User participation may not even be appropriate in all circumstances (Doll and Torkzadeh 1989). In a review of previous research, Ives and Olson (1984) concluded that participation was a “necessary but not sufficient condition for decreasing resistance and increasing acceptance to change” (p.588). In their review, they also noted that the characteristics of the participants were not examined.

In another review, 91 articles on user participation were examined (Cotton et al. 1988) and found mixed results of the relationship between participation and satisfaction. The researchers concluded that certain types of participation affected satisfaction whereas other forms did not. For example, they found that participation in work decisions appeared to increase employee productivity, but did not consistently increase satisfaction. On the other hand, representative participation did not affect productivity, but did increase satisfaction, not so much for the employees but rather for the representatives themselves (Cotton et al. 1988).

One reason for these mixed results may be because the user participation literature is generally silent on why users participate (Doll and Torkzadeh 1989). The Doll and Torkzadeh study indicates when users participate more than what they desire, participation is less effective.

Most research has examined the direct relationship between user participation and satisfaction (e.g., Lawrence and Low 1993). Other studies have included contingency variables in their analysis. McKeen, Guimaraes and Wetherbe (1994) analyzed 151

development projects and concluded that there was a direct relationship between user participation and satisfaction. However, they found that the strength of the relationship was affected by contingency factors. Although they did not study user characteristics, their findings do support the need for an interaction model to explain the participation and satisfaction relationship.

The Cotton et al conclusions were criticized in a meta-analysis review by (Wagner 1994). He concluded that participation had a measurable, but probably not a practical significant, effect on satisfaction. Wagner did concede that under certain favorable conditions, participation might have a greater effect on satisfaction. One possible condition is that the effects of participation on satisfaction might be moderated by personal or situational factors. Wagner proposed that future research needed to be redirected on issues other than the direct linkage between participation and satisfaction. Another common assumption of other studies is that individuals desire to participate. Satisfaction, however, is based in part on an individual's desires (Spreng, MacKenzie and Olshavsky 1996).

Individual differences among users may be the most important factor in the relationship between participation and satisfaction (Doll and Torkzadeh 1989). In their study of MIS users, Doll and Torkzadeh (1989) investigated the impact a discrepancy between a user's desired level of participation and his or her perceived level of participation had on satisfaction. End-user participation frequently is the user working alone, or with other users, using various tools to create a MIS application. The subjects, in the Doll and Torkzadeh study, were users who developed applications for their own

use. This end-user participation is different from what is typically studied because the participation literature normally assumes two parties are involved.

The subjects completed scales measuring their desire for participation, their perceived participation, and their satisfaction with the outcome. Based on their scores on the participation scales, subjects were classified into one of three groups. Results indicate that end-users were substantially more satisfied when they developed applications themselves rather than when working with others. This was in part because the desire to participate was higher for this segment of users than the other segments. The gap between desired and perceived participation was also small. Users in the high deprivation category (i.e., wanted to participate but could not) were the least satisfied. There were no significant differences in satisfaction between the equilibrium and saturated satisfaction scores. Perceived participation was highest among saturated users, slightly above average for the equilibrium group, and lowest in the deprived group.

The Doll and Torkzadeh study supported their three main hypotheses. First, they found that under conditions of equilibrium or moderate deprivation, end-user participation is positively associated with end-user computing satisfaction ($r = .307$). Secondly, their results supported that when deprived of participation, end-user participation is negatively associated with end-user computing satisfaction ($r = -.301$). Lastly, when desired participation is less than perceived participation, end-user participation and end-user computing satisfaction is nonsignificant or negative ($r = -.129$).

These results in a MIS context are clear support for the moderation of the relationship between participation and satisfaction by an individual's desire to participate. In a consumer service encounter, it is clear that there are individual differences in what

consumers want from a service encounter (Surprenant and Solomon 1987). A major determinant of consumer satisfaction is the congruence between the script and consumer expectations. Greater consumer satisfaction may result when the consumer has many personalization options. However, if the array of options requires cognitive effort which is not desired by the consumer, dissatisfaction may occur (Surprenant and Solomon 1987). If the service provider does not offer services which correspond to the needs of the consumer, service failure may result (Langeard et al. 1981).

Therefore, it is proposed that an interaction exists between a consumer's participation orientation and the consumer's level of participation on satisfaction,

H₁₈: Consumer Satisfaction With A High Participatory Service Encounter Will Be Greater For Those Consumers With A High Participation Orientation Than Will Consumer Satisfaction Be For Consumers With A Low Participation Orientation for the same service.

CHAPTER 3 – METHODS

The following section outlines the process for testing the proposed hierarchical (see Figure 1) and moderated (see Figure 2) models. Topics include scale development, experimental manipulation, data collection, and data analysis.

The first study is intended to develop and refine the measures which will be used in the later studies. Once the scales have been properly developed and validated, then the second study is designed to test the hierarchical model of personality. Study 2 is the administration of the measured variables which were developed in Study 1. This will allow the hypotheses pertaining to the hierarchical model to be fully tested. The measure of the situational trait of participation orientation is collected at this time. The responses on this trait are then used in the third study. This last study is an experiment which explores the proposed interaction effects.

STUDY 1

Scale Development

Testing the proposed hierarchical relationships between the various personality traits and service preferences requires several scales to be developed. Additionally, several existing scales (e.g., self-efficacy) need to be revisited and possibly refined. Once these measures have been properly validated, the entire model can be assessed in Study 2.

Measures of the situational and surface traits of participation need to be developed and validated. Initial items for the situational trait of participation orientation were generated from the domain of the construct based on the previously stated definition (see Appendix A). As defined, the situational trait of participation orientation is a two-

dimensional construct. A total of 21 items were generated to represent the decision making responsibility dimension and 16 items representing the dimension of effort.

In Study 1, these items will be administered to college students. The use of college students is preferred in this study because students will later be used in an experimental setting to test the moderated model. Once the models have been supported, additional data collection using a non-student sample can take place to further confirm the results. However this additional testing is beyond the scope of the dissertation. Given that the full hierarchical model has 13 variables, it is expected that a minimum sample size of at least 260 subjects is required. Guiding the eventual sample size is the goal of maintaining a desired ratio of 20 subjects for every measured variable (Hair et al. 1995).

The results from Study 1 will be used to purify the items following Churchill's (1979) prescribed method. Items not meeting a minimum .50 item-to-total correlation will be either revised or eliminated in order to reach an acceptable overall coefficient. Exploratory factor analysis will assess whether the two dimensions of participation orientation have been adequately captured. An analysis of the scree plot and eigenvalues will be used to verify that two dimensions are represented. Items having poor loadings on their expected factor or which significantly cross load on both factors will either be eliminated or revised. Confirmatory factor analysis will subsequently be conducted to verify the proposed items and model. The CFA analysis will also be applied for determining the proper convergent and discriminant validity described later in this section.

During this data collection, the surface traits of participation orientation will also be evaluated. As shown in Appendix A, items have been generated to capture the surface

trait of participation orientation. Because surface traits are category-specific, items for each of the different surface traits to be investigated are listed. Subjects will be assessed on each of the surface traits of weight control, investing, and travel. Analysis similar to what is proposed for the situational trait of participation will be conducted on the surface traits. An obvious exception is that the factor analysis should reveal that the surface traits are unidimensional.

Construct Validity

To determine proper construct validity, three additional scales will be included during the initial data collection: need for activity (Mowen, 2000), need for learning (Mowen, 2000), and a short form of social desirability bias (Crowne and Marlow, 1960).

The need for activity scale is a measure of the compound personality trait of an individual's propensity to be active (see Appendix A). Across a series of five studies, Mowen (2000) reported an average coefficient alpha of .85. The need for activity has been shown to be correlated with an individual's task orientation (Mowen 2000) and with job resourcefulness (Licata, Mowen and Brown 2000). Individuals with a relatively high need to be active are probably likely to focus that need on doing things themselves. While being active can also include directing the efforts of others, it is reasonable to expect a relatively clear association between an individual's need for activity and participation orientation. It is therefore expected that the need for activity should be positively related to an individual's participation orientation.

Partly based on a need for cognition and a need for information, the need to learn taps an individual's intrinsic motivation to acquire new knowledge (see Appendix A). As shown by Mowen (2000), the need for learning partly explains variance in value

consciousness, compulsive buying, and task orientation. Because of the intrinsic motivation aspect of the need for learning, it is proposed to be moderately correlated with participation orientation.

It is conceivable that positive responses for items on the participation orientation scale could be viewed by subjects as socially desirable. To assess this possibility, subjects will also complete a short 10-item version (Fischer and Fick 1993) of the Marlowe-Crowne social desirability scale (see Appendix A). However, subjects who have a low participation orientation are more willing to use surrogates in decision making responsibilities and efforts. As such, there should be a negative relationship between the SD scale and participation orientation.

Autonomy

The autonomy construct is assessed by the Deci & Ryan General Causality Orientation Scale (GCOS) (see Appendix A). This scale is comprised of 12 vignettes and has been widely used (e.g., Williams et al, 1996). Cronbach alpha of 0.75 and a test-retest coefficient of 0.74 over two months have been reported (Deci and Ryan, 1985). The GCOS actually is intended to measure three individual orientations: autonomy, control, and impersonal. In this present study, only the autonomy orientation is of interest. However, if the other two orientations are not included, at least initially, then conclusions drawn from the result may be suspect. Therefore, it is proposed that in Study 1 the entire GCOS is used.

However, because of the use of vignettes, the scale is not very economical. The length of the instrument, especially when used in conjunction with other measures, may cause respondent fatigue. As such, a shorter scale is proposed which only measures an

individual's autonomy orientation. This scale will thus be more parsimonious and specific than the GCOS. A list of 14 potential items were generated based on the items used in the GCOS (see Appendix A).

The new autonomy scale will be subjected to the same examination used for the participation measures. Because the intent is to replace the GCOS, it is proposed that a very strong relationship exists between the two scales. The purpose of developing a new parsimonious autonomy scale is for use in the second study. If the new scale is not acceptable then the original CGOS will be used.

Langeard et al. (1981) and others argued that perceived control was an important determinant of a consumer's choice of services. According to Deci and Ryan (1985), there should be no significant relation between an autonomy orientation measured by the GCOS and locus of control (Rotter 1966). The same finding between locus of control (see Appendix A) and the proposed autonomy measure should also exist with the new measure of autonomy. Hence the locus of control scale will be included for construct validation of the proposed autonomy scale.

Because autonomy is defined in this study as reflective instead of reactive, a measure of reactive autonomy will be included to demonstrate discriminant validity. The autonomy subscale of the Adjective Checklist (ACL) has been used as a measure of reactive autonomy (e.g., Koestner and Losier 1996). The ACL has a total of 300 trait adjectives which represent 16 different motives, including autonomy. Subjects are asked to indicate which adjectives are representative of their own personality. The autonomy subscale consists of 44 items of which 29 are scored positively and 15 are scored

negatively. The sum across the 44 total items represents the subject's reactive autonomy measure (see Appendix A).

ACL reactive autonomy scores have been shown to be unrelated to social desirability, and positively related to openness and extraversion. A significant negative relationship with agreeability has also been found (Koestner and Losier 1996). A moderate positive correlation between reactive autonomy and conscientiousness has also been reported (Cappeliez 1993). These relationships with reactive autonomy are proposed to be evident again in this study.

The Langeard et al study (1981) found a small, but significant effect between the detached dimension of the Compliance, Aggression, and Detached (CAD) scale (Cohen 1967) and a subject's preference for participatory services. A review of the items in the detached dimension (see Appendix A) indicates that this measure is somewhat similar to the definition of reactive autonomy. It is thus expected that the detached dimension of the CAD scale will be positively correlated with reactive autonomy. Including the detached scale will also allow the results of the Langeard et al study to be examined more closely.

Efficacy

Efficacy, the belief that one can perform the required behavior to achieve an outcome, can be measured either at the situational level or at a more general level of abstractness (Bandura 1977). It is important that the individual's perception of his or her ability to perform a behavior, or behaviors, is measured and not the possible outcomes of the behaviors (Maddux, Norton and Stolenberg 1986). Measures will thus be taken of perceived self-efficacy at both the general and situational level.

To measure a general level of self-efficacy, the 13-item measure developed by (Sherer et al. 1982), with a reported alpha of .86, will be used (see Appendix A). This scale was based in part on Rotter's locus of control scale (Rotter 1966). Although it is well established, a shorter, more parsimonious scale is desired. A 4-item scale with an alpha of .72 was reported by Mowen (2000) to measure a general level of efficacy. This particular scale was derived in part from the Sherer et al scale. While the Mowen scale does meet the requirement of parsimony, its lineage to the Rotter locus of control scale is problematic. Locus of control is a measure of the relationship between a means of control and the outcome. Efficacy, as defined by Bandura, deals with the relationship between the agent of behavior and the means of behavior (Skinner, 1996). Because of this distinction, a new general measure of self-efficacy is proposed. Proposed items were generated after reviewing the current literature and existing situational self-efficacy scales (see Appendix A). This scale will be subjected to the same development criteria specified earlier for the other proposed measures. The general measures of self-efficacy should also be discriminant from the autonomy and locus of control scores.

Elemental Traits

The eight elemental traits will be measured using the scales published in Mowen (2000). Listed in Appendix A, each of these scales has been shown to be reliable and valid indicators of the elemental traits. All items are measured on a 1 (Never) to 9 (Always) Likert-type scale. Because of the acceptance in the literature, no additional analyses beyond standard statistical tests are anticipated for these measures.

Dependent Variables

In the hierarchical model, the dependent variables are the service preferences of the subjects. A one-paragraph scenario has been written for each of the situations to be investigated (see Appendix B). After reading the scenario, subjects will be asked to complete two measures of the subject's likelihood of performing the prescribed behavior. Each item is a Likert-type measure on an 11-point scale. The sum of the two items is the subject's likelihood of performing the high participation behavior.

The following scenario is for the situation of weight loss:

You have decided that you need to lose weight. You know that there is a local weight reduction program, similar to Weight Watchers, offered in town. This program provides diet guidelines, daily calorie limits, and meal planning for you. Because of the structure of the plan, you simply need to follow what they tell you to do. Alternatively, you could decide to create your own personal diet by researching nutritional guidelines, recommended calorie levels, and appropriate meals. Presuming cost is not an issue,

How likely is it you will create your own weight loss program?

0 1 2 3 4 5 6 7 8 9 10
Not Likely Very Likely

Which are you more likely to do?

Join Weight Loss Program 0 1 2 3 4 5 6 7 8 9 10 Create own diet

In summary, Study 1 is primarily intended to develop the necessary measures which will be later used to test the hierarchical model of personality. Hierarchical regression will be used on this initial data set to explore the proposed relationships outlined in the model. The dependent variables will be regressed on the corresponding preceding traits for each specified hypothesis. The validated measures will then be used

in the second study. Table 1 is a list of the scales which will be included. Appendix C is the survey instrument itself.

TABLE 1 – SCALES USED

Scale	Author	Purpose (e.g., H1, H17)
Agreeableness	Mowen, 2000	H5, H11, H13
Arousal	Mowen, 2000	H8, H11, H13
Autonomy	Deci and Ryan, 1985	H12, H13,
Autonomy	Proposed	H12, H13,
Autonomy (Reactive)	Koestner and Losier, 1996	Construct Validity
CAD – Detached Dimension	Cohen, 1967	Construct Validity
Conscientiousness	Mowen, 2000	H3, H11, H13
Participation orientation	Proposed	H1→ H10, H12, H14→ H16, H18
Efficacy (General)	Sherer et al, 1982	Construct Validity
Efficacy (General)	Mowen, 2000	Construct Validity
Efficacy (General)	Proposed	H10, H11
Efficacy (Situational)	Proposed	Construct Validity
Extraversion	Mowen, 2000	H4, H11, H13
Involvement	Zaichkowsky, 1985	Construct Validity
Locus of Control	Rotter, 1966	Construct Validity
Materialism	Mowen, 2000	H7, H11, H13
Need for Activity	Mowen, 2000	Construct Validity
Need for Learning	Mowen, 2000	Construct Validity
Neuroticism	Mowen, 2000	H6, H11, H13
Openness	Mowen, 2000	H2, H11, H13
Physical	Mowen, 2000	H9, H11, H13
Social Desirability Bias	Fischer and Fisk, 1993	Construct Validity
Surface Traits	Proposed	H14→ H16

STUDY 2

Test of Models

The first part of the second study will be the collection of the personality traits using the validated scales from the first study. This data will be analyzed to test the hypotheses of the hierarchical model.

The second part of this study involves a 2x2 factorial between subjects design. This experiment (see Table 2) is to assess the proposed hypothesis of moderation (see Figure 2). This model requires subjects to actually participate in an activity. Participation can then be assessed by asking subjects about perceived participation levels and satisfaction. The measure of participation orientation will have been acquired in the first part of this study. The experiment, which manipulates the required amount of participation, is proposed to explore the proposed moderating influence of participation orientation. Manipulation via a controlled experiment will better detect significant effects than would a survey of consumers in a field study.

In this study, the refined measures from Study 1 will be administered at the beginning of the semester to students. Similar to the first study, it is anticipated that a minimum sample size of 260 students is required to fully test the hierarchical model. The second part of the study requires 40 subjects for each of the two experimental groups. The experiment manipulates the required participation for each group. The experiment will be pre-tested on a small group of subjects before it is used in the second study.

Required Participation	Participation Orientation	
	High	Low
High		
Low		

With research in general, student populations tend to be criticized for not being relevant. In this particular case, there are two problems with using a non-student population. First, having access to the same sample over time could be problematic. Subjects need to complete the personality trait survey and then participate in the

experiment. Secondly, because the sample is required to actually participate in a randomly assigned condition, a simple mall-intercept is not acceptable.

The use of a student sample is acceptable when the concept being tested is relevant to the student sample (Calder, Phillips and Tybout 1982). The challenge is creating a realistic setting for a student where participation levels can be manipulated. For the typical college student, registering for courses is very relevant. At this stage of this research, it is more important that evidence supporting the hypothesis is discovered than is the generalizability of the results. Later research, beyond this dissertation, can explore the issue of external validity more thoroughly.

Every semester college students must register for classes for the following semester until they are graduated. If scheduling is not handled carefully, a student may not be able to get a desired course, or worse, not be graduated on time. Because of the importance and the familiarity with the general process, course registration is chosen as the setting for an experiment.

The intent of the experiment is to have two groups which differ only in terms of the decision making participation required to register for classes. Because participation orientation is hypothesized to include the dimensions of decision making responsibility and effort, the experiment is designed to hold effort constant. The rationale for this is to better explain the results while minimizing potential confounds. A later experiment could manipulate the dimension of effort and hold decision making constant. Manipulation checks for both dimensions are included.

Students will be randomly assigned a scenario (see Appendix R) concerning a possible new course registration system. In the guise of researching a possible new course

registration system, subjects will receive a memo from a fictional individual in the Office of the Registrar. The importance and advantages of the possible new system are explained. One feature of the new system is long-range scheduling which means a student's schedule can be determined for several years in advance.

After reading a one-page description of the proposed system, students will be asked to imagine that they just used the system. In the high participation scenario, a student would be required to make all necessary decisions regarding the student's long-range schedule. The low participation scenario has a career counselor deciding the schedule on the student's behalf. Measures of satisfaction, perceived participation, and involvement are then administered.

In the beginning of the semester students will complete all of the personality trait measures and the dependent variables in the proposed hierarchical model. This data collection includes the situational and surface trait measures of participation orientation. Measures of involvement for the various surface traits will be included as well. The responses to the measures of participation orientation are necessary to test the interaction model. Approximately a month later, students will be randomly assigned to either a high participation group or a low participation group. Each subject will complete the scenario for the assigned group. The results from the earlier personality measure will then be matched to the results of the experiment for analysis.

The perceived level of participation on each dimension will serve as a manipulation check. Presumably a subject assigned into the high participation group will perceive higher levels of participation than will subjects assigned into the low participation group.

Involvement

Although previous studies (Barki and Hartwick 1994) have found only a small correlation between involvement and participation, it seems logical that the more important a service is to a consumer (i.e., high involvement), the more likely that a consumer will do what is necessary (i.e., participate) to ensure success. Furthermore, variables such as personal involvement have been suggested as possible influencers (Surprenant and Solomon 1987). As a control variable, a measure on situational involvement will be administered to the subjects. A four-item semantic differential measure based on (Zaichkowsky 1985) has been generated to measure situational involvement for each surface trait (see Appendix A).

Tests of Hypotheses

After the constructs have been properly refined and validated using structural equation modeling (SEM), path analysis will be used to analyze the data. Table 3 is a list of the hypotheses which will be tested in this study.

Analysis will be done to test both the proposed hypotheses which address the relationship between participation and satisfaction. First, if higher levels of participation do increase satisfaction, then the subjects in the high participation group should be more satisfied than will the subjects in the low participation group. Secondly, if a subject's participation orientation moderates the relationship between perceived participation and satisfaction, then a moderated (participation x desired participation) regression analysis should reveal this effect. Dummy coding of the participation treatment will be included.

TABLE 3 – SUMMARY OF HYPOTHESES

- H₁: Participation is a two-dimensional construct of consumer contribution to the service encounter.
- H₂: Individuals with a Higher Level of Openness will have a Greater Participation Orientation than will Individuals with a Lower Level of Openness.
- H₃: Individuals with a Higher Level of Conscientiousness will have a Greater Participation Orientation than will Individuals with a Lower Level of Conscientiousness.
- H₄: Individuals with a Lower Level of Introversion will have a Greater Participation Orientation than will Individuals with a Higher Level of Introversion.
- H₅: Individuals with a Lower Level of Agreeability will have a Greater Participation Orientation than will Individuals with a Higher Level of Agreeability.
- H₆: Individuals with a Higher Level of Neuroticism will have a Lower Participation Orientation than will Individuals with a Greater Level of Neuroticism.
- H₇: Individuals with a Higher Level of Materialism will have a Higher Participation Orientation than will Individuals with a Lower Level of Materialism.
- H₈: Individuals with a Higher Level of Arousal will have a Greater Participation Orientation than will Individuals with a Lower Level of Arousal.
- H₉: Individuals with a Higher Level of Physical Needs will have a Greater Participation Orientation than will Individuals with a Lower Level of Physical Needs.
- H₁₀: Individuals with a Higher Level of Self-Efficacy will have a Greater Participation Orientation than will Individuals with a Lower Level of Self-Efficacy.
- H_{11A}: The elemental traits of Openness, Conscientiousness, Extraversion, Agreeability, Arousal, and Physical Needs are proposed to be significant positive predictors of self-efficacy.
- H_{11B}: The elemental trait of Neuroticism is proposed to be significant negative predictor of self-efficacy.
- H₁₂: Individuals with a Higher Level of Autonomy will have a Greater Participation Orientation than will Individuals with a Lower Level of Autonomy.
- H_{13A}: The elemental traits of Conscientiousness, Neuroticism, and Arousal are proposed to be significant positive predictors of autonomy.
- H_{13B}: The elemental traits of Openness, Extraversion, and Agreeability are proposed to be significant negative predictors of autonomy.
- H_{14A}: An Individual's Level of Participation Orientation will be positively related to the Individual's Diet Participation Orientation.
- H_{14B}: An Individual's Level of Diet Participation Orientation will be positively related to the Individual's preference for making their own weight loss program as opposed to choosing an formal weight loss program.
- H_{15A}: An Individual's Level of Participation orientation will be positively related to the Individual's Travel Participation Orientation.
- H_{15B}: An Individual's Level of Travel Participation Orientation will be positively related to the Individual's preference for making his or her own travel arrangements as opposed to preferring the services of a travel agent.
- H_{16A}: An Individual's Level of Participation Orientation will be positively related to the Individual's Investing Participation Orientation.
- H_{16B}: An Individual's Level of Investing Participation Orientation will be positively related to the Individual's preference for making his or her own investments as opposed to choosing a financial advisor.
- H₁₇: An Individual's Level of Participation is Positively Related to The Individual's Satisfaction with the Service Encounter.
- H₁₈: Consumer Satisfaction With A High Participatory Service Encounter Will Be Greater For Those Consumers With A High Participation Orientation Than Will Consumer Satisfaction Be For Consumers With A Low Participation Orientation for the same service.

Lastly, because satisfaction is assessed against the subject's own participation, the outcome, and the service provider, analysis can be done to determine if these are separate facets of overall satisfaction. If so, then conclusions can be inferred about the necessity to measure consumers' satisfaction with their own participation.

CHAPTER 4 - RESULTS

A review of the data for possible influential cases resulted in eight cases (4% of the sample) from being eliminated from further analysis. Standards employed in the review were well established and include an analysis of DF Beta's, centered leverage scores, and studentized deleted residuals (Cook and Weisberg 1982).

PATH ANALYSIS

Because evidence did not support Hypothesis 1 (see Appendix G) that Participation Orientation is a two-dimensional construct, the remaining hypotheses were tested with both decision making orientation and effort orientation as separate constructs. These two elements of participation were allowed to correlate in the path analysis. The surface level traits (e.g., investing decision making orientation and investing effort orientation) were also treated as separate constructs to be consistent with the operationalization of the corresponding situation traits (i.e., decision making orientation and effort orientation). These traits were also allowed to correlate. As shown in Table 4, the correlations between the appropriate pairs ranged from .12 to .69 indicating further analysis should be done. All the correlations listed were significant except between the diet surface traits.

TABLE 4 – CORRELATIONS AMONG PARTICIPATION TRAITS

	Correlation
Decision Making \leftrightarrow Effort	.273
Diet Decision Making \leftrightarrow Diet Effort	.122
Investing Decision Making \leftrightarrow Investing Effort	.694
Travel Decision Making \leftrightarrow Travel Effort	.285

To test the proposed relationships, path analysis was done in LISREL 8.3. This method provides more detailed results, such as model and incremental fit indices, than does regression. Index scores were calculated for each construct of interest and a covariance matrix was created from the reduced data set (i.e., minus influential cases).

The results for each service scenario are similar for the general traits (e.g., decision making) but differ for the more concrete traits. The analysis does indicate varying results across the service scenarios. The general results are presented first followed by a breakdown of the service preference outcomes.

Overall Model

Models were created for each of the three service preference scenarios (i.e., diet, investing, travel). Figures 4 – 6 outline the results of the path analysis for each service scenario. Tables 5 and 6 present the results for each individual hypothesis. Fit indices were similar for the three different service scenarios. The diet scenario had the poorest fit (see Table 6) with GFI, CFI, and NNFI indices all below .90. The diet model also had the highest χ^2 (196.65, 36 df). The investing and travel models had improved indices but overall model fit still did not meet normally accepted standards. The RMSEA for all three models was also poor (.12 – .15). These results suggest that a better fitting model may be possible.

