

DETERMINING PERCEPTUAL GAPS OF SERVICE QUALITY AND VALUE IN HIGHER
EDUCATION: A MIDWESTERN BIBLE COLLEGE

by

Benjamin T. McIntosh

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

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Abstract

This doctoral research project examined perceptual gaps of service quality and value in the context of higher education. The researcher performed quantitative analysis of survey data gathered from students at a small, Midwestern Bible college. Students self-selected to participate in this research project and, using class status as an independent variable, were grouped as Freshman, Sophomore, Junior, or Senior. Additionally, based on the literature review, the researcher used the Access variable as the primary determinant of service quality and the Functional Value variable as the primary determinant of value. After an analysis of the data, it was determined that there are differing perceptions of service quality and value amongst the students at the target institution. A Scheffe's post-hoc test revealed that the Sophomore class perceives significantly lower levels of Access compared to the Freshman and Senior class. Furthermore, for the Functional Value variable, it was determined that students perceived lower levels of Functional Value the longer they were exposed to the curriculum of the college. These differences were significant at the $\alpha = 0.05$ level. Finally, the findings of this project are useful to college administrators in developing recruitment and retention policies at the target institution.

Keywords: higher education, service quality, access, functional value, Bible college, perceived value

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Dedication

This work is dedicated to the many friends and family who push me to be the best version of myself. While there are too many to mention, there are a few who require special recognition. First, special thanks and much love to Rick and Jenn Wadholm. Our DNA makes us friends, but your unconditional love makes us family. You have been a rock in both my professional and personal life. Rick, when we both get to walk across that stage and finally get to wear those fancy hats, we need to find some time to hang out again, maybe on a ship in the Caribbean.

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Section 1: Foundation of the Study

The focus of this study was to identify the growing value gap brought on by an increased emphasis of treating students like consumers within the context of higher education in America. This gap is the result of an increase in the marketization of higher education and may be exacerbated through increased accountability and oversight by forces within governmental and accreditation bodies (Judson & Taylor, 2014). Furthermore, the college experience is growing increasingly marketized, and there is mounting disillusionment amongst stakeholders (students, faculty, future employers, government, accreditors, etc.) who no longer perceive its value to justify the cost (Judson & Taylor, 2014; Taylor & Judson, 2011).

Background of the Problem

There is an implied marketing assumption that if a student invests money, in the form of tuition dollars paid to a college, that at graduation, the student will be satisfied and happy with the transaction (Judson & Taylor, 2014). This assumption is based on the belief that, with a degree in hand, the student's earning capacity will be greater than with just a high school diploma. Furthermore, this assumption is reinforced by the belief that paying for a college education is the primary vehicle for growing economic status and that access, availability, and benefits of college are somewhat guaranteed (Baum & Ma, 2014; Edel, 2013). According to Baum and Ma (2014), this marketing assumption is a flawed premise in that, over the past 20 years, the inflation-adjusted average published price for private four-year colleges has increased over 66%, while “graduates earned no more in 2007 than they did in 1979” (Higher Education, 2012, para. 12).

Further complicating this perception of value is the awareness that many students “borrow against their future incomes to help finance their education” (Baum & Ma, 2014, p. 8).

Per Baum and Ma, this borrowing is aggravated by the easy availability of student loans through a subsidized market. According to Edel (2013), the inflated demand that this process creates allows colleges to justify an increase in prices. Further fueling this apparent cyclical phenomenon is that the government continues to inject additional funds into the market, which leads to further increases in tuition. All of these factors continue to fuel the belief amongst high school graduates that college is unnecessarily expensive and, consequently, not worth the investment (Higher Education, 2012).

Problem Statement

The problem addressed is the inconsistency in the gap between the consumer's expectation of higher education service quality and the consumer's perception of educational value delivered. In terms of cost alone, the price of college has consistently outpaced inflation over the past several decades (Edel, 2013; Lorin, 2014). Furthermore "rising fees and increasing student debt, combined with shrinking financial and educational returns, are undermining at least the perception that university is a good investment (Higher Education, 2012, para. 1). Due to the increasing cost and the growing perception that college is an unwise investment, students and parents grow frustrated as they "perceive themselves as giving up increasing amounts of other things to pay for college" (Baum & Ma, 2014, p. 7). So, if perceived value is "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml, 1988, p. 14), then there appears to be a growing gap in the perceived value of higher education. Therefore, with this understanding, it is important to explore this perception of an educational value gap so that the institution used in this study can more effectively deliver educational value to the consumers that it serves. By examining the link between service quality

and perceptions of value, the educational leaders at the institution can work to remain viable in the increasingly competitive environment of higher education.

Purpose Statement

The purpose of this quantitative case study was to compare how current Bible college students describe their perceptions of service quality and their perceptions of the value delivered during each academic year throughout their educational careers. This was accomplished by surveying students at a small Midwestern Bible college so as to understand which attributes of the student's college education would improve perceptions of service quality and perceptions of value compared to the increasing cost of higher education. Furthermore, to determine if differences of perceptions exist as students move through their educational career, class status was a descriptive variable. This served to identify the perceptions of value from the perspective of current students so that the target institution of the case study can better understand how to deliver educational value in order to increase overall student retention and recruitment.

Nature of the Study

This study was a quantitative case study that is narrow in scope and focused on current Bible college students and their perception of value at the institution in question. A quantitative study is the most appropriate approach when there is a desire to explain or predict relationships amongst variables (Creswell, 2015). In this case, the focus was to explain value determinants as identified by current Bible college students. While qualitative research can lead to powerful insight and understanding of human activity (Stake, 2010), qualitative research is intended the study and measure how variables change (Martin & Bridgmon, 2012), and those changes are outside the purpose of this study. With this understanding, there were a variety of quantitative case study research designs that seemed to be appropriate and warranted further analysis.

According to Gay, Mills, and Airasian (2012), quantitative research is intended to “describe current conditions, investigate relations, and study cause-effect phenomena” (p. 7). This type of quantitative research can be accomplished through survey research, correlational research, causal-comparative research, experimental research, or single-subject research. Creswell (2014) described quantitative studies as either experimental or non-experimental. Experimental research, which is intended to test cause and effect among a variety of variables, includes experimental designs, quasi-experimental designs, and correlational designs. Experimental and quasi-experimental designs are similar to each other in that both experiment on an experimental group and control group. Quasi-experimental designs differ from experimental designs in that quasi-experimental designs do not make use of full randomization and instead use more naturally occurring groups (Abbott & McKinney, 2012; Martin & Bridgmon, 2012). Further, correlational research designs are intended to enable researchers to find the relationship between multiple variables in order to see if these variables influence each other in some way (Creswell, 2015). For the purpose of this study, the experimental research designs of experimental, quasi-experimental, and correlational were inappropriate because there was no cause-and-effect aspect to this study.

Due to the non-experimental nature of this study, a descriptive survey research design was more appropriate. A descriptive research design is one in which the researcher surveys the subjects in an attempt to find associations between the variables (Babbie, 2016). Descriptive research is useful when the researcher intends to understand the beliefs, attitudes, behaviors, perceptions, and opinions of research participants (Gay et al., 2012). Further, Gay et al. stated that survey research is intended to use numerical data to answer questions about the current state of a situation. According to Yin (2014), a case study examines a contemporary phenomenon

inside of its real-world context and can be particularly useful when the researcher wants to examine the internal workings of a common, everyday occurrence. Finally, Johnson and Christensen (2014) suggest that descriptive non-experimental research is the examination of a situation or a phenomenon, where the goal is to understand the relationship that exists between the variables as opposed to any sort of cause-and-effect relationship. Therefore, this study took a quantitative approach and used a descriptive survey research case study design because the researcher was primarily interested in understanding the contemporary phenomenon of student consumerism by examining student perceptions of service quality.

Research Questions

Because perceived value has a positive relationship to perceived quality (Chang & Wildt, 1994), it is necessary to look at the perception of quality at the institution in order to better understand student perceptions of value. Therefore, two primary research questions needed to be addressed. These questions are as follows:

1. Are there different levels of perceived service quality the more that students of a Midwestern Bible college are exposed to the curriculum of that college?
2. Are there different levels of perceived value the more that students of a Midwestern Bible college are exposed to the curriculum of that college?

Hypotheses

H₁₀. There is no statistically significant difference of perceived service quality among students of the college that is dependent upon the exposure levels to the curriculum of that college.

H1_a. There is a statistically significant difference of perceived service quality among students of the college that is dependent upon the exposure levels to the curriculum of that college.

H2₀. There is no statistically significant difference of perceived value among students of the college that is dependent upon the exposure levels to the curriculum of that college.

H2_a. There is a statistically significant difference of perceived value among students of the college that is dependent upon the exposure levels to the curriculum of that college.

Theoretical Framework

According to Farnsworth (1979), the introduction of consumerism in higher education was met with frustration from educators and faculty because they viewed academic consumerism as compromising academic freedom and were troubled at the seemingly deteriorating relationship between the student and the teacher. Despite this initial resistance, there is a new reality in higher education that forces colleges and universities to recognize the importance of the relationship between the various consumers and the deliverers of higher education (Newson, 2004). According to Angell, Heffernan, and Megicks (2008), because of this new reality, the days of simply providing a service without a customer- or student-centric approach are no more. According to Angell et al., this student/consumer approach is the result of increased competition in higher education where schools compete for student talent and fight to recruit and retain the best students from an increasingly shrinking pool.

Furthermore, as noted, the rising cost of college attendance has led to an increased awareness of costs by students and parents who are progressively looking for other low-cost alternatives (Baum & Ma, 2014; Stodnick & Rogers, 2008). While cost is not the sole determinant of college selection, it is helpful to note that overall, “students have become more

discriminating in their selection and more demanding of the colleges and universities they choose” (Joseph, Yakhou, & Stone, 2005, p. 68). Because of this, if a higher education provider is going to be relevant in the eyes of the student, it should become more familiar with the value requirements of these increasingly cost-conscious consumers. To address perceptions of consumerization and value in higher education, it is necessary to understand the various consumers of higher education, to recognize and evaluate the various quality and value measurement tools available, and to discuss the link between value and service quality. Finally, it is important to understand the role price elasticity plays in this marketing problem. These issues will serve to frame the discussion related to both the problem and the purpose statement of the study.

Consumerization of Higher Education

Consumers in a service industry like higher education play a unique role in the purchase process in that they are functional parts of production, consumption, and delivery process (Hill, 1995). Because of this role, it is important to distinguish between the various consumers of higher education. Complicating this is the notion that, in the service industry of higher education, there is a unique definition of consumer. For example, according to Owlia and Aspinwall (1996), the consumer label can identify employers, academic staff, the government, families, or the individual student. These multiple stakeholders add to the complexity of the question because each of these identified groups have differing viewpoints regarding exactly what higher education value looks like. This understanding of the complex question makes sense because, where the parent may be most concerned with obtaining value, the employer, or the external consumer of higher education, might be most concerned with the performance of the final product, or the student.

Despite the variances in defining the consumer, Redmond, Curtis, Noone, and Keenan (2008) believed that the most obvious consumer of higher education is the student.

Annamdevula and Bellamkonda (2012) concurred with this when they stated, “among all the stakeholders, students are to be considered as the primary stakeholder and their opinion plays an important role in [the] evaluation of service quality in higher education” (p. 412). Annamdevula and Bellamkonda’s assertion is based on an examination of professional and expert opinions regarding higher education quality as well as their subsequent development of the HiEdQUAL service quality measurement framework. Furthermore, according to Tan and Kek (2004), perceived quality in education can be said to be primarily determined by the extent to which the needs and expectations of the student can be satisfied. Logically, it is most appropriate to view the student as the primary consumer of higher education because it is the student who makes the greatest contribution to the consumption of services (Brochado, 2009). So, with the understanding of the student as the primary consumer, it is increasingly important to understand what the student wants, needs, feels, and perceives in regard to his or her individual education (Calvo-Porrá, Levy-Mangin, & Novo-Corti, 2013).

Disconfirmation Paradigm

One model that is useful in understanding the expectations and perceptions of the higher education consumer is that of the disconfirmation model. This model, which is derived from the satisfaction stream in service quality research, is comprised of the four concepts of expectations, performance, disconfirmation, and satisfaction (Churchill & Suprenant, 1982; Rosen, Karwan, & Scribner, 2003). The disconfirmation model is widely adopted in the literature regarding customer satisfaction (Appleton-Knapp & Krentler, 2006; Buttle, 1996). In the disconfirmation model, confirmation occurs when service performance is as expected, positive disconfirmation

occurs when performance exceeds expectations, and negative disconfirmation occurs when performance is below expectations. Interestingly, the gaps-based model of SERVQUAL flowed out of the disconfirmation paradigm (Buttle, 1996). This model will be further discussed below.

The gaps model. Conceptually, the current research focused on understanding perceived service quality gaps in student/consumer satisfaction based on understanding the difference between the expectation and the perception of the service of higher education, a key distinction in the disconfirmation paradigm. The focus was on the student's gap between the perception of service quality at the institution and the expectation of what service quality should be. This is important because colleges must be able to understand how their value proposition matches with the expectation of benefits from both students and parents so that administrators can best understand how to deliver value to current and future students (McLung & Werner, 2008). This process makes it difficult for the college to understand what marketing message is necessary because each individual student and parent have varying expectations and perceptions of service quality. Because of this, school administrators must work to both identify and eliminate gaps in the students' expectation and perception of educational value

One theory that can assist the institution in finding and eliminating gaps is the gaps model of service quality as identified in the seminal work of Parasuraman, Zeithaml, and Berry (1985). Essentially, Parasuraman et al. established the gaps model in an attempt to understand the various gaps between service expectations and actual service performance. This model led to the development of a service quality measurement tool known as SERVQUAL. This SERVQUAL methodology is foundational for this study because it provides the framework for exploring the various components that students identify as important contributors to their expectation and perception of educational value. For example, according to Oliveira and

Ferreira (2009), SERVQUAL assumes that, of the five RATER characteristics, the most important dimension is that of reliability. In other words, SERVQUAL results traditionally show that reliability is the single-most important dimension in determining the consumer's perception of service quality. However, other studies show that, in higher education, the empathy dimension is most important (Yeo, 2008b). This empathy concept is extremely important for colleges to understand because the empathy dimension "contributes the most variations in overall satisfaction" (Ramseook-Munhurrin, Naidoo, & Nundlall, 2010, p. 346). Therefore, with this understanding, it is desirable to quantitatively examine these variables from the perspective of the student in an attempt to understand how RATER impacts the students' view of educational value so that institutional leaders can better understand how to attract new students and retain existing students.

Service Quality and the Determination of Value

Connected to the student-as-consumer and service quality approach is the idea that service quality is integrally linked to the perception of value identified by the consumer. Further, for students, this perception of value is highly dependent on the student's "perceptions of what is received and what is given (Zeithaml, 1988, p. 14). The linking of service quality and the perception of value implies that the perception of value for the student is grounded in the subjective judgment and personal evaluation of how that student perceives the benefits and costs of the service received (Walker & Johnson, 2009). Therefore, this link to quality is important to note because the problem presented is focused on the value students find based on the price that they pay, which appears to be connected to how the student perceives service quality at the institution.

One foundational model that addresses perceived value is Sheth, Newman, and Gross's (1991) theory of consumption values. This theory holds that there are five consumption values that influence consumer choice behavior. These values include Functional Value, Conditional Value, Social Value, Emotional Value, and Epistemic Value. Here, functional value, which is understood to be the primary driver of consumer choice, is the perceived utility acquired from a product or service's functional, utilitarian, or physical performance. Conditional value is the perceived utility based on the condition, or situation, at the time of the purchase. Social value is the perceived utility of a product or service based on its association with one or more specific social groups. Emotional value is the perceived utility of a product or service that is derived from the ability of the product or service to arouse feelings or affective states, like nostalgia with classic cars. Finally, epistemic value is value derived from the perceived utility of a product or service's capacity to arouse curiosity, increase a desire for knowledge, or provide novelty. In support of Sheth et al.'s observation, LeBlanc and Nguyen (1999) found that functional value plays a key role in determining student-consumer perceptions of value in higher education.

Price Elasticity in Higher Education

Generally speaking, an increase in price in higher education is not an issue if the institution operates in an environment of monopolistic competition (Barry, 1997), which assumes price inelasticity of demand. Price inelasticity of demand is defined as a smaller ratio of shift in demand than the percentage change in price. Historically, higher education has experienced little shift in demand despite regular price increases above the Consumer Price Index (CPI). This inelastic demand from the student is due to the belief that there will always be a need for higher education. However, Carter and Curry (2011) claim that the assumptions regarding price inelasticity of demand and higher education are generally uninformed and incorrect. Carter and

Curry found that, at a macro, nationwide level, demand for higher education tends to be relatively inelastic but that, at a micro, individual level, demand is relatively elastic in response to rising tuition levels. This indicates that individual students are sensitive to price increases because the students have alternatives to college and, as a result, will play one option against the other to get the best value for money. Carter and Curry suggest that this is particularly true for high-performing students because these students have higher scholarship opportunities and can be more selective in their choice of college. As a result, when prices increase at a macro level, students will look for alternatives to college because they fail to see the value of their potential college degree. Additionally, as students increasingly opt to choose alternatives to college, a college degree becomes more of a luxury than a necessity, which further exacerbates the price elasticity of demand for higher education.

Definitions of Terms

Consumer expectation of quality: the desires or wants of consumers or what the consumer believes a service provider should offer as opposed to what the service provider actually offers (Parasuraman, Zeithaml, & Berry, 1988).

Consumer perception of quality: the consumer's judgment regarding the overall excellence or superiority of a product or service (Zeithaml, 1988).

Consumer perception of value: the consumer's overall assessment of a product's utility based on perceptions of what is received for what is given (Zeithaml, 1988).

Marketize: the influence of market competition whereby college students are increasingly being treated as consumers (Judson & Taylor, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

The focus of this study was to understand how the attitude of students as consumers had shifted at the Bible College used in the study. Because of this, one assumption was that the advent of treating students as consumers, as it currently exists, had been a fairly recent phenomenon at this school. Consequently, it was also assumed that upper-level students at this institution would describe educational value differently than lower-level students. It is possible that the assumed shift in describing educational value is concurrent with increasing tuition and fees. For instance, each year the cumulative cost of college attendance might signal a desire amongst upper-level students to take their college education more seriously than students who are just beginning their college journey. To mitigate the risk of this assumption, it was necessary to survey upper-level students in order to see if it was possible to verify this assumption. Further, it is important to explore how these upper-level students understand educational value in order to see if they describe service quality differently than lower-level students at this institution.

Limitations

One potential limitation in this study is the very nature of the study. As a descriptive quantitative case study, this study was not intended to explore causal relationships among the variables. Furthermore, this study was not intended to be transferrable to other contexts. This limitation was intentional in that the author had no desire to understand the nuanced differences between secular versus sacred students at public versus private colleges and universities. As previously noted, the Bible college of this study had unique characteristics that were personally interesting to the author, so the study was intended to closely examine this particular institution, while excluding other colleges who may not share the similar characteristics and challenges. While there may be a need to see if some similarities exist between this Bible college and other

similar Bible colleges, the underlying desire was to discover and affect change for the target college of the case study.

Delimitations

This study was limited in scope to the specific Bible college discussed previously. As noted, there is a desire to understand how this college is affected by the increasing marketization of the higher education experience. Because of this, the study primarily focused on students of this college and sought to understand how each class-level defines educational value. Put another way, this study was specifically designed to see if there were differing levels of perceived service quality and perceived value the longer a student is exposed to the curriculum of the college. While there may be other similar schools impacted by increasing higher education marketization, those schools sit outside the scope of this study. Furthermore, this study was limited to four primary groups including 1st year, 2nd year, 3rd year, and 4th year students.

Significance of the Study

Reductions of Gaps

The focus of this study was based on an acute interest in understanding gaps that exist in the mindset of the college student as consumer. As a result, one business gap that will potentially be reduced is that of the understanding of educational value, as described by the marketized college student, versus educational value as identified by the service provider within the context of a small, faith-based college. As noted previously, high school graduates increasingly describe a college education as unnecessarily expensive and not worth the investment (Higher Education, 2012). Further, Judson and Taylor (2014) suggest that some of this disconnect may be the result of the increased marketization of higher education, which tends

to emphasize training and credentialing over learning, personal growth, and increased social capital. Therefore, it is necessary to understand what role marketization plays in the increased consumerism of college to see what, if anything, needs to be done to emphasize a different approach toward educational value. Furthermore, if it is discovered that increasing marketization is healthy for the institution, this study can be used to reduce the growing disconnect in the students' perception of educational cost as contrasted with its overall, life-long value.

Implications for Biblical Integration

One potential implication for biblical integration is the idea that God is primarily concerned with quality of products and services as opposed to the price the organization charges (Chewning, Eby, & Roels, 1990). God's perspective is that the overall "purpose of business transactions [is] to serve people" (1990, p. 212). In the context of this study, the service of people refers to the need to ensure that the quality of the service is appropriate and that the resources of both the institution and the student are effectively and efficiently utilized. This is supported with Isaiah 1:22 (English Standard Version), which says, "Your silver has become dross, your best wine mixed with water." The context of this verse is that Isaiah is referencing how sin abounded in Judea because of the wickedness of the people. In this verse, while dross shines like real silver and watered down wine still looks like real wine, the overall quality of these two items was deceptively diminished and God is appropriately concerned about that. This thinking is connected to this study because, as noted, it is assumed that there is a link between the increased marketization of higher education and the growing perception of diminished educational value. If increased marketization is like the watered down wine of Isaiah, schools are propping up the diminishing value of a college degree by emphasizing a more short-term, consumer-driven college experience.

Another interesting biblical concept here is that of honesty and integrity in the marketing process. Proverbs 11:3 (New Century Version) says, “Good people will be guided by honesty; dishonesty will destroy those not trustworthy.” Proverbs is an interesting book to study because the two-line style of the Hebrew writing here requires that one line is weighed against the next line in a way that provokes the reader to both think about and then act on the content (Clifford, 2009). This style serves to give “voice to the belief in the moral balance whereby God runs the world” (Fox, 2007, p. 680). While both lines essentially say the same thing, the addition of the second line is a literary tool that provides a sense of moral balance, or ethical equilibrium, to the reader. In marketing, this moral balance is found in the tension between the need to highlight the benefits of the service being offered and the need to advertise with honesty and integrity. In other words, in the world full of consumer clutter, does the institution oversell its benefits in an unethical advertising of its services and value to the student, or does the college risk losing potential customers with a more straightforward, less consumer-oriented, marketing effort? Furthermore, can school administrators operationalize integrity by removing consumer-driven initiatives or should they play by the rules and standards put forth by their less candid counterparts? This is a valid question in the context of this study because it speaks to the central notion that colleges must increase the commodification and marketization of the higher education experience if they are going to compete with other schools and universities for qualified students.

Relationship to Field of Study

This study relates to the field of marketing in that the Bible college at the center of the study may be able to develop a more focused overall marketing orientation through a more clearly delineated target consumer profile. A more clearly delineated marketing orientation

would allow the school to focus its limited resources on recruiting those students that are most likely to benefit from the overall mission of the institution. This emphasis on resource utilization may serve to enhance the college's standing in the eyes of its other stakeholders as students at the institution may more clearly match the expectations of district leaders, pastors, churches, and parachurch organizations. Furthermore, this study might allow the school to understand the mindset of its current student body as well as the mindset of its potential target market, which may enhance its ability to recruit and retain revenue-generating students. Finally, this study may help the college better position itself to parents and students in that school administrators might have a better understanding of how these crucial consumers define and describe educational value.

A Review of the Professional and Academic Literature

To determine the gaps that exist in resolving the Problem Statement, it is important to review the literature in order to understand what is known regarding the inconsistency between the consumers' expectations of educational value and the perception of value delivered.

Therefore, this literature review is split into four distinct sections: (a) the nature of services and higher education, b) the construct of service quality, (c) methods and models for measuring service quality, and (d) methods and models for measuring perceived value. Each section is discussed and analyzed below.

The Nature of Services

When examining the nature of services, it is necessary to attempt to formulate a common understanding of what characteristics distinguish a service from a product. In an early attempt to outline service characteristics, Gronroos (1978) describes service definitions as unsatisfactory and, instead, attempts to outline three characteristics of services. These characteristics include

intangibility, production/consumption interaction, and the lack of ownership and transaction of ownership. Intangibility refers to the inability of a service to be felt, tasted, smelled, or seen before it is purchased. Additionally, production/consumption interaction refers to the inseparability of the production and consumption process (Gronroos, 1978). Finally, lack of ownership and transaction of ownership deals with the idea that the consumer is only given the right to use something and that there is no transfer of ownership.

In a comprehensive literature review, Zeithaml, Parasuraman, and Berry (1985) modified and refined Gronroos' (1978) three-characteristics model and found service characteristics including intangibility, inseparability of production and consumption, heterogeneity, and perishability. These four characteristics, eventually given the moniker IHIP, were universally accepted from the 1980's forward (Moeller, 2010). While there has been a push to amend IHIP, Moeller stated that with low-tech, high-touch services, "the dichotomous view of manufactured tangible goods and intangible, heterogeneous, inseparable and perishable services was not such a matter of controversy" (p. 359). Therefore, because of the low-tech, high-touch environment of higher education, IHIP is a services marketing framework that warrants further analysis.

IHIP in higher education. In response to the IHIP framework, Gruber, Fub, Voss, and Glaser-Zikuda (2010) assert that educational services in higher education meet each of the IHIP characteristics. For example, the lecture of the professor is simultaneously intangible, perishable, and inseparable with simultaneous production and consumption. Furthermore, the consumer plays a unique role in the purchase process in that they are functional parts of the production, the consumption, and the delivery process (Hill, 1995). In a service industry, a consumer's input becomes the raw material that the service organization converts into a service product. Put another way, "service characteristics force the buyer into intimate contact with the

production process” (Carman & Lanegard, 1980, p. 8), which makes the service process heterogeneous. Additionally, due to these characteristics, Hill might argue that both service productivity and service quality are dependent on the performance of both the service personnel and the service consumer.

The Nature of Consumerism in Higher Education. This leads to a discussion of consumerism in higher education. One interesting perspective in this discussion is that of Wright (2012) who suggested that there are four marketing orientations in higher education: (a) the production concept, (b) the product concept, (c) the selling concept, and (d) the marketing concept; where each orientation offers a distinct higher education experience for the institution and the student. The production concept, found mostly in community colleges, emphasizes low prices and large numbers of students as the driving factors of college growth and sustainability. The product concept focuses on the product of higher education and stresses quality above everything else. The idea is that quality instructors, research, equipment, infrastructure, coupled with innovative teaching methods and course design, will lead to an Apple-like experience for the students at the institution, where the institution becomes synonymous with quality and innovation in the eyes of its ideal consumers. These product features will, in turn, enhance the value of the institution to the students who purchase their education (Wright, 2012).

The selling concept focuses on volume and excess capacity, where classes or academic programs that have too few students are promoted over other classes or programs for the students. Based on the selling concept, it can be inferred that students are the ultimate consumers who need to be sold the appropriate mix of products. Finally, the marketing concept suggests that marketers need to discover the wants and needs of the consumer and that these marketers should strive to provide courses and instruction that most closely aligns with consumer

wishes. Using the marketing concept, college marketers would identify the appropriate consumer and build programs around the needs and wants of those consumers.

The marketing concept appears to be the most relevant to the current research since it was tested in this case study to determine if the marketing concept exists among the students at the target college. Judson and Taylor (2014) stated that there is growing disillusionment amongst stakeholders of higher education because of the emphasis of marketization over marketing in higher education. The marketization of higher education focuses on more short-term, transactional goals like perceived job relevance and views the exchange of knowledge like a commodity where the student is able to purchase credentials from a college or university. Alternatively, the marketing concept views higher education from a more long-term perspective where the student gains knowledge and becomes a better functioning member of society. Essentially, the growing consumerism of higher education has a direct impact on the identified problem because it shapes consumer expectation and perception of educational value. If students define value based on the credential they receive or on their ability to land a job after graduation, it is likely that they are highly influenced by consumerism and the college should employ the selling concept. However, if students define value more as growing and learning, the student is less likely to self-identify as a consumer and the college marketers should build on the values of the marketing concept as identified by Wright (2012). Because of these competing concepts, institutional leaders need to understand whom they view as consumers because the consumers' definition of value will shape their perception of educational value toward either the selling or the marketing concept, which will, in turn, influence the actions of the institutional leaders.

To add balance to this discussion, some authors appeared to take a more neutral position on the rise of consumerism higher education. Fairchild and Crage (2014) found that most of the

arguments used in academia regarding the marketization of higher education are speculative and that the popular belief that consumerism is a widely held attitude among students is inaccurate. Put another way, there is an assumption in the literature that students view themselves as consumers, but Fairchild and Cragge refute that assumption. Fairchild and Cragge developed a Consumerist Attitudes Toward Higher Education scale and found that consumerist students are more likely to choose future income potential over any intellectual interest in their chosen field of study, but that they are less likely to try to demand control of the classroom, as would be expected if they held to a consumerist viewpoint. In other words, consumerist students want to see the benefit of obtaining the college degree without necessarily determining or influencing “what well-educated means” (p. 415). Finally, these authors suggested that schools do not need to strongly challenge the consumer model in higher education because school administrators should focus on the other market or political forces that encourage student attitudes of consumerism, which might include increased government accountability through standardized testing, a weakening of faculty authority in the classroom, an augmented focus on credentialism where grades are awarded with little concern for actual learning, and a cultural climate that treats education like a product rather than a process. Each of these items has the potential to cause students to value higher education for something it was never intended to be, which contributes to the widening gap expressed in the problem and purpose statement.

A final neutral position can be found in Shahdad (2014) who suggested that consumerism is not hurting higher education, but, instead it is reshaping higher education by increasing a more market-based approach to learning and education. Shahdad proposed that, in an environment where college is becoming cost prohibitive, at least some students are willing to sacrifice the quality of a traditional college for the accessibility and affordability of other market-driven

alternatives like Massive Open Online Courses (MOOCS). Baggaley (2014) claims the promotion of MOOCS by college and universities is similar to the rise in consumerism in higher education, where college sacrifice quality as administrators and decision-makers “turn a blind eye to adverse pedagogical findings” (p. 162). In other words, Baggaley believed that MOOCS are negative and that they are tied to consumerism because schools are looking for ways to increase enrollment figures at very little cost. It might also be speculated that the growth of MOOCS contributes to the growth of the perception of consumerism in higher education students.

Those who argue against consumerism in higher education believe that increasing consumerism in higher education is detrimental to the long-term health of the institution. For example, Angell, Heffernan, and Megicks (2008), suggested that consumerism in higher education reduces a college from an academic institution to nothing more than a standard service provider, which diminishes the college’s view of educational value. Farnsworth (1979), further noted how, consumerism led to a perception of weakened enrollment standards and reduced the overall educational quality at Northeast Missouri State University (NMSU). This was evidenced in how NMSU responded to declining head counts and skyrocketing costs by reducing quality standards for incoming students in an attempt to prop up full time enrollment. Farnsworth argued that in order to reverse the trend of declining enrollment, NMSU administrators needed to counter-intuitively require stricter and more rigid enrollment standards, which would increase the overall perception of quality at NMSU. Over time, Farnsworth found that NMSU had a 16% jump in freshman enrollment from a pool of high school seniors that had only grown by one percent.