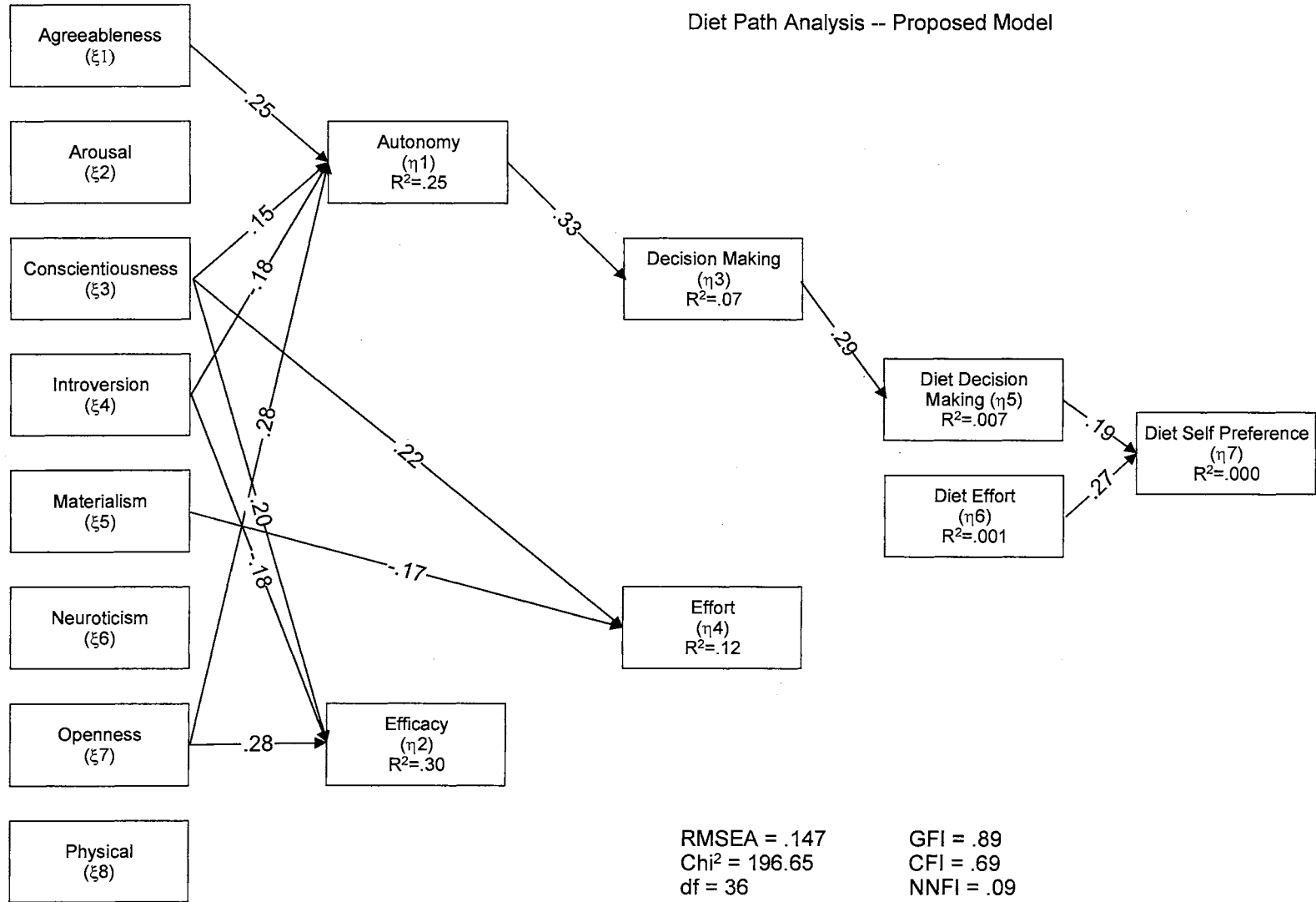


Figure 4 – Fully Mediated Diet Path Analysis

Investing Path Analysis -- Proposed Model

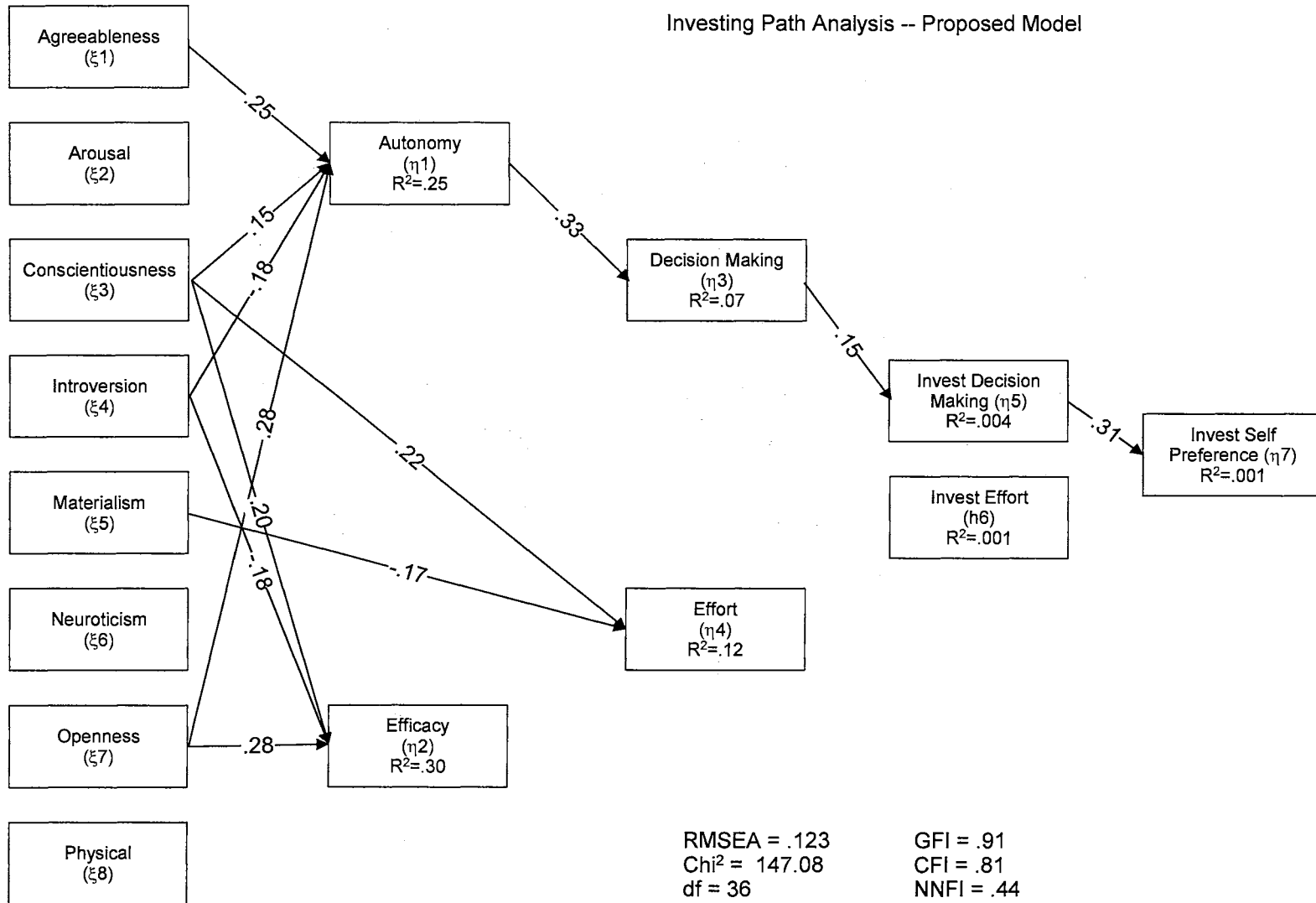


Figure 5 – Fully Mediated Investing Path Analysis

Figure 6 – Fully Mediated Travel Path Analysis

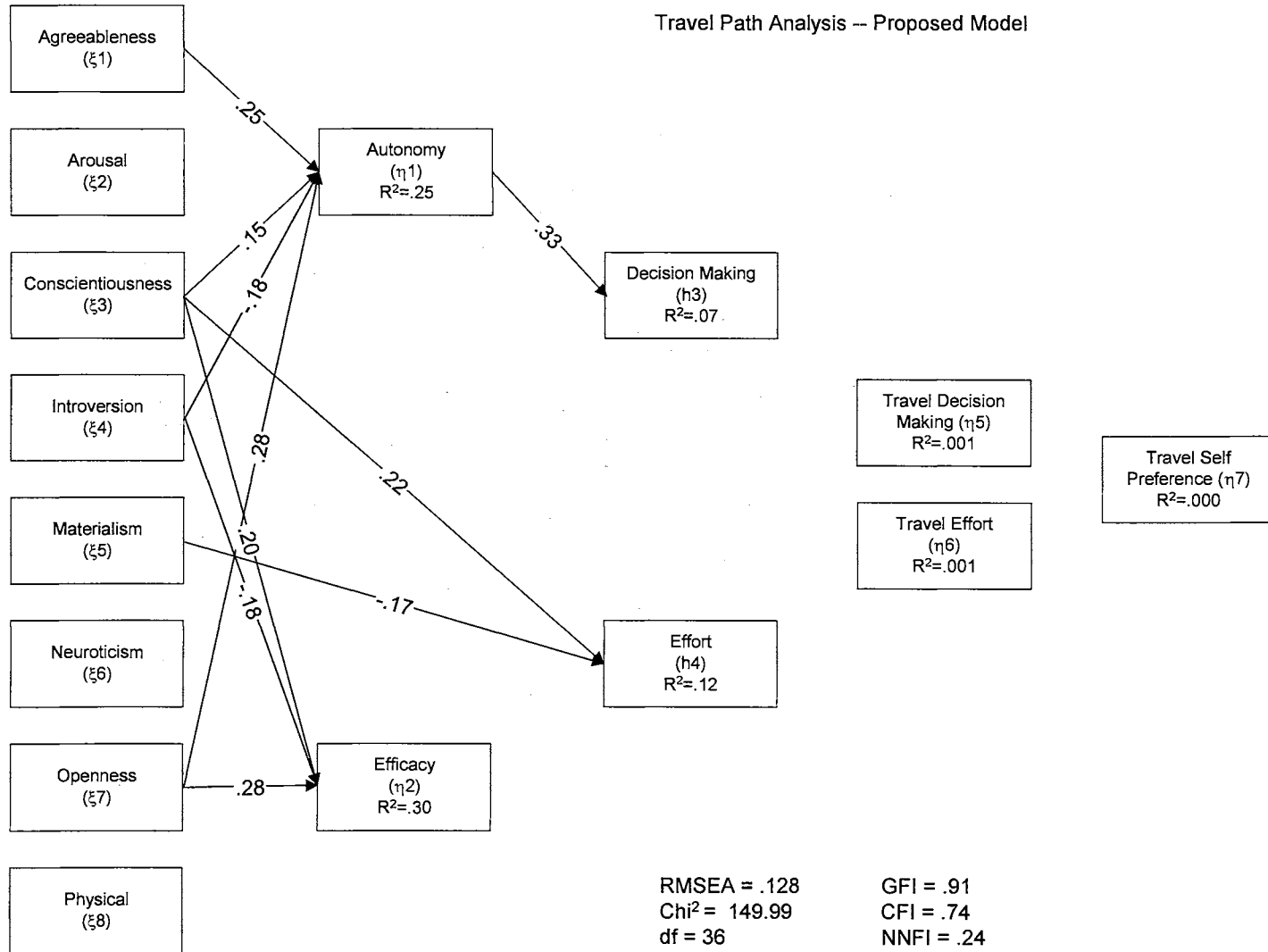


TABLE 5 – PATH ANALYSIS OF PROPOSED MODELS
Common Paths

Path	Completely Standardized Estimate	t-value	Hypothesis	Results
$\gamma_{1,1}$ Agreeableness → Autonomy	.25	3.52	H _{13B}	Partially Supported
$\gamma_{1,2}$ Arousal → Autonomy	-.01	-.07	H _{13A}	Not Supported
$\gamma_{1,3}$ Conscientiousness → Autonomy	.15	2.17	H _{13A}	Supported
$\gamma_{1,4}$ Introversion → Autonomy	-.18	-2.46	H _{13B}	Supported
$\gamma_{1,6}$ Neuroticism → Autonomy	-.05	-.66	H _{13A}	Not Supported
$\gamma_{1,7}$ Openness → Autonomy	.28	3.74	H _{13B}	Partially Supported
$\gamma_{2,1}$ Agreeableness → Efficacy	.10	1.45	H _{11A}	Not Supported
$\gamma_{2,8}$ Arousal → Efficacy	.15	1.93	H _{11A}	Not Supported
$\gamma_{2,3}$ Conscientiousness → Efficacy	.20	2.92	H _{11A}	Supported
$\gamma_{2,4}$ Introversion → Efficacy	-.18	-2.61	H _{11A}	Supported
$\gamma_{2,6}$ Neuroticism → Efficacy	-.07	-1.04	H _{11B}	Not Supported
$\gamma_{2,7}$ Openness → Efficacy	.28	3.88	H _{11A}	Supported
$\gamma_{2,8}$ Physical → Efficacy	-.04	-.51	H _{11A}	Not Supported
$\gamma_{3,1}$ Agreeableness → Decision Making	.03	.34	H _{5A}	Not Supported
$\gamma_{3,2}$ Arousal → Decision Making	-.07	-.79	H _{8A}	Not Supported
$\gamma_{3,3}$ Conscientiousness → Decision Making	.03	.42	H _{3A}	Not Supported
$\gamma_{3,4}$ Introversion → Decision Making	.03	.34	H _{4A}	Not Supported
$\gamma_{3,5}$ Materialism → Decision Making	.11	1.48	H _{7A}	Not Supported
$\gamma_{3,6}$ Neuroticism → Decision Making	.04	.51	H _{6A}	Not Supported
$\gamma_{3,7}$ Openness → Decision Making	-.04	-.47	H _{2A}	Not Supported
$\gamma_{3,8}$ Physical → Decision Making	.06	.81	H _{9A}	Not Supported
$\beta_{3,1}$ Autonomy → Decision Making	.33	4.11	H _{12A}	Supported
$\beta_{3,2}$ Efficacy → Decision Making	.14	1.69	H _{10A}	Not Supported
$\gamma_{4,1}$ Agreeableness → Effort	.05	.66	H _{5B}	Not Supported
$\gamma_{4,2}$ Arousal → Effort	.01	.13	H _{8B}	Not Supported
$\gamma_{4,3}$ Conscientiousness → Effort	.22	2.83	H _{3B}	Supported
$\gamma_{4,4}$ Introversion → Effort	.08	1.04	H _{4B}	Not Supported
$\gamma_{4,5}$ Materialism → Effort	-.17	-2.30	H _{7B}	Partially Supported
$\gamma_{4,6}$ Neuroticism → Effort	.01	.10	H _{6B}	Not Supported
$\gamma_{4,7}$ Openness → Effort	-.09	-1.01	H _{2B}	Not Supported
$\gamma_{4,8}$ Physical → Effort	.09	1.16	H _{9B}	Not Supported
$\beta_{4,1}$ Autonomy → Effort	.16	1.93	H _{12B}	Not Supported
$\beta_{4,2}$ Efficacy → Effort	.09	1.04	H _{10B}	Not Supported

Boldface is significant at <.05 (t-value ≥ 1.96)

TABLE 6 – PATH ANALYSIS FOR SERVICE PREFERENCE SCENARIOS

Diet Scenario

Path		Completely Standardized Estimate	t-value	Hypothesis	Results
$\beta_{5,3}$	Decision Making → Diet Decision Making	.29	3.86	H _{14A}	Supported
$\beta_{5,4}$	Effort → Diet Decision Making	.03	.40	H _{14A}	Not Supported
$\beta_{6,3}$	Decision Making → Diet Effort	-.09	-1.20	H _{14A}	Not Supported
$\beta_{6,4}$	Effort → Diet Effort	.11	1.38	H _{14A}	Not Supported
$\beta_{7,5}$	Diet Decision Making → Self Service Preference	.19	2.73	H _{14B}	Supported
$\beta_{7,6}$	Diet Effort → Self Service Preference	.27	3.85	H _{14B}	Supported
Fit Indices					
RMSEA	.147	GFI	.888	CFI	.689
Chi ²	196.646	NNFI	.093	df	36

Investing Scenario

$\beta_{5,3}$	Decision Making → Investing Decision Making	.15	2.01	H _{15A}	Supported
$\beta_{5,4}$	Effort → Investing Decision Making	.11	1.38	H _{15A}	Not Supported
$\beta_{6,3}$	Decision Making → Investing Effort	.07	.95	H _{15A}	Not Supported
$\beta_{6,4}$	Effort → Investing Effort	.07	.88	H _{15A}	Not Supported
$\beta_{7,5}$	Investing Decision Making → Self Service Preference	.31	3.30	H _{15B}	Supported
$\beta_{7,6}$	Investing Effort → Self Service Preference	.12	1.30	H _{15B}	Not Supported
Fit Indices					
RMSEA	.123	GFI	.913	CFI	.807
Chi ²	147.075	NNFI	.438	df	36

Travel Scenario

$\beta_{5,3}$	Decision Making → Travel Decision Making	.07	.86	H _{16A}	Not Supported
$\beta_{5,4}$	Effort → Travel Decision Making	.03	.40	H _{16A}	Not Supported
$\beta_{6,3}$	Decision Making → Travel Effort	.14	1.86	H _{16A}	Not Supported
$\beta_{6,4}$	Effort → Travel Effort	-.01	-.14	H _{16A}	Not Supported
$\beta_{7,5}$	Travel Decision Making → Self Service Preference	.11	1.36	H _{16B}	Not Supported
$\beta_{7,6}$	Travel Effort → Self Service Preference	.05	.68	H _{16B}	Not Supported
Fit Indices					
RMSEA	.128	GFI	.908	CFI	.740
Chi ²	149.988	NNFI	.241	df	36

Boldface is significant at <.05 (t-value ≥ 1.96)

Autonomy

Only three of the six predicted paths from the elemental traits to autonomy were supported. These predictors resulted in a squared multiple correlation for autonomy of .25. Paths from arousal, conscientiousness, or neuroticism were not significant.

Among the significant paths, only introversion ($\gamma_{1,4} = -.18$; $t = -2.46$) had an effect similar to what was predicted. Agreeableness ($\gamma_{1,1} = .25$; $t = 3.52$) and openness ($\gamma_{1,7} = .28$; $t = 3.74$) were positively related to autonomy contrary to the original prediction. This reversal of predicted effects for agreeability and openness is contrary to previous research (Koestner & Losier 1996) which suggested otherwise.

Agreeability measures an external focus (e.g., “Kind to others”) whereas autonomy has a greater internal focus (e.g., “I generally like new challenges even if they make me slightly nervous”).

There is some logic in understanding why someone high in openness would view autonomy positively. Openness has a strong element of creativity and newness which corresponds to the acceptance of challenges measured by autonomy.

General Self-Efficacy

Similar to the results discussed for autonomy, only three of the seven predicted paths were significant between the elemental traits and general efficacy. However, all paths were in the direction as predicted. The resulting R^2 was .30. Conscientiousness ($\gamma_{2,3} = .20$; $t = 2.92$), introversion ($\gamma_{2,4} = -.18$; $t = -2.61$), and openness ($\gamma_{2,7} = .28$; $t = 3.88$) were significant. These results indicate that an individual with higher levels of conscientiousness and openness are more likely to believe in their own abilities (i.e., efficacy). Introverts are less likely to share that confidence.

Participation Orientation

As the figures detail, none of the predicted paths between the traits and decision making were significant except for autonomy ($\beta_{3,1}=.33$; $t=4.11$), with an R^2 of .07. The paths from conscientiousness ($\gamma_{4,3}=.22$; $t=2.83$) and materialism ($\gamma_{4,5}=-.17$; $t=-2.30$) were the only two of the ten hypothesized paths significant in predicting effort. While conscientiousness was positively related to effort, materialism was unexpectedly negative. One possible conclusion is that individuals high in materialism may view others who do things on their behalf as a possession. If true, then a negative relationship is understandable between materialism and effort.

Surface Traits

The results among the different service scenarios were mixed. The relationship between decision making and surface-level decision making was supported in both the diet ($\beta_{5,3}=.29$; $t=3.86$) and investing ($\beta_{5,3}=.15$; $t=2.01$) scenarios. The path from decision making to the surface traits of effort was not significant. No paths were significant from effort to either surface-level effort or surface-level decision making in any of the scenarios. Table 6 lists the results of the hypotheses tested.

Self-Service Preference

The path from the surface trait of decision making to the self-service preference was supported in the diet and investing scenarios (minimum $t=2.73$). The trait of surface effort ($\beta_{7,6}=.27$; $t=3.85$) also predicted self service preference in the diet scenario.

The most unusual, and inexplicable finding was the nonexistent variance explained ($R^2 \leq .01$) for each of the surface traits and dependent variables in the three models. This is in spite of significant paths between surface decision making and surface

effort and the self service preference in both the diet and investing scenarios. The lack of explained variance likely indicates that the model is misspecified and additional analysis is required.

The results for the hypotheses are presented in Table 6. As was discussed, evidence for most hypotheses was not found. These poor results indicate further analysis and research are needed.

ALTERNATE MODEL

To investigate alternate models a fully saturated model for each service preference scenario was estimated. Direct paths were added to each subsequent lower level in the hierarchy. Based on a review of the modification indices a direct path was also added from general efficacy to autonomy. The models for each service scenario were fully saturated.

Autonomy

The addition of direct paths from materialism, physical needs, and efficacy to autonomy produced unexpected results. Beside the expected increase in R^2 , the needs for openness ($\gamma_{1,7}=.12$; $t=1.87$) and introversion ($\gamma_{1,4}=-.07$; $t=-1.16$) were no longer significant. Evidently the effects of these traits are mediated through materialism ($\gamma_{1,5}=-.14$; $t=-2.52$) and efficacy ($\beta_{1,2}=.58$; $t=9.28$). Physical needs was not a significant predictor.

The impact of efficacy on autonomy is understandable in that people who have confidence in their ability may be more willing to work with others and enjoy challenging work (i.e., autonomy). The negative influence of materialism is reasonable because

autonomy deals with intrinsic motives whereas materialism is focused on extrinsic rewards.

General Efficacy

Adding paths from materialism ($\gamma_{2,5} = -.18$; $t = -2.76$) and physical needs ($\gamma_{8,2} = -.03$; $t = -.46$) to efficacy also produced surprising results. The three paths which were significant before (i.e., conscientiousness, introversion, and openness) remained significant. However the previously insignificant path from arousal is now significant ($\gamma_{2,8} = .19$; $t = 2.48$). The R^2 improved to .33 in this model.

The results show that individuals with higher levels of arousal, conscientiousness, and openness have greater self-confidence in their own abilities. The negative relationship between materialism and general self-efficacy, similar to that between materialism and autonomy, may be based on the importance individuals place on the extrinsic (“Enjoy owning luxurious things”) versus the intrinsic (“I am confident in my abilities”).

Participation Orientation

Similar to the original model, the only significant path to decision making was from autonomy ($\beta_{3,1} = .32$; $t = 3.25$). The R^2 decreased slightly to .06 in this model from the originally proposed model (.07). There were no changes in the paths predicting effort from the original model but the R^2 , as expected, improved to .14.

Surface Decision Making

As listed in Table 7, the results for the surface traits in the three different service scenarios were varied. Only general efficacy was significant in more than one (diet and investing) surface decision making scenario. It is reasonable to expect that efficacy is significantly related to decision making at the surface level. Greater confidence should lead to a greater preference to make decisions. However, the lack of significance of general efficacy in the travel setting ($\beta_{5,2}=.16$; $t=1.53$) may mean that either subjects do not believe making travel decisions are difficult or that a more specific measure of travel efficacy is necessary.

Efficacy ($\beta_{5,2}=.20$; $t=2.05$), physical needs ($\gamma_{5,8}=.26$; $t=3.33$), and decision making ($\beta_{5,3}=.21$; $t=2.77$) were significant in predicting the surface trait of diet decision making. The significance of physical needs in this setting is understandable because of the physical nature of dieting. It is surprising that decision making only predicts the surface decision making in the diet scenario. The lack of significance in the other scenarios may be explained by an efficacy component of the surface decision making items. For example, the item "Investment decisions are easy for me to make" may imply that decisions are easy only if the subject feels that he/she has the confidence in his or her ability in a particular domain (i.e., investing). One possible explanation why the path from decision making to surface decision making was significant in the diet scenario may be a result of greater experience with dieting than with either investing or travel. However, subjects indicated that they actually had more experience with traveling (mean = 5.96) than with dieting (mean = 4.01) or with investing (mean = 3.44).

TABLE 7 –STRUCTURAL PATH ANALYSIS OF SATURATED MODEL

Path		Diet		Investing		Travel	
		Std. Path	t-value	Std. Path	t-value	Std. Path	t-value
Agreeableness → Surface DecMake	γ5,1	.05	.72	-.04	-.48	-.05	-.64
Arousal → Surface DecMake	γ5,2	-.03	-.36	.02	.17	.05	.59
Conscientiousness → Surface DecMake	γ5,3	-.07	-.85	-.17	-2.08	.04	.55
Introversion → Surface DecMake	γ5,4	.04	.53	.17	2.16	.08	.95
Materialism → Surface DecMake	γ5,5	.01	.18	.13	1.62	.12	1.55
Neuroticism → Surface DecMake	γ5,6	-.03	-.38	.07	.99	-.05	-.60
Openness → Surface DecMake	γ5,7	.09	1.13	.11	1.27	.19	2.19
Physical → Surface DecMake	γ5,8	.26	3.33	.04	.52	-.11	-1.37
Efficacy → Surface DecMake	β5,2	.20	2.05	.24	2.28	.16	1.53
Autonomy → Surface DecMake	β5,1	-.02	-.20	-.04	-.38	-.02	-.19
Decision Making → Surface DecMake	β5,3	.21	2.77	.10	1.26	.00	.01
Effort → Surface DecMake	β5,4	-.02	-.32	.12	1.55	.03	.31
Agreeableness → Surface Effort	γ6,1	.02	.33	-.11	-1.34	.12	1.49
Arousal → Surface Effort	γ6,2	-.29	-3.45	.07	.81	.08	.90
Conscientiousness → Surface Effort	γ6,3	-.06	-.83	-.11	-1.33	.16	1.96
Introversion → Surface Effort	γ6,4	-.04	-.54	.12	1.51	-.01	-.07
Materialism → Surface Effort	γ6,5	.03	.41	.18	2.25	.04	.54
Neuroticism → Surface Effort	γ6,6	.14	2.02	-.09	-1.16	-.06	-.81
Openness → Surface Effort	γ6,7	.13	1.57	-.05	-.59	.12	1.37
Physical → Surface Effort	γ6,8	.51	6.87	.03	.30	-.03	-.35
Efficacy → Surface Effort	β6,2	.03	.28	.29	2.76	-.06	-.52
Autonomy → Surface Effort	β6,1	-.05	-.49	-.05	-.50	.03	.28
Decision Making → Surface Effort	β6,3	-.13	-1.75	.02	.31	.10	1.19
Effort → Surface Effort	β6,4	.08	1.08	.09	1.16	-.06	-.74
Agreeableness → Self Preference	γ7,1	-.14	-1.82	-.02	-.27	-.09	-1.07
Arousal → Self Preference	γ7,2	.13	1.52	.01	.11	-.02	-.22
Conscientiousness → Self Preference	γ7,3	-.05	-.66	-.15	-2.00	-.21	-2.57
Introversion → Self Preference	γ7,4	-.05	-.60	.01	.15	-.04	-.54
Materialism → Self Preference	γ7,5	-.13	-1.75	-.15	-2.00	-.17	-2.15
Neuroticism → Self Preference	γ7,6	-.06	-.91	.12	1.74	.07	.91
Openness → Self Preference	γ7,7	-.08	-.93	.13	1.58	.02	.20
Physical → Self Preference	γ7,8	.09	1.00	.02	.21	-.01	-.12
Efficacy → Self Preference	β7,2	.09	.92	.03	.34	.17	1.64
Autonomy → Self Preference	β7,1	-.13	-1.30	-.16	-1.63	-.09	-.84
Decision Making → Self Preference	β7,3	.08	1.02	.06	.77	.05	.68
Effort → Self Preference	β7,4	.16	2.19	.01	.14	.08	1.02
Surface Decision Making → Self Preference	β7,5	.15	2.06	.26	2.69	.11	1.40
Surface Effort → Self Preferences	β7,6	.26	3.41	.18	1.83	.11	1.48

Boldface is significant at <.05 (t-value ≥1.96)

In addition to general efficacy, conscientiousness and introversion were significant predictors of investing decision making. The negative path from conscientiousness ($t = -2.08$) to investing decision making may indicate that investment decisions are not considered as being organized and precise (i.e., conscientious). Perhaps the inherent unpredictability of many investments may be uncomfortable for conscientious individuals. The positive path from introversion ($t = 2.16$) suggests that an introverted individual may view his or her investments as private and confidential and are reluctant to have others involved.

Openness ($\gamma_{5,7} = .19$; $t = 2.19$) was the only trait to have a significant effect on surface decision making in the travel scenario. Openness was not significant in the other settings. A possible explanation is that travel may invoke thoughts of exploration which may appeal to people who are open to new ideas and adventures (i.e., greater openness).

Surface Effort

General efficacy was significant only in predicting investing effort ($\beta_{6,2} = .29$; $t = 2.76$). This may be because investing is seen as needing greater skill than the other domains. Also, subjects reported the least amount of personal experience (mean = 3.44) with investing. Materialism ($t = 2.25$) was also a significant predictor of investing effort. Investing may be viewed as a means to acquiring possessions (i.e., materialism) which would explain the relationship.

Arousal ($\gamma_{6,2} = -.29$; $t = -3.45$), neuroticism ($\gamma_{6,6} = .14$; $t = 2.02$), and physical needs ($\gamma_{6,8} = .51$; $t = 6.87$) were significant predictors of diet effort. As with surface decision making, the significance of physical needs is understandable given the overt connection between diets and physical needs. The negative relationship between arousal and diet

effort is similar to the results reported by Mowen (2000) in a study of healthy diet lifestyles. Individuals high in arousal may view dieting as a form of sensory deprivation which would explain the negative relationship.

The only significant predictor of travel effort was conscientiousness ($\gamma_{6,3}=.16$; $t=1.96$). It follows that an individual concerned with organization and efficiency would be more likely to put forth effort in a domain that typically involves an itinerary and planning.