Further, Kalafatis and Ledden (2013) suggested that the current influx of consumerism in higher education has led scholars to suggest that globalization, commoditization, massification, and McDonaldization of education has occurred, which are viewed as negative consequences of consumerism run amok in higher education. Despite this negative tone, Kalafatis and Ledden indicated that students contribute to the educational process. Where administrators do not want to use the consumer label for students, they should, at a minimum, refer to the student as a collaborator in the creation of educational value. This implies that how the students view their role in education and the service quality of the institution may impact their expectation and perception of educational value. This idea of collaboration in educational value provides a solid argument for treating students as at least one of the consumers in the educational process. Finally, this debate is significant because it leads to an appropriate consideration of the role institutional service quality plays in understanding how students describe educational value.

Stakeholder and consumers in higher education. In the service industry of higher education, there is a unique description of consumer in that the consumer can be students, parents, employers, faculty, the government, or society as a whole (Owlia & Aspinwall, 1996). While it is suggested that a student-as-consumer approach might be appropriate in higher education, this approach is also problematic in that, in many ways, students are both consumers as well as products in the educational process (Annamdevula & Bellamkonda, 2012); which implies that future employers of the student are also necessary and important consumers of higher education (Emery, Kramer, & Tian, 2001). Despite the appropriate influence of future employers, students are still important consumers in that they have considerable control over their higher education options and, with this control, are more than just passive observers of the educational process (Mark, 2013a). Additionally, students bring preexisting knowledge and

educational attitudes to the college and, as such, contribute greatly to their process of higher education learning and development. This implies that, because of their relationship to the process of higher education, students are, at a minimum, co-creators of educational value and not solely products or solely consumers (Judson & Taylor, 2014).

Students as the primary consumer. The identification of the consumer of higher education is rife with debate among the literature. A number of authors exist who support the students-as-consumers view (Annamdevula & Bellamkonda, 2012; Mark 2013; Owlia & Aspinwall, 1996; Rose, 2013; Sunder, 2016) whereas others reject the notion (Harrison & Risler, 2015; Hubbell, 2015; Marshall, Fayombo, & Marshall, 2015; Regan, 2012). Hubbell stated that students are not and should not be treated as consumers because the creeping consumerism of higher education can lead to grade inflation, skewed student evaluations of faculty, syllabi contractual obligations, and the dumbing down of course content. The student might identify value from this creeping consumerism in that they probably expect higher grades in exchange for their paid tuition dollars. Alternatively, educational leaders and faculty are likely to lament a less rigid curriculum, which should lead to an unwillingness to inflate grades in exchange for increased recruitment and retention. Hubbell supported this when he stated that institutional leaders should spend their energies on engaging the pursuit of learning instead of worrying about less important issues like customer (student) satisfaction. Harrison and Risler (2015) agreed with Hubbell's position by arguing that consumerism diminishes actual student learning and works to objectify the student by "positioning them as a means to income generation rather than ends in themselves" (p. 74). Finally, Marshall, Fayombo, and Marshall (2015) suggested that the students-as-consumer view can lead to the problem of degree entitlement, where students believe that, since they paid tuition dollars, they are entitled to their degree.

Conversely, Annamdevula and Bellamkonda (2012) argued that, despite the aforementioned pitfalls, students are the primary consumer of higher education and, as a result, the quality of service, as perceived by the student, should be analyzed and studied in order to better understand the determinants of service quality as observed by the students. Owlia and Aspinwall (1996) found that, when looking at the various quality dimensions in higher education, the dominant customer of each quality dimension is the student. Owlia and Aspinwall identified six service quality dimensions including tangibles, competence, attitude, content, delivery, and reliability. Each of these dimensions puts the student as the dominant customer and frames the other stakeholders, including college personnel and future employers, as secondary customers. Owlia and Aspinwall's observation is relevant to both the problem and the purpose statement in that, if students are the primary consumer of higher education, it is important to understand the quality dimensions students use to identify value so that institutional leaders can better service their identified consumers.

Rose (2013) also appeared to support the student-as-consumer view, but approached it from a cost-versus-value position as found in the problem statement. Rose posited that the cost of college has led to increased student debt, and that debt is often framed to the student as being a wise investment in his or her future. While Rose suggested that a modest amount of debt is acceptable, he also stated that students should benefit from this debt, in the form of actual job skills gained, because it is otherwise "difficult to argue that attending college will lead to positive economic effects after graduation" (2013, p. 25). The implication from Rose's argument is that, at a minimum, the cost of college necessitates an empowered student-consumer because these are the consumers paying for a college degree, while also expecting higher lifetime earning potential.

Mark (2013a) appeared to support Rose (2013) in finding that, as paying consumers, students are more than mere products of an educational process or assembly line. Instead, Mark argued that students are active participators in their educational development, which makes them co-producers of the educational process. Mark also observed that most arguments against students-as-consumers are anecdotal and not based on empirical evidence. The implication here is that the belief that a customer focus somehow endangers education quality is unproven. Mark went on to suggest that, when students pay for their educational experience “and do what is required to successfully earn their credentials, they fit the profile of customers in the modern sense and would benefit from being treated as such” (2013a, p. 492). This treatment can be as simple as finding ways to embed quality into the education process. These observations by Mark impact the purpose and problem statements in that, if students are viewed as products of the educational process, it can lead to an undervaluing of the role students actually play in the educational process. Furthermore, as Mark (2013b) suggested, students can only find value and satisfaction when they receive the quality education and accompanying credential that is valued in the labor market. Finally, just as satisfied customers are necessary for a successful business, “satisfied students are crucial to the success of any institution of higher learning” (p. 8).

Marks (2013a, 2013b) satisfaction argument is especially compelling when one considers the idea of student referrals and word-of-mouth (WOM) promotional strategies. According to Lan and Lawson (2013), WOM communication can be a powerful tool for nonprofit organizations, which includes institutions of higher education. For the purpose of this study, WOM communication is centered on the idea that satisfied and dissatisfied students talk to their friends after enrollment and can positively or negatively influence their friends regarding the college (Casidy, 2014). Lang and Lawson suggested that most consumers both rely on and

engage in WOM communication, which can be used to enhance the message as well as the messages quick and timely delivery. The notion of WOM communication is important to the problem and purpose statement because if students fail to identify educational value at their higher education institution, it can lead to those students expressing frustration to their peers, which can negatively impact the college's ability to attract and retain future students.

The millennial student. While the student-as-consumer view has been around for decades, it is speculated that the rapidly increasing movement toward consumerism is at least partially tied to the generation of students enrolling in college today. In particular, while millennial college students are some of the most ethnically diverse and socially connected students, "the most distinguishing feature of this group, at least in the classroom, may be their academic entitlement" (Goldman & Martin, 2016). As noted by Boswell (2012), academic entitlement is perhaps a defining component of the identity of millennial students. Twenge (2009) further observed that the sense of narcissism and entitlement in today's classroom is only increasing as college students increasingly reflect the notion that more students are demanding better grades simply for trying or working hard as opposed to those who earn the grades through good performance in the classroom.

The sense of academic entitlement in the millennial student is especially important for institutions of higher education because studies show that students today are primarily concerned with schools that "care for their social needs, listen to their thoughts and opinions and have approachable staff" (Carter & Yeo, 2016, p 647). The implication here, as it relates to the purpose and problem statement is that students who do not feel satisfied with their college experience are likely to drop out, which should show higher levels of satisfaction the longer a student is exposed to the curriculum of the college. Additionally, college administrators need to

be aware of potentially lower satisfaction levels amongst millennial students so that appropriate retention strategies can be implemented.

The Construct of Service Quality

In the extant literature, service quality has been and continues to be an “elusive and abstract construct that is difficult to define and measure” (Cronin & Taylor, 1992, p. 55). According to Baron, Warnaby, and Hunter-Jones (2014), the topic of service quality is one of the most prevalent themes in contemporary service-related journals. In the literature, one of the most widely known set of service quality dimensions was proposed by Parasuraman et al. (1988) who describe service quality as “a form of an attitude, related but not equivalent to satisfaction” (p. 15). This attitude results from the consumer’s comparison of expectations with perceptions of performance. Cronin and Taylor, however, dispute Parasuraman et al.’s definition in that Cronin and Taylor believed that only perceptions of service quality are important for the consumer. Therefore, it is imperative to explore these fundamentally differing expectation versus perception descriptions in relation to service quality.

Expectations versus perceptions? One model that explores the gap between expectations versus perceptions is the disconfirmation model. The disconfirmation model is derived from the satisfaction stream of research in service quality (Rosen et al., 2003). The disconfirmation model is comprised of the four concepts of expectations, performance, disconfirmation, and satisfaction (Churchill & Surprenant, 1982). Here, disconfirmation refers to the “discrepancies between prior expectations and actual performance” (p. 492). Then, according to Churchill and Surprenant, it is in the magnitude of the disconfirmation where satisfaction or dissatisfaction is generated. Put another way “satisfaction is the evaluation rendered that the experience was at least as good as it was supposed to be, [which is] an

underlying tenet of virtually all quality management thinking” (Rosen et al., 2003). Further, the disconfirmation model “has been studied and tested by many researchers and serves as the basis for the vast majority of satisfaction studies that have been completed in the fields of marketing and consumer behavior” (Appleton-Knapp & Krentler, 2006, p. 256).

Despite the widespread support of the disconfirmation model, there is debate regarding whether customer expectations and perceptions should be used or whether it is more appropriate to only consider perceptions. Berry, Parasuraman, and Zeithaml (1988) believed that expectations are important because “customers assess quality by comparing what they want or expect to what they actually get or perceive they are getting” (p. 37). This understanding of service quality seems to make intuitive sense in that a consumer’s expectation of a service level probably plays a role in how that consumer identifies the quality of that service delivered. Despite this, several authors believe that attempting to measure expectations, which can really only be conducted after the service is performed, is problematic because the hindsight bias plays a role in shaping what the consumer identifies as his or her expectations (Appleton-Knapp & Krentler, 2006). This bias, especially in the context of higher education, can result in student’s using their high school expectations to inform their perceptions of quality in higher education (Hill, 1995), which would seem to support the elimination of expectations from the service quality discussion.

Service quality in higher education. While it has been noted that the notion of quality in the service sector is elusive and abstract, Lagrosen, Seyyed-Hashemi, and Leitner (2004) observed that service quality, in the context of higher education, may be even “more difficult to define than in most other sectors” (p. 63). Lagrosen et al. found that there are many different definitions of service quality in higher education, which is primarily due to the varying

stakeholders and methods used to define and describe higher education quality. For instance, per Lagrosen et al., some authors emphasize the importance of student learning, some authors stress the importance of student transformation, and some authors argue for consistency amongst the graduates. The perspective of each author was likely derived from their perception of the primary stakeholder, which, as noted, can be a difficult group to identify. Therefore, it could be said that the concept of quality is relative and that “different interest groups of ‘stakeholders’ in higher education have different priorities and their focus of attention may be different” (Sunder, 2016, p. 1093).

Regardless of how service quality in higher education is defined, this topic is highly relevant to this study in that, due to the relatively uncertain and high-risk decision of choosing a school, students tend to look toward evidences of service quality (Donaldson & McNicholas, 2004). Furthermore, when compared with the private sector, the desire to understand service quality in higher education is a relatively new topic (Sultan & Wong, 2010). Because of the desire for students to observe service quality and the relatively recent interest in identifying service quality dimensions in the higher education-specific context, it is important to contribute to the literature in seeking to understand what drives the perception of service quality in higher education. Additionally, the increasingly competitive field of higher education has enhanced the need for higher education institutions to understand and measure service quality (De Jager & Gbadamosi, 2010; Dehghan, Dugger, Dobrzykowski, & Balazs, 2014). The increased focus on competition has pushed schools of higher education to understand and improve service quality dimensions through an increasingly student-centered approach (DeShields, Kara, & Kaynak, 2005).

Service quality and satisfaction in higher education. According to Morgan, Anderson, and Mittal (2005), “there is increasing evidence linking a firm’s financial performance to the level of satisfaction reported by its customers” (p. 131). Furthermore, an important component of an organizations sustainable competitive advantage is the organizations ability to focus on high levels of service quality that will, in turn, lead to highly satisfied customers (Sureshchandar, Rajendran, & Anantharaman, 2002). Because of this link, it is important for organizations to fully understand the constructs of service quality and customer satisfaction, which, while linked, are also fundamentally different (Gruber et al., 2010). Where service quality is thought of as a long-term attitude that encompasses every aspect of the organization, satisfaction appears to be short-term, or transactional in nature (Vajda, Farkas, & Malovics, 2015). The transaction-specific nature of customer satisfaction is important to organizations because service quality is a more abstract concept that is only based on current perceptions whereas satisfaction accounts for former, current, or anticipated outcomes or experiences (Anderson, Fornell, & Lehmann, 1994).

Despite the positive aspect of satisfaction, one potential problem of transaction-specific measures is that short-term dissatisfaction may be incongruous with a more long-term positive attitude (Jones & Suh, 2000). For example, a student might receive a poor grade in a class, which would cause short-term dissatisfaction, but still maintain an overall positive attitude in regard to the college or degree program. To combat this satisfaction problem, Olsen and Johnson (2003) found that organizational leaders should focus on cumulative evaluations to set priorities for service quality improvements. These cumulative evaluations tend to be better predictors of loyalty, which will help an institution with overall retention.

Service quality and satisfaction are two concepts that, although linked, are abstract, ambiguous, and difficult to define (Munteanu, Ceobanu, Bobalca, & Anton, 2010). One reason

for this difficulty is the notion that there is considerable debate in the literature regarding which of these two concepts comes first. For example, Cronin and Taylor (1992) argued that service quality is an antecedent to satisfaction. Cronin and Taylor's position appears to be well established in the literature with most authors believing that service quality is an antecedent to satisfaction (Gruber et al., 2010). This position is further supported by Oliver (1993) who maintained that, this antecedent relationship would be true regardless of whether customer satisfaction and service quality were transactional or cumulative. Despite these findings, there are those who argue that satisfaction might instead be an antecedent to service quality. For example, Parasuraman et al. (1988), the creator of SERVQUAL, found that higher levels of satisfaction led to increased perceptions of service quality. Regardless of which came first, service quality and customer satisfaction are, at a minimum, bound to each other. For the purpose of this study, it is assumed that perceived service quality is an antecedent to student satisfaction and that, because of this relationship, student satisfaction in higher education can be influenced by perceptions of service quality at the college or university.

Service quality and value in higher education. On average, individuals with higher levels of education tend to have higher earnings than those without higher education (Blomquist, Coomes, Jepsen, Koford, & Troske, 2014). According to the US Department of Education and the National Center for Education Statistics (2015), in 2013, full-time, young adult workers with a bachelor's degree had median earnings of \$48,500, compared to median earnings of \$23,900 for those without a high school diploma and \$30,000 for those with only a high school diploma. In other words, students with a bachelor's degree earned more than twice as much as students who failed to complete high school. Furthermore, The National Center for Education Statistics found that the pattern of higher earnings associated with higher levels of education was

consistent across multiple variables including gender and race. This information regarding the probable earning potential of those with higher education is important because, as noted by Nica and Popescu (2014), students tend to pursue higher education based on their understanding of cost versus benefit. The implication of Nica and Popescu's observation is that price and future income potential are important considerations for students selecting a college or a university.

While the private and economic value of higher education is firmly established, it is also important to note that there are other considerations that can aid students in the college selection process. Blomquist et al. (2014) suggested that there is a social value of education that is large unaccounted for and unspecified. These social values typically include a better quality of life, increased productivity, and personal growth. Furthermore, Brannlund (2014) suggested that there are numerous nonmarket outcomes of higher education, which include an accentuated voice and a higher level of agency within the student, which can increase the student's ability "to express political view and strengthens their self-governance" (p. 14). The heightened voice and agency in the student also leads to increases in individual well-being and positive affects on social participation. In addition, Chapman and Kounkaew (2015) found that the public benefits from increasing levels of higher education amongst the general population. Chapman and Kounkaew observed that, as education increases in the overall population of a nation, there is better public health, increased democratization, greater political stability, lower crime rates, and reductions in overall poverty. Finally, Badea (2013) found that, from a socio-economic perspective, higher levels of education result in higher economic revenue for both the individual and for society as a whole.

Complicating the understanding of educational value is the idea that identifying quality education, that is also perceived to be valuable, can be a complex and frustrating process.

According to Takalo, Abadi, Vesal, Mirzaei, and Nawaser (2013), the product of education is mostly intangible and, as a result, it is hard to quantify and measure. For instance, education is a reflection of how a student is transformed over time. This transformation process is reflected in the creative, critical, and analytical skills gained by the student. This rigorous process can be difficult to quantify and measure because it is primarily concerned with the enduring impact on the life of the student and not on the professional qualifications gained by the student. Put another way, higher education faculty are primarily concerned with producing life-long learners with a secondary concern of professional skill development, which can be difficult to quantify and measure. This thinking regarding the complexity of educational value is supported by Williams (2012) who observed that frameworks for measuring student perceptions of service quality undermine actual learning and that more holistic, interdisciplinary approaches are necessary.

While Taylor and Judson (2011) suggested that the marketization of higher education justifies the need for an increased emphasis on service quality, they also proposed that a more long-term perspective would focus on quality of service as described by the institution instead of service quality as perceived by the student. This would appear to view the student as a consumer while simultaneously advocating for a less student-friendly service quality measurement framework. Taylor and Judson based their view on what they believed to be the difference between marketization and marketing in higher education. For example, they stated that marketization of higher education is erroneous because it focuses on increased stakeholder (student, faculty, future employer, government, accreditor, etc.) satisfaction instead of the academic pursuit of actual learning. Taylor and Judson's view seems especially important to the topic of this study in that, while they argued for a decreased emphasis on consumerism in higher

education, they also appeared to support the notion that increased marketization makes service quality much more important. Therefore, if it is shown that treating students as consumers is essential to the long-term viability of the college, an increased quantitative emphasis on the students' perception of quality is necessary. However, if it is found that marketization of higher education is detrimental to the long-term viability of the college, it was necessary to quantitatively understand how students view themselves in order to more effectively address the consumer-mentality of students.

Service quality and value in the Christian college context. At the Christian college and university (CCU) level, it is generally understood that there is a distinctive mission and biblical mandate that promotes diversity, equity, excellence, and intercultural engagement (Nussbaum & Chang, 2013). The implication of this distinctive mission and biblical mandate is that both incoming and current students at CCU's somewhat conform to the mission and values of the institution. For example, if the institution places a high value on cross-cultural engagement, incoming students and current students are also likely to value cross-cultural engagement. Furthermore, if the institution highly values building community through daily chapel services, the students are also likely to value a sense of community and engagement.

Methods and Models for Measuring Service Quality

As demonstrated, it has been shown that, while there are various views regarding the differing stakeholders in higher education, students are viewed as an important component of understanding quality and value in higher education. Because of this, it is now important to discuss the necessity of establishing a service quality measurement methodology so as to ensure that higher education quality, as perceived by the student or as dictated by the institution, can be observed, measured, and improved. Perceptions of value are based upon observations of the

quality of education received by the student. To help measure these qualities, there are several frameworks that, according to the literature, can be helpful in assessing higher education quality. These frameworks are the perceived quality of service model (Gronroos, 1984), SERVQUAL (Parasuraman et al., 1985, 1988), Evaluated Performance (Teas, 1993), HESQUAL (Teeroovengadum, Kamalanabhan, & Seebaluck, 2016), SERVPERF (Cronin & Taylor, 1992), HEdPERF (Firdaus, 2005), and HiEdQUAL (Annamdevula & Bellamkonda, 2012). Each of these service quality measurement frameworks will be addressed and discussed below with a final recommendation as to which framework, and its accompanying survey, is the most appropriate for the chosen higher education context of this study.

Perceived Quality of Service Model. One of the earliest attempts to envision a model of service quality was Gronroos (1984). Gronroos believed that the consumer's perception of service quality would be based on the evaluation process of the consumer, where expectations of the consumer were compared with the service the consumer perceived. This process makes the perceived quality of service model (PQSM) dependent on the variables of expected service and perceived service. Gronroos stated that promises from marketers would influence the expectations of customers and, consequently, that these promises would have an impact on the expected service. Gronroos found that there were two quality dimensions that the service provider would need to address: technical quality and functional quality. Here, technical quality refers to "what" the customer receives from his or her interaction with the firm and functional quality refers to "how" the customer gets the technical outcome from the service interaction. Further, Gronroos observed that the image of the firm shapes consumer expectations of the firm and, therefore, the image of the firm is built up by the technical and functional quality of its

services. Finally, while the PQSM is foundational to the modern understanding of service quality, it is probably too theoretical to be modified for use in this study.

SERVQUAL. The most widely used service quality measurement tool is SERVQUAL, which is used to measure the expectation of the consumer against the perception of the consumer in relation to the service performed by the service provider (Ladhari, 2009). Essentially, Parasuraman et al. (1988) based their model on the disconfirmation paradigm where service quality is measured as the difference between what the customer believes the organization should offer, measured against their perceptions of actual organizational performance. Parasuraman et al. believed that the consumers evaluation of service quality is dependent on the enormity of the gap between consumer expectations and consumer perceptions. If there is a large gap between expectations and performance, then there is a low level of service quality as perceived by the consumer.

To accomplish the measurement of gaps, the SERVQUAL instrument uses two mirrored 22-question/statement surveys. The questions and statements, as described by Parasuraman et al. (1988), ask the customer to rate their expectations of service in one set of questions and their perceptions of the service performed in the second set of questions. For example, question E1 asks if the organizations in the industry should have up-to-date equipment, while the corresponding P1 asks if the organization of the study has up-to-date equipment. Using a 7-point Likert scale, the customer ranks his or her answer and the difference between the consumers' expectation and the consumers' perception forms a gap. Negative gaps reveal that perceptions are below expectations and positive gaps indicate that the institution is providing better than expected service.

The SERVQUAL model establishes five key characteristics or dimensions of service quality including reliability, assurance, tangibility, empathy, and responsibility (RATER). In this context, reliability refers to how consistent and dependable a company is in performing a service; assurance refers to how secure the consumer is in the competency and education of the employee, tangibility refers to the physical buildings, equipment, and people; empathy refers to the personalized attention provided by the employee to the consumer; and responsiveness refers to how quickly the employee responds to consumer desires.

Parasuraman et al. (1988) believed that SERVQUAL could be applied to nearly every service organization and, as a generic scale, SERVQUAL has been adapted and used to assess service quality in industries all over the world (Donlagic & Fazlic, 2015). Additionally, SERVQUAL provides an excellent foundation for understanding expectations and perceptions of service quality because it is both reliable and valid (Cronin & Taylor, 1992). In fact, many studies have used SERVQUAL as a foundation for examining the context of higher education (Donlagic & Fazlic, 2015; Narang, 2012; Oliveira & Ferreira, 2009; Shekarchizadeh, Rasli, & Hon-Tax, 2011; Stodnick & Rogers, 2008; Tan & Kek, 2004). Despite this positive affirmation regarding the use of SERVQUAL in higher education, this model is not without its critics. Buttle (1996), found that there is inconclusive evidence that consumers “routinely assess service quality in terms of Expectations and Perceptions” (p. 25). Furthermore, Buttle argued that the service quality dimensions used in the SERVQUAL model are not universal and, therefore, need to be contextualized to the situation of the organization. This assertion is supported by Yeo (2008a) who found that “service quality is a complex issue largely driven by contextual uncertainties” (p. 283). Therefore, while the SERVQUAL instrument provides a good foundation, it is probably too generic to be extensively used in the context of higher education.

Evaluated performance. One framework that attempts to modify SERVQUAL for use in the context of higher education is Teas' (1993) Evaluated Performance (EP), which is a lesser-known quality measurement framework. EP and SERVQUAL are very similar except that EP measures the gap between consumer perception and the ideal level of performance as defined by the institution, while SERVQUAL only measures the gap between perception and expectation as defined by the consumer (Firdaus, 2005; Teas, 1993). Unfortunately for Teas, aside from a few scant mentions in the literature, there are very few researchers who have empirically and independently examined the EP model. Despite this lack of empirical and independent examination, EP may be helpful as a service quality measurement tool because colleges are critically concerned with establishing and measuring their own internal ideal learning outcomes; especially in light of external pressure from governmental and accreditation bodies. In other words, EP measures that gap between the consumer's perception of service performance and the ideal level of performance as established by the institution (Annamdevula & Bellamkonda, 2012). Unfortunately, as noted previously, scant attention has been given to empirically proving EP's validity, which indicates that better service quality measurement tools might be available.

HESQUAL. Another relatively new framework that uses SERVQUAL as a base is HESQUAL as espoused by Teeroovengadum, Kamalanabhan, and Seebaluck (2016). Teeroovengadum et al. believed that their scale was super to all other service quality frameworks in higher education because of its holistic integration of both functional and technical quality elements. They believed that these elements were essential to higher education quality frameworks because they work through issues related to the process of quality as well as the outcome of quality. Building off the SERVQUAL foundation, Teeroovengadum et al. suggested that there are five higher education service quality dimensions including administrative quality,

physical environment quality, core educational quality, support facilities quality, and transformative quality. Of these five dimensions, support facilities quality and transformative quality were found to be unidimensional while administrative quality, physical environment quality, and core educational quality were found to be multi-dimensional. The primary weakness of HESQUAL is that it was administered in the developing country of Mauritius, which is a tiny island nation in the middle of the Indian Ocean and, from the view of the researchers, the findings cannot be generalized to other countries without caution. As a result, the HESQUAL framework can be rejected for use in this project. Despite this rejection, the HESQUAL framework does show an increasingly important need to better understand determinants of service quality in higher education.

SERVPERF. The next framework to be discussed is that of SERVPERF, as designed by Cronin and Taylor (1992). Cronin and Taylor believed that SERVQUAL is a flawed tool because it puts too much emphasis on the consumer's expectation of service quality, which they say plays little to no role in the consumer's actual perception of service quality. Because of this belief, Cronin and Taylor created SERVPERF to only measure service performance as designated by the service provider. Furthermore, Cronin and Taylor empirically found that service quality should be measured as an attitude, which undermines the satisfaction paradigm proposed by SERVQUAL because Cronin and Taylor found attitude as a more long-term evaluation of service quality, whereas satisfaction is a more transaction-specific measure.

At a cursory level, SERVPERF seems to make sense for use in higher education because colleges and universities are highly focused on outcomes-based assessment. Because of this outcomes-based focus, the institution's description and definition of service quality would be more important to the institution than the students' varying expectations of service quality.

However, for the purpose of this study, where students are viewed as a necessary consumer of higher education, SERVPERF would prove to be too narrow in that understanding student expectations is of paramount importance. Furthermore, despite the belief that consumer expectations may change over time, understanding the expectation of student-consumers can prove to be valuable information to the higher education institution (Vajda et al., 2015; Voss, Gruber, & Szmigin, 2007). For instance, freshmen and seniors, by virtue of their station in life, are likely to have differing opinions on what they expect from the institution and how they defined and describe institutional service quality. Despite this shift in expectations and definitions, the college needs to understand how both groups describe service quality in order to recruit new students, retain existing students, and prepare graduating students to be generous contributors as alumni.

As noted, the SERVPERF instrument focuses solely on the performance of the service by the institution. The SERVPERF model is nearly identical to the SERVQUAL model except that the customer is asked to rate their expected feelings about the organization. In fact, the only functional difference between the SERVPERF and the SERVQUAL frameworks is that SERVPERF only considers customer perceptions of service quality (Sultan & Wong, 2013). So, for example, using the previous E1/P1 question, SERVPERF would only ask about the customer's perception of whether or not the organization has up-to-date equipment. Despite the functional difference, both SERVQUAL and SERVPERF have been found to be adequate predictors of overall service quality (Carrillat, Jaramillo, & Mulki, 2007). However, like SERVQUAL, the SERVPERF instrument is too generic to be used extensively in higher education and, therefore, is too generic to be of much use in this quantitative study.

HEdPERF. The next framework is HEDdPERF as discussed by Firdaus (2005).

HEdPERF is essentially a customized SERVPERF scale that has been modified to fit within the specific context of higher education (Firdaus, 2006). Firdaus believed that, while substantially better than SERVQUAL and EP, SERPERF still needed to be modified and clarified so as to better fit within the environment of higher education. Firdaus (2005) wrote, “Although SERVPERF was developed and has subsequently proven to be the superior generic scale to measure service quality in a wide range of service industries, it did not provide a better perspective for the higher education setting” (p. 319). Firdaus believed that HEdPERF is better because it is more specific in areas that are more important in evaluating service quality in higher education. For example, HEdPERF asks if academic staff has the knowledge to answer the student’s questions relating to course content, if academic staff has time to appropriately answer questions in a caring and courteous manner, and if academic staff shows positive attitudes towards students.

At 41 questions, the HEdPERF scale is considerably longer than SERVPERF, which could be a potential weakness of the HEdPERF model. However, as noted, HEdPERF does a better job of drilling down to higher education-specific concerns. Additionally, Ali, Zhou, Hussain, Nair, and Ragavan (2016) found that most of the studies investigating HEdPERF are comparative to SERVPERF and that HEdPERF is a better service quality measurement framework than SERVPERF precisely because it is specifically designed for use in higher education. Furthermore, despite the extra length of HEdPERF, results show that it captures more variance relative to the SERVPERF scale and, therefore, is probably a better service quality measurement tool than SERVPERF (Sultan & Wong, 2010).

HiEdQUAL. A final service quality framework is that of HiEdQUAL as described by Annamdevula and Bellamkonda (2012). As in the development of HEdPERF, Annamdevula and Bellamkonda were troubled by the use of generic instruments for the measurement of service quality in higher education. Because of the widespread use of generic tools, Anamdevula and Bellamkonda developed HiEdQUAL as an alternative to SERVQUAL, SERVPERF, and EP. Modeled after SERVQUAL, HiEdQUAL consists of 27 items over five higher education-specific factors including teaching and course content, administrative services, academic facilities, campus infrastructure, and support services. Questions include areas asking whether teachers are responsive and accessible; whether teachers follow the curriculum; whether the course is relevant; whether staff is accessible during office hours; whether the dorms are appropriate; and whether counseling services are available. As a modification of SERVQUAL, HiEdQUAL addresses the generic nature of SERVQUAL, but still shares that primary weakness of SERVQUAL, which is that it focuses too heavily on responsiveness to the needs and expectations of the consumer (Moreno, 2013).

Best service quality model for use in the context of higher education. Essentially, PQSM, SERVQUAL, EP, HESQUAL, SERVPERF, HEdPERF, and HiEdQUAL are very similar to each other. Each framework uses PQSM and SERVQUAL as a foundation but has been modified to correct perceived weaknesses in these two models. For instance, EP, HESQUAL, and HiEdQUAL use SERVQUAL as a foundation but are designed to specifically address the shortfall of SERVQUAL in measuring service quality in the context of higher education. Similarly, SERVPERF and HEdPERF deviate from SERVQUAL in that both tools only measure the attitude or perception of the consumer or student. Furthermore, between

SERVPERF and HEdPERF, only HEdPERF attempts to specifically address the industry of higher education.

As exhibited, there is considerable debate and support from a variety of authors concerning the preferred service quality measurement framework in the context of higher education. Despite this, some argue that each of the aforementioned models have weaknesses and that no one best scale exists. Yusoff, McLeay, and Woodruffe-Burton (2015) claimed that none of the discussed models is appropriate and that the frameworks serve to oversimplify the rich and deep complexities of managing service quality in higher education. Ramseook-Munhurrun, Naidoo, and Nundlall (2010) further suggest that each model is too weak because none of them expressly considers the view of other stakeholders or faculty. Cheng and Tam (1997) suggested that, due to the subjective and abstract nature of measuring higher education quality, the “best” method is whatever method the institution chooses. In other words, among the identified frameworks, there is no one best service quality measurement framework. Finally, Drule et al. (2014) suggested that, because of the multiple strategies available and the differing needs of each individual institution, the most important framework is whichever one the institution opts to implement, assess, and review for sustained service quality.