Self-Service Preference

The trait of surface decision making predicted self-service preferences in the dieting ($\beta_{7,5}=.15$; $t=2.06$) and investing ($\beta_{7,5}=.26$; $t=2.69$) scenarios. The absence of significance in the travel scenario is surprising because subjects indicated greater frequency of making their own travel arrangements (mean = 4.73) than diets (mean = 1.54) or investments (mean = 3.74). Perhaps the higher experience level suggests that less perceived effort or decision making is required.

Effort ($\beta_{7,4}=.16$; $t=2.19$) and diet effort ($\beta_{7,6}=.26$; $t=3.41$) were significant in predicting a diet self-service preference. The surprise here is that surface effort did not fully mediate the effects of effort. However the physical nature of the situational trait of effort corresponds with the physical aspects of dieting.

Conscientiousness ($\gamma_{7,3}=-.15$; $t=-2.00$), materialism ($\gamma_{7,5}=-.15$; $t=-2.00$), and investing decision making ($\beta_{7,5}=.26$; $t=2.69$) significantly predicted investing self preference. The interesting finding here is that unlike predicting investing effort, materialism has a negative effect on investing self preference. One possible explanation is that both the investment advisor and investing effort may be viewed as luxury items.

The investing effort results in knowledge which is an information resource which can be collected like any other resource. Having an investment advisor may be a social resource (Bristow and Mowen 1998) that also can be accumulated.

Conscientiousness ($\gamma_{7,3} = -.21$; $t = -2.57$) and materialism ($\gamma_{7,5} = -.17$; $t = -2.15$) are also negative predictors of travel self preference. The negative impact of conscientiousness is opposite its effect on investing effort. The more precise and orderly an individual is the greater the likelihood he or she is to engage in travel effort but less likely to make his or her own travel arrangements. Similar to the negative path from conscientiousness to decision making, the actual making of travel arrangements may be viewed as being inefficient.

The negative relationship between materialism and travel self preference may be for similar reasons as with investing. A travel agent (i.e., not doing it yourself) may be viewed by materialistic individuals as a possession as would an investment advisor.

TRIMMED MODELS

Non-significant paths (< 1.645) were trimmed from the fully saturated model and the models were re-estimated (see Figures 7 – 9). A review of each figure shows that the fit indices improved from the original model in all three service scenarios.

Trimming non-significant paths from the fully saturated model caused several previously significant relationships to disappear. In the diet scenario, decision making no longer affected diet effort ($\beta_{6,3}$; $t = -1.61$) nor did materialism ($\gamma_{7,5}$; $t = -1.25$) affect self-service dieting. The effects of conscientiousness on investment decision making ($\gamma_{7,3}$; $t = -.40$) and the effects of materialism on investment self service ($\gamma_{7,5}$; $t = -1.60$) were also no longer significant.

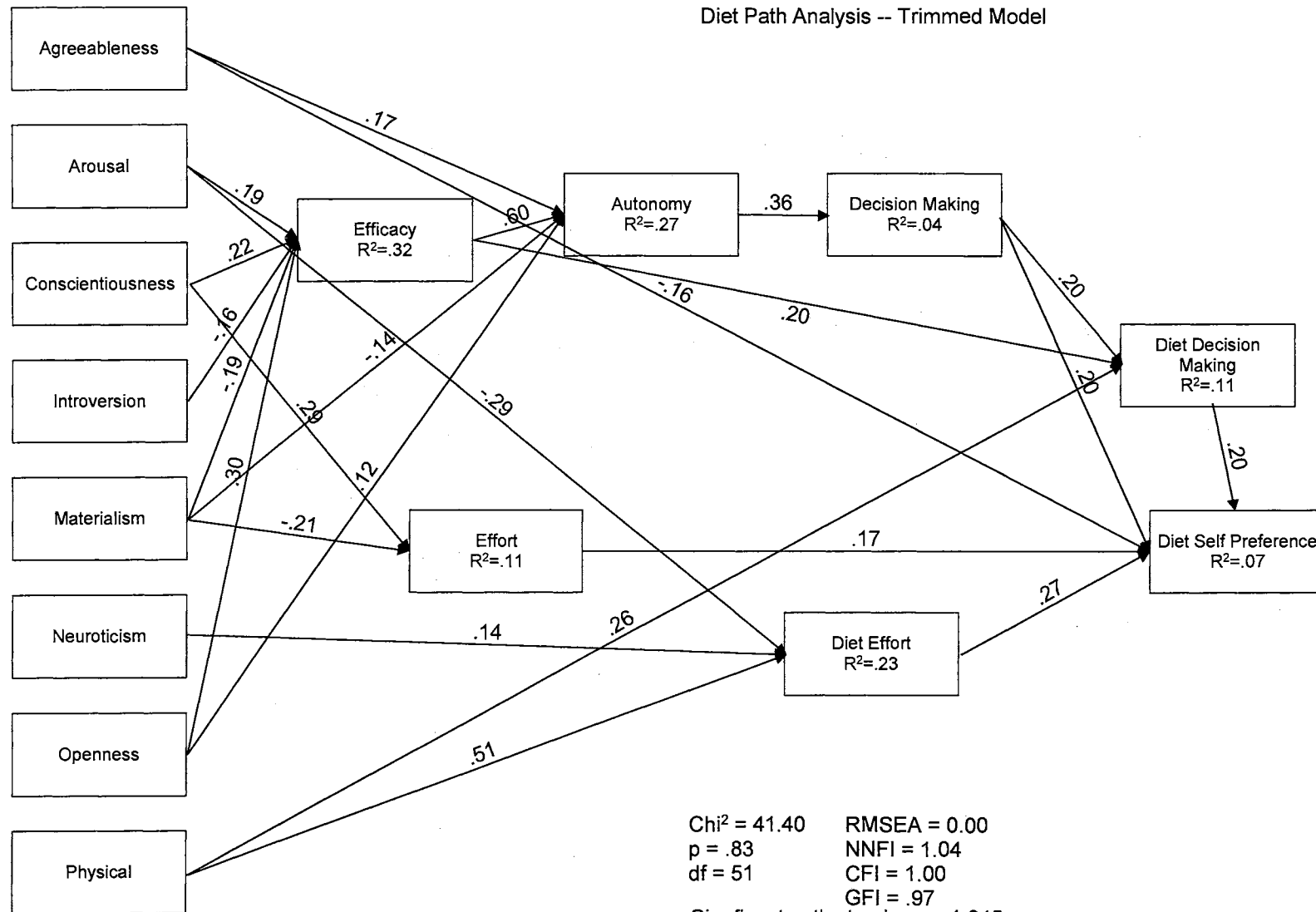


Figure 7 – Trimmed Diet Path Analysis

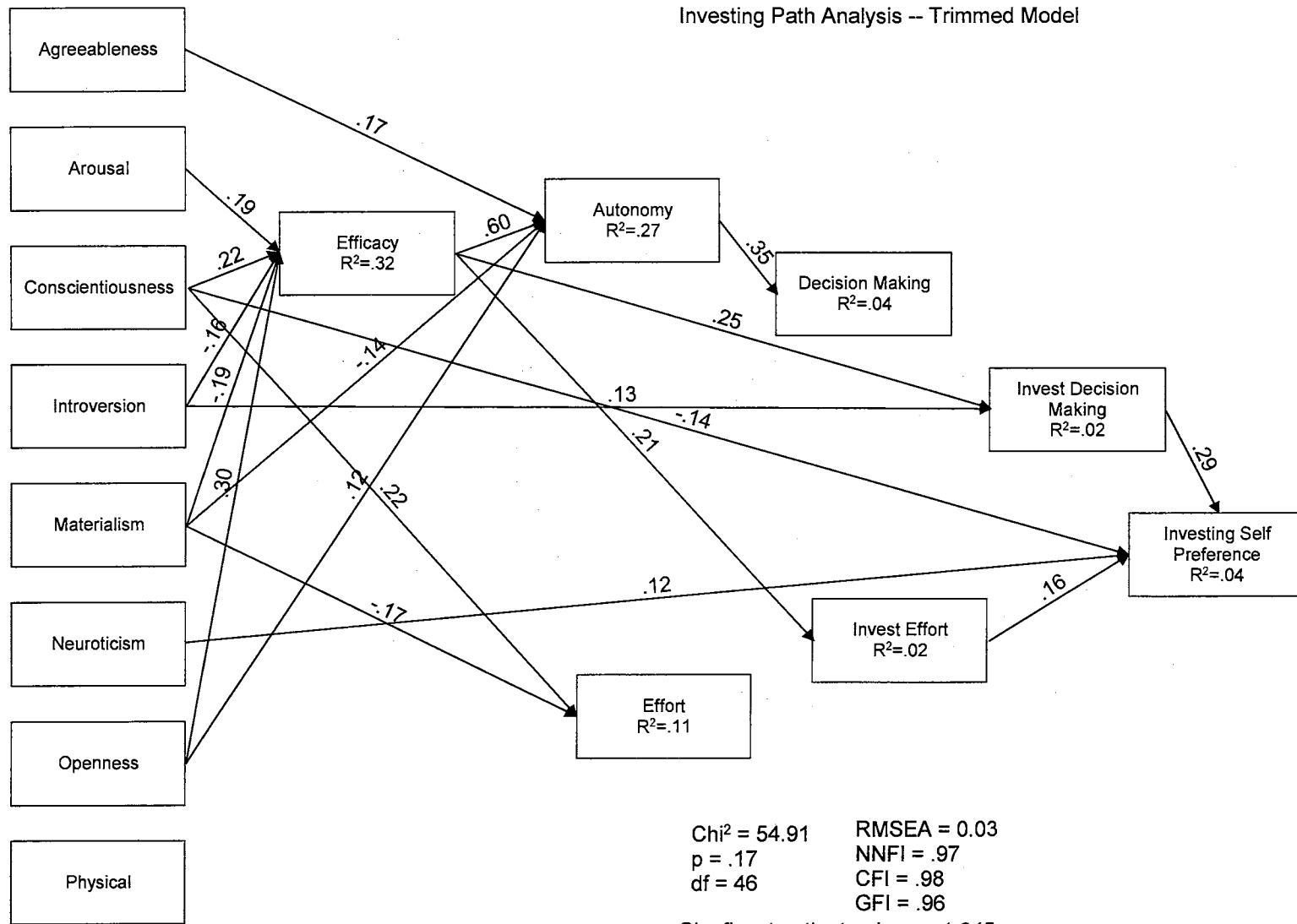


Figure 8 - Trimmed Investing Path Analysis

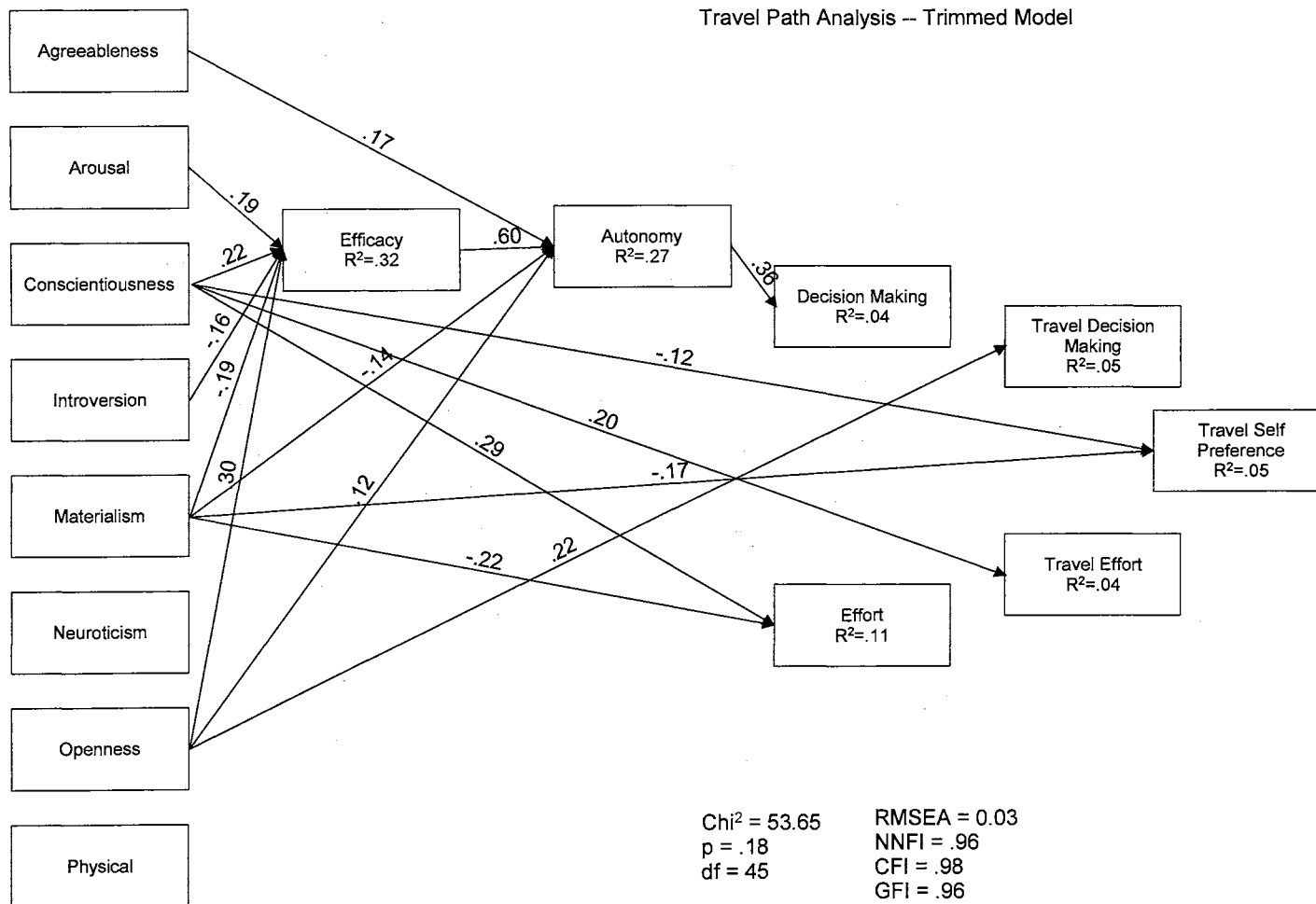


Figure 9 - Trimmed Travel Path Analysis

Surface Efficacy and Involvement

Measures of domain-specific efficacy and involvement were added to the path analysis for each of the trimmed models. Direct paths were added from surface efficacy and involvement to the traits of surface decision making, surface effort, and the self-service preference. As Table 8 shows, the fit indices and R^2 for each of the models declined slightly, but still above acceptable limits, compared to the trimmed models but the variance explained for each trait increased considerably. A χ^2 difference test revealed that addition of surface efficacy and involvement did make a significant difference in the diet ($\Delta\chi^2=16.17$; 8 df), investing ($\Delta\chi^2=25.58$; 8 df) and travel ($\Delta\chi^2=36.18$; 8 df) models.

	Diet	Investing	Travel
Fit Indices			
Chi ²	57.57	80.49	89.83
p=	.53	.01	0.00
df	59	54	53
RMSEA	.00	.05	.06
NNFI	1.01	.92	.86
CFI	1.00	.96	.93
GFI	.97	.95	.94
R²			
Autonomy	.27	.27	.27
Efficacy	.32	.32	.32
Decision Making	.04	.03	.04
Effort	.11	.11	.11
Surface Decision Making	.23	.33	.15
Surface Effort	.33	.31	.16
Self Service Preference	.21	.16	.13

Surface Efficacy

The previously significant paths from efficacy to the lower level personality traits were no longer significant. Although not directly tested, these results indicate that the surface efficacy traits mediate the measure of general efficacy.

Surface efficacy has the most consistent impact on a subject's willingness to make domain-specific decisions and select self-service. As Table 9 shows, the measure of surface efficacy was significant in each of the three difference service scenarios on surface decision making and preference for self-service. Surface efficacy was not significant in the travel scenario in predicting surface effort.

Involvement

Involvement was consistent in predicting the effort a subject was willing to give in the three different service settings. Surface decision making in the diet and investing scenarios was also significantly impacted by involvement. Interestingly only the preference to choose a self-service diet was affected by involvement.

TABLE 9 – RESULTS OF EFFICACY AND INVOLVEMENT

	Diet		Investing		Travel	
	Standardized Path Coefficient	(<.10) (1.645) T-Value	Standardized Path Coefficient	(<.10) (1.645) T-Value	Standardized Path Coefficient	(<.10) (1.645) T-Value
Surface Efficacy → Surface DecMake	.34	4.96	.50	7.41	.26	3.40
Involvement → Surface DecMake	-.22	-3.09	.12	1.78	.09	1.25
Surface Efficacy → Surface Effort	.12	1.79	.38	5.55	.06	.80
Involvement → Surface Effort	.29	4.23	.28	3.98	.31	4.23
Surface Efficacy → Self Service Preference	.19	2.51	.16	1.95	.26	3.35
Involvement → Self Service Preference	.21	2.79	.03	.33	.07	.89

Boldface is significant at <.10 (t-value ≥ 1.645)

These results indicate that the greater personal importance a service has to an individual the more likely that individual will put forth effort but not necessarily be willing to make relevant decisions or choose to perform the service. Decision making and self-service are clearly affected by how confident an individual feels about his or her ability concerning the subject.

The reason measures of diet efficacy and involvement did not have a similar impact as in the other scenarios may be that subjects reported the least amount of efficacy (mean = 6.27) and involvement (mean = 5.62) with dieting. The higher investing (mean = 6.04) and travel (mean = 7.48) efficacy suggests a need to feel confident in his or her abilities to affect the process before being willing to make decisions, put forth effort, or select a self-service option.

The subject's reported involvement with investing (mean = 7.17) and travel (mean = 7.53) also suggests that a consumer is more willing to become drawn into the process when a service has greater importance to the consumer.

EXPERIMENT

A subset of subjects (n=83) in the second study were administered the experiment that presented a scenario of working with a counselor to use a proposed new course registration system. Two cases were identified as outliers and eliminated from further analysis. Subjects were randomly assigned into a required high decision making (n=44) or low decision making (n=39) scenario. The gender breakdown, presented in Table 10, shows a relatively even split among males and females in the high- and low-decision making groups. Two subjects did not indicate gender.

TABLE 10 – DECISION MAKING AND GENDER COMPOSITION OF EXPERIMENTAL GROUPS

	Gender		Total
	Female	Male	
Low Decision Making	17	21	38
High Decision Making	20	23	43
Total	37	44	81*

*Two subjects did not indicate gender

Subjects were asked to assess the perceived amount of required participation as a manipulation check. A oneway ANOVA revealed that significant differences were perceived ($F=4.419$, $p=.039$) between the two groups. Although the differences are significant, a stronger manipulation is desired. Because the focus of the experiment was on decision making, the perceived amount of effort was held constant between the two conditions. A oneway ANOVA ($F=1.322$, $p=.254$) showed that no perceived differences in effort existed. These results indicate that the experiment was successful at manipulating decision making between groups while holding perceived effort constant.

No significant differences between the groups were found on two difference measures of possible dissonance (appeal $p=.831$; enjoy $p=.296$) with the new system; a rating that the proposed new system was better than the current system ($p=.828$); the importance of course registration ($p=.968$); or time left before the subject is graduated ($p=.561$)

Satisfaction

Subjects completed measures (see Table 11) of satisfaction on 7-point Likert-type scales that assessed three different dimensions: satisfaction with the service offered (i.e., ability to schedule courses); satisfaction with consumer participation in the process; and satisfaction with the outcome (i.e., schedule).

Factor	Mean	Std. Dev.	
.746	5.31	1.52	How satisfied are you with your ability to schedule your courses?
.824	5.01	1.68	How satisfied are you with your participation in the process?
.780	4.74	1.49	How satisfied are you with your schedule?

The three items were combined into a measure of overall satisfaction with item-to-total correlations ranged from .46 to .55 with an overall alpha of .69. Exploratory factor analysis of the three items revealed a single factor (sampling adequacy=.654; variance explained=61.49%). Because the separate measures are meant to represent different facets of satisfaction another principal components analysis with varimax rotation was done with three factors specified a priori. This resulted in a solution with each item loading on only one factor ($\geq .948$) with no significant cross-loadings ($\leq .237$) between factors. This supports the multi-dimensionality of the satisfaction measures.

Direct Effect

The first hypothesis (H₁₇) regarding the experiment was that increased participation results in greater satisfaction. This means subjects in the high-participation group should have higher satisfaction than subjects in the low-participation group. A oneway ANOVA indicated a significant difference between the groups only on the measure of satisfaction with ability to schedule courses (F=3.77, df=1). As Table 12 shows, subjects in the high participation group were more satisfied with their ability to schedule courses than were the subjects in the low participation group. The implication is partial support for the hypothesis that increasing consumer decision making responsibility does positively affect satisfaction with the service encounter.

TABLE 12 – SATISFACTION MEANS BY PARTICIPATION GROUP

Satisfaction with:	High Participation Group	Low Participation Group
Ability	5.62	5.11
Process	5.29	4.78
Schedule	4.62	4.84
Overall	5.17	4.92

The non-significant findings for the other dimensions of satisfaction and the overall measure of satisfaction implies that firms need to assess consumer satisfaction on each relevant dimension. However, if overall satisfaction is not directly affected then shifting decision making responsibility to the consumer may be beneficial only if the firm can benefit in other areas (e.g., lower costs) . One caveat, which will be discussed later in more depth, is that a stronger manipulation between the groups may have resulted in different findings.

Moderated Effect

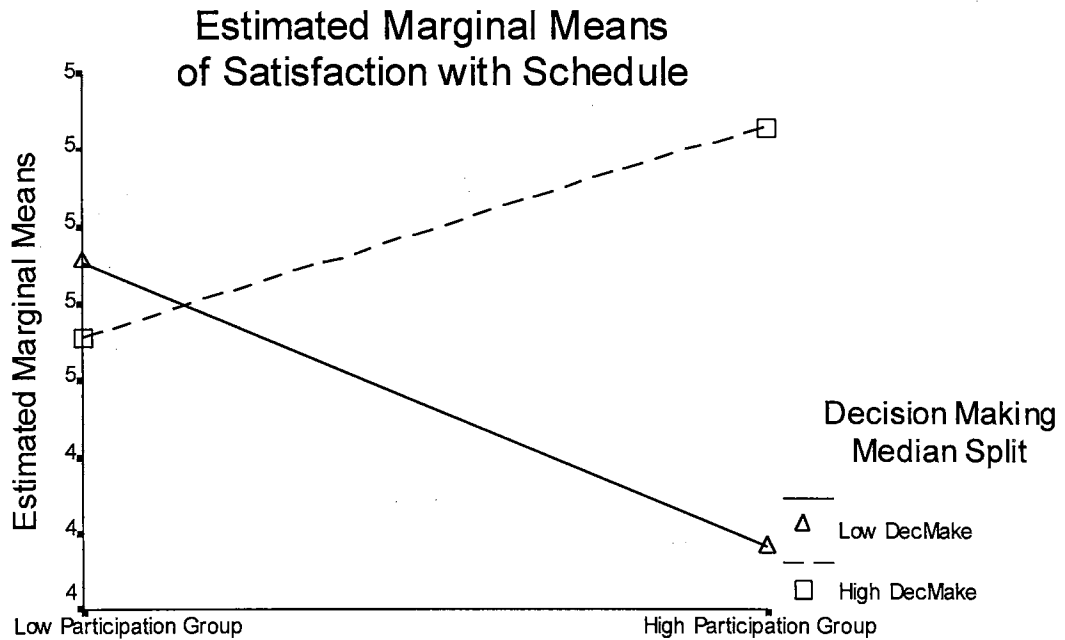
The second hypothesis (H:18) proposed that individuals with a higher decision making orientation would be more satisfied in a situation that required decision making than would individuals with a low decision making orientation. This hypothesis was tested by regressing each measure of satisfaction on the personality trait of decision making, the dummy coding for the participation group, and the decision making-by-participation group interaction. However, none of the models tested were significant.

A median split was then done on the decision making trait and included with the high- and low-participation groups in a full factorial MANOVA on the satisfaction measures. Again no significant differences were found between the groups.

The next step was to conduct separate oneway ANOVA's on each satisfaction measure. The only significant finding was a participation-by-decision making interaction on a subject's satisfaction with his/her schedule ($F=3.77$, 1df, $p<.056$). The significant disordinal interaction (see Figure 10) indicates that a subject high in decision making orientation will have greater satisfaction with the outcome of a service (i.e., schedule) when the opportunity to make decisions is high. Similarly, a subject that does not have a

high decision making orientation will have lower satisfaction when in a situation where decisions are required. There is no difference in satisfaction when the subject can not make decisions regardless of the individual's decision making orientation.

Figure 10 - Interaction Effects



This partial support for the moderated hypothesis means that there are individual differences among consumers regarding the impact of participation on satisfaction across different levels of a consumer's preference for decision making responsibility.

Covariates

Possible covariates were identified and tested for possible influence on satisfaction. First, because the subjects were students the remaining time each subject had before being graduated was collected. A subject with only a short time to graduation may

have less interest in a proposed new course registration system. Conversely a subject that will need to utilize such a system several more time might have greater interest. No significant effects were found indicating that a subject's remaining time before graduation was immaterial in this situation.

Another possible covariate was how important course registration and advisors were to the subject. Involvement for course registration and advisors was found to be non-significant.

CHAPTER 5 – DISCUSSIONS AND CONCLUSIONS

The primary purpose of this research was to investigate consumer motivations to use or avoid self-service options. To accomplish this, psychometrically sound scales were developed and validated that captured an individual's preference for decision making responsibility and effort. Together these two scales represent the dimensions of a consumer's participation orientation.

Embedded within a hierarchical model of personality, the relationships between participation orientation and other established personality measures were investigated. Furthermore, the impact of participation orientation on a consumer's preference for self-service was explored. Lastly, satisfaction with a service encounter was analyzed by considering consumer participation and a consumer's participation orientation.

SCALE DEVELOPMENT

The newly developed personality traits of consumer decision making responsibility and consumer effort are important contributions to understanding consumer participation in service encounters. As Bateson (1983) and others have stated, measures were necessary to identify individuals with a "propensity to participate." These new scales accomplish are a solution to that need.

Autonomy

The autonomy scale was intended to replace the lengthy Deci and Ryan (1985) General Causality Orientation Scale (GCOS). To that end it was successful because the resulting seven-item scale is clearly more parsimonious than the twelve-vignette GCOS. One problem noticed in reconciling the autonomy scale into the hierarchical model was that the GCOS includes many situation-specific items which, by Mowen's (2000)

definition of the hierarchy, would place autonomy as a situational or surface-level trait rather than the compound trait originally proposed. Further evidence that autonomy was not a compound trait was discovered when regression analysis showed that autonomy was mediating the effects of efficacy (a compound trait) on decision making (a surface trait).

Reflexive autonomy (i.e., self-determination) does have a place in our literature and deserves further research. The results from the first study indicate that it is separate ($r = .16$) from the traditional definition of autonomy (i.e., reactive) and locus of control ($r = -.09$). More work is required to refine the measure and understand the nomological properties of autonomy.

HIERARCHICAL MODEL

The lack of a strong relationships between the different levels of participation traits in the hierarchy is intriguing. Subjects that indicate a willingness to participate on a surface level and then not prefer the service that allows the greater participation indicates that the model may be flawed. Either the wrong surface traits are specified, the service scenarios are not clearly related to the surface traits, or there is an omitted variable problem. The very low levels of variance explained in the service preference is also problematic. In any case, further research is necessary to understand the linkages between the hierarchical levels of personality.

The strong influence of surface efficacy and involvement on consumer preferences for self-service options may mean that a simpler model of personality traits is required. Although the hierarchical model provides a comprehensive perspective, the resulting complexity of the model may actually disguise a parsimonious reality.

SATISFACTION

Similar to the findings of Cotton et al (1988) the current results indicate that the relationship between participation and satisfaction is mixed. The finding that an increase in work decisions had no effect on satisfaction may explain the results. If a consumer views a self-service encounter similar to work, than satisfaction may not be impacted.

It is worth noting that the separate dimensions of satisfaction with a service encounter are affected differently by consumer participation. This research shows that satisfaction with the service encounter itself can be affected by varying degrees of consumer decision making participation. Satisfaction with the other facets of satisfaction may not be directly affected by consumer participation.

The other key finding is that individual differences among consumers in decision making orientations do impact satisfaction with the outcome of a service encounter across different levels of consumer participation. Providing a consumer that prefers to make decisions the opportunity to do so will increase satisfaction with the outcome. However, the increased satisfaction of this one segment is at the expense of lower satisfaction of those consumers who prefer not to make decisions. Segmenting consumers and services by required decision making responsibility is an important contribution to the literature. The early work by Langeard et al (1979), Bateson, (1983), has been validated in that it is necessary to identify and segment participative and non-participative groups of consumers.

MANAGERIAL IMPLICATIONS

The findings presented have several clear implications for firms segmenting and targeting consumers based on consumer participation. Areas of importance include increasing a consumer's self-efficacy with a specific service domain, designing new services, promoting existing services, and the sales of existing services.

Efficacy

A crucial finding is that firms that rely on the consumer to be an active participant must be effective trainers. Because efficacy is partly learned (Bandura 1977) it is important for a firm to be a teacher of the necessary skills and behavior to use the service.

As Hollander and Rassulli (1999) suggest, consumers may choose a surrogate because of perceived impediments. This implies that service enablers should focus efforts on removing the perceived barriers. As the current research shows, an individual's level of efficacy in specific domains is a key determinant of a preference for a self-service option. Increasing a consumer's perceived self-efficacy can result in an increased likelihood of choosing a self-service option.

Satisfaction

Offering services that require consumer participation may increase satisfaction with the service itself. This bodes well for a firm that can also reduce costs by shifting the production responsibility to the consumer.

A full-service firm can benefit by recognizing the importance of including the consumer into the service but still controlling the process and outcome. This may mean that a more consultative sales approach is warranted.

When high levels of decision making is required than satisfaction is more vulnerable because not all consumer want to be decision makers. Individual differences among consumers on participation orientations may impact satisfaction with outcomes of a service encounter. Clearly firms must recognize that some consumers will be more satisfied if a greater decision making role is available. Increasing self-efficacy for those consumers that are not comfortable making decisions may possibly prevent lower satisfaction.

Segmentation

Individual differences in decision making orientations suggest that message appeals can be crafted to target these segments. Stressing the enabling qualities of the firm for a decision maker could be a central theme of advertisements and communication with the consumer. Full-service firms may instead promote the obstacles and difficulties associated with consumer participation in their promotional literature.

Firms should consider designing new services that enable consumers to be responsible for decision making. With the proper support, the consumer may actually have greater satisfaction because of an internal attribution of causality. Conversely, services can be offered that are based on surrogate decision making. The trend to consumer participation may be an opportunity for a firm to differentiate itself by being a full-service provider.

LIMITATIONS

The most obvious limitation in this research is the use of student subjects. Although scenarios were constructed to be relevant for students (e.g., course registration), stronger and more generalizable results will likely be obtained if a sample representing the general population is used. The three service scenarios used in the path analysis only represent a very small domain of possible service encounters a typical consumer would be a participant. More domains need to be identified and explored to better understand consumer participation.

The manipulation of the experimental conditions also needed to be stronger. Better results may have been possible had the manipulation been greater. Although the experimental setting was appropriate for a student sample, a more generalizable and relevant experiment needs to be conducted which has much stronger manipulations.

Given the complexity of the hierarchical model the sample size needs to be increased. The large number of variables resulted in a ratio of subjects-to-variables of 12.40. Although acceptable, a larger sample size would be preferred.

FURTHER RESEARCH

The results clearly indicate a need to understand the impact consumer participation has on satisfaction and dissatisfaction. Consumer participation does impact some, but not all dimensions, of satisfaction. A better understanding of different types of participation and the direct and indirect effects on satisfaction is an immense challenge.

The outcome of the experiment was held constant in this research. This was appropriate in this preliminary research but additional research could investigate the effects of varying outcomes when participation is required. This would allow greater insight in to potential satisfaction and dissatisfaction when a consumer is an active participant.

The amount of consumer effort was also held constant so decision making responsibility could be examined. Another experiment should hold decision making constant in order to research consumer effort.

The distinctions between service providers and service enablers is another area that needs to be explored extensively. The role of a service provider is typically the focus, or setting, of most consumer behavior research. Different strategies, characteristics, positioning, pricing, branding, and prescribed message appeals of a service enabler is urged. If different segments of consumers exist that prefer enablers over providers than firms need to understand how to respond accordingly.

It has been suggested that relationships are built on trust and commitment (Morgan and Hunt 1994) but that conclusion presumed consumers were dealing with a service provider. Another set of constructs may better explain a relationship with an

enabler. For instance, how important is a firm's commitment to the relationship when the role they fill is that of an enabler and the consumer is the active creator of the service.

For example, the value of brand loyalty for a service enabler may be much different than that of a service provider. Building brand loyalty may require different strategies for the enabler because the consumer has a greater role in creating the product.

Autonomy as defined by Deci and Ryan needs to be introduced into the consumer literature. To do so requires more research in refining the scale and its applications. A complete nomological net should be created that reveals the relationship autonomy has with other known constructs. Understanding a consumer's desire to be self-determined may be an important contribution to the literature and practice.

The elemental traits may not be as fundamental as proposed (Mowen 2000). Evidence shows that some traits (e.g., materialism) mediated the effects of other elemental traits. This finding was unexpected, and not explored in this project, but does warrant additional research.

Another potential influence on participation orientation is a consumer's need for privacy. It is possible that a consumer with a high need for privacy may be less willing to allow a surrogate handle personal affairs on behalf of the consumer (e.g., financial investments). The relationship between privacy and participation orientation thus needs further exploration.

The varying correlations among the surface level decision making and effort participation orientation traits (see Table x__x) is interesting. It may be an anomalous result of a student sample or may indicate that decision making and effort are perceived very differently across domains.

REFERENCES

- Abdel Halim, Ahmed A. (1983), "Effects of Task and Personality Characteristics on Subordinate Responses to Participative Decision Making," *Academy of Management Journal*, 26(September, 3),
- Abdel Halim, Ahmed A. and Kendrith M. Rowland (1976), "Some personality determinants of the effects of participation: A further investigation," *Personnel Psychology*, 29(1), 41-55.
- Averill, James R. (1973), "Personal Control Over Aversive Stimuli and Its Relationship to Stress," *Psychological Bulletin*, 80(4), 286-303.
- Bagozzi, Richard P. and Paul R. Warshaw (1990), "Trying to consume," *Journal of Consumer Research*, 17(2), 127-40.
- Baker, Julie, Michael Levy, and Dhruv Grewal (1992), "An experimental approach to making retail store environmental decisions," *Journal of Retailing*, 68(4), 445-60.
- Bandura, Albert (1977), "Self-Efficacy: Toward a Unifying Theory of Behavioral Change," *Psychological Review*, 84(2), 191-215.
- Bandura, Albert (1982), "Self-Efficacy Mechanism in Human Agency," *American Psychologist*, 37(2), 122-47.
- Bandura, Albert (1989), "Human Agency in Social Cognitive Theory," *American Psychologist*, 44(9), 1175-84.
- Bandura, Albert (1997), *Self Efficacy: The Excercise of Control*. New York: W.H. Freeman and Company.
- Barki, Henri and Jon Hartwick (1994), "Measuring User Participation, User Involvement, and User Attitude," *MIS Quarterly*, March, 59-82.
- Bateson, J. E. (1985a), "Self-service consumer: An exploratory study," *Journal of Retailing*, 61(3), 49-76.
- Bateson, John E.G. (1983), *The Self-Service Customer - Empirical Findings. Marketing of Services*, ,
- Bateson, John E. G. (1985b), *Perceived Control and the Service Encounter. The Service Encounter: Managing Employee/Customer Interaction in Service Businesses*, , 67-82.
- Becherer, Richard C. and Lawrence M. Richard (1978), "Self-monitoring as a moderating variable in consumer behavior," *Journal of Consumer Research*, 5(3), 159-62.
- Belk, Russell W. (1985), "Materialism: Trait aspects of living in the material world," *Journal of Consumer Research*, 12(3), 265-80.
- Bettencourt, Lance A. (1997), "Customer Voluntary Performance: Customers as Partners in Service Delivery," *Journal of Retailing*, 73(3), 383-406.
- Block, Jack (1995), "A Contrarian View of the Five-Factor Approach to Personality Description," *Psychological Bulletin*, 117(2), 187-215.

- Bristow, Dennis N. and John C. Mowen (1998), "The Consumer Resource Exchange Model: Theoretical Development and Empirical Evaluation," *Marketing Intelligence and Planning*, 16(2), 90-9.
- Brond, David (1997), "Customer participation is the latest trend in service delivery," *Marketing News*, 31(22, October 27), 11.
- Brown, Steven P., William L. Cron, and Jr. John W. Slocum (1998), "Effects of Trait Competiveness and Perceived Intraorganizational Competition on Salesperson Goal Setting and Performance," *Journal of Marketing*, 62(October), 88-98.
- Brown, Tom J., John C. Mowen, D. Todd Donavan, and Jane W. Licata (In Press), "The Customer Orientation of Service Workers: Personality Trait Influences on Self and Supervisor Ratings," *Journal of Marketing Research*, ,
- Calder, Bobby J., Lynn W. Phillips, and Alice M. Tybout (1982), "The concept of external validity," *Journal of Consumer Research*, 9(3), 240-4.
- Cappeliez, P. (1993), "The Relationship Between Beck's Concepts of Sociotropy and Autonomy and the NEO-Personality Inventory," *British Journal of Clinical Psychology*, 32, 78-80.
- Cavanaugh, Tim (1997), "Making Home Shopping Work," *American Demographics*, July,
- Chisholm, Rupert F. and Leopold S. Vansina (1993), "Varieties of Participation," *Public Administration Quarterly*, Fall(1993), 291-315.
- Churchill, Gilbert A. (1979), "A paradigm for developing better measures of marketing constructs," *Journal of Marketing Research*, 16(1), 64-73.
- Cohen, Joel B. (1967), "An Interpersonal Orientation to the Study of Consumer Behavior," *Journal of Marketing Research*, 4, 270-8.
- Cook, R. Dennis and Sandford Weisberg (1982), *Residuals and Influence in Regression*. New York: Chapman and Hall
- Cotton, John L., David A. Vollrath, Kirk L. Froggatt, Mark L. Lengnick-Hall, and Kenneth R. Jennings (1988), "Employee Participation: Diverse Forms and Different Outcomes," *Academy of Management Review*, 13(1), 8-22.
- Darley, William K. and Jeen su Lim (1992), "The effect of consumers' emotional reactions on behavioral intention: The moderating role of personal relevance and self-monitoring," *Psychology and Marketing*, 9(4), 329-46.
- Deci, Edward L. and Richard M. Ryan (1985), "The General Causality Orientations Scale: Self-Determination in Personality," *Journal of Research in Personality*, 19, 109-34.
- Deci, Edward L. and Richard M. Ryan (1987), "The Support of Autonomy and the Control of Behavior," *Journal of Personality and Social Psychology*, 53(6), 1024-37.

- Deci, Edward L/ and Richard M. Ryan (1991), "A Motivational Approach to Self: Integration in Personality," *Nebraska Symposium on Motivation*, 38(Perspectives on motivation), 237-88.
- Doll, William J. and Gholamreza Torkzadeh (1989), "A Discrepancy Model of End-User Computing Involvement," *Management Science*, 35(10, October), 1151-71.
- Ellen, Pam S., William O. Bearden, and Subhash Sharma (1991), "Resistance to technological innovations: An examination of the role of self-efficacy and performance satisfaction," *Journal of the Academy of Marketing Science*, 19(4), 297-307.
- Endler, Norman S. and Alvin J. Rosenstein (1997), "Evolution of the Personality Construct in Marketing and Its Applicability to Contemporary Personality Research," *Journal of Consumer Psychology*, 6(1), 55-66.
- Faber, Ronald J. and Thomas C. O'Guinn (1992), "A clinical screener for compulsive buying," *Journal of Consumer Research*, 19(3), 459-69.
- Fischer, Donald G. and Carol Fick (1993), "Measuring Social Desirability: Short Forms of the Marlowe-Crowne Social Desirability Scale," *Educational and Psychological Measurement*, 53, 417-24.
- Folkes, Valerie S. (1984), "Consumer reactions to product failure: An attributional approach," *Journal of Consumer Research*, 10(4), 398-409.
- Fry, Louis W. and Don Hellriegel (1987), "The role and expectancy participation model: An empirical assessment and extension," *Journal of Occupational Behaviour*, 8(4), 295-309.
- Goldberg, Lewis R. (1990), "An Alternative "Description of Personality": The Big-Five Factor Structure," *Journal of Personality and Social Psychology*, 59(6), 1216-29.
- Goldsmith, Ronald E. and Charles F. Hofacker (1991), "Measuring consumer innovativeness," *Journal of the Academy of Marketing Science*, 19(3), 209-21.
- Guttman, Monika (2000), *The Web makes Housecalls. USA Weekend*, , 6-12.
- Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham, and William C. Black (1995), *Multivariate Data Analysis: with readings*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Harrison, Allison W., Jr. R. Kelly Rainer, Wayne A. Hochwarter, and Kenneth R. Thompson (1997), "Testing the Self-Efficacy--Performance Linkage of Social-Cognitive Theory," *The Journal of Social Psychology*, 127(1), 79-87.
- Hartline, Michael D. and O. C. Ferrell (1996), "The management of customer-contact service employees: An empirical investigation," *Journal of Marketing*, 60(4), 52-70.
- Hollander, Stanley C. and Kathleen M. Rassuli (1999), "Shopping with Other People's Money: The Marketing Management Implications of Surrogate-Mediated Consumer Decision Making," *Journal of Marketing*, 63(2), 102-18.

- Hubbert, Amy R., Mary Jo Bitner, and Susan Schultz Kleine (1996), "Satisfaction with Performance and Satisfaction with the Service Provider: Do Customers Make Distinctions?," *AMA Educators' Proceedings*,
- Hunton, James E. and Kenneth H. Price (1997), "Effects of the User Participation Process and Task Meaningfulness on Key Information System Outcomes," *Management Science*, 43(6, June), 797-812.
- James, William (1890), *The Principles of Psychology*. New York: Henry Holt.
- Jayanti, Rama K. and Alvin C. Burns (1998), "The Antecedents of Preventive Health Care Behavior: An Empirical Study," *Journal of the Academy of Marketing Science*, 26(1), 6-15.
- Jerome, Marty (2000), *Is your company next? PC Computing*, 13(2), 90-101.
- Kelley, Scott W., James H. Donnelly, and Steven J. Skinner (1990), "Customer participation in service production and delivery," *Journal of Retailing*, 66(3), 315-35.
- Kelley, Scott W., Steven J. Skinner, and James H. Donnelly (1992), "Organizational socialization of service customers," *Journal of Business Research*, 25(3), 197-214.
- Koestner, Richard and Gaetan F. Losier (1996), "Distinguishing Reactive versus Reflective Autonomy," *Journal of Personality*, 64:2(June), 465-94.
- La Barbera, Priscilla A. and Zeynep Gurhan (1997), "The role of materialism, religiosity, and demographics in subjective well-being," *Psychology and Marketing*, 14(1), 71-97.
- Lach, Jennifer (1999a), "Banker Blues," *American Demographics*, August,
- Lach, Jennifer (1999b), *Scan it yourself. American Demographics*, September,
- Lach, Jennifer (1999c), "The Web Doctor Is In," *American Demographics*, July,
- Langeard, Eric, John E. G. Bateson, Christopher H. Lovelock, and Pierre Eiglier (1981), "Services Marketing: New Insights from Consumer and Managers," 81-104, Marketing Science Institute, Cambridge, MA.
- Lawrence, Michael and Graham Low (1993), "Exploring Individual User Satisfaction Within User-Led Development," *MIS Quarterly*, June, 195-208.
- Licata, Jane W., John C. Mowen, and Tom J. Brown (2000), "Selecting and Training Service Employees: Personality Influences on Customer Orientation and Job Resourcefulness," *Working Paper (submitted to JM)*, ,
- Lifton, Peter D. (1983), "Measures of Autonomy," *Journal of Personality Assessment*, 47(5), 514-23.
- Locke, E.A. and D.M. Schweiger (1979), *Participation in Decision Making: One More Look. Research in organizational behavior*, 1, 265-339.
- Lovelock, Christopher H. (1983), "Classifying services to gain strategic marketing insights," *Journal of Marketing*, 47 (Summer), 9-20.

- Lovelock, Christopher H. and Robert F. Young (1979), "Look to consumers to increase productivity," *Harvard Business Review*, May-June, 168-78.
- MacInnis, Deborah J., Christine Moorman, and Bernard J. Jaworski (1991), "Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information from ads," *Journal of Marketing*, 55(4), 32-53.
- Maddux, James E., Larry W. Norton, and Cal D. Stolenberg (1986), "Self-Efficacy Expectancy, Outcome Expectancy, and Outcome Value: Relative Effects on Behavioral Intentions," *Journal of Personality and Social Psychology*, 51(4), 783-9.
- McCrae, Robert R. and Paul T. Costa (1987), "Validation of the Five-Factor Model of Personality Across Instruments and Observers," *Journal of Personality and Social Psychology*, 52(1), 81-90.
- McKeen, James D. and Tor Guimaraes (1997), "Successful Strategies for User Participation in Systems Development," *Journal of Management Information Systems*, 14(2), 133-50.
- McKeen, James D., Tor Guimaraes, and James C. Wetherbe (1994), "The Relationship Between User Participation and User Satisfaction: An Investigation of Four Contingency Factors," *MIS Quarterly*, December, 427-51.
- Midgley, David F. and Grahame R. Dowling (1978), "Innovativeness: The concept and its measurement," *Journal of Consumer Research*, 4(4), 229-42.
- Mills, Peter K., Richard B. Chase, and Newton Margulies (1983), "Motivating the Client/Employee System as a Service Production Strategy," *Academy of Management Review*, 8(2), 301-10.
- Mills, Peter K. and James H. Morris (1986), "Clients as "Partial" Employees of Service Organizations: Role Development in Client Participation," *Academy of Management Review*, 11(No. 4), 726-35.
- Mogelonsky, Marcia (1998), "Home Meal Replacment," *American Demographics*, July,
- Mooradian, Todd A. (1996), "Personality and Ad-Evoked Feelings: The Case for Extraversion and Neuroticism," *Journal of the Academy of Marketing Science*, 24(2), 99-109.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The commitment-trust theory of relationship marketing," *Journal of Marketing*, 58(3), 20-38.
- Mowen, John C. (2000), *The 3M Model of Motivation and Personality: Theory and Empirical Applications to Consumer Behavior*. Boston, MA: Kluwer Academic Publishers.
- Mowen, John C. and Nancy Spears (1999), "Understanding Compulsive Buying Among College Students: A Hierarchical Approach," *Journal of Consumer Psychology*, 8(4), 407-30.

- Mowen, John C., James C. Stone, and Nancy Spears (1997), "Personality traits and predicting movie preferences: an exploratory comparison of the big 3, big 5, and 3M personality models," *Working Paper*, , 1-41.
- Netemeyer, Richard G., Scot Burton, and Donald R. Lichtenstein (1995), "Trait aspects of vanity: Measurement and relevance to consumer behavior," *Journal of Consumer Research*, 21(4), 612-26.
- Noe, Raymond A. and Steffanie L. Wilk (1993), "Investigation of the Factors That Influence Employees' Participation in Development Activities," *Journal of Applied Psychology*, 78(2), 291-302.
- O'Guinn, Thomas C. and Ronald J. Faber (1989), "Compulsive buying: A phenomenological exploration," *Journal of Consumer Research*, 16(2), 147-57.
- Oliver, Richard L. and Wayne S. DeSarbo (1988), "Response determinants in satisfaction judgments," *Journal of Consumer Research*, 14(4), 495-507.
- Raymond, Joan (1999), "20/20 Vision," *American Demographics*, December,
- Richins, Marsha L. and Scott Dawson (1992), "A consumer values orientation for materialism and its measurement: Scale development and validation," *Journal of Consumer Research*, 19(3), 303-16.
- Roman, Robert J., Gordon B. Moskowitz, Morris I. Stein, and Ronda F. Eisenberg (1995), "Individual Differences in Experiment Participation: Structure, Autonomy, and the Time of the Semester," *Journal of Personality*, 63(1, March), 113-38.
- Rotter, Julian B. (1966), "Generalized Expectancies for Internal versus External Control of Reinforcement," *Psychological Monographs*, 80(1), 1-28.
- Sheldon, Kennon M. and Andrew J. Elliot (1998), "Not All Personal Goals are Personal: Comparing Autonomous and Controlled reasons for Goals as Predictors of Effort and Attainment," *Personality and Social Psychology Bulletin*, 24(5, May), 546-57.
- Sherer, Mark and Carol H. Adams (1983), "Construct Validation of the Self-efficacy Scale," *Psychological Reports*, 53, 899-902.
- Sherer, Mark, James E. Maddux, Blaise Mercandante, Steven Prentice-Dunn, Beth Jacobs, and Ronald W. Rogers (1982), "The Self-efficacy Scale: Construction and Validation," *Psychological Reports*, 51, 663-71.
- Shim, Soyeon and Mary Frances Drake (1990), "Consumer Intention to Utilize Electronic Shopping," *Journal of Direct Marketing*, 4(3), 22-33.
- Skinner, Ellen A. (1996), "A Guide to Constructs of Control," *Journal of Personality and Social Psychology*, 71(3), 549-70.
- Smith, Ronald E. (1989), "Effects of Coping Skills Training on Generalized Self-Efficacy and Locus of Control," *Journal of Personality and Social Psychology*, 56(2), 228-33.

- Spreng, Richard A., Scott B. MacKenzie, and Richard W. Olshavsky (1996), "A reexamination of the determinants of consumer satisfaction," *Journal of Marketing*, 60(3), 15-32.
- Steenkamp, Jan Benedict E. and Hans Baumgartner (1992), "The role of optimum stimulation level in exploratory consumer behavior," *Journal of Consumer Research*, 19(3), 434-48.
- Surprenant, Carol F. and Michael R. Solomon (1987), "Predictability and personalization in the service encounter," *Journal of Marketing*, 51(2), 86-96.
- Wagner III, John A. (1994), "Participation's Effects on Performance and Satisfaction: A Reconsideration of Research Evidence," *Academy of Management Review*, 19(2), 312-30.
- Weissman, Rachel X. (1999), "Getting Bigger all the Time," *American Demographics*, February,
- Williams, Geoffrey C., Virginia M. Grow, Zachary R. Freedman, Richard M. Ryan, and Edward L. Deci (1996), "Motivational Predictors of Weight Loss and Weight-Loss Maintenance," *Journal of Personality and Social Psychology*, 70(1), 115-26.
- Wind, Jerry and Arvind Rangaswamy (2000), "Customerization: The Next Revolution in Mass Customization," *MSI Reports - Forthcoming*, ,
- Yellen, Richard E., MaryAnne Winniford, and Clive C. Sanford (1995), "Extraversion and introversion in electronically-supported meetings," *Information and Management*, 28, 63-74.
- Zaichkowsky, Judith L. (1985), "Measuring the involvement construct," *Journal of Consumer Research*, 12(3), 341-52.
- Zeithaml, Valarie A. and Mary Jo Bitner (1996), *Services Marketing*. New York: The McGraw-Hill Companies, Inc.

APPENDIXES

APPENDIX A – SCALE ITEMS

INITIAL PARTICIPATION ORIENTATION ITEMS

7-point Likert scale Disagree (1) to Agree (9)

Decision Making - Consumer tendency to prefer to make their own service-related decisions rather than delegate the responsibility to a surrogate.

1. It is important to me that I make the decisions which may affect me.
2. I can make as good of a decision as anybody.
3. Even though others may know more than I do, I still insist on making my own decisions.
4. Decisions which affect me should be made by me.
5. I don't mind if someone else makes decisions for me. (r)
6. Others can influence my choices.
7. Even if I make the wrong decision, I am glad that it was my decision.
8. I often make choices without talking to anyone else first.
9. Even if I am sure I can make the right choice, I will let someone else decide. (r)
10. It is more important to me that I make a decision than it is being right.
11. It is never wrong if I make my own choice.
12. It is more important that the right decision is made than it is that I make the decision. (r)
13. I make more of my own decisions than my friends do.
14. I take responsibility for my choices in life.
15. My friends seem to be more comfortable making their own decisions than I am. (r)
16. It is more satisfying to me knowing that I made a decision rather than someone else making the decision.
17. Among my friends, I tend to be the decision maker.
18. I am decisive.
19. My friends look to me to make their decisions.
20. I wish I could be more decisive. (r)
21. I am very comfortable with the decisions I make.

Effort - Consumer tendency to prefer to exert mental and physical energy on service-related activities rather than to delegate the activity.

1. I prefer to do something myself rather than pay someone else to do the same thing.
2. It is satisfying when I make the effort to do something.
3. Regardless of cost, I prefer to do things myself.
4. Regardless of cost, I prefer to let others do things for me. (r)
5. Given a choice, I prefer to do things myself.
6. I believe that if I want things done right, I must do things myself.
7. I am always prepared.
8. Compared to my friends, I put more effort into my work.
9. I prefer to do things myself rather than let others do them for me.
10. All things equal, I will do things myself rather than have someone else do them for me.
11. I tend to do a lot of research before buying anything.
12. Whenever possible I prefer to do things for myself.
13. I always am very diligent in preparing for anything.
14. I prefer to let others do things for me rather than doing the same things myself. (r)
15. I am uncomfortable letting others do things for me.
16. I rarely put much effort into things. (r)

SURFACE TRAIT ITEMS

Diet Participation Orientation

Items Include:

1. I do a lot of research before making weight loss decisions.
2. Deciding on my own weight loss diet is important to me.
3. Weight loss experts are a waste of money.
4. There is plenty of research available to make good weight loss decisions.
5. I enjoy losing weight.
6. Deciding on how to lose weight is easy for me.
7. I enjoy researching possible weight loss programs.
8. Weight loss decisions are easy for me to make.
9. Researching weight loss opportunities is enjoyable.

Travel Participation Orientation

Items Include:

1. I do a lot of research before deciding where to travel.
2. Deciding on my own travel arrangements is important to me.
3. Travel agents are a waste of money.
4. There is plenty of research available to make good travel decisions
5. I enjoy planning trips.
6. Deciding on where to travel is easy for me.
7. I enjoy researching possible travel destinations.
8. Travel decisions are easy for me to make.
9. Researching travel opportunities is enjoyable.

Investing Participation Orientation

Items Include:

1. I do a lot of research before making investments.
2. Deciding on my own investments is important to me.
3. Financial advisors are a waste of money.
4. There is plenty of research available to make good investment decisions.
5. I enjoy investing.
6. Deciding on how to invest is easy for me.
7. I enjoy researching possible investments.
8. Investment decisions are easy for me to make.
9. Researching investment opportunities is enjoyable.