Unfortunately, the aforementioned positions are too ambiguous and lack the necessary clarity on establishing which service quality framework would be ideal for the institution of this study. While each tool may offer its own share of advantages and disadvantages, it is imperative to determine the strengths and weaknesses of the tools relative to the study in question so that an ideal framework can be studied and implemented. For instance, Teas (1993) found that removing the performance expectation variable found in SERVQUAL increased the accuracy of the service quality tool, which would seem to rule out SERVQUAL as a valid quality

measurement tool for this study. Added to this is the belief that, while SERVQUAL provides an excellent foundation for understanding the gaps model, it is also too broad and needs to be adapted for more industry-specific constructs (Ladhari, 2009).

Furthermore, Brochado (2009) found that both SERVPERF and HEdPERF presented the most consistent service quality measurements. Therefore, due to the unique nature and mission of institutions of higher education, a higher education-specific framework is probably ideal, which would indicate a preferred quality measurement tool of HEdPERF. Further, because of the need for a holistic, long-term, attitudinal, institution-wide analysis of quality measurement, HEdPERF is ideal for this particular study. This finding is supported by Randheer (2015) who found that, when considering the other available service quality measurement tools in the context of higher education, “HEdPERF serves the best purpose” (p. 31). Therefore, for the purpose of this study, HEdPERF was used as a foundation for the quantitative analysis of students at the institution in question.

Methods and Models for Measuring Perceived Value in Higher Education

When studying what the student-consumer identifies as value in higher education, there are a couple of important considerations. First, because students are identified as a collaborator, co-creator, and consumer of higher education and because service quality frameworks are identified as important, it is necessary to understand the concept of service quality as it relates to the construct of perceived value. As suggested previously, it is important to link service quality and value because students invariably identify value based on their subjective perception of quality (Walker & Johnson, 2009). Parasuraman et al. (1988, 1991) suggested that various cues of perceived value, like price, durability, and reliability, are actually determinants of service

quality for the consumer. Zeithaml (1988) further suggested that the concept of value is inextricably linked to the constructs of quality and price.

Woodall, Hiller, and Resnick (2014) found that value is a term that is full of semantic diversity. Woodall et al. argued that a student's understanding of value could be influenced by at least five factors including (a) attributes, (b) outcomes, (c) value for money, (d) net value, and (e) cheapest option. Here attributes describes the service features the consumer finds to be beneficial, outcomes refers to the benefits the consumer derives from the service, value for money is the balance between the benefits and sacrifices based on the price and the attributes of the service, *net value* is the combination of all benefits and all sacrifices, and cheapest option refers to the notion of the smallest possible sacrifice required for the service. Each of these five factors were examined and it was determined that only the net value factor had a strong relationship with overall satisfaction. This implies that the best determination of value, as identified by the student, will come from a combination of the benefits and the sacrifices as described by the student, which is supported by the long-term, holistic approach found in the HEdPERF service quality measurement framework.

Another aspect regarding value in higher education is the notion that student-perceived value is a complex, multifaceted concept and that it, along with retention, can be predicted by a student's perception of service quality (Dlagic et al., 2014). Furthermore, Dlagic et al. found that perceived service quality and perceived value can be enhanced by emphasizing excellence and by "providing reliable service that is delivered by empathetic and competent academic and administrative staff in visually appealing and appropriately equipped facilities" (p. 153). The implication here is that service quality is an important component of perceived value, which can be measured and dissected by examining the available service quality frameworks.

Unfortunately, service quality frameworks alone do not do a good job of incorporating the value construct of this study. In fact, none of the service quality models attempted to isolate and measure the perceived value construct. Therefore, due to the lack of coverage of this variable, it is necessary to attempt to find a perceived value model that can be incorporated into this study.

In a seminal work on the link between quality and value, Zeithaml (1988) found four basic customer definitions of value. Zeithaml argued that these four definitions could be captured in one overall definition, “perceived value is the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given”. Put another way, Zeithaml suggested that value is a tradeoff between “give” and “get” components. Zeithaml’s observation was supported by research from Babin, Darden, and Griffin (1994) who found that value is the tradeoff between benefits and costs, which both come from the consumer’s understanding of quality and price. Additionally, Eggert and Ulaga (2002) found that perceived value a balance of the multiple benefits and the multiple sacrifices made by the consumer in light of the various alternatives available to the consumer. Eggert and Ulaga’s view is supported by Li, Granizo, and Gardo (2016) who found that “the equation of value appears in the balancing of receipts and sacrifices” (p. 862). These sacrifices can be both monetary, in terms of actual expenses, and non-monetary, in terms of the time and effort that is consumed.

Perceived value index. One interesting model that incorporates Zeithaml’s (1988) work is the perceived value index as put forth by Alves (2010). Alves studied college students in Portugal and argued that perceptions of value are impacted by overall perceptions of image and quality at the college. Further, Alves suggested that, while image and quality are determinants of value, perceived value is a determinant of student satisfaction and loyalty. Unfortunately, further studies using Alves’ work have concluded that Portugal has a somewhat unique higher education

environment and Alves' index underperforms when used in other environments (Vaz, Freira, Vernazza, & Alves, 2016).

LeBlanc and Nguyen's perceived value model. Another potential perceived value model is that of LeBlanc and Nguyen (1999). LeBlanc and Nguyen built their model off Sheth, Newman, and Gross's (1991) theory of consumption values, who found five values that influence consumer choice. These values include Functional Value, Conditional Value, Social Value, Emotional Value, and Epistemic Value. LeBlanc and Nguyen, one of the first empirical works to apply the theory of consumption values to higher education (Amir, Auzair, Maelah, & Ahmad, 2016), then applied Sheth et al.'s theory to higher education by examining business education students. LeBlanc and Nguyen identified six service value factors that determine perceptions of value in higher education, which include Functional Value (want satisfaction), Epistemic Value (knowledge), Image, Emotional Value, Functional Value (price/quality), and Social Value. Interestingly, the Functional Value variables, which relate to future employment (economic utility) and price versus quality (the degree is worth the investment), appear to be the most important variables in LeBlanc and Nguyen's study. Furthermore, functional value is widely supported as an important value dimension in a variety of articles (Zeithaml, 1988), and, as it relates to consumption, Sheth et al. argue that functional value is traditionally seen as the primary driver of consumer choice.

LeBlanc and Nguyen's (1999) model is interesting for this study in that it addresses the missing perceived value variable in the other service quality frameworks. In fact, it could be said that LeBlanc and Nguyen's model is the only model that addresses the "give" portion of Zeithaml's (1988) give versus get understanding of perceived value. Therefore, based on the LeBlanc and Nguyen's findings, this model is extremely important for this study in that it helps

better understand the perceived value/perceived service quality relationship. Furthermore, by honing in on the Functional Value variables, this study will better address the educational value gap addressed in the problem and purpose statements.

Research Variables

As part of the comprehensive literature review, it is also important to discuss the research variables of the project. The variables for this study were chosen due to their direct and immediate relationship to the problem statement, purpose statement, and research questions of this project. These variables, both independent and dependent, will be discussed in detail below.

Independent variable. The independent variable in this research was class status. For the purpose of this study, class status refers to the participant's status as either a Freshman, Sophomore, Junior, or Senior. These class status rankings are important for this study because class status is impacted by retention and retention, along with its counterpart attrition, is an important area of concern for institutions in higher education. Retention and attrition are particularly important in that collectively, colleges and universities lost close to \$16.5 billion in annual revenue do to attrition (Raisman, 2013). Private schools averaged an annual loss in revenue of \$8,331,593. Furthermore, according to Raisman, the target institution of the study lost \$643,574 in revenue due to its 40% attrition rate in 2008. This information helps to show the important link between retention, class status, and institutional success.

Class status and quality. In addition to the link between revenue and retention, there is also a connection between student retention and perceived service quality (Hovdhaugen & Aamodt (2009). Peterson, Kovel-Jarboe, and Schwartz 1997) suggested that social and academic integration and the construct of quality in higher education share complementary processes for students. Peterson et al. further argued "that retention is a reflection of students' perceptions of

the quality of their educational experiences” (p. 138). Because of this reflection between retention and quality, it is implicitly important to see how perceptions of quality are assessed by throughout the educational and curricular processes at a school.

To support the observation by Peterson et al. (1997), Bowles, Fisher, McPhail, Rosenstreich, and Dobson (2014) found that there are distinct endogenous and exogenous enablers that support the transition of high school seniors into college, which may also support retention beyond the first semester for these new freshmen. Bowles et al. further observed that universities have direct control over exogenous enablers like web-based resources and university-led social activities, the latter of which appears to not be meeting the needs of students in their study. This observation by Bowles et al. suggests that school of higher education need to do a better job of understanding the enablers or drivers of continued student enrollment in order to minimize the costs of continuously attracting new students to replace those students who drop out of college.

Additionally, Willcoxson, Cotter, and Joy (2011) found that most studies that examine attrition and retention in higher education focus solely on the first-year experience in college, with little attention given to the other three years. While first-year students are the group that is most at risk of attrition, Willcoxson et al. found that this group accounts for only half of all attrition. Therefore, from both a student perspective and an accreditor perspective, quality and retention, dimensions that ultimately impact the variable of class status, should to be better studied and understood.

Class status and value. There is also a link in the literature regarding retention, or achieving class status, and value. For instance, Kilburn, Kilburn, and Cates (2014) found that, positive perceived value, as seen by the student, accounts for nearly 60% of a students’ loyalty to

an institution. Furthermore, McClung and Werner (2008) suggest that if consumer-oriented, or marketized students do not find value “in maintaining their educational relationship with the university, they will leave” (p. 109). McClung and Werner’s view is especially relevant to this project in that they argue for a better relative and perceptual understanding of value from students’ perspective at a university.

Dependent variables. The dependent variables in the current research were Access, as identified by Firdaus (2006), and Functional Value, as described by LeBlanc and Nguyen (1999). As previously discussed Access and Functional Value are two of the most important determinants of service quality and value, as described by student-consumers of higher education. Because of this importance, the researcher chose to highlight these determinants in the administered survey. Each variable will be discussed in detail below.

Access. As described by Firdaus (2006), access relates to approachability and availability of faculty and staff at the target institution. Firdaus found that “students perceived access to be more important than other dimensions in determining the quality of the service that they received” (p. 569). Firdaus’ observation was based on the fact that, in his study, Access accounted for 15% of the variance of the level of service quality, while the other dimensions of non-academic aspects, academic aspects, reputation, program issues, and understanding only contribute an additional 27.9% of the variance. Because of this finding, it was determined that the elements of his survey that contributed to Access should be extracted for use in this project.

Firdaus (2006) was not alone in his understanding of the significance of Access in higher education. Bernardo et al. (2016) found that relationships that are forged between faculty and students contribute to both academic excellence and continued enrollment at a college. This finding is consistent with Wang and Kennedy-Phillips (2013) who found that institutional

commitment to students through all four years is vitally important. Further Wang and Kennedy-Phillips found that there is a significant and positive relationship between academic engagement and the student's commitment to the university. In fact, Wang and Kennedy-Phillips suggested that, "it is the students' commitment to the institution (sense of belonging, satisfaction, etc.) that seems to encourage them to engage in academically related interaction" (p. 545). Finally, Tinto (2007) suggested that the classroom is vitally important to student retention because it is, "for many students, the one place, perhaps only place, where they meet each other and the faculty" (p. 4).

Furthermore, Raisman found that students cited four main reasons that account for 84% of the attrition rate in the United States. These reasons include perceptions that the college does not care, poor service and treatment, college is not worth it, and schedule incompatibility. Three of these four reasons appear to link directly to feelings of Access amongst the student population. Additionally, Leveson, McNeil, and Joiner (2013) found that students "who interacted frequently with staff were less likely to consider withdrawing from their studies in the following year" (pp. 940-941). Interestingly, there is evidence to suggest that students acknowledge that teachers are probably available if the student would seek help, but that the student often feels that the relationship is too distant (Mestan, 2016), which might indicate a need for the institution or faculty to find ways to reduce obstacles in building relationships with students.

A final thought regarding the variable of Access is the understanding that this variable appears to vary in importance through the four years of traditional higher education. In a similar cross-sectional study, Willcoxson (2010) found that in the first semester of the first year of college, students contemplating departure from college tend to focus issues of commitment, engagement, and teacher and administrative staff support. By the second semester of the first

year of college, students increasingly cite negative perceptions of teaching quality and support as reasons for departure. By the first semester of the second year of college, students are primarily impacted by the financial opportunity cost of college as well as feelings of loneliness and academic disengagement. In the second semester of the second year, students circle back to a lack of teacher enthusiasm and support, but also struggle with a lack of purpose and perceptions of academic inadequacy. Finally, by the third year, the main trigger for departure appears to be completely teacher-related, with students perceiving a lack of sensitivity to their individual student needs. Willcoxson's findings point to a greater need to better understand the Access dimension, especially as it relates to class status.

Functional value. Functional value, as detailed by LeBlanc and Nguyen (1999) refers to the economic utility of services as well as the benefits associated with possessing the service. Lai, To, Lung, and Lai (2012) build on LeBlanc and Nguyen's definition of functional value by discussing the perceived utility of students in higher education. Lai et al.'s perception of utility includes future employment opportunities, a good salary, or the possibility of future promotions. Interestingly, as noted previously, these attributes of functional value are also cited by Parasuraman et al. (1988, 1991) as determinants of service quality. For the purpose of this project, LeBlanc and Nguyen further dissect the functional value variable into the two dimensions of want satisfaction and price/quality. Each of these is discussed below.

Functional value: Want satisfaction. The want satisfaction dimension of LeBlanc and Nguyen's (1999) functional value variable is related to the economic utility associated with the desired degree and its value to students who hope to use the degree to gain future employment or to advance their careers. Kalafatis and Ledden (2013) affirm this position by finding that

“functional value accounts for the perceived benefits of the chosen course of study in terms of enhancing students’ employment or career objectives” (p. 1546).

Functional value: Price/quality. The price/quality dimension, which LeBlanc and Nguyen (1999) found to be the most important factor in student perceived value in higher education, focuses on the utilitarian function of an education. This dimension examines the relationship between price and quality when the student considers what he or she determines as value in education. Put another way, this dimension is dependent on the school convincing the student “that they are receiving quality services in exchange for what they give by means of their tuition fees” (p. 190). Further, as noted previously, Nica and Popescu (2014) observed that students tend to pursue higher education opportunities based on their understanding of higher education’s cost versus higher education’s benefit. Finally, while Woodruff (1997) refers this concept by a different title, Woodruff’s description of customer value as being the perspective of the customer considering what the customer wants and what the customer believe they get, seems to clearly align with LeBlanc and Nguyen’s description of the price/quality dimension of functional value.

Summary of Research Findings and Gaps in the Literature

The comprehensive literature review above showed several issues. First, despite the many varying definitions and descriptions of service quality in higher education, there is appears to be consistency in understanding both the need for improved service quality and the understanding of what higher education consumers identify as important determinants of service quality. This idea is rooted in the fact that the researcher found that every author in this literature review cited the need to improve service quality in general and levels of service quality in higher education specifically. Further, there appeared to be widespread agreement that, amongst

students, Access, or some iteration of Access, is essential to the student's perception of service quality. For example, while Firdaus (2006) found Access to be the most important determinant of service quality in higher education, Yeo (2008b) observed that the Empathy dimension of SERVQUAL's RATER is the most important determinant in the student's perception of service quality. Interestingly, Empathy refers to the personalized attention provided by the employee (faculty/staff) to the consumer (student), while Access relates to the students' perception of how approachable and available faculty and staff are at the college or university. Finally, Berardo et al. (2016) found that relationships between faculty and students are vitally important to both the academic excellence of the student as well as for the students continued enrollment at the institution.

A second finding from the review is that there is a significant gap in the literature regarding a standardized model for measuring service quality and value in higher education. This gap is observed in the myriad of available models including PQSM, SERVQUAL, EP, HESQUAL, SERVPERF, HEdPERF, and HiEdQUAL. Each model was developed in order to measure service quality, and each researcher believes that their model is superior to other available models. This gap makes it especially difficult to standardize findings of service quality at institutions of higher education. Further, none of the available models incorporated the concept of perceived value, which demonstrates the need for a more comprehensive scale. This need is especially important considering that a student perceives value and service quality based on the subjective and personal evaluation of how that student perceives the benefits and costs of the service he or she receives (Walker & Johnson, 2009).

Transition and Summary

As noted, there appears to be significant consensus regarding the need to quantitatively define and measure service quality and value in higher education. Despite this consensus, there is no clear agreement on exactly which framework is superior in measuring these two important variables. The increasingly competitive environment of higher education requires that an institution understands both how to attract new students as well as retain existing students. For higher education institutions, high attrition rates result in high losses of revenue and can potentially lead to increased scrutiny by government and accreditation stakeholders, who both appear to be highly concerned with the value component of higher education in the United States (Raisman, 2013). Because of this scrutiny, school administrators must work to understand what drives student perceptions of service quality and value so that they can effectively implement policies intended to increase retention rates amongst their student body.

Finally, this study was designed to fill the gap in the current body of literature that pertains to a standardized perceived service quality and perceived value framework. While the study was intended to be narrow in scope and only applicable to the target institution, it may be possible for other researchers to repeat this survey at different institutions, which may lead to more generalizable findings. Toward that end, the applied doctoral research project is further discussed in the remaining sections, which are intended to outline the research methodology as well as the findings from the study.

Section 2: The Project

As demonstrated, increasing marketization in higher education has led to value dilution amongst key higher education stakeholders including students, parents of students, higher education faculty, future employers, the government, and accreditors. This value dilution is exacerbated by the increasing cost of higher education and relatively flat inflation-adjusted salaries for graduates. Furthermore, the easy availability and growing burden of student loans has led students and politicians to question if college is unnecessarily expensive and not worth the investment (Higher Education, 2012). The question of value in higher education has led to a gap between the consumer's expectation and the consumer's perception of educational value. This gap must be explored so that the institution can better meet the consumers' expectations of value during the delivery of higher education, which will enable the institution to remain viable in the increasingly competitive environment of higher education.

As an introduction, Section 2 will present the research study design and will include a restating of the purpose statement, a description of the role of the researcher, and a description of the research participants. Furthermore, this section will detail the research method, the research design, the population and sampling, and the data collection process. Finally, this section will discuss the data analysis technique, the reliability, and the validity of this study. The purpose of these activities is to attempt to better understand the answers to the proposed research questions.

Purpose Statement

The purpose of this quantitative case study was to compare how current Bible college students describe their perceptions of service quality and their perceptions of the value delivered during each academic year throughout their educational careers. This was accomplished by surveying students at a small Midwestern Bible college so as to understand which attributes of

the student's college education would improve perceptions of service quality and perceptions of value compared to the increasing cost of higher education. Furthermore, to determine if differences of perceptions exist as students move through their educational career, class status was a descriptive variable. This served to identify the perceptions of value from the perspective of current students so that the target institution of the case study can better understand how to deliver educational value in order to increase overall student retention and recruitment.

Role of the Researcher

For this study, the researcher worked in conjunction with the Registrar at the Bible college used in the study to contact each of the participants through a student e-mail distribution list. Once students agreed to take part in the survey and submitted responses, the researcher examined the data using statistical analysis so as to confirm or disaffirm the hypotheses of the study. Finally, the researcher interpreted the results of the analysis in order to see how the data helped answer the research questions and related hypotheses. The role of the researcher in the data collection and data analysis process is discussed below.

Data Collection

For this project, the data was gathered from the census population of a small Midwestern Bible college. As part of the process, the researcher worked with the Registrar at the Bible college to generate an appropriate list of full-time residential students at the target institution. Once the list of students was generated, the researcher worked with the IT department at the school to verify participant e-mail addresses, to ensure that every eligible participant was included in the request for survey participation. Once the Office of Academic Affairs approved the final survey and final IRB approval was granted, the researcher uploaded the survey to the school's Google Drive so that the survey data collection process could be initiated. All

participant information was gathered from the target institution. Finally, the relevant survey data regarding descriptive statistical variables and survey responses was obtained from the participants through the online survey.

Data Analysis

Since the study is a descriptive quantitative case study intended to find associations between the variables (Babbie, 2016), there was no treatment or manipulation of the variables by the researcher. For both hypotheses and research questions, the intent was measure service quality and value perceptual differences between groups of students at the target institution. Therefore, due to the stated hypotheses and research questions, the researcher used a one-way ANOVA test to measure the differences between the groups based on the descriptive variables collected from the participants.

The researcher also selected the dependent variables and independent variables in light of the stated hypotheses and research questions. For this project, the desire was to understand if students perceive service quality and value differently at the target institution, based on their class status. Because of this desire, the researcher chose class status as the dependent variable. Furthermore, because Firdaus (2006) found that Access is the most important dimension in determining service quality in higher education and because LeBlanc and Nguyen (1999) found that Functional Value has the highest relative importance in explaining perceived value in higher education, the researcher chose Access and Functional Value as the independent variables in this study. Further, it was determined by LeBlanc and Nguyen that there were two dimensions to Functional Value, namely functional value (want satisfaction) and functional value (price/value). Therefore, the researcher chose to incorporate both values into the project in order to measure the perceived value of higher education amongst the students at the target institution.

Participants

Participants in this study represent students of the small Midwestern Bible college. This is the target population because the study was designed to understand how that population viewed educational value in the context of service quality. All participants of the study were pursuing degrees in Biblical Studies, Business Administration, Exercise Science, General Studies, Intercultural Studies, Ministerial Studies, or Teacher Education. The participant selection process was broad in that every student of the college population was petitioned for inclusion in the study.

Prior to the study, all of the participants were personally known by the researcher in that the researcher was a professor at the principal college of the study. Despite this prior relationship, the researcher will work in conjunction with the Registrar at the college in order to administer the survey so as to ensure that participants are not influenced by the researcher's participation in the study. Additionally, the researcher will take care to ensure that all participants understood that their participation was completely voluntary, that all answers were anonymous and confidential, and that the information will only be used in this research project. Finally, participants were given an informed consent agreement that clearly spelled out the purpose of the study and the expectations of the participant.

Research Method and Design

The following section outlines the research methodology and design, which were chosen to address the problem statement, research questions, and hypothesis of this project. Additional information regarding the research method and research design, as used in this project, is discussed below.

Method

For this project, the researcher selected a quantitative research method. This method was chosen because quantitative research is the most appropriate approach when the primary desire is to explain or predict various relationships amongst variables (Creswell, 2015). For the purpose of this study, the goal was to explain the relationship between student satisfaction levels and student perceptions of value delivered as observed through various stages of exposure to the subject college's curriculum. The quantitative method was chosen over the qualitative research method because, while the exploratory nature of qualitative research might provide for good insight into the environmental context of student value perceptions in higher education (Malhotra, 2015), this understanding sits outside the scope of this explanatory study. Furthermore, the intent of this study was to determine to what extent perceptions existed in a significant sample size of the target population, which cannot be accomplished using qualitative research methods. Therefore, the quantitative method was most appropriate for addressing the research questions and testing the hypothesis of this research project.

Research Design

Among the established quantitative research methods, the researcher decided on a descriptive case study design for use in this project. This research design was selected due to the non-experimental research aspect of the project. According to Johnson and Christensen (2014), descriptive non-experimental research attempts to explain the relationship that exists between variables instead of any sort of cause-and-effect relationship. Furthermore, the case study element is designed to examine a contemporary phenomenon inside of its real-world context (Yin, 2014). For the purpose of this study, since it is speculated that the rise of consumerism in higher education has led to value confusion amongst college students, a case study would allow the researcher to examine that phenomenon at the college used in the study. Additionally, this

study compared the value and quality perceptions of the target students with what is currently being offered at the target college. These targeted findings were best served in the quantitative descriptive case study research method and design.

Other research designs include experimental designs. Creswell (2014) categorized quantitative research as either experimental or non-experimental, where the experimental research uses experimental designs, quasi-experimental designs, and correlational designs. For the purpose of this study, experimental research was inappropriate because there was no cause-and-effect aspect to this study. Furthermore, Creswell stated that experimental research is intended to see “if a specific treatment influences an outcome” (p. 13). Therefore, because there was no specific treatment and there was no cause-and-effect aspect to this study, experimental research, and its various research designs, were deemed to be inappropriate.

Population and Sampling

The general population of the target institution was 170 residential undergraduate students. The general population could be further divided into year of study with 54 freshmen, 35 sophomores, 45 juniors, and 36 seniors. Due to the relatively small general population, invitations to participate in the survey were sent to the census population of residential undergraduate students to participate in the study and, as a result, respondents self-selected to participate in the study. The minimum sample size needed in order to achieve a 95% confidence level with an error margin of 5% was 119 students, which is based on the following formula: (Raosoft, 2017)

$$\text{Sample} = \frac{\text{Total Population} \times \text{Confidence}}{((\text{Total Population} - 1) \times \text{Error}^2 + \text{Confidence})}$$

Data Collection

The methods of data collection are discussed in the following sections. This discussion includes the instruments utilized, the data collection techniques, and information regarding the process of data organization techniques. This information is intended to show how the research questions were addressed from the data that are gathered.

Instruments

As addressed in the literature review, there are a variety of service quality performance survey instruments available. These instruments include PQSM, SERVQUAL, Evaluated Performance, HESQUAL, SERVPERF, HEdPERF, and HiEdQUAL. From this list of instruments, it was determined that, for the purpose of this study, the most appropriate survey instrument to address the research questions is HEdPERF (Firdaus, 2005). The HEdPERF survey is based on the SERVPERF survey. The original HEdPERF survey, as shown in Appendix A, consisted of 41 statements and mapped service quality, satisfaction, and loyalty to the factors of Non-academic Aspects, Academic Aspects, Reputation, Access, Program Issues, and Understanding. For this study, Firdaus found that, despite the correlation between the six factors and service quality, the dimension of Access showed to have the highest correlation to the students' perception of service quality and was the only statistically significant dimension that explains the variance in the overall rating of service quality. Put another way, the dimension of Access "is the most important determinant of service quality in higher education" (Firdaus, 2005, p. 320). Therefore, due to the relative importance of the Access dimension, the 41 original HEdPERF statements (Appendix A) was reduced to the nine questions, which can be seen in Appendix C.

Firdaus (2006) also empirically tested his scale "for unidimensionality, reliability, and validity using both exploratory and confirmatory factor analysis" (p. 569). Further, Firdaus

tested for validity by incorporating a comprehensive literature review, by interviewing various industry experts, by checking for high degrees of correlation between the dimensions, and by ensuring that a χ^2 difference test was statistically significant at the $P = 0.01$ level. Therefore, the HEdPERF survey instrument has been found to be internally consistent with satisfactory reliability and to have face, content, construct, discriminant, and criterion-related validity.

While the HEdPERF survey is adequate for measuring service quality in higher education, it fails to capture the perceived value component of this study, which indicates that another survey instrument must be used. As observed in the literature review, LeBlanc and Nguyen's (1999) perceived value model (PVM) was considered the most appropriate model for incorporating the dimensions of perceived value relevant to this study. The original PVM, as shown in Appendix B, consisted of 33 statements and mapped perceived value to the factors of Functional Value (want satisfaction), Epistemic Value (knowledge), Image, Emotional Value, Functional Value (price/quality), and Social Value. For this study, LeBlanc and Nguyen found that the two most important factors were the Functional Value dimensions. The dimension of Functional Value (want satisfaction) explains 35.7% of the variance (Table 1) and Functional Value (price/quality) had the highest standardized beta coefficient of 0.59 (Table 2). Because of the relative importance of Functional Value in the determination of perceived value, the 33 statements of the original PVM (Appendix B) was reduced to the nine statements that loaded onto the factors of Functional Value. A final version of the survey is shown in Appendix C.

Table 1: Six Service Value Factors

Factors	Percentage of variance explained	Cronbach alpha (α)
Functional value (want satisfaction)	35.70	0.86
Epistemic value (knowledge)	7.40	0.81

Image	7.00	0.84
Emotional value	5.10	0.82
Functional value (price/quality)	4.10	0.73
Social value	3.80	0.69

(LeBlanc & Nguyen, 1999)

Table 2: Regression Results Based on Factor Scores

Factors	Betas	Significance
Functional value (price/quality)	0.59	p < 0.001
Epistemic value (knowledge)	0.29	p < 0.001
Functional value (want satisfaction)	0.22	p < 0.001
Image	0.21	p < 0.001
Emotional value	0.12	p < 0.001
Social value	0.09	p < 0.01

(LeBlanc & Nguyen, 1999)

For the final survey, it was determined to use a combined HEdPERF/PVM survey (Appendix C) for this study. This combined survey instrument was selected because of its ability to measure the variables of interest (perceived service quality and perceived value) outlined in the research questions. These surveys enjoy proven levels of validity and reliability and are discussed in greater detail in the appropriate section below. Internal consistency was tested using Cronbach's alpha, which was compared to the existing survey.

While both the HEdPERF and PVM survey were appropriate for use in this research, the original surveys were determined to be too long to include the entire set of survey questions. Therefore, the researcher decided to take the most appropriate dimensions from each survey, as determined by the hypotheses and research questions. Here, the perceived service quality variable was observed in the Access variable from questions B1-B9, which correlate to the Access dimension questions from Firdaus' (2006) original HEdPERF survey (Appendix A,

questions 33-41). Further the perceived value variable was observed in the Functional Value (want satisfaction) and the Functional Value (price/quality) dimensions from questions B10-B18, which are taken from LeBlanc and Nguyen's (1999) original PVM survey (Appendix B, questions 1-2, 4-5, 8, 10-11, 32-33). Questions B10-15 deal with Functional value (want satisfaction) and questions B16-18 deal with Functional value (price/quality).

In addition to extracting the Access and Functional value dimensions from HEdPERF and PVM, there were a couple of minor changes that needed to be made to the selected questions. First, the IRB process required the modification of question B7 in order to add clarity. The original question read, "The institution encourages and promotes the setting up of Student's Union". The IRB believed this question to be confusing as it could have a different meaning to different participants. For example, it could mean a place where students can fellowship, a relationship students have with each other, or it could mean a union type organization for students. Therefore, based on the context of Firdaus' (2006) original survey, the researcher changed the clarified the question to read as follows, "The institution encourages and promotes the setting up of a student's union (student government)."

In addition to the change required for Firdaus' (2006) HEdPERF survey, LeBlanc and Nguyen's (1999) survey was developed in order to be administered to students within a business school at a larger university. Because of the business school element to their study, the original survey included the phrase "business school" as part of the survey questions. So, in order to add clarity to the undergraduate participants at the target institution, the phrase "business school" was replaced with the word "school".

Data Collection Technique

As noted, a scaled down version of the HEdPERF/PVM survey was used to collect the data (Appendix C). Once IRB approval was granted by both the supervising authority and the target institution, a link to the survey was sent to the official school e-mail addresses of census population at the target institution. The target institution uses Google Forms for surveying the student body so the researcher used Google Forms to administer the survey, as all school email addresses were preloaded into the Google database at the institution. One week after the survey was distributed, a follow-up reminder e-mail was sent to the students inviting them to participate.

The survey was accessed through the invitation and follow-up emails sent to the students at the target institution. All data was collected and stored in the online Google Drive of the researcher. Once the survey closed, the data was transferred from Google Drive to an SPSS file for data analysis. The survey instrument (Appendix C) contained 21 questions. The first three questions (A1-A3) were demographic in nature and asked the student to select their class status, their gender, and their degree program from a list of options. The next 18 questions (B1-B18) were the merged HEdPERF/PVM survey, which was designed to measure the higher education service quality dimensions of Access (B1-B9) and Functional Value (B10-B18). Finally, in developing both surveys, Firdaus (2006) and LeBlanc & Nguyen (1999) used a seven-point Likert scale, which was mirrored in this study.