NEED FOR LEARNING SCALE

Need for Learning	<i>Never</i>	<i>Always</i>
Enjoy learning new things more than others.	1 2 3 4 5 6 7 8 9	
Enjoy working on new ideas.	1 2 3 4 5 6 7 8 9	
Information is most important resource.	1 2 3 4 5 6 7 8 9	
People consider me to be intellectual.	1 2 3 4 5 6 7 8 9	

NEED FOR ACTIVITY SCALE

Need for Activity	<i>Never</i>	<i>Always</i>
Keep really busy doing things.	1 2 3 4 5 6 7 8 9	
Try to cram as much as possible into a day.	1 2 3 4 5 6 7 8 9	
Extremely active in my daily life.	1 2 3 4 5 6 7 8 9	

SOCIAL DESIRABILITY BIAS

Social Desirability: Short Form	1. I like gossip at times. ®	True	False
	2. There have been occasion when I took advantage of someone. ®	True	False
	3. I'm always willing to admit it when I've made a mistake.	True	False
	4. I always try to practice what I preach.	True	False
	5. I sometimes try to get even rather than forgive and forget.®	True	False
	6. At times I have really insisted on having things my way.®	True	False
	7. There have been occasions when I felt like smashing things.®	True	False
	8. I never resent being asked to return a favor.	True	False
	9. I have never been irked when people expressed ideas very different from my own.	True	False
	10. I have never deliberately said something that hurt someone's feelings.	True	False

3. You had a job interview several weeks ago. In the mail you received a form letter which states that the position has been filled. It is likely that you might think:

- a) It's not what you know, but who you know.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) I'm probably not good enough for the job.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) Somehow they didn't see my qualifications as matching their needs.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

4. You are a plant supervisor and have been charged with the task of allotting coffee breaks to three workers who cannot all break at once. You would likely handle this by:

- a) Telling the three workers the situation and having them work with you on the schedule.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) Simply assigning times that each can break to avoid any problems.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) Find out from someone in authority what to do or do what was done in the past.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

5. A close (same-sex) friend of yours has been moody lately, and a couple of times has become very angry with you over "nothing." You might:

- a) Share your observations with him/her and try to find out what is going on for him/her.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) Ignore it because there's not much you can do about it anyway.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) Tell him/her that you're willing to spend time together if and only if he/she makes more effort to control him/herself.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

6. You have just received the results of a test you took, and you discovered that you did very poorly. Your initial reaction is likely to be:

- a) "I can't do anything right," and feel sad.
1 2 3 4 5 6 7
very unlikely moderately likely very likely
- b) "I wonder how it is I did so poorly," and feel disappointed.
1 2 3 4 5 6 7
very unlikely moderately likely very likely
- c) "That stupid test doesn't show anything," and feel angry.
1 2 3 4 5 6 7
very unlikely moderately likely very likely

7. You have been invited to a large party where you know very few people. As you look forward to the evening, you would likely expect that:

- a) You'll try to fit in with whatever is happening in order to have a good time and not look bad.
1 2 3 4 5 6 7
very unlikely moderately likely very likely
- b) You'll find some people with whom you can relate.
1 2 3 4 5 6 7
very unlikely moderately likely very likely
- c) You'll probably feel somewhat isolated and unnoticed.
1 2 3 4 5 6 7
very unlikely moderately likely very likely

8. You are asked to plan a picnic for yourself and your fellow employees. Your style for approaching this project could most likely be characterized as:

- a) Take charge: that is, you would make most of the major decisions yourself.
1 2 3 4 5 6 7
very unlikely moderately likely very likely
- b) Follow precedent: you're not really up to the task so you'd do it the way it's been done before.
1 2 3 4 5 6 7
very unlikely moderately likely very likely
- c) Seek participation: get inputs from others who want to make them before you make the final plans.
1 2 3 4 5 6 7
very unlikely moderately likely very likely

9. Recently a position opened up at your place of work that could have meant a promotion for you. However, a person you work with was offered the job rather than you. In evaluating the situation, you're likely to think:

- a) You didn't really expect the job; you frequently get passed over.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) The other person probably "did the right things" politically to get the job.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) You would probably take a look at factors in your own performance that led you to be passed over.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

10. You are embarking on a new career. The most important consideration is likely to be:

- a) Whether you can do the work without getting in over your head.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) How interested you are in that kind of work.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) Whether there are good possibilities for advancement.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

11. A woman who works for you has generally done an adequate job. However, for the past two weeks her work has not been up to par and she appears to be less actively interested in her work. Your reaction is likely to be:

- a) Tell her that her work is below what is expected and that she should start working harder.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) Ask her about the problem and let her know you are available to help work it out.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) It's hard to know what to do to get her straightened out.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

12. Your company has promoted you to a position in a city far from your present location. As you think about the move you would probably:

- a) Feel interested in the new challenge and a little nervous at the same time.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- b) Feel excited about the higher status and salary that is involved.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely
- c) Feel stressed and anxious about the upcoming changes.
 1 2 3 4 5 6 7
 very unlikely moderately likely very likely

PROPOSED AUTONOMY ITEMS

7-point Likert scales similar to GCOS

Proposed Autonomy Items	Disagree Agree
In general, I have a lot of confidence in my abilities	1 2 3 4 5 6 7
Finding a job which is interesting is a goal of mine	1 2 3 4 5 6 7
I take pride in my work.	1 2 3 4 5 6 7
I am responsible for my own actions.	1 2 3 4 5 6 7
I would rather have a job which is interesting with low pay than one which is boring but pays well.	1 2 3 4 5 6 7
I enjoy the feeling of having done a good job.	1 2 3 4 5 6 7
I will prefer a job which is interesting even if it pays me less than other jobs.	1 2 3 4 5 6 7
It is important to me to understand a situation before making any decisions	1 2 3 4 5 6 7
When getting a disappointing grade on an exam, I tend to wonder why I did so poorly.	1 2 3 4 5 6 7
At parties I can usually find someone to which I can relate.	1 2 3 4 5 6 7
When working with others, I think it is important to get their input rather than me just making decisions on their behalf.	1 2 3 4 5 6 7
When I do not do as well as I think I should, I can usually see why my performance was bad.	1 2 3 4 5 6 7
I generally like new challenges even if they make me slightly nervous.	1 2 3 4 5 6 7
When not getting a job I wanted, I assume it is because my qualifications did not match their needs.	1 2 3 4 5 6 7

LOCUS OF CONTROL SCALE

23 items plus 6 filler items (in *italics*). **Bold** numbers are added to create a score for external control.

- Filler *1a. Children get into trouble because their parents punish them too much.*
- Filler *1b. The trouble with most children nowadays is that their parents are too easy with them.*
- External **2a.** Many of the unhappy things in people's lives are partly due to bad luck.
- Internal 2b. People's misfortunes result from the mistakes they make.
- Internal 3a. One of the major reasons why we have wars is because people don't take enough interest in politics.
- External **3b.** There will always be wars, no matter how hard people try to prevent them.
- Internal 4a. In the long run people get the respect they deserve in this world.
- External **4b.** Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- Internal 5a. The idea that teachers are unfair to students is nonsense.
- External **5b.** Most students don't realize the extent to which their grades are influenced by accidental happenings.
- External **6a.** Without the right breaks one cannot be an effective leader.
- Internal 6b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- External 7a. No matter how hard you try some people just don't like you.
- Internal 7b. People who can't get others to like them don't understand how to get along with others.
- Filler *8a. Heredity plays the major role in determining one's personality.*
- Filler *8b. It is one's experiences in life which determine what they're like.*
- External **9a.** I have often found that what is going to happen will happen.
- Internal 9b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- Internal 10a. In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.
- External **10b.** Many times exam questions tend to be so unrelated to course work that studying is really useless.
- Internal 11a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.
- External **11b.** Getting a good job depends mainly on being in the right place at the right time.
- Internal 12a. The average citizen can have an influence in government decisions.
- External **12b.** This world is run by the few people in power, and there is not much the little guy can do about it.
- Internal 13a. When I make plans, I am almost certain that I can make them work.
- External **13b.** It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- Filler *14a. There are certain people who are just no good.*
- Filler *14b. There is some good in everybody.*
- Internal 15a. In my case, getting what I want has little or nothing to do with luck.
- External **15b.** Many times we might just as well decide what to do by flipping a coin.
- External **16a.** Who gets to be the boss often depends on who was lucky enough to be in the right place first.

- Internal 16b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
- External 17a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
- Internal 17b. By taking an active part in political and social affairs the people can control world events.
- External 18a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
- Internal 18b. There really is no such thing as "luck".
- Filler 19a. *One should always be willing to admit mistakes.*
- Filler 19b. *It is usually best to cover up one's mistakes.*
- External 20a. It is hard to know if a person really likes you.
- Internal 20b. How many friends you have depends upon how nice a person you are.
- External 21a. In the long run the bad things that happen to us are balanced by the good things.
- Internal 21b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
- Internal 22a. With enough effort we can wipe out political corruption.
- External 22b. It is difficult for people to have much control over the things politicians do in office.
- External 23a. Sometimes I can't understand how teachers arrive at the grades they give.
- Internal 23b. There is a direct connection between how hard I study and the grades I get.
- Filler 24a. *A good leader expects people to decide for themselves what they should do.*
- Filler 24b. *A good leader makes it clear to everybody what their jobs are.*
- External 25a. Many times I feel that I have little influence over the things that happen to me.
- Internal 25b. It is impossible for me to believe that chance or luck plays an important role in my life.
- Internal 26a. People are lonely because they don't try to be friendly.
- External 26b. There's not much use in trying too hard to please people, if they like you, they like you.
- Filler 27a. *There is too much emphasis on athletics in high school.*
- Filler 27b. *Team sports are an excellent way to build character.*
- Internal 28a. What happens to me is my own doing.
- External 28b. Sometimes I feel that I don't have enough control over the direction my life is taking.
- External 29a. Most of the time I can't understand why politicians behave the way they do.
- Internal 29b. In the long run the people are responsible for bad government on a national as well as on a local level.

REACTIVE AUTONOMY MEASURE

Adjective Checklist (ACL) has a total of 300 trait adjectives which represent 16 different motives, including autonomy. Subjects are asked to indicate which adjectives are representative of their own personality. The autonomy subscale consists of 44 items of which 29 are scored positively and 15 are scored negatively. The sum across the 44 total items represents the subject's reactive autonomy measure. The positive adjectives are scored a +1 if circled by the subject and a 0 if not circled. The negative adjectives are scored the opposite of the positive adjectives with a score of +1 if the adjective is not circled and a 0 if it is circled.

Positive adjectives are:

adventurous, aggressive, aloof, argumentative, arrogant, assertive, autocratic, confident, cynical, dissatisfied, egotistical, fault-finding, frank, hard-headed, headstrong, hostile, independent, indifferent, individualistic, irresponsible, opinionated, outspoken, rebellious, self-centered, self-confident, tactless, unconventional, undependable, and uninhibited.

Negative adjectives are: cautious, conventional, cooperative, dependable, dependent, meek, moderate, obliging, self-denying, spineless, submissive, suggestible, tactful, timid, and tolerant.

COMPLIANCE, AGGRESSION, DETACHED (CAD) SCALE

Detached dimension of the scale (CAD) scale (Cohen 1967)		Extremely Undesirable		Extremely Desirable			
		1	2	3	4	5	6
1.	Being free of emotional ties with others is:	1	2	3	4	5	6
2.	Enjoying a good movie by myself is:	1	2	3	4	5	6
3.	For me to pay little attention to what others think of me seems:	1	2	3	4	5	6
4.	To be able to work hard while others elsewhere are having fun is: ..	1	2	3	4	5	6
5.	If I could live all alone in a cabin in the woods or mountains it would be:	1	2	3	4	5	6
6.	Being free of social obligations is:	1	2	3	4	5	6
7.	Planning to get along without others is:	1	2	3	4	5	6
8.	For me to avoid situations where others can influence me would be: ..	1	2	3	4	5	6
9.	If I knew that others paid very little attention to my affairs it would be:	1	2	3	4	5	6
10.	For me to work alone would be:	1	2	3	4	5	6

EFFICACY ITEMS

Efficacy – Mowen (2000) $\alpha=.72$

I feel in control of what is happening to me.

Never Always

1 2 3 4 5 6 7 8 9

Once I make up my mind, I can reach my goals.

1 2 3 4 5 6 7 8 9

I have a great deal of will power.

1 2 3 4 5 6 7 8 9

When I make a decision, I carry it out.

1 2 3 4 5 6 7 8 9

Efficacy -- (Sherer et al. 1982) $\alpha=.86$

Never Always

1. When I make plans, I am certain I can make them work.

1 2 3 4 5 6 7 8 9

2. One of my problems is that I cannot get down to work when I should. ®

1 2 3 4 5 6 7 8 9

3. If I can't do a job the first time, I keep trying until I can.

1 2 3 4 5 6 7 8 9

4. When I set important goals for myself, I rarely achieve them ®

1 2 3 4 5 6 7 8 9

5. I give up on things before completing them. ®

1 2 3 4 5 6 7 8 9

6. I avoid facing difficulties. ®

1 2 3 4 5 6 7 8 9

7. If something looks too complicated, I will not even bother to try it. ®

1 2 3 4 5 6 7 8 9

8. When I have something unpleasant to do, I stick to it until I finish it.

1 2 3 4 5 6 7 8 9

9. When I decide to do something, I go right to work on it.

1 2 3 4 5 6 7 8 9

10. When trying to learn something new, I soon give up if I am not initially successful ®

1 2 3 4 5 6 7 8 9

11. When unexpected problems occur, I don't handle them well. ®

1 2 3 4 5 6 7 8 9

12. I avoid trying to learn new things when they look too difficult for me. ®

1 2 3 4 5 6 7 8 9

13. Failure just makes me try harder.

1 2 3 4 5 6 7 8 9

14. I feel insecure about my ability to do things. ®

1 2 3 4 5 6 7 8 9

15. I am a self-reliant person.

1 2 3 4 5 6 7 8 9

16. I give up easily. ®

1 2 3 4 5 6 7 8 9

17. I do not seem capable of dealing with most problems that come up in life. ®

1 2 3 4 5 6 7 8 9

PROPOSED GENERAL EFFICACY ITEMS

1. I believe that I am capable of doing whatever I decide to do.	1 2 3 4 5 6 7 8 9
2. In general, I have better skills than most people.	1 2 3 4 5 6 7 8 9
3. I am confident in my abilities.	1 2 3 4 5 6 7 8 9
4. When faced with a decision, I am confident that I can make a good decision.	1 2 3 4 5 6 7 8 9
5. I feel confident in skills.	1 2 3 4 5 6 7 8 9
6. I feel confident that my skills and abilities equal or exceed those of my peers.	1 2 3 4 5 6 7 8 9
7. Once I know what I need to do, I can do it.	1 2 3 4 5 6 7 8 9
8. In a new situation I expect I can handle things.	1 2 3 4 5 6 7 8 9
9. When I'm stressed, I can count on myself to cope successfully.	1 2 3 4 5 6 7 8 9
10. I feel that I am overqualified for the job I am doing.	1 2 3 4 5 6 7 8 9
11. I could handle a more challenging job than the one I am doing.	1 2 3 4 5 6 7 8 9

SURFACE TRAIT EFFICACY ITEMS

Diet

	<i>Never</i>	<i>Always</i>
I am confident that I can lose weight.	1 2 3 4 5 6 7 8 9	
I have the ability to lose weight.	1 2 3 4 5 6 7 8 9	
Compared to my friends, I am more capable in trying to lose weight.	1 2 3 4 5 6 7 8 9	
I can create my own weight loss program as well as a dietician.	1 2 3 4 5 6 7 8 9	
I am confident that I can learn how to lose weight properly.	1 2 3 4 5 6 7 8 9	
Once I know how to lose weight, I can do it.	1 2 3 4 5 6 7 8 9	

Investing

	<i>Never</i>	<i>Always</i>
I am confident that I can invest on my own	1 2 3 4 5 6 7 8 9	
I have the ability to handle my own investments	1 2 3 4 5 6 7 8 9	
I can invest as well as any of my friends	1 2 3 4 5 6 7 8 9	
I can invest as well as a stockbroker	1 2 3 4 5 6 7 8 9	
I am confident that I can learn how to invest well.	1 2 3 4 5 6 7 8 9	
Once I know how to invest, I can do it.	1 2 3 4 5 6 7 8 9	

Travel

	<i>Never</i>	<i>Always</i>
I am confident that I can make travel arrangements.	1 2 3 4 5 6 7 8 9	
I have the ability to make my own travel arrangements.	1 2 3 4 5 6 7 8 9	
Compared to my friends, I am more capable in making travel arrangements.	1 2 3 4 5 6 7 8 9	
I can make travel arrangements as well as a travel agent.	1 2 3 4 5 6 7 8 9	
I can make travel arrangements as well as my friends.	1 2 3 4 5 6 7 8 9	
Once I know how to make travel arrangements, I can do it well.	1 2 3 4 5 6 7 8 9	

Computer Use

Never Always

I am confident that I can use a computer on my own.	1 2 3 4 5 6 7 8 9
I have the ability to use a computer.	1 2 3 4 5 6 7 8 9
I can use a computer as well as any of my friends.	1 2 3 4 5 6 7 8 9
I can use a computer as well as a computer geek.	1 2 3 4 5 6 7 8 9
I am confident that I can learn how to use a computer well.	1 2 3 4 5 6 7 8 9
Once I know how to use a computer, I can do it.	1 2 3 4 5 6 7 8 9

ELEMENTAL TRAIT ITEMS

Circle the one number that best indicates how frequently you feel or act in the way described.

Openness	<i>Never</i>	<i>Always</i>
Feel highly creative.	1 2 3 4 5 6 7 8 9	
Imaginative	1 2 3 4 5 6 7 8 9	
Find novel solutions.	1 2 3 4 5 6 7 8 9	
More original than others.	1 2 3 4 5 6 7 8 9	

Conscientiousness	<i>Never</i>	<i>Always</i>
Precise.	1 2 3 4 5 6 7 8 9	
Efficient.	1 2 3 4 5 6 7 8 9	
Organized.	1 2 3 4 5 6 7 8 9	
Orderly.	1 2 3 4 5 6 7 8 9	

Introversion	<i>Never</i>	<i>Always</i>
Bashful more than others.	1 2 3 4 5 6 7 8 9	
Introverted.	1 2 3 4 5 6 7 8 9	
Quiet when with people.	1 2 3 4 5 6 7 8 9	
Shy.	1 2 3 4 5 6 7 8 9	

Agreeableness	<i>Never</i>	<i>Always</i>
Tender Hearted.	1 2 3 4 5 6 7 8 9	
Agreeable with others.	1 2 3 4 5 6 7 8 9	
Kind to others.	1 2 3 4 5 6 7 8 9	
Softhearted.	1 2 3 4 5 6 7 8 9	

Neuroticism

Moody more than others.

Temperamental.

Touchy.

Emotions go way up and down.

Never *Always*

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

Materialism

Enjoy buying expensive things.

Like to own nice things more than most people.

Acquiring valuable things is important to me.

Enjoy owning luxurious things.

Never *Always*

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

Arousal

Drawn to experiences with an element of danger.

Seek an adrenaline rush.

Actively seek new experiences.

Enjoy taking more risks than others.

Never *Always*

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

Physical

Focus on my body and how it feels.

Devote time each day to improving my body.

Feel that making my body look good is important.

Work hard to keep my body healthy.

Never *Always*

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

INVOLVEMENT WITH THE SERVICE CHOICES

Unimportant	:	:	:	:	:	:	Important
Of no concern	:	:	:	:	:	:	Of concern to me
Irrelevant	:	:	:	:	:	:	Relevant
Means nothing to me	:	:	:	:	:	:	Means a lot to me

APPENDIX B –SERVICE PREFERENCE SCENARIOS

Weight Loss

You have decided that you need to lose weight. You know that there is a local weight reduction program, similar to Weight Watchers, offered in town. This program provides diet guidelines, daily calorie limits, and meal planning for you. Because of the structure of the plan, you simply need to follow what they tell you to do. Alternatively, you could decide to create your own personal diet by researching nutritional guidelines, recommended calorie levels, and appropriate meals. Presuming cost is not an issue,

1. **How likely is it you will create your own weight loss program?**
0 1 2 3 4 5 6 7 8 9 10
Not Likely Very Likely

2. **Which are you more likely to do?**
Join Weight Loss Program 0 1 2 3 4 5 6 7 8 9 10 Create own diet

Travel

You have an upcoming trip which requires you to make airline reservations. There are several travel agents in town which are capable of making the reservations for you. The travel agency would make recommendations for your trip. Alternatively, you could research airline schedules and fares yourself, perhaps by calling the airlines directly or using a travel web site. Presuming there is no difference in cost between using a travel agent or making the travel arrangements yourself,

3. **How likely is it you will create your own travel arrangements?**
0 1 2 3 4 5 6 7 8 9 10
Not Likely Very Likely

4. **Which are you more likely to do?**
Use Travel Agent 0 1 2 3 4 5 6 7 8 9 10 Make own travel arrangements

Investing

You have money which you would like to invest. There are financial advisors in town which can help you decide how best to invest your money. Alternatively, you can do your own research and decide on your own what investments are best for you. Presuming there is no difference in cost between using a financial advisor or investing on your own,

5. **How likely is it you will make your own investments?**
0 1 2 3 4 5 6 7 8 9 10
Not Likely Very Likely

6. **Which are you more likely to do?**
Use financial advisor 0 1 2 3 4 5 6 7 8 9 10 Make own investments

APPENDIX C – SURVEY STUDY 1A



College of Business Administration
 201 Business
 Stillwater, Oklahoma 74078-4011
 405-744-5064; Fax 405-744-5180

CONSENT FORM

This semester you will be asked to assist Oklahoma State University Department of Marketing researchers by completing several surveys. In approximately two weeks you will be asked to complete a second survey for this same research. Each survey requires approximately 20 minutes of class time to complete.

Your individual answers to the questions are completely anonymous and will not be made available to your instructor. You will be asked to provide only the last 5 digits of your Student Identification number so surveys can be matched together. Once the surveys have been matched together, the page which has your Identification number listed will be discarded.

This research investigates the antecedents and consequences of consumer behavior in a service encounter. Specifically the researchers are interested in how different personality types behave in different settings. As such, you will be asked to complete several personality measures which are included for classification purposes. There are no right or wrong answers to these questions. You should answer all the questions truthfully and completely.

Signing this consent form does **not** prevent you from withdrawing from the research. Your participation is completely voluntary and you may stop at any time. Whether you choose to participate or not does not affect your grade.

Agreeing to participate allows market researchers to gain better understanding of consumer motivation. You will also be involved in a real-life market research project.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying my instructor."

 Signature

 Date

If you have any questions regarding this form, your rights, or the ongoing research, please contact either Dr. Joshua Wiener, Chair of the Marketing Department or Gay Clarkson, IRB Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number: (405) 744-5700.



The Campaign for OSU

OKLAHOMA STATE UNIVERSITY



College of Business Administration
201 Business
Stillwater, Oklahoma 74078-4011
405-744-5064; Fax 405-744-5180

Please list the last 5 Digits of your Student ID#:

X X X - X _ - _ _ _

This research investigates your attitudes, beliefs, and personal characteristics associated with several topics. Your participation is completely voluntary. You may withdraw from participation in this study at any time. To protect your privacy, no personal identifying information about you will be saved.

In the following sections you will be asked to indicate the extent to which you agree or disagree about various statements. There are also motivational questions that you should answer according to how frequently you feel or act in the manner described. Keep in mind that there are no right or wrong answers. Please circle the response that most accurately describes how you feel or act in your daily life, **not** how you wish you would act.

This cover sheet will be discarded and no record will be maintained linking your Student Identification number to your responses. Your individual answers are confidential and will only be used for academic research.

Thank you for your assistance in completing this survey.

The Campaign for OSU



Marketing Survey Fall 2000

For Office Use Only

Age: 18-24 25-29 30-34 35-39 40-44 45-49
 50-54 55-59 60-64 65-69 70+

Birth Date: Circle the Month and Day

Jan	Feb	Mar	Apr	1	2	3	4	5	6	7	8	9	10
May	Jun	Jui	Aug	11	12	13	14	15	16	17	18	19	20
Sep	Oct	Nov	Dec	21	22	23	24	25	26	27	28	29	30
				31									

US Citizen? Yes No

Country of Birth: USA Other: _____

Gender: Male Female

Major: Advertising Accounting Economics Finance
 Management Marketing General Business
 Public Relations MIS Other _____

For this section, circle the number which best represents your feelings about the statement.

	Disagree	Agree
1. It is important to me that I make the decisions which may affect me.	1	2 3 4 5 6 7 8 9
2. My decisions are as good as anyone's.	1	2 3 4 5 6 7 8 9
3. Even though others may know more than I do, I still insist on making my own decisions.	1	2 3 4 5 6 7 8 9
4. Decisions which affect me should be made by me.	1	2 3 4 5 6 7 8 9
5. I don't mind if someone else makes decisions for me.	1	2 3 4 5 6 7 8 9
6. Others can influence my choices.	1	2 3 4 5 6 7 8 9
7. Even if I make the wrong decision, I am glad that it was my decision.	1	2 3 4 5 6 7 8 9
8. I often make choices without talking to anyone else first.	1	2 3 4 5 6 7 8 9
9. Even if I am sure I can make the right choice, I will let someone else decide.	1	2 3 4 5 6 7 8 9
10. It is more important to me that I make a decision than it is being right.	1	2 3 4 5 6 7 8 9
11. It is never wrong if I make my own choice.	1	2 3 4 5 6 7 8 9
12. It is more important that the right decision is made than it is that I make the decision.	1	2 3 4 5 6 7 8 9
13. I make more of my own decisions than my friends do.	1	2 3 4 5 6 7 8 9
14. I take responsibility for my choices in life.	1	2 3 4 5 6 7 8 9
15. My friends seem to be more comfortable making their own decisions than I am. ...	1	2 3 4 5 6 7 8 9
16. It is more satisfying to me knowing that I made a decision rather than someone else making the decision.	1	2 3 4 5 6 7 8 9
17. Among my friends, I tend to be the decision maker.	1	2 3 4 5 6 7 8 9
18. I am decisive.	1	2 3 4 5 6 7 8 9
19. My friends look to me to make their decisions.	1	2 3 4 5 6 7 8 9
20. I wish I could be more decisive.	1	2 3 4 5 6 7 8 9
21. I am very comfortable with the decisions I make.	1	2 3 4 5 6 7 8 9
22. I prefer to do something myself rather than pay someone else to do the same thing. .	1	2 3 4 5 6 7 8 9
23. It is satisfying when I make the effort to do something.	1	2 3 4 5 6 7 8 9
24. Regardless of cost, I prefer to do things myself.	1	2 3 4 5 6 7 8 9

	Disagree	Agree
25. Regardless of cost, I prefer to let others do things for me.	1 2 3 4 5 6 7 8 9	
26. Given a choice, I prefer to do things myself.	1 2 3 4 5 6 7 8 9	
27. I believe that if I want things done right, I must do things myself.	1 2 3 4 5 6 7 8 9	
28. I am always prepared.	1 2 3 4 5 6 7 8 9	
29. Compared to my friends, I put more effort into my work.	1 2 3 4 5 6 7 8 9	
30. I prefer to do things myself rather than let others do them for me.	1 2 3 4 5 6 7 8 9	
31. All things equal, I will do things myself rather than have someone else do them for me.	1 2 3 4 5 6 7 8 9	
32. I tend to do a lot of research before buying anything.	1 2 3 4 5 6 7 8 9	
33. Whenever possible I prefer to do things for myself.	1 2 3 4 5 6 7 8 9	
34. I always am very diligent in preparing for anything.	1 2 3 4 5 6 7 8 9	
35. I prefer to let others do things for me rather than doing the same things myself.	1 2 3 4 5 6 7 8 9	
36. I am uncomfortable letting others do things for me.	1 2 3 4 5 6 7 8 9	
37. I rarely put much effort into things.	1 2 3 4 5 6 7 8 9	
38. I do a lot of research on my own before making decisions.	1 2 3 4 5 6 7 8 9	
39. In general, I have a lot of confidence in my abilities.	1 2 3 4 5 6 7 8 9	
40. Finding a job which is interesting is a goal of mine.	1 2 3 4 5 6 7 8 9	
41. I take pride in my work.	1 2 3 4 5 6 7 8 9	
42. I am responsible for my own actions.	1 2 3 4 5 6 7 8 9	
43. I would rather have a job which is interesting with low pay than one which is boring but pays well.	1 2 3 4 5 6 7 8 9	
44. I enjoy the feeling of having done a good job.	1 2 3 4 5 6 7 8 9	
45. I will prefer a job which is interesting even if it pays me less than other jobs.	1 2 3 4 5 6 7 8 9	
46. It is important to me to understand a situation before making any decisions.	1 2 3 4 5 6 7 8 9	
47. When getting a disappointing grade on an exam, I tend to wonder why I did so poorly.	1 2 3 4 5 6 7 8 9	
48. At parties I can usually find someone to which I can relate.	1 2 3 4 5 6 7 8 9	
49. When working with others, I think it is important to get their input rather than me just making decisions on their behalf.	1 2 3 4 5 6 7 8 9	
50. When I do not do as well as I think I should, I can usually see why my performance was bad.	1 2 3 4 5 6 7 8 9	
51. I generally like new challenges even if they make me slightly nervous.	1 2 3 4 5 6 7 8 9	
52. When not getting a job I wanted, I assume it is because my qualifications did not match their needs.	1 2 3 4 5 6 7 8 9	
53. I would try getting away with stuff if I thought no one was watching.	1 2 3 4 5 6 7 8 9	
54. I fiercely guard my confidentiality.	1 2 3 4 5 6 7 8 9	
55. There are times I have not purchased an item because I did not want other people to know about the purchase.	1 2 3 4 5 6 7 8 9	
56. I don't care what other people think about me.	1 2 3 4 5 6 7 8 9	
57. I will go out of my way to make a purchase just so people I know won't know about it.	1 2 3 4 5 6 7 8 9	

	Disagree	Agree
58. I resent being asked for my full social security number because I feel it should be kept confidential.	1 2 3 4 5 6 7 8 9	
59. When possible, I prefer to remain anonymous.	1 2 3 4 5 6 7 8 9	
60. I hesitate when a sales clerk asks me for my home address because I don't feel that it any of their business.	1 2 3 4 5 6 7 8 9	
61. I have purposely given the wrong phone number/address to a sales clerk to protect my confidentiality.	1 2 3 4 5 6 7 8 9	
62. I am more open with my thoughts and opinions if I believe other people can not identify me.	1 2 3 4 5 6 7 8 9	

In this section, indicate if the statement is True or False about yourself.

63. I like gossip at times.	True	False
64. There have been occasions when I took advantage of someone.	True	False
65. I'm always willing to admit it when I've made a mistake.	True	False
66. I always try to practice what I preach.	True	False
67. I sometimes try to get even rather than forgive and forget.	True	False
68. At times I have really insisted on having things my way.	True	False
69. There have been occasions when I felt like smashing things.	True	False
70. I never resent being asked to return a favor.	True	False
71. I have never been irked when people expressed ideas very different from my own. .	True	False
72. I have never deliberately said something that hurt someone's feelings.	True	False

Circle the number which best indicates how frequently you feel or act in the way described.

	Never	Always
73. I believe that I am capable of doing whatever I decide to do.	1 2 3 4 5 6 7 8 9	
74. In general, I have better skills than most people.	1 2 3 4 5 6 7 8 9	
75. I am confident in my abilities.	1 2 3 4 5 6 7 8 9	
76. When faced with a decision, I am confident that I can make a good decision.	1 2 3 4 5 6 7 8 9	
77. I feel confident that my skills and abilities equal or exceed those of my colleagues. .	1 2 3 4 5 6 7 8 9	
78. Once I know what I need to do, I can do it.	1 2 3 4 5 6 7 8 9	
79. In a new situation I expect I can handle things.	1 2 3 4 5 6 7 8 9	
80. When I'm stressed, I can count on myself to cope successfully.	1 2 3 4 5 6 7 8 9	
81. I feel that I am overqualified for the job I am doing.	1 2 3 4 5 6 7 8 9	
82. I could handle a more challenging job than the one I am doing.	1 2 3 4 5 6 7 8 9	
83. Enjoy learning new things more than others.	1 2 3 4 5 6 7 8 9	
84. Enjoy working on new ideas.	1 2 3 4 5 6 7 8 9	
85. Information is most important resource.	1 2 3 4 5 6 7 8 9	
86. People consider me to be intellectual.	1 2 3 4 5 6 7 8 9	
87. Keep really busy doing things.	1 2 3 4 5 6 7 8 9	
88. Try to cram as much as possible into a day.	1 2 3 4 5 6 7 8 9	
89. Extremely active in my daily life.	1 2 3 4 5 6 7 8 9	
90. I feel in control of what is happening to me.	1 2 3 4 5 6 7 8 9	
91. Once I make up my mind, I can reach my goals.	1 2 3 4 5 6 7 8 9	

	Never	Always
92. I have a great deal of will power.	1 2 3 4 5 6 7 8 9	
93. When I make a decision, I carry it out.	1 2 3 4 5 6 7 8 9	
94. Enjoy competition more than others.	1 2 3 4 5 6 7 8 9	
95. Feel that it is important to outperform others.	1 2 3 4 5 6 7 8 9	
96. Enjoy testing my abilities against others.	1 2 3 4 5 6 7 8 9	
97. Feel that winning is extremely important.	1 2 3 4 5 6 7 8 9	
98. Feel highly creative.	1 2 3 4 5 6 7 8 9	
99. Imaginative.	1 2 3 4 5 6 7 8 9	
100. Find novel solutions.	1 2 3 4 5 6 7 8 9	
101. More original than others.	1 2 3 4 5 6 7 8 9	
102. Precise.	1 2 3 4 5 6 7 8 9	
103. Efficient.	1 2 3 4 5 6 7 8 9	
104. Organized.	1 2 3 4 5 6 7 8 9	
105. Orderly.	1 2 3 4 5 6 7 8 9	
106. Bashful more than others.	1 2 3 4 5 6 7 8 9	
107. Introverted.	1 2 3 4 5 6 7 8 9	
108. Quiet when with people.	1 2 3 4 5 6 7 8 9	
109. Shy.	1 2 3 4 5 6 7 8 9	
110. Tender Hearted.	1 2 3 4 5 6 7 8 9	
111. Agreeable with others.	1 2 3 4 5 6 7 8 9	
112. Kind to others.	1 2 3 4 5 6 7 8 9	
113. Softhearted.	1 2 3 4 5 6 7 8 9	
114. Moody more than others.	1 2 3 4 5 6 7 8 9	
115. Temperamental.	1 2 3 4 5 6 7 8 9	
116. Touchy.	1 2 3 4 5 6 7 8 9	
117. Emotions go way up and down.	1 2 3 4 5 6 7 8 9	
118. Enjoy buying expensive things.	1 2 3 4 5 6 7 8 9	
119. Like to own nice things more than most people.	1 2 3 4 5 6 7 8 9	
120. Acquiring valuable things is important to me.	1 2 3 4 5 6 7 8 9	
121. Enjoy owning luxurious things.	1 2 3 4 5 6 7 8 9	
122. Drawn to experiences with an element of danger.	1 2 3 4 5 6 7 8 9	
123. Seek an adrenaline rush.	1 2 3 4 5 6 7 8 9	
124. Actively seek new experiences.	1 2 3 4 5 6 7 8 9	
125. Enjoy taking more risks than others.	1 2 3 4 5 6 7 8 9	
126. Focus on my body and how it feels.	1 2 3 4 5 6 7 8 9	
127. Devote time each day to improving my body.	1 2 3 4 5 6 7 8 9	
128. Feel that making my body look good is important.	1 2 3 4 5 6 7 8 9	
129. Work hard to keep my body healthy.	1 2 3 4 5 6 7 8 9	

List all of your hobbies:

APPENDIX D – SURVEY STUDY 1B

OKLAHOMA STATE UNIVERSITY



College of Business Administration
201 Business
Stillwater, Oklahoma 74078-4011
405-744-5064; Fax 405-744-5180

Please list the last 5 Digits of your Student ID#:

X X X - X _ - _ _ _

This research investigates your attitudes, beliefs, and personal characteristics associated with several topics. Your participation is completely voluntary. You may withdraw from participation in this study at any time. To protect your privacy, no personal identifying information about you will be saved.

In the following sections you will be asked to indicate the extent to which you agree or disagree about various statements. There are also motivational questions that you should answer according to how frequently you feel or act in the manner described. Keep in mind that there are no right or wrong answers. Please circle the response that most accurately describes how you feel or act in your daily life, **not** how you wish you would act.

This cover sheet will be discarded and no record will be maintained linking your Student Identification number to your responses. Your individual answers are confidential and will only be used for academic research.

Thank you for your assistance in completing this survey.

The Campaign for OSU



Marketing Survey Fall 2000

Circle all of the following adjectives which describe you:

	Outspoken	Uninhibited	Cautious	Meek	Adventurous	Dissatisfied
	Rebellious	Cooperative	Dependable	Self-denying	Argumentative	Aggressive
Reactive Autonomy	Submissive	Opinionated	Moderate	Suggestible	Autocratic	Arrogant
	Headstrong	Undependable	Spineless	Tolerant	Self-centered	Confident
	Tactless	Timid	Tactful	Aloof	Unconventional	Egotistical
	Obliging	Indifferent	Conventional	Assertive	Frank	Hard-headed
	Fault-finding	Self-confident	Dependent	Cynical	Hostile	Independent
					Individualistic	Irresponsible

This section of questions is intended to determine your beliefs about various issues. Each pair of alternatives is lettered *a* or *b*. Please circle the letter from the pair of statements which you more strongly believe to be accurate. Be sure to select the one (and only one) you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of your personal beliefs which means there are no right or wrong answers.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice. In some instances you may discover that you believe both statements or neither statement. In such cases, be sure to select the one you more strongly believe to be the true. Also respond to each item by ignoring your previous choices; do not be influenced by your previous choices.

- 1a. Children get into trouble because their parents punish them too much.
- 1b. The trouble with most children nowadays is that their parents are too easy with them.
- 2a. Many of the unhappy things in people's lives are partly due to bad luck.
- 2b. People's misfortunes result from the mistakes they make.
- 3a. One of the major reasons why we have wars is because people don't take enough interest in politics.
- 3b. There will always be wars, no matter how hard people try to prevent them.
- 4a. In the long run people get the respect they deserve in this world.
- 4b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- 5a. The idea that teachers are unfair to students is nonsense.
- 5b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
- 6a. Without the right breaks one cannot be an effective leader.
- 6b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 7a. No matter how hard you try some people just don't like you.
- 7b. People who can't get others to like them don't understand how to get along with others.
- 8a. Heredity plays the major role in determining one's personality.
- 8b. It is one's experiences in life which determine what they are like.
- 9a. I have often found that what is going to happen will happen.
- 9b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- 10a. In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.
- 10b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

- 11a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.
 11b. Getting a good job depends mainly on being in the right place at the right time.
- 12a. The average citizen can have an influence in government decisions.
 12b. This world is run by the few people in power, and there is not much the little guy can do about it.
- 13a. When I make plans, I am almost certain that I can make them work.
 13b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- 14a. There are certain people who are just no good.
 14b. There is some good in everybody.
- 15a. In my case, getting what I want has little or nothing to do with luck.
 15b. Many times we might just as well decide what to do by flipping a coin.
- 16a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
 16b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
- 17a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
 17b. By taking an active part in political and social affairs the people can control world events.
- 18a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
 18b. There really is no such thing as "luck".
- 19a. One should always be willing to admit mistakes.
 19b. It is usually best to cover up one's mistakes.
- 20a. It is hard to know if a person really likes you.
 20b. How many friends you have depends upon how nice a person you are.
- 21a. In the long run the bad things that happen to us are balanced by the good things.
 21b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
- 22a. With enough effort we can wipe out political corruption.
 22b. It is difficult for people to have much control over the things politicians do in office.
- 23a. Sometimes I can't understand how teachers arrive at the grades they give.
 23b. There is a direct connection between how hard I study and the grades I get.
- 24a. A good leader expects people to decide for themselves what they should do.
 24b. A good leader makes it clear to everybody what their jobs are.
- 25a. Many times I feel that I have little influence over the things that happen to me.
 25b. It is impossible for me to believe that chance or luck plays an important role in my life.
- 26a. People are lonely because they don't try to be friendly.
 26b. There's not much use in trying too hard to please people, if they like you, they like you.
- 27a. There is too much emphasis on athletics in high school.
 27b. Team sports are an excellent way to build character.
- 28a. What happens to me is my own doing.
 28b. Sometimes I feel that I don't have enough control over the direction my life is taking.
- 29a. Most of the time I can't understand why politicians behave the way they do.
 29b. In the long run the people are responsible for bad government on a national as well as on a local level.

For this next set of questions, circle the number which best indicates your agreement or disagreement with the statement.

	Disagree	Agree
30. When I make plans, I am certain I can make them work.	1 2 3 4 5 6 7 8 9	
31. One of my problems is that I cannot get down to work when I should.	1 2 3 4 5 6 7 8 9	
32. If I can't do a job the first time, I keep trying until I can.	1 2 3 4 5 6 7 8 9	
33. When I set important goals for myself, I rarely achieve them.	1 2 3 4 5 6 7 8 9	

34. I give up on things before completing them. 1 2 3 4 5 6 7 8 9
35. I avoid facing difficulties. 1 2 3 4 5 6 7 8 9
36. If something looks too complicated, I will not even bother to try it. 1 2 3 4 5 6 7 8 9
37. When I have something unpleasant to do, I stick to it until I finish it. 1 2 3 4 5 6 7 8 9
38. When I decide to do something, I go right to work on it. 1 2 3 4 5 6 7 8 9
39. When trying to learn something new, I soon give up if I am not initially successful. 1 2 3 4 5 6 7 8 9
40. When unexpected problems occur, I don't handle them well. 1 2 3 4 5 6 7 8 9
41. I avoid trying to learn new things when they look too difficult for me. 1 2 3 4 5 6 7 8 9
42. Failure just makes me try harder. 1 2 3 4 5 6 7 8 9
43. I feel insecure about my ability to do things. 1 2 3 4 5 6 7 8 9
44. I am a self-reliant person. 1 2 3 4 5 6 7 8 9
45. I give up easily. 1 2 3 4 5 6 7 8 9
46. I do not seem capable of dealing with most problems that come up in life. 1 2 3 4 5 6 7 8 9

Please circle the number which best represents your personal feelings.

- | | Extremely
Undesirable | Extremely
Desirable |
|---|--------------------------|------------------------|
| 47. Being free of emotional ties with others is: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 48. Enjoying a good movie by myself is: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 49. For me to pay little attention to what others think of me seems: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 50. To be able to work hard while others elsewhere are having fun is: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 51. If I could live all alone in a cabin in the woods or mountains it would be: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 52. Being free of social obligations is: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 53. Planning to get along without others is: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 54. For me to avoid situations where others can influence me would be: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 55. If I knew that others paid very little attention to my affairs it would be: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| 56. For me to work alone would be: | 1 2 3 4 5 6 | 1 2 3 4 5 6 |

Circle all of your hobbies:

- | | | |
|------------|------------|-------------|
| Cooking | Travel | Reading |
| Crafts | Exercising | Woodworking |
| Car Repair | Sports | Other _____ |

This section presents a series of hypothetical sketches. Each sketch describes an incident and lists three ways of responding to it. Please read each sketch, imagine yourself in that situation, and then consider each of the possible responses. Think of each response option in terms of how likely it is that you would respond that way.

1. You have been offered a new position in a company where you have worked for some time. The first question that is likely to come to mind is:

- a) What if I can't live up to the new responsibility?

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- b) Will I make more at this position?

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- c) I wonder if the new work will be interesting.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	

2. You have a school-age daughter. On parents' night the teacher tells you that your daughter is doing poorly and doesn't seem involved in the work. You are likely to:

- a) Talk it over with your daughter to understand further what the problem is.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- b) Scold her and hope she does better.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- c) Make sure she does the assignments, because she should be working harder.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	

3. You had a job interview several weeks ago. In the mail you received a form letter which states that the position has been filled. It is likely that you might think:

- a) It's not what you know, but who you know.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- b) I'm probably not good enough for the job.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- c) Somehow they didn't see my qualifications as matching their needs.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	

4. You are a plant supervisor and have been charged with the task of allotting coffee breaks to three workers who cannot all break at once. You would likely handle this by:

- a) Telling the three workers the situation and having them work with you on the schedule.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- b) Simply assigning times that each can break to avoid any problems.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	
- c) Find out from someone in authority what to do or do what was done in the past.

1	2	3	4	5	6	7
very unlikely		moderately likely			very likely	

5. A close (same-sex) friend of yours has been moody lately, and a couple of times has become very angry with you over "nothing." You might:

a) Share your observations with him/her and try to find out what is going on for him/her.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) Ignore it because there's not much you can do about it anyway.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) Tell him/her that you're willing to spend time together if and only if he/she makes more effort to control him/herself.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

6. You have just received the results of a test you took, and you discovered that you did very poorly. Your initial reaction is likely to be:

a) "I can't do anything right," and feel sad.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) "I wonder how it is I did so poorly," and feel disappointed.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) "That stupid test doesn't show anything," and feel angry.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

7. You have been invited to a large party where you know very few people. As you look forward to the evening, you would likely expect that:

a) You'll try to fit in with whatever is happening in order to have a good time and not look bad.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) You'll find some people with whom you can relate.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) You'll probably feel somewhat isolated and unnoticed.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

8. You are asked to plan a picnic for yourself and your fellow employees. Your style for approaching this project could most likely be characterized as:

a) Take charge: that is, you would make most of the major decisions yourself.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) Follow precedent: you're not really up to the task so you'd do it the way it's been done before.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) Seek participation: get inputs from others who want to make them before you make the final plans.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

9. Recently a position opened up at your place of work that could have meant a promotion for you. However, a person you work with was offered the job rather than you. In evaluating the situation, you're likely to think:

a) You didn't really expect the job; you frequently get passed over.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) The other person probably "did the right things" politically to get the job.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) You would probably take a look at factors in your own performance that led you to be passed over.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

10. You are embarking on a new career. The most important consideration is likely to be:

a) Whether you can do the work without getting in over your head.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) How interested you are in that kind of work.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) Whether there are good possibilities for advancement.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

11. A woman who works for you has generally done an adequate job. However, for the past two weeks her work has not been up to par and she appears to be less actively interested in her work. Your reaction is likely to be:

a) Tell her that her work is below what is expected and that she should start working harder.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) Ask her about the problem and let her know you are available to help work it out.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) It's hard to know what to do to get her straightened out.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

12. Your company has promoted you to a position in a city far from your present location. As you think about the move you would probably:

a) Feel interested in the new challenge and a little nervous at the same time.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

b) Feel excited about the higher status and salary that is involved.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

c) Feel stressed and anxious about the upcoming changes.

1 2 3 4 5 6 7
very unlikely moderately likely very likely

Thank you for your assistance in completing this survey. Your individual answers are confidential and will only be used for academic research.

APPENDIX E – SURVEY STUDY 2



College of Business Administration
201 Business
Stillwater, Oklahoma 74078-4011
405-744-5064; Fax 405-744-5180

CONSENT FORM

Service Encounters

You are asked to assist Oklahoma State University Department of Marketing researchers by completing the attached survey. The survey requires approximately 20 minutes of class time to complete.

Your individual answers to the questions are completely anonymous and will not be made available to your instructor. You will be asked to provide only the last 5 digits of your Student Identification number to assure that no duplicate responses are used. Once the data has been collected, the page which has your Identification number listed will be discarded.

This research investigates the antecedents and consequences of consumer behavior in a service encounter. Specifically the researchers are interested in how different personality types behave in different settings. As such, you will be asked to complete several personality measures which are included for classification purposes. There are no right or wrong answers to these questions. You should answer all the questions truthfully and completely.

Signing this consent form does **not** prevent you from withdrawing from the research. Your participation is completely voluntary and you may stop at any time. Whether you choose to participate or not does not affect your grade.

Agreeing to participate allows market researchers to gain better understanding of consumer motivation. You will also be involved in a real-life market research project.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying my instructor."

Signature

Date

If you have any questions regarding this form, your rights, or the ongoing research, please contact either Dr. Joshua Wiener, Chair of the Marketing Department or Gay Clarkson, IRB Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number: (405) 744-5700.



Please list the last 5 Digits of your Student ID#:

X X X - X _ - _ _ _ _

This research investigates your attitudes, beliefs, and personal characteristics associated with several topics. Your participation is completely voluntary. You may withdraw from participation in this study at any time. To protect your privacy, no personal identifying information about you will be saved.

In the following sections you will be asked to indicate the extent to which you agree or disagree about various statements. There are also motivational questions that you should answer according to how frequently you feel or act in the manner described. Keep in mind that there are no right or wrong answers. Please circle the response that most accurately describes how you feel or act in your daily life, **not** how you wish you would act.

This cover sheet will be discarded and no record will be maintained linking your Student Identification number to your responses. Your individual answers are confidential and will only be used for academic research.

Thank you for your assistance in completing this survey.

Survey ID#: F2000-2: _____

For Office Use Only

Marketing Survey Fall 2000

Age: 18-24 25-29 30-34 35-39 40-44 45-49
 (Circle) 50-54 55-59 60-64 65-69 70+

Birth Date: Circle the Month and Day

Jan	Feb	Mar	Apr	1	2	3	4	5	6	7	8	9	10
May	Jun	Jul	Aug	11	12	13	14	15	16	17	18	19	20
Sep	Oct	Nov	Dec	21	22	23	24	25	26	27	28	29	30
31													

US Citizen? Yes No

Country of Birth: USA Other: _____

Gender: Male Female

Major: Advertising	Accounting	Economics	Finance
Management	Marketing	General Business	
Public Relations	MIS	Other _____	

Very Little Very Much

- | | |
|--|-------------------|
| 1. How much experience do you have with diets? | 1 2 3 4 5 6 7 8 9 |
| 2. How much experience do you have with investing? | 1 2 3 4 5 6 7 8 9 |
| 3. How much experience do you have with travelling? | 1 2 3 4 5 6 7 8 9 |
| 4. How frequently does someone else made travel arrangements on your behalf? | 1 2 3 4 5 6 7 8 9 |
| 5. How frequently do you make your own travel arrangements? | 1 2 3 4 5 6 7 8 9 |
| 6. How frequently do you use a web-based travel site to make your travel arrangements? | 1 2 3 4 5 6 7 8 9 |
| 7. How frequently does someone else made financial investments on your behalf? | 1 2 3 4 5 6 7 8 9 |
| 8. How frequently do you make your own investments? | 1 2 3 4 5 6 7 8 9 |
| 9. How frequently do you use a web-based financial site to make your investments? | 1 2 3 4 5 6 7 8 9 |
| 10. How frequently do you use a diet program (e.g. Jenny Craig; NutriSystem)? | 1 2 3 4 5 6 7 8 9 |
| 11. How frequently does someone else make diet decisions for you? | 1 2 3 4 5 6 7 8 9 |
| 12. How frequently do you use a web-based health/nutrition site to make your diet? | 1 2 3 4 5 6 7 8 9 |
| 13. What is the purpose of your diet? (circle all that apply) | |

Weight Loss Nutrition Fitness Other _____

14. What diet programs have you used? (List all that apply)

- | | | |
|---|-------------------|--------------|
| For this section, circle the number which best represents your feelings about the statement. | Disagree | Agree |
| 15. It is important to me that I make the decisions which may affect me. | 1 2 3 4 5 6 7 8 9 | |
| 16. Even though others may know more than I do, I still insist on making my own decisions. | 1 2 3 4 5 6 7 8 9 | |
| 17. Decisions which affect me should be made by me. | 1 2 3 4 5 6 7 8 9 | |

Circle the number which best represents your feelings about the statement.	Disagree	Agree
18. Even if I make the wrong decision, I am glad that it was my decision.	1 2 3 4 5 6 7 8 9	
19. I want to make my own decisions.	1 2 3 4 5 6 7 8 9	
20. It is more satisfying to me knowing that I made a decision rather than someone else making the decision.	1 2 3 4 5 6 7 8 9	
21. I prefer to make my own decisions.	1 2 3 4 5 6 7 8 9	
22. I fiercely guard my confidentiality.	1 2 3 4 5 6 7 8 9	
23. I resent being asked for my full social security number because I feel it should be kept confidential.	1 2 3 4 5 6 7 8 9	
24. When possible, I prefer to remain anonymous.	1 2 3 4 5 6 7 8 9	
25. I hesitate when a sales clerk asks me for my home address because I don't feel that it any of their business.	1 2 3 4 5 6 7 8 9	
26. I have purposely given the wrong phone number/address to a sales clerk to protect my confidentiality.	1 2 3 4 5 6 7 8 9	
27. I am more open with my thoughts and opinions if I believe other people can not identify me.	1 2 3 4 5 6 7 8 9	
28. I prefer to do something myself rather than pay someone else to do the same thing.	1 2 3 4 5 6 7 8 9	
29. Given a choice, I prefer to do things myself.	1 2 3 4 5 6 7 8 9	
30. I prefer to do things myself rather than let others do them for me.	1 2 3 4 5 6 7 8 9	
31. Whenever possible I prefer to do things for myself.	1 2 3 4 5 6 7 8 9	
32. I do a lot of research before making diet decisions.	1 2 3 4 5 6 7 8 9	
33. Deciding on my own diet is important to me.	1 2 3 4 5 6 7 8 9	
34. Diet experts are a waste of money.	1 2 3 4 5 6 7 8 9	
35. There is plenty of research available to make good diet decisions.	1 2 3 4 5 6 7 8 9	
36. Deciding on how to diet is easy for me.	1 2 3 4 5 6 7 8 9	
37. I enjoy researching possible diets.	1 2 3 4 5 6 7 8 9	
38. Diet decisions are easy for me to make.	1 2 3 4 5 6 7 8 9	
39. Researching diets is enjoyable.	1 2 3 4 5 6 7 8 9	
40. I do a lot of research before deciding where to travel.	1 2 3 4 5 6 7 8 9	
41. Deciding on my own travel arrangements is important to me.	1 2 3 4 5 6 7 8 9	
42. Travel agents are a waste of money.	1 2 3 4 5 6 7 8 9	
43. There is plenty of research available to make good travel decisions.	1 2 3 4 5 6 7 8 9	
44. Deciding on where to travel is easy for me.	1 2 3 4 5 6 7 8 9	
45. I enjoy researching possible travel destinations.	1 2 3 4 5 6 7 8 9	
46. Travel decisions are easy for me to make.	1 2 3 4 5 6 7 8 9	
47. Researching travel opportunities is enjoyable.	1 2 3 4 5 6 7 8 9	
48. I do a lot of research before making investments.	1 2 3 4 5 6 7 8 9	
49. Deciding on my own investments is important to me.	1 2 3 4 5 6 7 8 9	
50. Financial advisors are a waste of money.	1 2 3 4 5 6 7 8 9	
51. There is plenty of research available to make good investment decisions.	1 2 3 4 5 6 7 8 9	
52. Deciding on how to invest is easy for me.	1 2 3 4 5 6 7 8 9	
53. I enjoy researching possible investments.	1 2 3 4 5 6 7 8 9	
54. Investment decisions are easy for me to make.	1 2 3 4 5 6 7 8 9	
55. Researching investment opportunities is enjoyable.	1 2 3 4 5 6 7 8 9	

Instructions:

For this section, read each scenario and then answer each question as if you were participating in the described situation.

Diet

You have decided that you need to follow a diet. You know that there is a local diet program, similar to Weight Watchers, offered in town. This program provides diet guidelines, daily calorie limits, and meal planning for you. Because of the structure of the plan, you simply need to follow what they tell you to do. Alternatively, you could decide to create your own personal diet by researching nutritional guidelines, recommended calorie levels, and appropriate meals. Presuming cost is not an issue,

	Not Likely	Very Likely
56. How likely is it you will create your own diet plan?	0 1 2 3 4 5 6 7 8 9 10	
57. How likely is it you will join the weight loss program?	0 1 2 3 4 5 6 7 8 9 10	

Travel

You have an upcoming trip which requires you to make airline reservations. There are several travel agents in town which are capable of making the reservations for you. The travel agency would make recommendations for your trip. Alternatively, you could research airline schedules and fares yourself, perhaps by calling the airlines directly or using a travel web site. Presuming there is no difference in cost between using a travel agent or making the travel arrangements yourself,

	Not Likely	Very Likely
58. How likely is it you will make your own travel arrangements?	0 1 2 3 4 5 6 7 8 9 10	
59. How likely is it you will use a travel agent?	0 1 2 3 4 5 6 7 8 9 10	

Investing

You have money which you would like to invest. There are financial advisors in town which can help you decide how best to invest your money. Alternatively, you can do your own research and decide on your own what investments are best for you. Presuming there is no difference in cost between using a financial advisor or investing on your own,

	Not Likely	Very Likely
60. How likely is it you will make your own investments?	0 1 2 3 4 5 6 7 8 9 10	
61. How likely is it you will use a financial advisor?	0 1 2 3 4 5 6 7 8 9 10	

Circle the number which best represents your feelings about the statement.	Disagree	Agree
62. In general, I have a lot of confidence in my abilities.	1 2 3 4 5 6 7 8 9	
63. Finding a job which is interesting is a goal of mine.	1 2 3 4 5 6 7 8 9	
64. I would rather have a job which is interesting with low pay than one which is boring but pays well.	1 2 3 4 5 6 7 8 9	
65. I enjoy the feeling of having done a good job.	1 2 3 4 5 6 7 8 9	
66. I will prefer a job which is interesting even if it pays me less than other jobs.	1 2 3 4 5 6 7 8 9	
67. When working with others, I think it is important to get their input rather than me just making decisions on their behalf.	1 2 3 4 5 6 7 8 9	
68. I generally like new challenges even if they make me slightly nervous.	1 2 3 4 5 6 7 8 9	
69. My financial resources are adequate.	1 2 3 4 5 6 7 8 9	
70. I have the financial support to do what I want.	1 2 3 4 5 6 7 8 9	
71. I have the financial resources to do as I please.	1 2 3 4 5 6 7 8 9	
72. I believe that I am capable of doing whatever I decide to do.	1 2 3 4 5 6 7 8 9	
73. I am confident in my abilities.	1 2 3 4 5 6 7 8 9	
74. When faced with a decision, I am confident that I can make a good decision.	1 2 3 4 5 6 7 8 9	
75. Once I know what I need to do, I can do it.	1 2 3 4 5 6 7 8 9	
76. In a new situation I expect I can handle things.	1 2 3 4 5 6 7 8 9	
77. I am confident that I can follow a diet.	1 2 3 4 5 6 7 8 9	
78. I have the ability to maintain a diet.	1 2 3 4 5 6 7 8 9	
79. Compared to my friends, I am more capable in trying to stay with a diet.	1 2 3 4 5 6 7 8 9	
80. I can create my own diet program as well as a dietician.	1 2 3 4 5 6 7 8 9	
81. I am confident that I can learn how to diet properly.	1 2 3 4 5 6 7 8 9	
82. Once I know how to diet properly, I can do it.	1 2 3 4 5 6 7 8 9	
83. I am confident that I can make travel arrangements.	1 2 3 4 5 6 7 8 9	
84. I have the ability to make my own travel arrangements.	1 2 3 4 5 6 7 8 9	
85. Compared to my friends, I am more capable in making travel arrangements.	1 2 3 4 5 6 7 8 9	
86. I can make travel arrangements as well as a travel agent.	1 2 3 4 5 6 7 8 9	
87. I can make travel arrangements as well as my friends.	1 2 3 4 5 6 7 8 9	
88. Once I know how to make travel arrangements, I can do it well.	1 2 3 4 5 6 7 8 9	
89. I am confident that I can invest on my own.	1 2 3 4 5 6 7 8 9	
90. I have the ability to handle my own investments.	1 2 3 4 5 6 7 8 9	
91. I can invest as well as any of my friends.	1 2 3 4 5 6 7 8 9	
92. I can invest as well as a stockbroker.	1 2 3 4 5 6 7 8 9	
93. I am confident that I can learn how to invest well.	1 2 3 4 5 6 7 8 9	
94. Once I know how to invest, I can do it.	1 2 3 4 5 6 7 8 9	
95. I am confident that I can use a computer on my own.	1 2 3 4 5 6 7 8 9	
96. I have the ability to use a computer.	1 2 3 4 5 6 7 8 9	
97. I can use a computer as well as any of my friends.	1 2 3 4 5 6 7 8 9	
98. I can use a computer as well as a computer geek.	1 2 3 4 5 6 7 8 9	
99. I am confident that I can learn how to use a computer well.	1 2 3 4 5 6 7 8 9	
100. Once I know how to use a computer, I can do it.	1 2 3 4 5 6 7 8 9	

Circle the number which best indicates how frequently you feel or act in the way described.