Data Organization Technique

The data was collected using Google Forms and stored online in the researcher's Google Drive. Once the survey closed, the data was transferred from the Google Drive to an SPSS file to perform the statistical analyses. The data were organized into two sections; where section A was descriptive demographic data and section B is the HEdPERF/PVM survey. Furthermore, once the survey was closed, all data was stored and secured on a personal computer owned by

the researcher. The computer was kept in a locked office, was password protected, and was only accessible by the researcher. A backup copy of the data was kept on a personal external hard drive locked in a cabinet in the office of the researcher.

Data Analysis Technique

The data obtained from the survey was analyzed in light of the stated Research Questions and Hypotheses. For the purpose of this study, the HEDPERF/PVM survey captured perceptions of service quality and perceptions of value from the student body at the target institution. The demographic data (A1-A3) are nominal data with question A1 being the Independent Variable (IV) for each of the hypotheses. Section B (B1-B18) contains the Dependent Variables (DV) of the study, which are scaled data. Each of the hypotheses, the corresponding survey questions, and the necessary statistical tests can be seen in Table 3.

Table 3: Null Hypotheses, Survey Questions, and Statistical Tests

Null Hypotheses	Survey Questions	Statistical Tests
H1. No significant difference of perceived service quality among students of the college that is dependent upon the exposure levels to the curriculum of that college.	IV: A1 DV: B1-B9	One-way ANOVA
H2. No significant difference of perceived value among students of the college that is dependent upon the exposure levels to the curriculum of that college.	IV: A1 DV: B10-B18	One-way ANOVA

For this project, the researcher analyzed the collected data using IBM SPSS Statistics Version 24. For both hypotheses and research questions, the one-way ANOVA was used in order to observe potential differences between the groups based on the DV's. The IV found in

question A1 is nominal data and was coded as 1 = Freshman, 2 = Sophomore, 3 = Junior, and 4 = Senior in SPSS. Questions A2 and A3, also nominal data, were only used to check for appropriate representation amongst the population. Question A2 was coded as 1 = Male and 2 = Female. Question 3 was coded as 1 = Biblical Studies, 2 = Business Administration, 3 = Exercise Science, 4 = General Studies, 5 = Intercultural Studies, 6 = Ministerial Studies, and 7 = Teacher Education. The DV's are scaled data using a seven-point Likert scale with 1 = Strongly disagree and 7 = Strongly agree.

Reliability and Validity

As noted by Gay et al. (2012), if the findings of research are going to be valuable, they are also going to have to be both reliable and valid. Because of the need for reliability and validity, it is important to examine this study and the instruments that were used by the researcher to ensure that this study and its tools are reliable and valid. Therefore, the reliability and validity of the instruments are discussed below.

Reliability

Reliability refers to the consistency of a scale throughout repeated application (Hair et al., 2016). In other words, if a scale has reliability, it will yield consistent results every time the test is repeated. There are several tests that can show reliability, which include the split-half coefficient and Cronbach's alpha. For the HEdPERF scale, both the split-half coefficient and the Cronbach alpha reveal that the HEdPERF scale has internal reliability, which is shown in Table 4. Furthermore, for the PVM scale, the Cronbach alpha reveals that the PVM scale has internal reliability, which is shown in Table 5.

Table 4: HEdPERF reliability for service quality dimensions

Dimension	Cronbach alpha (α)	Split-half coefficient (r)
Non-academic aspects	0.96	0.97

Academic aspects	0.93	0.93
Reputation	0.93	0.94
Access	0.93	0.95
Program Issues	0.90	0.93
Understanding	0.73	0.74

(Firdaus, 2006)

Table 5: PVM reliability for perceived value dimensions

Factors	Cronbach alpha (α)
Functional value (want satisfaction)	0.86
Epistemic value (knowledge)	0.81
Image	0.84
Emotional value	0.82
Functional value (price/quality)	0.73
Social value	0.69

(LeBlanc & Nguyen, 1999)

In addition, because this was a quantitative study, it is equally important to ensure that the study itself is consistent and reliable. Fortunately, it is much easier to assess reliability than it is to assess validity (Cooper & Schindler, 2013). According to Cooper and Schindler, reliability ensures that instruments and studies are free from random error and robust, which indicates that they work well at different times under different conditions. To ensure reliability, one must consider stability, equivalence, and internal consistency.

Stability and equivalence. Cooper and Schindler (2013) state that stability is enhanced through a test-retest arrangement. Additionally, equivalence looks at how errors may be minimized by taking different samples at different times in differing locations. For this study, stability was difficult to demonstrate as the design was cross sectional in nature. However, equivalence, a more robust reliability measure, was employed to determine the consistency or the degree to which the study proved to replicate findings of earlier research. In this instance, this

study built on the reliability of previous studies that show a need to quantitatively understand the perceptions of service quality and value in higher education.

Internal Consistency. Cooper and Schindler (2013) discuss internal consistency as an approach to reliability that uses only one administration of a test, with a goal of assessing homogeneity among the items. For the purpose of this study, using the split-half technique and Cronbach alpha, the researcher examined the questions associated with each variable to ensure that there is high internal consistency and reliability.

Validity

Validity, which refers to how accurately the scale measures the intended concept, is typically measured using content, construct, and criterion-related validity (Hair et al., 2016). Content validity, also known as face validity, ensures that a scale measures all of the appropriate areas of given construct. Content validity is often measured by expert examination of a given scale as compared through a comprehensive literature analysis. For the purpose of this study, Firdaus (2006) found that the scale had content validity. Construct validity assesses the degree to which the scale is measuring what it intends to measure. To ensure construct validity, the researcher checks for convergent validity, or positive correlation, and discriminant validity, or low correlation (Hair et al., 2016). As seen in Table 6, HEdPERF was determined to have evidence of convergent validity in that all the dimensions of HEdPERF are highly correlated (Firdaus, 2006). Furthermore, according to Firdaus, discriminant validity was tested on all service quality constructs and all the tests were found to be statistically significant at the $P = 0.01$ level. Firdaus claimed that this indicates that all the factors are distinct constructs, which is indicative of discriminant validity.

Table 6: HEdPERF correlation matrix of service quality factors

Factors	Non-academic aspects	Academic aspects	Reputation	Access	Program Issues	Understanding
Non-academic aspects	1.00	0.84	0.87	0.93	0.85	0.82
Academic aspects	0.84	1.00	0.85	0.79	0.90	0.81
Reputation	0.90	0.85	1.00	0.87	0.91	0.87
Access	0.90	0.79	0.87	1.00	0.83	0.85
Program issues	0.85	0.90	0.90	0.83	1.00	0.81
Understanding	0.82	0.81	0.87	0.85	0.81	1.00

(Firdaus, 2006)

Finally, there was a need to test for criterion-related validity. Criterion-related validity assesses how the given construct performs relative to other related variables (Hair et al., 2016). As with construct validity, criterion-related validity is determined by the degree to which the various constructs are correlated. For the HEdPERF scale, criterion-related validity can be observed through the correlation between the dimensions and the variables, which is shown in Table 7.

Table 7: HEdPERF correlations among the service quality factors and the criteria

Dimension	Service quality level	Satisfaction level	Loyalty
Non-academic aspects	0.62	0.66	0.5
Academic aspects	0.56	0.62	0.5
Reputation	0.61	0.63	0.53
Access	0.65	0.67	0.52
Program Issues	0.58	0.63	0.51
Understanding	0.58	0.62	0.52

All correlations are statistically significant at 0.01 level.

(Firdaus, 2006)

As for the PVM scale, LeBlanc and Nguyen found the scale to have content validity through the thorough their analysis of available research. Further, Table 8 shows the eigenvalues for the six factors and Table 9 shows the factor loadings of the nine questions used in the

HEdPERF/PVM survey, which supports convergent validity in that each of these questions load together onto the Functional Value dimensions.

Table 8: Eigenvalues of the Factors of Perceived Value

Factors	Eigenvalues
Functional value (want satisfaction)	9.64
Epistemic value (knowledge)	1.99
Image	1.87
Emotional value	1.38
Functional value (price/quality)	1.10
Social value	1.03

(LeBlanc & Nguyen, 1999)

Table 9: Factor Loadings and Variance of Functional Value Variables

Factors	Factor loading	Percentage of variance explained
Functional value (want satisfaction)		35.70
A degree in business will allow me to earn a good salary	0.74	
A degree in business will allow me to achieve my career goals	0.73	
The knowledge I have acquired at my business school will allow me to get promotions	0.72	
I believe employers are interested in hiring students from my business school	0.62	
A degree from my business school is a good investment	0.58	
It is better to obtain a post-secondary degree than to enter the workforce immediately after high school	0.56	
Functional value (price/quality)		4.10
When considering the price I pay for tuition, I believe that my business school offers sufficient services	0.78	
When considering the price I pay for tuition, I believe that the price/quality ratio is good at my business school	0.75	
I believe that my business school offers quality services	0.55	

(LeBlanc & Nguyen, 1999)

Just as this study needs to be reliable, it must also prove to have validity. Just as “a valid test is a test that measures what it is supposed to” (Salkind, 2017, p. 168), a valid study is a study that measures what it is supposed to. In order to ensure study validity, it is necessary to examine both internal and external threats to validity (Creswell, 2014). Each of these is examined in greater detail below.

Internal threats to validity. As identified by Creswell (2015), internal threats to validity are those threats that can cause a researcher to draw an incorrect inference from the data about the population of the study. Types of threats include threats involving the participants, threats involving experimental treatment from the researcher, and threats involving procedures used in the experiment. As a descriptive quantitative study, there are no threats involving experimental treatment from the researcher as there was no control or experimental group. Furthermore, threats involving procedures used in the experiment are also based on the threats that exist in testing and instrumentation procedures between control and experimental groups, which are not germane to the study. Therefore, only threats involving the participants need to be examined.

Threats involving participants. According to Creswell (2015), validity threats involving participants include the types of history, maturation, regression, selection, or mortality. History, maturation, and regression threats are associated with the passing of time during an experiment that might result in events that can influence study results. Furthermore, selection threats occur when participants are selected based on characteristics that might predispose them toward certain outcomes. Finally, mortality threats involve the threat of a participant dropping out of an experiment, which would leave the outcome for that participant as unknown. To address these threats, the researcher determined to keep the survey open for a minimal amount of time so as to

ensure that history and maturation threats are countered. Further, to counter regression and selection threats, the researcher opted to include participants from the census population at the target institution. Using the census population ensures that all participants have an equal opportunity to take part in the study, which should minimize selection threats. Furthermore, by including the census population, the researcher can minimize mortality threats to account for those who fail to complete the entire survey.

External threats to validity. According to Creswell (2015), external threats to validity “arise when experimenters draw incorrect inferences from the sample data to other persons, other settings, and past or future situations” (p. 175). These threats typically occur when participants characteristics are too narrow to generalize findings, when setting characteristics are too narrow to generalize findings, and when a researcher is unable to apply generalized findings to future situations. For this study, the researcher used a census population at the target institution so that findings could be generalized to the institution. Further, since this is a descriptive quantitative case study that is narrow in scope, the study was not intended to be transferrable to other contexts. As stated in the limitations section, this limitation is intentional on the part of the researcher in that the target institution has unique characteristics and the researcher is disinterested in generalizing results to other settings. Therefore, none of these external threats to validity warrant further analysis.

Transition and Summary

The purpose of this quantitative case study was to understand perceptions of service quality and educational value of students throughout various stages of an undergraduate educational career. Following an extensive literature review of the available service quality and perceived value models, it was determined that HEdPERF (Firdaus, 2005) is a superior service

quality scale for use in higher education and that the PVM scale (LeBlanc & Nguyen, 1999) provides adequate coverage of the value variable in the study. As shown, each of these models has been tested for reliability and validity. Furthermore, using factor analysis, each model was dissected to find the most important dimensions of their respective variables. HEdPERF demonstrated that Access was the most important determinant of higher education service quality and PVM demonstrated that Functional Value is an important determinant of perceived value for students in higher education. Because of the analysis, the two models were integrated to isolate the Access and Functional Value dimensions of service quality and perceived value. This integration created the survey that was used in this study.

The target institution of the proposed study was a small, Midwestern Bible College. Because of the size and location of the college, the census population of undergraduate residential students was contacted for participation. Once the data was collected, a one-way ANOVA was used to test for service quality and perceived value differences that might result from prolonged exposure to the curriculum of the college. The following section presents the findings of the study and will include a discussion of the applications and implications of the results.

Section 3: Application to Professional Practice and Implications for Change

As demonstrated, there is a perceived disillusionment among students regarding perceptions of service quality and perceptions of value at institutions of higher education. This disillusionment appears to be the result of the growing perceptual gaps of service quality and value among students in higher education. The purpose of this study was to examine student perceptions of service quality and value at a Midwestern Bible college in order to understand differences in perceived quality and value amongst students who have varying levels of exposure to the college's curriculum. Therefore, the findings of this study are presented in this section and may contribute to the current body of research concerning biblical Christian higher education.

Overview of Study

This applied doctoral research project was intended to understand how Bible college students perceive service quality and educational value delivered during the current stage of their academic careers. This project was designed to address two research questions, which were centered on the potential for different levels of perceived service quality and perceived value the more that students of a Midwestern Bible college were exposed to the curriculum of that college. The students were arranged by class status and a one-way ANOVA was used to test for differences in perceived service quality and perceived value. As discovered in a comprehensive literature review, service quality in higher education is best determined by how students describe Access, which is understood to refer to the approachability and availability of the faculty and staff at the institution (Firdaus, 2006). Further, value in higher education is best determined by how students describe functional value, which is determined by the perceived economic utility associated with the desired higher education degree as well as the utilitarian function of education (LeBlanc & Nguyen, 2009)

Overall, the findings of this study indicate that there are statistically significant differences between the various classes of students at the target institution. Furthermore, because the one-way ANOVA does not specify where the differences between the groups exist, Tukey's HSD and Scheffe's post-hoc test were run. These post-hoc tests are intended to identify where the differences between the groups exist (Urdan, 2017). Further, according to Urdan, while both tests are used to find the difference between each of the groups, Tukey's HSD is a more liberal test and Scheffe's post-hoc test is a more conservative test. Because the results of Tukey's and Scheffe's tests are similar, both results are included in the presentation of the findings. For the Access variable, it was determined that there are statistically significant differences between the Freshman and Sophomore variables and between the Senior and Sophomore variables. Additionally, for Functional Value, it was determined that there are statistically significant differences between every group except the Sophomore and Junior variables and between the Sophomore and Senior variables. A detailed discussion of the findings can be found in the following sections.

Presentation of the Findings

This section presents the findings from this applied doctoral research project. The goal was to understand the inconsistency in the gap in how students at a Bible college perceive service quality and value in higher education. Therefore, this section includes a discussion of the findings as observed through the two research questions and two hypotheses. Further, the author relates these findings to the literature review as discussed in Section One.

The data used in this project were obtained from a survey that was administered to students at a Midwestern Bible college. This survey was used to collect the required data from a population of 170 students at the target institution. The survey was sent via the official school e-

mail address for each student. Of the 170 students, 119 responded to the survey, which represents 70% of the total population. The survey was designed to not allow partially completed responses so there were 119 total responses. Further, in order to prevent duplicate responses, students had to log in to the survey with their school e-mail address and password, neither of which were recorded in the survey response database so as to protect the anonymity and confidentiality of the respondents. The 119 responses enabled this survey to achieve the desired 5% margin error with a 95% confidence level (Raosoft, 2017). Once the researcher obtained 119 responses, the survey was closed and no further response data were recorded. The data were collected over a two-week period.