	Never	Always
101. Enjoy learning new things more than others.	1 2 3 4 5 6 7 8 9	
102. Enjoy working on new ideas.	1 2 3 4 5 6 7 8 9	
103. Information is most important resource.	1 2 3 4 5 6 7 8 9	
104. People consider me to be intellectual.	1 2 3 4 5 6 7 8 9	
105. Keep really busy doing things.	1 2 3 4 5 6 7 8 9	
106. Try to cram as much as possible into a day.	1 2 3 4 5 6 7 8 9	
107. Extremely active in my daily life.	1 2 3 4 5 6 7 8 9	
108. Feel highly creative.	1 2 3 4 5 6 7 8 9	
109. Imaginative.	1 2 3 4 5 6 7 8 9	
110. Find novel solutions.	1 2 3 4 5 6 7 8 9	
111. More original than others.	1 2 3 4 5 6 7 8 9	
112. Precise.	1 2 3 4 5 6 7 8 9	
113. Efficient.	1 2 3 4 5 6 7 8 9	
114. Organized.	1 2 3 4 5 6 7 8 9	
115. Orderly.	1 2 3 4 5 6 7 8 9	
116. Bashful more than others.	1 2 3 4 5 6 7 8 9	
117. Introverted.	1 2 3 4 5 6 7 8 9	
118. Quiet when with people.	1 2 3 4 5 6 7 8 9	
119. Shy.	1 2 3 4 5 6 7 8 9	
120. Tender Hearted.	1 2 3 4 5 6 7 8 9	
121. Agreeable with others.	1 2 3 4 5 6 7 8 9	
122. Kind to others.	1 2 3 4 5 6 7 8 9	
123. Softhearted.	1 2 3 4 5 6 7 8 9	
124. Moody more than others.	1 2 3 4 5 6 7 8 9	
125. Temperamental.	1 2 3 4 5 6 7 8 9	
126. Touchy.	1 2 3 4 5 6 7 8 9	
127. Emotions go way up and down.	1 2 3 4 5 6 7 8 9	
128. Enjoy buying expensive things.	1 2 3 4 5 6 7 8 9	
129. Like to own nice things more than most people.	1 2 3 4 5 6 7 8 9	
130. Acquiring valuable things is important to me.	1 2 3 4 5 6 7 8 9	
131. Enjoy owning luxurious things.	1 2 3 4 5 6 7 8 9	
132. Drawn to experiences with an element of danger.	1 2 3 4 5 6 7 8 9	
133. Seek an adrenaline rush.	1 2 3 4 5 6 7 8 9	
134. Actively seek new experiences.	1 2 3 4 5 6 7 8 9	
135. Enjoy taking more risks than others.	1 2 3 4 5 6 7 8 9	
136. Focus on my body and how it feels.	1 2 3 4 5 6 7 8 9	
137. Devote time each day to improving my body.	1 2 3 4 5 6 7 8 9	
138. Feel that making my body look good is important.	1 2 3 4 5 6 7 8 9	
139. Work hard to keep my body healthy.	1 2 3 4 5 6 7 8 9	

The purpose of this section is to measure your involvement or interest in several product categories.

Registering for Classes is:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Means nothing to me	0 1 2 3 4 5 6 7 8 9 10	Means a lot to me

Course Advisors are:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Mean nothing to me	0 1 2 3 4 5 6 7 8 9 10	Mean a lot to me

Travel is:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Means nothing to me	0 1 2 3 4 5 6 7 8 9 10	Means a lot to me

Investing is:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Means nothing to me	0 1 2 3 4 5 6 7 8 9 10	Means a lot to me

Dieting is:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Means nothing to me	0 1 2 3 4 5 6 7 8 9 10	Means a lot to me

Grocery Shopping is:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Means nothing to me	0 1 2 3 4 5 6 7 8 9 10	Means a lot to me

Using a Computer is:

Unimportant	0 1 2 3 4 5 6 7 8 9 10	Important
Of no concern	0 1 2 3 4 5 6 7 8 9 10	Of concern to me
Irrelevant	0 1 2 3 4 5 6 7 8 9 10	Relevant
Means nothing to me	0 1 2 3 4 5 6 7 8 9 10	Means a lot to me

Thank you for your assistance in completing this survey. Your individual answers are confidential and will only be used for academic research.

APPENDIX F – EXPERIMENT



College of Business Administration
201 Business
Stillwater, Oklahoma 74078-4011
405-744-5064; Fax 405-744-5180

CONSENT FORM

Course Registration System

You are asked to assist Oklahoma State University Department of Marketing researchers by completing the attached survey. This survey requires approximately 20 minutes of class time to complete.

Your individual answers to the questions are completely anonymous and will not be made available to your instructor. You will be asked to provide only the last 5 digits of your Student Identification number to assure that no duplicate responses are used. Once the data has been collected, the page which has your Identification number listed will be discarded.

This research investigates how consumers might react to a new proposed Course Registration System. You will be asked to answer questions about the system itself and your perception of the proposed system. There are no right or wrong answers to these questions. You should answer all the questions truthfully and completely.

Signing this consent form does **not** prevent you from withdrawing from the research. Your participation is completely voluntary and you may stop at any time. Whether you choose to participate or not does not affect your grade.

Agreeing to participate allows market researchers to gain better understanding of consumer motivation. You will also be involved in a real-life market research project.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying my instructor."

Signature

Date

If you have any questions regarding this form, your rights, or the ongoing research, please contact either Dr. Joshua Wiener, Chair of the Marketing Department or Gay Clarkson, IRB Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number: (405) 744-5700.

The Campaign for OSU



OKLAHOMA STATE UNIVERSITY



College of Business Administration
201 Business
Stillwater, Oklahoma 74078-4011
405-744-5064; Fax 405-744-5180

To: Oklahoma State Students
From: Teresa Dawes, Office of the Registrar
Date: Fall 2000
Subject: Student feedback on possible new course registration system

Dear Student:

Based on feedback from students concerning frustrations with the current system, the College is examining changes in how students register for classes. Your opinion is important in determining how the college proceeds. Please read the following information and then answer the questions which follow. Remember, your answers are confidential and will be used only after they have been combined with the responses of other students. This ensures confidentiality of your opinions.

To ensure that we do not record your responses more than once, we ask that you provide the last five digits of your student ID#. Once this research is concluded, your responses will be discarded.

Last 5 digits of Student ID#: XXX - X _ - _ _ _ _

Many students have expressed displeasure about the difficulty in the current course registration system. Common complaints include frustrations dealing with faculty advisors, unavailability of necessary courses, and waiting in long lines to register. After reviewing several innovative programs used by other schools, OSU has decided to investigate the feasibility of using long-range scheduling of course enrollment. Starting next year, if this new system is implemented, students who have declared a major will start using this new method of long-range course registration. Students who have not declared a major will continue under the current system.

Under this new system, students will schedule all remaining classes through the time required to be graduated. The advantage of this long-term scheduling is that you will know, perhaps a few years in advance, exactly what your schedule is for each semester. Another advantage is that the College can better plan teaching schedules which means that you will get into the classes you need. This long-range scheduling has been used successfully at other Big 12 schools.

At your convenience, you will go to the office of a Career Counselor. Once there, you will complete a short questionnaire about your career goals. Responses from this questionnaire and your desired graduation date will be used to schedule appropriate classes. The career counselor will then decide on a schedule of courses which best fit your graduation requirements and career goals. The counselor will ensure the necessary prerequisites are scheduled. The counselor makes all decisions on your behalf regarding your schedule. At any time you can get a copy of your schedule for each remaining semester.



The Campaign for OSU

Imagine that you have at least two years remaining here at OSU and that you will be using this new course registration system to register for classes. You meet with your new counselor (i.e., not your current counselor), and complete the career questionnaire, and provide your desired graduation date. For each and every remaining semester the counselor decides which courses you need to take. Once complete, the counselor enrolls you into the chosen classes. You get a printed copy of your entire schedule and leave.

Please answer the following questions about the system:

How satisfied are you with the proposed system? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your ability to schedule your courses? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with long-range course scheduling? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your schedule? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your level of participation in the process? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your participation in the process? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How much decision making is required by you in this system? Very Little 1 2 3 4 5 6 7 Very Much

How much effort is required by you in this system? Very Little 1 2 3 4 5 6 7 Very Much

How important is the course registration process to you? Very Little 1 2 3 4 5 6 7 Very Much

Is this proposed system better than the current course registration system? No 1 2 3 4 5 6 7 Yes

Your Expected Graduation Date: __ / __

The new system would be: -5 -4 -3 -2 -1 0 1 2 3 4 5
 Not at all Appealing Neutral Very Appealing

The new system would be: -5 -4 -3 -2 -1 0 1 2 3 4 5
 Not at all Enjoyable Neutral Very Enjoyable

Do you have any suggestions for the proposed system?

Do you have any concerns about the proposed system?

OKLAHOMA STATE UNIVERSITY



College of Business Administration
201 Business
Stillwater, Oklahoma 74078-4011
405-744-5064; Fax 405-744-5180

To: Oklahoma State Students
From: Teresa Dawes, Office of the Registrar
Date: Fall 2000
Subject: Student feedback on possible new course registration system

Dear Student:

Based on feedback from students concerning frustrations with the current system, the College is examining changes in how students register for classes. Your opinion is important in determining how the college proceeds. Please read the following information and then answer the questions which follow. Remember, your answers are confidential and will be used only after they have been combined with the responses of other students. This ensures confidentiality of your opinions.

To ensure that we do not record your responses more than once, we ask that you provide the last five digits of your student ID#. Once this research is concluded, your responses will be discarded.

Last 5 digits of Student ID#: XXX - X _ - _ _ _ _

Many students have expressed displeasure about the difficulty in the current course registration system. Common complaints include frustrations dealing with faculty advisors, unavailability of necessary courses, and waiting in long lines to register. After reviewing several innovative programs used by other schools, OSU has decided to investigate the feasibility of using long-range scheduling of course enrollment. Starting next year, if this new system is implemented, students who have declared a major will start using this new method of long-range course registration. Students who have not declared a major will continue under the current system.

Under this new system, students will schedule all remaining classes through the time required to be graduated. The advantage of this long-term scheduling is that you will know, perhaps a few years in advance, exactly what your schedule is for each semester. Another advantage is that the College can better plan teaching schedules which means that you will get into the classes you need. This long-range scheduling has been used successfully at other Big 12 schools.

At your convenience, you will go to the office of a Career Counselor. Once there, you will complete a short questionnaire about your career goals. This will help you better focus on which classes are appropriate for you. Secondly you will use the Plan of Schedule for your major to select which courses you want and need to take. From the published 2000-2003 course schedule, you will then decide the classes which you wish to enroll. Before leaving the Counselor's office, you will decide on the courses you wish to take for each and every semester remaining. Furthermore you will make all decisions concerning course times. The counselor does not make any decisions or recommendations. All decisions are made by you. Once you have decided your course schedule, the counselor will automatically enroll you into all of your selected classes. At any time you can get a copy of your schedule for each remaining semester.



The Campaign for OSU

Imagine that you have at least two years remaining here at OSU and that you will be using this new course registration system to register for classes. You meet with your new (i.e., not your current counselor) counselor, complete the career questionnaire, and provide your desired graduation date. For each and every remaining semester you must decide on which courses you want to take. From this list you then must decide on what class times you want. When you have made all the decision on all of your selections, the counselor simply enrolls you into your chosen classes. You get a printed copy of your entire schedule and leave.

Please answer the following questions about the system:

How satisfied are you with the proposed system? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your ability to schedule your courses? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with long-range course scheduling? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your schedule? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your level of participation in the process? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How satisfied are you with your participation in the process? Not Satisfied 1 2 3 4 5 6 7 Very Satisfied

How much decision making is required by you in this system? Very Little 1 2 3 4 5 6 7 Very Much

How much effort is required by you in this system? Very Little 1 2 3 4 5 6 7 Very Much

How important is the course registration process to you? Very Little 1 2 3 4 5 6 7 Very Much

Is this proposed system better than the current course registration system? No 1 2 3 4 5 6 7 Yes

Your Expected Graduation Date: ___ / ___

The new system would be: -5 -4 -3 -2 -1 0 1 2 3 4 5
Not at all Appealing Neutral Very Appealing

The new system would be: -5 -4 -3 -2 -1 0 1 2 3 4 5
Not at all Enjoyable Neutral Very Enjoyable

Do you have any suggestions for the proposed system?

Do you have any concerns about the proposed system?

APPENDIX G – SCALE DEVELOPMENT RESULTS

The purpose of the first study is to develop and validate the scales necessary for the second study. Undergraduate students enrolled in upper-level Consumer Behavior marketing courses at Oklahoma State University (IRB# BU-016) were asked to participate. Because of the length of the instrument (see Table G-1 for a listing of all included scales), the data was collected in two sessions approximately two weeks apart. In addition to established scales, Study 1A included the proposed items for autonomy, efficacy, decision making, and effort. The responses from both studies were matched (n=160) for analysis. A subset of the subjects (n=72) in Study 1B also completed refined measures of decision making and effort in order to further develop the proposed measures.

TABLE G-1 – SCALES INCLUDED IN STUDY 1

Study 1A		
Scale	Author	Purpose (e.g., H1, H17)
Activity	(Mowen 2000)	Construct Validity
Agreeableness	(Mowen 2000)	H5, H11, H13,
Arousal	(Mowen 2000)	H8, H11, H13
Autonomy - Proposed	Proposed	H12, H13,
Competitiveness	(Mowen 2000)	Construct Validity
Conscientiousness	(Mowen 2000)	H3, H11, H13
Efficacy – (General)	(Mowen 2000)	Construct Validity
Efficacy – (General)	Proposed	H10, H11
Extraversion	(Mowen 2000)	H4, H11, H13
Learning	(Mowen 2000)	Construct Validity
Materialism	(Mowen 2000)	H7, H11, H13
Neuroticism	(Mowen 2000)	H6, H11, H13
Openness	(Mowen 2000)	H2, H11, H13
Participation Orientation	Proposed	H1→H10, H12, H14→H16,H18
Physical	(Mowen 2000)	H9, H11, H13
Social Desirability Bias	(Fischer and Fick 1993)	Construct Validity

Study 1B		
Autonomy – Deci Ryan	(Deci and Ryan 1985)	H12, H13,
Autonomy - Reactive	(Koestner and Losier 1996)	Construct Validity
Participation Orientation	Proposed	H1→H10, H12, H14→H16,H18
Efficacy – Sherer (General)	(Sherer et al. 1982)	Construct Validity
CAD – Detached Dimension	(Cohen 1967)	Construct Validity
Locus of Control	(Rotter 1966)	Construct Validity

DESCRIPTIVES

As shown in Table G-2, slightly more females than males completed the first surveys. The opposite was found in the second study. As would be expected subjects were predominantly U.S. citizens and primarily in the 18-24 year age demographic. Furthermore, forty four percent of the subjects were majoring in Marketing; fifteen percent in General Business; thirteen percent listed themselves as Other; and the remaining subjects studying various business-related majors.

TABLE G-2 – DEMOGRAPHIC INFORMATION

	Study 1A	Matched 1A&1B	Subset*	Study 2
Males	97	68	30	107
Females	110	88	40	83
US Citizen	194	150	64	186
Non-US Citizen	15	7	6	7
Age: 18-24	89%	91%	88%	88%
n=	213	160	72	194

*Subset completed refined Decision Making and Effort scales in Study 1.

Autonomy

Subjects in Study 1A (ns=213) completed 14 items for the proposed autonomy scale. These items were generated to correspond to the 12 vignettes of the GCOS. Each item was rated on a 1-9 Disagree – Agree scale. The Deci and Ryan General Causality

Orientation Scale (GCOS) and the ACL measure of reactive autonomy were administered in Study 1B. The purpose was to develop a parsimonious Likert-type scale to replace the lengthy 12-vignette GCOS scale. The ACL scale was included for construct validation.

Deci & Ryan Autonomy

The Deci and Ryan GCOS scale measures three different orientations using 12 vignettes. After each vignette subjects responded to three items representing the autonomy, control, and impersonal orientations. Although only the autonomy orientation was pertinent to this study, the items for the other two orientations were included to preserve the integrity of the original instrument. Only the results for the autonomy orientation are reported.

The twelve autonomy items in Study 1B had an alpha of .65 (n=158) with item-to-total correlations ranging from .14 to .53. Principal Component analysis revealed 4 factors with eigenvalues greater than 1.0. These factors cumulatively explained 56% of the variance. Deci and Ryan (1985) reported an alpha of .75 for the autonomy orientation and item-to-total correlations ranging from .43 to .60 from a sample of 636 students. No exploratory factor analysis results were reported. In this study, the twelve Deci and Ryan autonomy items were combined into a single scale with higher scores representing a greater autonomy orientation.

Confirmatory factor analysis resulted in a model with acceptable fit ($\chi^2=181.81$, 54 *df*, RMSEA=.105, GFI=.876). This model has a composite reliability of .67 but only extracted 16 percent of the variance. More detailed results are presented in Table G-8. Because Deci and Ryan never reported any results beyond Cronbach's alpha no judgment can be made on these current results.

Reactive Autonomy

The ACL list of 44 adjectives were used to measure reactive autonomy. After reverse scoring of the 15 negative adjectives, alpha was .71 (n=158). Koestner and Losier (1996) reported an alpha of .69 from an earlier study but did not report an alpha from their own study. The scores were combined into a summated scale representing reactive autonomy. The confirmatory factor analysis revealed a model with acceptable overall fit ($\chi^2=2027.54$, 902 *df*, RMSEA=.077, GFI=.697) that had a composite reliability of .71 and extracted 11 percent of the variance. Table G-8 lists more complete results.

Proposed Autonomy

The 14 proposed autonomy items were administered to 213 subjects. The initial alpha was .71 with item-to-total correlations ranging from .03 to .64. Individual items with the lowest item-to-total correlation were iteratively deleted until only four items remained. These four items had an alpha of .75 and item-to-total correlations from .40 to .76. However these items were narrow in their representation of autonomy. Each item focused on job related issues including the importance of interesting work and low pay. Thus three items with broader content validity were added back to the scale. The broader content area is important because autonomy is proposed to be a compound trait which by definition is relatively abstract. This seven item scale had an alpha of .67 and item-to-total correlations ranged from .20 to .58. Three varimax rotated factors with eigenvalues greater than 1.0 accounted for 75 percent of the variance.

As shown in Table G-8, this scale had a fit ($\chi^2=250.51$, *df*=14, GFI=.748) similar to that of the Deci and Ryan measure. This was expected because the intent of the new autonomy scale was to replicate their vignettes. The new scale had a composite reliability

of .67 and it extracted 24 percent of the variance. This seven item scale was used in the second study (see Table G-3 for a list of the items).

TABLE G-3 – PROPOSED AUTONOMY ITEMS

1. In general, I have a lot of confidence in my abilities.
2. Finding a job which is interesting is a goal of mine.
3. I would rather have a job which is interesting with low pay than one which is boring but pays well.
4. I enjoy the feeling of having done a good job.
5. I will prefer a job which is interesting even if it pays me less than other jobs.
6. When working with others, I think it is important to get their input rather than me just making decisions on their behalf.
7. I generally like new challenges even if they make me slightly nervous.

As shown in Table G-4, the proposed autonomy scale shares similar relationships to other constructs as does the GCOS scale. There is a modest but significant relationship between the proposed scale and the ACL scale.

Further evidence of construct validity was demonstrated when the proposed measure of autonomy was compared with locus of control. Rotter’s Locus of Control scale was administered in Study 1B. After reverse scoring the appropriate items the scores were summed into a single scale. The 23 items had an alpha of .73 and item-to-total correlations ranging from .06 to .49. Eight factors were extracted via exploratory factor analysis which cumulatively accounted for 59 percent of the variance. A non-significant ($t=-1.54$) negative relationship of .13 was estimated via confirmatory factor analysis. This finding is similar to what Deci and Ryan proposed.

TABLE G-4 – AUTONOMY CORRELATIONS

	Proposed Autonomy	Deci & Ryan Autonomy	ACL Reactive Autonomy	Locus of Control
Proposed Autonomy	.91			
Deci & Ryan Autonomy	.469	6.32		
ACL Reactive Autonomy	.157	.207	4.45	
Locus of Control	-.086	-.137	-.052	3.94

*boldface numbers are significant at the .05 level Standard deviations are listed in the diagonals.

Confirmatory Factor Analysis revealed that the proposed autonomy scale and the Deci and Ryan autonomy orientation were correlated .76. A chi square difference test supported that the two measures were different ($\chi^2=28.13, df=1$).

Efficacy

Items were generated to represent Bandura's notion of efficacy. For construct validation subjects also completed Mowen's 3M efficacy scale and the Sherer et al efficacy scale. The proposed efficacy scale was assessed for reliability using Cronbach's alpha and individual items that had item-to-total correlations below .50 were iteratively deleted. This left five items (see Table G-5) with item-to-total correlations ranging from .61 to .76 and an alpha of .85. Exploratory factor analysis of all items revealed three factors with the five items identified earlier all loading significantly on the first factor. An EFA of these five items revealed a single factor which explained 63% of variance. Sampling adequacy was .814 and Bartlett's test was significant ($\chi^2=445.218, df=10$).

TABLE G-5 – PROPOSED EFFICACY ITEMS

1. I believe that I am capable of doing whatever I decide to do.
 2. I am confident in my abilities.
 3. When faced with a decision, I am confident that I can make a good decision.
 4. Once I know what I need to do, I can do it.
 5. In a new situation I expect I can handle things.
-

Confirmatory factor analysis showed similar results as presented in Table G-6. The five item factor had better overall and incremental fit indices than did the model using all possible items (see Table G-7 for a more complete listing of indices). This parsimonious efficacy measure also extracted 54 percent of the variance and had a composite reliability of .85. These five items will be used henceforth as the measure of proposed efficacy.

TABLE G-6 – EFFICACY CONSTRUCTS

	Alpha	χ^2	df	p=	RMSEA	NNFI	GFI
Efficacy (5 items)	.8483	31.96	5	.00001	.159	.883	.943
Efficacy (All items)	.8438	249.94	35	.00000	.170	.689	.809
Efficacy (Mowen)	.7675	25.80	2	.00000	.237	.745	.943
Efficacy (Sherer)	.8454	803.00	135	.00000	.153	.436	.704

The four item Mowen scale was administered in Study 1A. This scale had an alpha of .77 and exploratory factor analysis indicated a single factor explained 61% of variance. The Sherer et al scale was completed in Study 1B and had an alpha of .85 for the 18 items. EFA revealed four factors which cumulatively explained 40% of variance.

One reason a new measure of efficacy was proposed was that the existing scales were derived, in part, from Rotter’s measure of locus of control. It was proposed that there should be no significant relationship between efficacy and locus of control. A review of the correlations presented in Table G-7 shows significant relationships do exist between all three measures of efficacy and locus of control. However, the proposed new measure has only a slight correlation, although significant, with locus of control. The other two measure of efficacy have much stronger relationships. This is evidence that the new measure of efficacy is less similar to control than are the other scales.

TABLE G-7 – CORRELATIONS WITH EFFICACY

	Proposed Efficacy	Mowen Efficacy	Sherer et al Efficacy	Locus of Control
Proposed Efficacy	.92			
Mowen Efficacy	.698	1.11		
Sherer et al Efficacy	.598	.521	18.37	
Locus of Control	-.164	-.196	-.349	3.94

Boldface significant at 0.05 Standard deviations in diagonals

Discriminant validity was established by comparing the proposed measure of efficacy with the Mowen and Sherer measures and with the locus of control scale. Chi

square difference tests between when the correlations were set to equal 1.0 and when correlations were estimated were significant for all pairings.

It was also proposed that efficacy should differ from the new measure of autonomy. A chi square difference test showed this to be true at the .05 level of significance but not at the .01 level ($\chi^2=4.53, 1 df$).

Elemental Traits

Table G-8 presents the results for the elemental and compound personality traits (Mowen 2000) included in the first study. These traits all showed similar results to those previously published (e.g., Mowen 2000). The elemental traits of openness, conscientiousness, extraversion, agreeableness, neuroticism, materialism, arousal, and physical needs had alphas ranging from .73 to .94. All items loaded onto their respective constructs with fit indices being acceptable. The variance extracted was greater than .73 for each factor.

The compound traits of activity, competitiveness, and learning had alphas ranging from .69 to .90. Only 41 percent of the variance was extracted from the need for learning which is below the typical standard of .50. However, the fit indices were all very acceptable (e.g., GFI=.99). Because of the acceptance of this scale in the literature, no additional revision was done.

TABLE G-8 – STUDY 1 CONVERGENT VALIDITY

Study 1A	# Items	Variance Composite			DF	Chi ²	p=	RMSEA	GFI	CFI	NNFI
		Alpha	Extracted	Reliability							
Activity	3	0.84	0.64	0.84	0	0.000	1.000	0.000			
Agreeableness	4	0.73	0.50	0.77	2	14.860	0.001	0.174	0.966	0.938	0.813
Arousal	4	0.94	0.80	0.94	2	29.210	0.000	0.253	0.936	0.957	0.871
Autonomy Proposed	7	0.67	0.24	0.67	14	250.510	0.000	0.282	0.748	0.411	0.117
Competitiveness	4	0.90	0.70	0.90	2	14.910	0.001	0.174	0.966	0.978	0.934
Conscientiousness	4	0.88	0.68	0.89	2	85.350	0.000	0.443	0.832	0.837	0.511
Efficacy - 3M	4	0.77	0.46	0.77	2	25.800	0.000	0.237	0.943	0.915	0.745
Efficacy - Proposed	5	0.85	0.54	0.85	5	31.960	0.000	0.159	0.943	0.942	0.883
Extraversion	4	0.92	0.74	0.92	2	2.940	0.230	0.047	0.993	0.999	0.996
Learning	4	0.69	0.41	0.71	2	4.040	0.132	0.069	0.991	0.990	0.970
Materialism	4	0.90	0.71	0.91	2	10.340	0.006	0.140	0.976	0.984	0.951
Neuroticism	4	0.86	0.61	0.86	2	6.240	0.044	0.100	0.985	0.988	0.964
Openness	4	0.87	0.65	0.88	2	26.010	0.000	0.238	0.942	0.944	0.832
Physical	4	0.90	0.70	0.90	2	9.040	0.011	0.129	0.979	0.987	0.962
Social Desirability	10	0.54	0.13	0.55	35	52.000	0.032	0.048	0.953	0.817	0.765
Study 1B											
Autonomy - Deci Ryan	12	0.65	0.16	0.67	54	180.810	0.000	0.105	0.876	0.653	0.576
Autonomy - Reactive	44	0.71	0.11	0.71	902	2027.542	0.000	0.077	0.697	0.282	0.247
CAD -- Detached	10	0.69	0.21	0.70	35	74.420	0.000	0.073	0.934	0.832	0.785
Efficacy - Sherer	18	0.85	0.35	0.85	135	803.000	0.000	0.153	0.704	0.502	0.436
Locus of Control	23	0.73	0.13	0.73	230	541.920	0.000	0.080	0.818	0.524	0.476

Participation Orientation – Decision Making

A total of twenty-one items were generated to represent the domain decision making orientation. All subjects (n=213) in study 1A were administered the items as part of a survey on consumer behavior. A sub-sample (n=72) of participants in Study 1B completed the same items for a second time. This sub-sample also completed four revised items from the first study. The initial items are listed in Appendix A.

After reverse coding the appropriate items, principal components factor analysis was conducted (see Table G-9). Results indicated a sampling adequacy of .751 which is considered “meritorious” by Hair et al. Bartlett’s Test for Sphericity was significant ($\chi^2=1103$, df=210, p=.000).

TABLE G-9 -- STUDY 1A PRELIMINARY RESULTS PARTICIPATION ORIENTATION – DECISION MAKING

Rotated (varimax) n=213		Factor						
Item#	Initial Item	1	2	3	4	5	6	7
3	Even though others may know more than I do, I still insist on making my own decisions.	.720					.301	
4	Decisions which affect me should be made by me.	.711						
7	Even if I make the wrong decision, I am glad that it was my decision .	.711						
16	It is more satisfying to me knowing that I made a decision rather than someone else making the decision	.632	.331					
1	It is important to me that I make the decisions which may affect me .	.478	.411					
10	It is more important to me that I make a decision than it is being right .	.426					.354	.342
12	It is more important that the right decision is made than it is that I make the decision. R	.366	-		.328		.426	
2	My decisions are as good as anyone's.	.342	.487					-
11	It is never wrong if I make my own choice	.312					.587	.628
14	I take responsibility for my choices in life	$\alpha=.71$	.724				.362	
21	I am very comfortable with the decisions I make.		.687					
13	I make more of my own decisions than my friends do		.434	.684				
15	My friends seem to be more comfortable making their own decisions than I am. R		.434		.403	.397		
18	I am decisive		.346	.375	.625			
19	My friends look to me to make their decisions		$\alpha=.60$	.787				
17	Among my friends, I tend to be the decision maker			.772				
20	I wish I could be more decisive R			$\alpha=.70$	.847			
5	I don't mind if someone else makes decisions for me. R					$\alpha=.53$	.673	
6	Others can influence my choices. R						.760	
8	I often make choices without talking to anyone else first						$\alpha=.64$	.722
9	Even if I am sure I can make the right choice, I will let someone else decide. R							$\alpha=.06$
						$\alpha=.25$	.756	

Seven factors with eigenvalues greater than 1.0 accounted for 64% of the cumulative variance. The first factor ($\epsilon=4.097$) accounted for 19.5% of the variance and

the second factor represented another 12.4% of the variance. The loadings after a varimax rotation are shown in Table G-9. Ten of the items cross loaded onto multiple factors at the .30 level or higher. Nine items loaded onto the first factor ($\geq .30$) and eight items loaded onto the second factor. Three items cross loaded on these two factors.

The first factor represents the decision making orientation as proposed (e.g., “Even though others may know more than I do, I still insist on making my own decisions”). The second factor is similar but has more emphasis on the outcome of the decision (e.g., “I am comfortable with the decisions I make). The third factor is a relative dimension of decision making. The item “Among my friends, I tend to be the decision maker” indicates a degree of decision making relative to others and not a preference for making decisions. The fourth factor captures the decisiveness of decision making.

The fifth factor indicates a willingness to let others make decisions. However, only one of the items significantly loaded (-.362) on the decision making factor. The sixth factor has five items but only a single item did not also load on another factor. This single item showed an openness to be influenced by others. The other items cross loaded on the first factor. The last factor appears to represent an independence of decision making. Making choices without talking to others is the highest loading item.

Confirmatory Factor Analysis of the first factor revealed a relatively poor fit among the items (see Table G-10). A review of the theta-delta modification indices showed several items with loadings on multiple items greater than 3.84 indicating an improvement in fit was possible (*Hair et al*). As shown in the table, the resulting four item factor had an improved fit and extracted considerably more variance while being more parsimonious. This factor was used in the next step of analysis.

TABLE G-10 -- DECISION MAKING RESULTS

Study 1A (n=213)	Variance Composite			DF	Chi²	p=	RMSEA	GFI	CFI
	Alpha	Extracted	Reliability						
Decision Making - (21 Items)	.75	.047	.714	2	9.017	.011	.137	.976	.977
First EFA Factor (9 items)	.71	.245	.720	27	143.17	.000	.142	.870	.726
CFA Factor (4 items) 3,4,7,16	.71	.410	.725	2	7.460	.024	.113	.983	.962
Study 1B (n=72)									
Decision Making - (21 Items)	.80	.156	.416	189	1563.4	.000	.185	.587	.332
First 1A EFA Factor (9 items)	.76	.300	.599	27	220.18	.000	.184	.812	.615
First 1B EFA Factor (7 items)	.78	.338	.641	14	41.180	.000	.096	.947	.902
Decision Making A - 1,3,4,7	.63	.478	.713	2	3.600	.165	.061	.992	.987
Decision Making B - 1,3,4,7,16	.70	.381	.716	5	12.320	.031	.083	.977	.954
Decision Making C - 3,4,7,16	.73	.413	.725	2	10.320	.006	.140	.976	.946

However, it was decided that all items be retained for Study 1B with the exception of four items. These items from Study 1A (13, 17, 18, and 19) were revised for Study 1B (see Table G-11). None of these original items significantly loaded onto the first EFA factor.

#	TABLE G-11 -- REVISED ITEMS USED IN STUDY 1B
13	I want to make my own decisions.
17	I tend to be a decision maker.
18	I prefer to make my own decisions.
19	I have made all the important decisions in my life.

Study 1B

During the second stage of data collection 72 subjects from the initial sample were given the participation orientation items including the revised decision making items. The results of the principal components analysis are shown in Table G-9. Only four items from Study 1A significantly loaded onto the first factor. Two of the revised items also loaded onto this decision making factor. The alpha for this factor was .78 and it explained twenty four percent of the variance. Confirmatory factor analysis of this first factor resulted in a χ^2 of 41.18, GFI of .947, and a RMSEA of .096.

The alpha for the corresponding first factor items from study 1A in study 1B was .76 with item-to-total correlations ranging from .11 to .65. The test-retest correlation between the first factor in Study 1A and the same items in the second study was .68. The test-retest correlation among items common to the first factors in the two studies was .54 (see Table 12).

TABLE G-12 – TEST-RETEST CORRELATIONS

	Decision Making (1A)	Decision Making (1B)	Effort (1A)	Effort (1B)	CAD – Detached
Decision Making (1A)	1.25				
Decision Making (1B)	.543	1.28			
Effort (1A)	.262	.288	1.32		
Effort (1B)	.338	.433	.722	1.31	
CAD-Detached	-.043	.161	.125	.040	.74

Boldface significant at 0.05 Standard deviations in diagonals

Because the results were mixed between the two studies, it was decided to retain those items which not only statistically were justified but also had content validity. This allows further analysis to be done in Study 2.

Participation Orientation - Effort

Subjects in Study 1A completed the sixteen proposed items for Effort. Principal components analysis with Varimax rotation revealed four factors explaining 61 percent of the variance. The first factor had eleven items with significant loadings and explained 34 percent of the variance. Table G-13 lists each item and rotated loadings. The alpha for each factor is also listed. The first factor, which closely corresponds to the proposed construct, had an alpha of .87 with item-to-total correlations ranging from .31 to .73.

TABLE G-13 -- STUDY 1A PRELIMINARY RESULTS PARTICIPATION ORIENTATION – EFFORT

Rotated (varimax) n=213		Factor			
Item- Total	Initial Survey # and Item	1	2	3	4
.73	5 Given a choice, I prefer to do things myself.	.786			
.61	1 I prefer to do something myself rather than pay someone else to do the same thing.	.726			
.73	10 All things equal, I will do things myself rather than have someone else do them for me.	.724	.401		
.53	4 Regardless of cost, I prefer to let others do things for me. R	.713			
.65	12 Whenever possible I prefer to do things for myself.	.684			
.68	9 I prefer to do things myself rather then let others do them for me. . .	.668	.435		
.54	3 Regardless of cost, I prefer to do things myself.	.656		.360	
.60	2 It is satisfying when I make the effort to do something.	.639			
.49	14 I prefer to let others do things for me rather than doing the same things myself. R .	.632		-	
.46	6 I believe that if I want things done right, I must do things myself. . . . .	.436	.498	.349	
.31	16 I rarely put much effort into things. R .	.322	.333	-	
	7 I am always prepared.			.717	
	8 Compared to my friends, I put more effort into my work..	$\alpha=.87$	.810		
	13 I always am very diligent in preparing for anything.		.774		
	11 I tend to do a lot of research before buying anything.		.701		.340
	15 I am uncomfortable letting others do things for me.				.911
			$\alpha=.79$		
				.598	$\alpha=.34$
				$\alpha=.46$	

As shown in Table G-14, confirmatory factory analysis, using the covariance matrix, of the items revealed a poor fitting model. The CFA of the first factor indicated a poor fit ($\chi^2=171.69$, RMSEA =.118, GFI=.87). A review of the modification indices revealed individual items that could be deleted from the model without compromising the

intended validity of the construct. The resulting four item model has a coefficient alpha of .81 and item-to-total correlations ranging from .52 to .65.

TABLE G-14 – EFFORT

Study 1A	Variance Composite			DF	Chi ²	p=	RMSEA	GFI	NNFI	CFI
	Alpha	Extracted	Reliability							
Effort (All 16 Items)	0.84	0.274	0.844	104	476.43	.000	.131	.778	?	.731
Effort First EFA Factor	0.87	0.658	0.759	44	171.69	.000	.118	.870		.869
Effort 4 Items (22,26,30,33)	0.81	0.525	0.814	2	6.010	.050	.098	.986		.986
Study 1B										
Effort (All 16 Items)	0.82	0.275	0.762	104	345.01	.000	.156	.688		.598
Effort 4 Items (1,5,9,12)	0.86	0.618	0.863	2	16.923	.000	.280	.918		.926
Study 2										
Effort (All 4 Items)	0.92	0.731	0.916	2	5.47	.065	.095	.986		0.994
Effort (29,30,31)	0.94	0.833	0.937	0	0	1.00	.000			

The results from Study 1B (n=94) show that all items together had an alpha of .82 with item-to-total correlations ranging from .05 to .76. The same four item scale (see Table G-15) identified in Study 1A had an alpha of .86 and item-to-total correlations varied from .55 to .82.

The test-retest correlations between studies 1A and 1B for the four item scale was .72. Only a sub-sample of the subjects in study 1B (n=72) scored the items. The retest correlation is among the subjects who completed the items in both studies (see Table G-12).

TABLE G-15 – EFFORT PARTICIPATION ORIENTATION ITEMS

1. I prefer to do something myself rather than pay someone else to do the same thing.
5. Given a choice, I prefer to do things myself.
9. I prefer to do things myself rather than let others do them for me.
12. Whenever possible I prefer to do things for myself.

Participation Orientation

It was proposed (H_1) that participation orientation was a two-dimensional construct representing a consumer's tendency to make decisions and engage in physical and mental activities during a service encounter. This means that each dimension should discriminate from the other but be sufficiently correlated to be considered similar. Each participation facet should also share similar relationships with other constructs. One possible method of examination is a second order factor analysis. But an analysis of a two-dimensional second order factor can not be done because the model would be locally underidentified.

Following the scale development process for the individual dimensions, confirmatory factor analysis was used to assess the proposition of a multi-dimensional construct of participation orientation. This model ($\chi^2=39.03$, $df=19$) revealed a correlation between the two dimensions of .37. The model was then reanalyzed with the correlation between the two dimensions set to equal 1.0 ($\chi^2=191.82$, $df=20$). A χ^2 difference test suggests that the original proposition of a single multi-dimensional construct was incorrect.

To further explore the dimensionality of participation orientation, correlations were analyzed with several other variables in the study. Decision making was significantly ($<.05$) correlated with Materialism (.168) but Effort did not have a similar significant relationship. Effort was significantly correlated with Deci and Ryan's Autonomy (.176), Agreeableness (.161), and Openness (.297) whereas Decision making was not. The different relationships between Decision Making and Effort with other constructs is additional support against the hypothesized multi-dimensional construct.

Because the evidence indicates that Decision Making and Effort are two distinct types of participation, all tests from this point forward will be based on this finding. A consumer will have a Decision Making Participation Orientation and an Effort Participation Orientation.

Construct Validation

Participation orientation was proposed to be positively related to an individual's need for activity and need for learning. A negative relationship was suggested with Social Desirability. Because participation orientation was found to be two constructs (i.e., decision making and effort), the proposed relationships were analyzed for each construct separately. Predictive validity is assessed in Study 2.

As shown in Table G-16, there are significant positive correlations between the two participation dimensions and the need for activity and the need for learning. There is a slight, nonsignificant negative relationship between decision making orientation and social desirability. A nonsignificant positive relationship exists between effort and social desirability. The negative relationship between the decision making orientation and social desirability is what was proposed for the original participation construct. However the nonsignificance of the relationships also means that the proposed construct is relatively free from potential social bias by respondents.

Further evidence of discriminant validity was found through confirmatory factor analysis. Both decision making orientation and effort orientation were loaded independently with the need for learning, activity, and social desirability.

	Decision Making	Effort	Activity	Learning	Social Desirability
Decision Making	1.25				
Effort	.262	1.32			
Activity	.135	.178	1.53		
Learning	.172	.271	.299	1.06	
Social Desirability	-.064	.118	.155	.113	1.89

Boldface significant at the .05 level (2-tailed) Standard Deviations are listed in the diagonals

A one-way ANOVA to determine if a gender difference existed for either decision making ($F=1.027$) or effort ($F=.378$) was not significant.

STUDY 2

The second study was intended to test the relationships hypothesized among the constructs. The measures that were developed and validated earlier were administered to students enrolled in marketing principles' class at Oklahoma State University (IRB# BU019). These subjects were different than those surveyed in the first study.

Approximately two weeks after subjects completed the personality survey, a confederate administered a seemingly unrelated survey asking subjects their thoughts and feelings on a proposed new course registration system. Responses were then matched for analysis ($n=194$) of the effects of participation on satisfaction. Presented in Table G-2 is the breakdown of subjects by gender, age, and nationality.

Decision Making Participation Orientation

Subjects completed seven items (listed in Table G-17) that represented the decision making orientation. These include the four items from Study 1A and three additional items introduced in Study 1B. The seven items had an alpha of .84 and item-to-total correlations ranging from .47 to .73. Exploratory factor analysis revealed a single

factor that explained 53.49% of the variance. Factor loadings were from .58 to .85 and the Kaiser-Meyer measure of sampling adequacy was .82. Bartlett's Test for sphericity was significant ($\chi^2=584.191$, $df=21$). Confirmatory factor analysis (see Table G-18) indicated a relatively poor fit among the items with a RMSEA of .163, CFI=.874, GFI=.887, and NFI=.855. Subsequent review of the modification indices indicated a better fitting model was possible that did not compromise the theoretical definition of the construct.

TABLE G-17 – DECISION MAKING ITEMS IN STUDY 2

- 15.** It is important to me that I make the decisions which may affect me.
 - 16. Even though others may know more than I do, I still insist on making my own decisions.
 - 17. Decisions which affect me should be made by me.
 - 18. Even if I make the wrong decision, I am glad that it was my decision.
 - 19. I want to make my own decisions.
 - 20. It is more satisfying to me knowing that I made a decision rather than someone else making the decision.
 - 21.** I prefer to make my own decisions.
-

Boldface items were used in the final scale.

The resulting 4-item decision making scale had a composite reliability of .84 and extracted 56 percent of the variance. Overall fit was deemed to be much better ($\chi^2=2.20$, $p=.333$, RMSEA=.023, NFI=.993, and CFI=.999) than the original model. It was thus decided that this 4-item scale (items 15, 17, 19, & 21) would represent decision making participation orientation.

TABLE G-18 – STUDY 2 CONVERGENT VALIDITY

	Mean	S.D.	# Items	Alpha	Variance Extracted	Composite Reliability	df	Chi ²	p=	RMSEA	GFI	NNFI	CFI
Study 2 (n=194)													
Decision Making A	7.12	1.14	7	.84	.414	.830	14	86.02	.000	.163	.887	.811	.874
Decision Making B	7.69	1.14	4	.83	.567	.836	2	2.20	.333	.023	.994	.998	.999
Effort	6.89	1.59	4	.92	.731	.916	2	5.47	.065	.095	.986	.983	.994

Effort Participation Orientation

The four-item scale measuring effort participation orientation had an alpha of .92 and item-to-total correlations exceeding .74. Principle components analysis revealed a single factor accounting for 82% of the variance. All items loaded greater than .842 on the factor. The Kaiser-Meyer-Olkin measure of sampling adequacy was .829 which is very good.

Confirmatory factor analysis (see Table G-18) verified a single factor with a composite reliability of .92 and variance extracted of .731. The model had very good fit indices (GFI=.986, NNFI=.983, and CFI=.994).

Construct Validation

Similar to the results from the first study, decision making and effort participation were positively correlated with each other (see Table G-19). The need for learning and the need for activity also showed similar results. However, the relationship between decision making and activity, although positive (.139), was not significant. In the first study the correlation was .135 and deemed significant at the .05 level. Effort, unlike Decision Making, was significantly correlated with Activity (.199) in this study. Surprisingly, the correlation between decision making and the need for learning was considerably stronger (.354) than in the first study (.172). This is probably a reflection of the better measure of decision making used in the second study than the initial items

administered in the first study or the smaller sample size in study 1B who completed the revised decision making scale.

TABLE G-19 – CORRELATIONS FROM STUDY 2

	Decision Making	Effort	Activity	Learning
Decision Making	1.14			
Effort	.296	1.59		
Activity	.139	.199	1.50	
Learning	.354	.194	.487	1.08

Boldface significant at the .05 level (2-tailed) Standard Deviations are listed in the diagonals

Further evidence that decision making and effort are separate constructs, rather than closely related dimensions of a single construct, was found in this study. Models with the items set to load on their respective factors were compared when the correlation between the factors set to equal 1.0. The χ^2 difference of 325.67 (1 *df*) between the two models indicates the constructs are independent. Similar to the first study, the correlation between each factor was .34 ($\chi^2=44.19$, 19 *df*, RMSEA=.083).

Decision making was significantly (<.05) correlated with Openness (.222) and Physical Needs (.179) whereas Effort was not. However, Effort alone was significantly correlated with Activity (.199) and Materialism (-.147).

The results of both studies indicate that Decision Making and Effort are two distinct constructs that are nomologically related. As was stated earlier, a consumer would have both a Decision Making Participation Orientation and an Effort Participation Orientation.

Surface Traits

Because it was earlier decided that participation orientation was a multi-dimensional construct, the surface level traits measuring participation orientation in

specific settings (e.g., investing participation orientation) were split into two separate constructs. For example, results are reported for an investing decision making orientation and an investing effort orientation.

There were eight items generated for each surface participation trait. Four items were intended to represent the decision making dimension and the other four to characterize effort. The eight items were revised to represent the specific surface trait but otherwise were identical. For example, an item worded “Deciding how to diet is easy for me” was reworded as “Deciding how to invest is easy for me.” This consistency in wording allowed for easy comparisons between the constructs (see Table G-20).

Diet Decision Making Orientation

Analysis of the four diet decision making items revealed a poor fitting model ($\alpha=.66$, $\chi^2=11.90$, 2 *df*, RMSEA=.16). Exploratory factor analysis showed a single item loading (.808) on a second factor. A review of the CFA modification indices indicated the removal of this single item would improve the model fit. The item was judged to be asking an opinion of others (“Diet experts are a waste of money” rather than asking for a self-assessment. Because of this evidence it was decided to eliminate this item and use a three-item scale. This reduced item model had an alpha of .75 and confirmatory factor analysis indicated a perfectly fitting model.

TABLE G-20 – SURFACE TRAIT ITEMS

Diet Decision Making Orientation ($\alpha=.75$)

1. There is plenty of research available to make good diet decisions.
2. Deciding on how to diet is easy for me.
3. Diet decisions are easy for me to make.

Diet Effort Orientation ($\alpha=.83$)

1. I do a lot of research before making diet decisions.
 2. I enjoy researching possible diets.
 3. Researching diets is enjoyable.
-

Diet Effort Orientation

The four items representing effort were analyzed similarly to the decision making orientation. Together the items had an alpha with item-to-total correlations ranging from .07 to .72. Principal components analysis indicated a single factor but one item did not load significantly (.126). Confirmatory factor analysis also indicated that the same item should be deleted because it was not significant (t value=.77). A content review of the item further justified its removal. The three remaining items (see Table G-20) had an alpha of .83 and exploratory factor analysis revealed a single factor that explained 76% of the variance. Confirmatory factor analysis indicated a model with a perfect fit.

Similar results were obtained for the investing and travel decision making orientation surface traits. As such, the respective three item scales were used for each orientation (see Table G-21 for more details).

Table G-21 – Study 2 Surface Orientation Traits

Variable	Mean	S.D.	Alpha
Diet Decision Making Orientation	6.11	1.87	0.75
Diet Effort Orientation	2.93	1.98	0.83
Investing Decision Making Orientation	4.69	1.76	0.75
Investing Effort Orientation	4.64	2.35	0.87
Travel Decision Making Orientation	6.65	1.38	0.68
Travel Effort Orientation	5.87	1.90	0.79

Autonomy

The seven item scale showed similar but stronger results in Study 2. However, these results were still relatively poor. As shown in Table G-25, the scale had a RMSEA of .20 and a CFI of .75. Cronbach's alpha was .73 and item-to-total correlations ranged from .32 to .65.

A review of the items suggested that one item was redundant and too specific for a compound trait. With this single item eliminated, the fit improved considerably (RMSEA=.07, GFI=.97, NNFI=.91, CFI=.94). A chi square difference test ($\chi^2 = 105.40$, 1 *df*) indicated the better fitting six-item model was significantly different than the seven-item model. This more parsimonious model is used in further analysis.

Efficacy

In this study efficacy was measured at both a general level and at the domain-specific level (e.g., investing efficacy). As was done with the participation measures, the domain level items were similarly worded. For each domain, six items were written that corresponded to the general measure of efficacy (see Table G-22).

TABLE G-22 – DIET EFFICACY ITEMS

I am confident that I can follow a diet.

I have the ability to maintain a diet.

Compared to my friends, I am more capable in trying to stay with a diet.

I can create my own diet program as well as a dietician.

I am confident that I can learn how to diet properly.

Once I know how to diet properly, I can do it.

Following standard scale development steps it was decided to reduce each scale to four items. These four items had good fit indices and extracted at least 58% of the variance (see Table G-23). Composite reliability exceeded .84 for each domain-specific efficacy measure.

TABLE G-23 – STUDY 2 EFFICACY SCALES

Variable	Mean	S.D.	Alpha	Composite Variance		DF	Chi ²	p=	RMSEA	GFI	CFI	NNFI
				Reliability	Extracted							
General Efficacy	7.62	1.00	0.84	0.836	0.561	2	4.33	.115	.018	.989	.993	.978
Diet Efficacy	6.20	1.95	0.90	0.908	0.718	2	0.67	.714	.000	.998	1.000	1.008
Investing Efficacy	6.05	1.65	0.82	0.839	0.582	2	1.25	.536	.000	.997	1.000	1.008
Travel Efficacy	7.45	1.35	0.88	0.875	0.640	2	8.6	.014	.131	.978	.984	.953
Computing Efficacy	8.09	1.15	0.85	0.850	0.591	2	6.03	.049	.102	.985	.989	.968

As would be expected, the correlations among the measures were significant and positive (see Table G-24). The only exception was that the correlation between diet efficacy and investing efficacy was non-significant. Surprisingly, only travel efficacy was correlated with general efficacy at greater than a .5 level. This suggests that an overall feeling of efficacy does not necessarily translate into specific situations.

TABLE G-24 – EFFICACY CORRELATIONS

	General Efficacy	Diet Efficacy	Investing Efficacy	Travel Efficacy	Computing Efficacy
General Efficacy	1.00				
Diet Efficacy	.289	1.95			
Investing Efficacy	.369	.117	1.65		
Travel Efficacy	.567	.159	.412	1.35	
Computing Efficacy	.373	.216	.149	.387	1.15

Boldface items are significant at .05. Standard deviations are listed in the diagonals.

3M Elemental and Compound Traits

The eight elemental personality traits all had results consistent with previous studies. Although composite reliabilities and extracted variance have not been previously published, the results were acceptable (see Table G-25).

TABLE G-25 – STUDY 2 CONVERGENT VALIDITY

Variable	Mean	S.D.	Alpha	Composite		DF	Chi ²	p=	RMSEA	GFI	CFI	NNFI
				Reliability	Variance Extracted							
Autonomy 7 items	7.43	.92	.73	.78	.46	14	122.79	.000	.201	.846	.754	.632
Autonomy 6 items	7.57	.84	.63	.64	.24	9	17.39	.043	.070	.971	.944	.907
Efficacy	7.62	1.00	.84	.84	.56	2	4.33	.115	.018	.989	.993	.978
Decision Making	7.69	1.14	.83	.84	.57	2	2.201	.333	.023	.994	.999	.998
Effort	6.89	1.59	.92	.92	.73	2	5.473	.065	.095	.986	.994	.983
Elemental Traits												
Openness	5.79	1.92	.89	.89	.67	2	8.580	.014	.131	.987	.986	.957
Conscientiousness	6.86	1.48	.87	.88	.68	2	67.040	.000	.410	.852	.860	.580
Extraversion	4.88	2.18	.92	.93	.76	2	1.670	.433	.000	.996	1.000	1.001
Agreeableness	6.99	1.2	.70	.75	.48	2	12.210	.002	.163	.969	.937	.812
Neuroticism	4.54	1.83	.86	.86	.61	2	23.390	.000	.235	.943	.937	.812
Materialism	5.34	2.15	.89	.90	.68	2	11.520	.003	.157	.971	.979	.938
Arousal	5.78	1.93	.90	.91	.73	2	12.240	.002	.163	.969	.981	.943
Physical	5.79	1.92	.88	.90	.69	2	4.400	.111	.079	.989	.995	.985
Compound Traits												
Activity	6.73	1.5	.83	.84	.64	0	.000	1.00	.000			
Learning	7.14	1.08	.77	.78	.48	2	7.970	.019	.124	.980	.978	.934

Involvement

Involvement was measured for each specific service preference and course registration and course advisors. The involvement with computers was also measured as a possible control variable. Each four-item scale had an alpha of at least .92 or better.

As Table G-26 shows, the importance of course registration (mean=9.35) and advisors (mean=8.38) supports the use of a course registration scenario for the student sample. Of lesser importance to the student sample was travel, investing, and dieting. The relatively low score for dieting (mean=5.59) indicates that this sample may be indifferent to diets.

TABLE G-26 – INVOLVEMENT CORRELATIONS

	Advisor	Registration	Computer	Diet	Investing	Travel
Course Advisor	8.38					
Course	.229	9.35				
Registration						
Computer	.060	.171	8.56			
Diet	-.119	.114	.056	5.59		
Investing	-.057	.078	.201	.068	7.15	
Travel	.004	.108	.198	.122	.306	7.49

Boldface are significant at .05. Means are listed in the diagonals.

Income Adequacy

The three item income adequacy scale (Table G-27) had an alpha of .86 and item-to-total correlations from .65 to .80. All items loaded onto a single factor (.83 or greater) and explained 78 percent of the variance. The Kaiser-Meyer-Olkin measure of sampling adequacy was .70 and Bartlett's test for sphericity was significant.

TABLE G-27 – INCOME ADEQUACY

My financial resources are adequate.
I have the financial support to do what I want.
I have the financial resources to do as I please.

APPENDIX H – IRB APPROVAL FORMS

Oklahoma State University
Institutional Review Board

Protocol Expires: 9/11/01

Date : Tuesday, September 12, 2000

IRB Application No BU016

Proposal Title: CONSUMERS' PARTICIPATION ORIENTATION IN A SERVICE ENCOUNTER:
ANTECEDENTS AND CONSEQUENCES. STUDY 1 SCCALE DEVELOPMENT

Principal
Investigator(s) :

Tom Brown
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Jim Lee
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Dr. John Mowen
323 CBA
Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s) : Approved

Signature



Carol Olson, Director of University Research Compliance

Tuesday, September 12, 2000

Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

Oklahoma State University
Institutional Review Board

Protocol Expires: 10/22/01

Date : Monday, October 23, 2000

IRB Application No BU019

Proposal Title: CONSUMERS' PARTICIPATION ORIENTATION IN A SERVICE ENCOUNTER:
ANTECEDENTS AND CONSEQUENCES. STUDY 2 TEST OF HIERARCHICAL MODEL

Principal
Investigator(s) :

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Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s) : Approved

Signature :



Carol Olson, Director of University Research Compliance

Monday, October 23, 2000

Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

VITA ²

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