Research Question and Hypothesis One

The first research question asked: Are there different levels of perceived service quality the more that students of a Midwestern Bible college are exposed to the curriculum of that college? In order to address this question, the researcher examined the available service quality frameworks commonly used in higher education. After an extensive review of the professional literature, it was determined that the HEdPERF (Firdaus, 2005) was the most appropriate survey for use in this project. In the HEdPERF survey, Firdaus found six factors of service quality but determined that the Access variable of his survey, which is referred to as the approachability and availability of the faculty and staff at the institution (Firdaus, 2006), was the most important dimension in determining a students' perception of service quality. Because of this finding, only the questions that loaded onto the Access factor were used in the survey for this project.

Connected to the first research question was the first research hypothesis, which stated: There is a statistically significant difference of perceived service quality among students of the college that is dependent upon the exposure levels to the curriculum of that college. To test this

hypothesis, the researcher performed a one-way ANOVA using Class Status as the IV and Access as the DV. Of the 119 respondents to the survey, 34 were freshmen, 26 were sophomores, 32 were juniors, and 27 were seniors. A summary of the descriptive statistics for the nine Access variable survey questions can be found in Table 10. In addition to the descriptive statistics, Table 10 also shows Cronbach's alpha if each item were deleted. The Cronbach's alpha for the nine survey questions was 0.871, and there was no improvement when any of the questions were removed from the survey. The Cronbach's alpha shows that there was reliability within the nine Access questions. After the data was collected, SPSS was used to calculate the mean of the Access variable. The one-way ANOVA test results showed a significant difference between the Class Status groups at the $p < 0.05$ level [$F(3,115) = 5.095, p = 0.002$]. The complete one-way ANOVA results can be found on Table 11.

Table 10: Descriptive Statistics for Access Variable Survey Questions

Question	Cronbach's Alpha if Item Deleted	Class Status	N	Mean	Std. Deviation	Std. Error
B01 - Students are treated equally and with respect by the staff	0.850	Freshman	34	5.970	1.267	0.217
		Sophomore	26	4.920	1.129	0.221
		Junior	32	5.440	1.190	0.210
		Senior	27	5.740	1.228	0.236
		Total	119	5.550	1.254	0.115
B02 - Students are given a fair amount of freedom	0.863	Freshman	34	4.680	1.821	0.312
		Sophomore	26	4.310	1.644	0.322
		Junior	32	4.310	0.965	0.171
		Senior	27	4.960	1.192	0.229
		Total	119	4.560	1.459	0.134
B03 - The staff respect my confidentiality when I disclose information to them	0.860	Freshman	34	6.030	1.087	0.186
		Sophomore	26	5.350	1.018	0.200
		Junior	32	5.500	1.164	0.206
		Senior	27	6.110	1.121	0.216
		Total	119	5.760	1.135	0.104
B04 - The staff	0.861	Freshman	34	5.740	1.399	0.240

ensure that they are easily contacted by telephone		Sophomore	26	5.310	0.838	0.164
		Junior	32	5.380	1.454	0.257
		Senior	27	5.520	1.312	0.252
		Total	119	5.500	1.288	0.118
		<hr/>				
B05 - The institution operates an excellent counseling service	0.855	Freshman	34	5.000	1.435	0.246
		Sophomore	26	4.500	1.421	0.279
		Junior	32	4.470	1.626	0.287
		Senior	27	5.040	1.018	0.196
		Total	119	4.760	1.414	0.130
<hr/>						
B06 - Health services are adequate and necessary	0.862	Freshman	34	4.760	1.742	0.299
		Sophomore	26	3.730	1.638	0.321
		Junior	32	4.410	1.563	0.276
		Senior	27	4.560	1.423	0.274
		Total	119	4.390	1.627	0.149
<hr/>						
B07 - The institution encourages and promotes the setting up of a student's union (student government)	0.859	Freshman	34	6.090	1.026	0.176
		Sophomore	26	4.540	1.334	0.262
		Junior	32	5.690	1.230	0.217
		Senior	27	6.070	0.874	0.168
		Total	119	5.640	1.267	0.116
<hr/>						
B08 - The institution values feedback from students to improve service performance	0.847	Freshman	34	5.210	1.754	0.301
		Sophomore	26	4.270	1.663	0.326
		Junior	32	4.720	1.397	0.247
		Senior	27	5.260	1.318	0.254
		Total	119	4.880	1.579	0.145
<hr/>						
B09 - The institution has standardized and simple service delivery procedures	0.853	Freshman	34	5.470	1.285	0.220
		Sophomore	26	4.730	1.116	0.219
		Junior	32	4.940	1.105	0.195
		Senior	27	5.480	0.975	0.188
		Total	119	5.170	1.167	0.107

Table 11: One-way ANOVA Test for Access Variable Survey Questions

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.667	3	4.222	5.095	0.002
Within Groups	95.298	115	0.829		
Total	107.965	118			

Because the one-way ANOVA test only shows a difference between the groups and does not specify where the difference exists, the researcher conducted a post-hoc test in SPSS. Out of an abundance of caution, both Tukey's HSD test and Scheffe's test were conducted and, as summarized in Table 12, both yielded similar results. Using the more conservative Scheffe post-hoc criterion (Urdan, 2017), significant differences were found between the Freshman and Sophomore class ($M_{diff} = 0.8097, p = 0.011$) and between the Senior and Sophomore class ($M_{diff} = 0.78743, p = 0.023$). These differences indicate that the Sophomore class had a significantly lower evaluation of the Access variable than the Freshman and Senior class. Interestingly, as shown in Table 13, for the Access variable, the Freshman ($M = 5.4379$) and Senior ($M = 5.4156$) class were similar and the Sophomore ($M = 4.6282$) and Junior ($M = 4.9826$) class were similar. This similarity in means indicates that Freshmen and Seniors tend to view service quality, as described by the Access variable, in a similar way, as do Sophomores and Juniors.

Table 12: Post-Hoc Test for Access Variable Survey Questions

	Class Status	Class Status	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
						LB	UB
Tukey HSD	Freshman	Sophomore	0.8097*	0.2372	0.0050	0.1914	1.4280
		Junior	0.4553	0.2242	0.1830	-0.1292	1.0398
		Senior	0.0223	0.2347	1.0000	-0.5895	0.6340
	Sophomore	Freshman	-0.8097*	0.2372	0.0050	-1.4280	-0.1914
		Junior	-0.3544	0.2404	0.4560	-0.9810	0.2722
		Senior	-0.7874*	0.2501	0.0110	-1.4395	-0.1353
	Junior	Freshman	-0.4553	0.2242	0.1830	-1.0398	0.1292
		Sophomore	0.3544	0.2404	0.4560	-0.2722	0.9810
		Senior	-0.4330	0.2379	0.2690	-1.0532	0.1872
	Senior	Freshman	-0.0223	0.2347	1.0000	-0.6340	0.5895
		Sophomore	0.7874*	0.2501	0.0110	0.1353	1.4395
		Junior	0.4330	0.2379	0.2690	-0.1872	1.0532
Scheffe	Freshman	Sophomore	0.8097*	0.2372	0.0110	0.1368	1.4826
		Junior	0.4553	0.2242	0.2540	-0.1809	1.0914

	Senior	0.0223	0.2347	1.0000	-0.6435	0.6881
Sophomore	Freshman	-0.8097*	0.2372	0.0110	-1.4826	-0.1368
	Junior	-0.3544	0.2404	0.5390	-1.0364	0.3275
	Senior	-0.7874*	0.2501	0.0230	-1.4971	-0.0777
Junior	Freshman	-0.4553	0.2242	0.2540	-1.0914	0.1809
	Sophomore	0.3544	0.2404	0.5390	-0.3275	1.0364
	Senior	-0.4330	0.2379	0.3500	-1.1080	0.2420
Senior	Freshman	-0.0223	0.2347	1.0000	-0.6881	0.6435
	Sophomore	0.7874*	0.2501	0.0230	0.0777	1.4971
	Junior	0.4330	0.2379	0.3500	-0.2420	1.1080

* The mean difference is significant at the 0.05 level.

Table 13: Descriptive Statistics for the Access Variable

Class Status	N	Mean	Std. Deviation	Std. Error
Freshman	34	5.4379	0.99266	0.17024
Sophomore	26	4.6282	0.93489	0.18335
Junior	32	4.9826	0.84954	0.15018
Senior	27	5.4156	0.84485	0.16259
Total	119	5.1335	0.95653	0.08769

The p values of the one-way ANOVA and the Scheffe post-hoc test led to a rejection of the first null hypothesis of no difference of perceived service quality among the students of the college that is dependent upon the exposure levels to the curriculum of that college. This rejection comes with a caveat in that, while there are statistically significant differences, these differences are only significant between the Freshman and Sophomore variables and the Senior and Sophomore variables. These findings are consistent with a similar cross-sectional study conducted by Willcoxson (2010). Willcoxson found that perceptions of quality, as described by a lack of student/teacher engagement and support causes second year students to disengage and, eventually, depart from the college. Further, student attrition due to perceptions of inadequate access to faculty and staff occur most often during the sophomore and junior year of college.

Based on this discussion of Sophomore and Junior attrition, it makes intuitive sense that Seniors at the institution would cite higher perceptions of Access, as, by this stage of their educational career, those who grow frustrated with access to faculty would have already disengaged from their studies and, potentially, would have already dropped out of college.

These findings do not suggest that all college students share similar perceived feelings regarding the service quality dimension of Access. Instead, these findings indicate that Sophomore students at the college in question, as a group, cite statistically significant differences in perceptions of Access when compared to the Freshmen and Seniors of the target institution. Put another way, the findings from this research question and hypothesis should not be generalized to other institutions, nor should the findings be generalized to future classes of students at the target institution.

Research Question and Hypothesis Two

The second research question asked: Are there different levels of perceived value the more that students of a Midwestern Bible college are exposed to the curriculum of that college? In order to address this question, the researcher examined multiple models and methods for measuring perceived value in higher education. Following an extensive review of the professional literature, it was determined that LeBlanc and Nguyen's (1999) perceived value model (PVM) was the most appropriate for use in this project. In the PVM survey, LeBlanc and Nguyen found six factors that determine perceived value in higher education. Of these factors, functional value (want satisfaction) and functional value (price/quality) were determined to be the most appropriate factors in understanding a students' perception of value in higher education. Because this finding is widely supported in the literature, (Kalafatis & Ledden, 2013; Lai et al.,

2012; Nica & Popescu, 2014; Parasuraman et al., 1988, 1991), only the questions that loaded onto the Functional Value factors were used in the survey for this project.

Connected to the second research question was the second research hypothesis, which stated: There is a significant difference of perceived value among students of the college that is dependent upon the exposure levels to the curriculum of that college. To test this hypothesis, the researcher performed a one-way ANOVA using Class Status as the IV and Functional Value (FV) as the DV. A summary of the descriptive statistics for the nine FV variable survey questions can be found in Table 14. Further, like the Access variable, Table 14 also shows Cronbach's alpha if each item were deleted. The Cronbach's alpha for the nine FV survey questions was 0.893, and there was no improvement when any of the questions were removed from the survey. The Cronbach's alpha shows that there was reliability within the nine FV questions. Again, SPSS was used to calculate the mean of the FV variable. The one-way ANOVA test results showed a significant difference between the Class Status groups at the $p < 0.05$ level [$F(3,115) = 14.556, p = 0.000$]. The complete one-way ANOVA results can be found in Table 15.

Table 14: Descriptive Statistics for Functional Value Variable Survey Questions

Question	Cronbach's Alpha if Item Deleted	Class Status	N	Mean	Std. Deviation	Std. Error
B10 - A degree will allow me to earn a good salary	0.885	Freshman	34	5.650	1.495	0.256
		Sophomore	26	4.460	1.272	0.249
		Junior	32	5.060	1.458	0.258
		Senior	27	3.850	1.064	0.205
		Total	119	4.820	1.494	0.137
B11 - A degree will allow me to achieve my career goals	0.884	Freshman	34	6.150	1.306	0.224
		Sophomore	26	5.730	1.002	0.197
		Junior	32	5.500	1.164	0.206
		Senior	27	4.960	0.649	0.125

		Total	119	5.610	1.151	0.105
B12 - The knowledge I have acquired at my school will allow me to get promotions	0.877	Freshman	34	5.850	1.105	0.189
		Sophomore	26	4.850	1.120	0.220
		Junior	32	5.190	1.030	0.182
		Senior	27	4.110	0.847	0.163
		Total	119	5.060	1.202	0.110
B13 - I believe employers are interested in hiring students from my school	0.873	Freshman	34	5.820	1.218	0.209
		Sophomore	26	5.420	0.987	0.194
		Junior	32	5.130	1.289	0.228
		Senior	27	3.930	1.174	0.226
		Total	119	5.120	1.360	0.125
B14 - A degree from my school is a good investment	0.875	Freshman	34	6.240	0.741	0.127
		Sophomore	26	5.620	0.983	0.193
		Junior	32	5.340	1.405	0.248
		Senior	27	4.480	1.189	0.229
		Total	119	5.460	1.261	0.116
B15 - It is better to obtain a post-secondary degree than to enter the workforce immediately after high school	0.889	Freshman	34	5.790	1.225	0.210
		Sophomore	26	4.650	1.522	0.298
		Junior	32	4.690	1.256	0.222
		Senior	27	4.110	0.751	0.145
		Total	119	4.870	1.359	0.125
B16 - When considering the price I pay for tuition, I believe that my school offers sufficient services	0.876	Freshman	34	5.150	1.048	0.180
		Sophomore	26	4.380	1.722	0.338
		Junior	32	4.630	1.454	0.257
		Senior	27	4.260	1.289	0.248
		Total	119	4.640	1.407	0.129
B17 - When considering the price I pay for tuition, I believe that the price/quality ratio is good at my school	0.883	Freshman	34	5.210	1.095	0.188
		Sophomore	26	4.230	1.840	0.361
		Junior	32	4.380	1.641	0.290
		Senior	27	3.960	1.192	0.229
		Total	119	4.490	1.517	0.139
B18 - I believe that my school offers quality services	0.884	Freshman	34	5.790	1.067	0.183
		Sophomore	26	4.920	1.354	0.266
		Junior	32	4.910	1.510	0.267
		Senior	27	5.070	1.174	0.226
		Total	119	5.200	1.325	0.121

Table 15: One-way ANOVA Test for Functional Value Variable Survey Questions

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31.685	3	10.562	14.556	0.000
Within Groups	83.444	115	0.726		
Total	115.128	118			

Because the one-way ANOVA test only shows a difference between the groups and does not specify where the difference exists, the researcher conducted a post-hoc test in SPSS. Once again, both Tukey's HSD and Scheffe's test were run and, as summarized in Table 16, both yielded similar, but not identical results. Tukey's HSD showed statistically significant differences between every group except Sophomore's and Junior's. Scheffe's test showed statistically significant differences between every group except Sophomore's and Junior's and Sophomore's and Senior's. Out of the researcher's desire to be more cautious, the more conservative Scheffe post-hoc criterion was used for analysis.

Table 16: Post-Hoc Test for Functional Value Variable Survey Questions

	Class Status	Class Status	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
						LB	UB
Tukey HSD	Freshman	Sophomore	0.8198*	0.2219	0.0020	0.2412	1.3983
		Junior	0.7594*	0.2098	0.0020	0.2124	1.3063
		Senior	1.4340*	0.2196	0.0000	0.8616	2.0065
	Sophomore	Freshman	-0.8198*	0.2219	0.0020	-1.3983	-0.2412
		Junior	-0.0604	0.2249	0.9930	-0.6467	0.5260
		Senior	0.6143*	0.2341	0.0480	0.0041	1.2245
	Junior	Freshman	-0.7594*	0.2098	0.0020	-1.3063	-0.2124
		Sophomore	0.0604	0.2249	0.9930	-0.5260	0.6467
		Senior	0.6746*	0.2226	0.0160	0.0943	1.2549
	Senior	Freshman	-1.4340*	0.2196	0.0000	-2.0065	-0.8616
		Sophomore	-0.6143*	0.2341	0.0480	-1.2245	-0.0041
		Junior	-0.6746*	0.2226	0.0160	-1.2549	-0.0943
Scheffe	Freshman	Sophomore	0.8198*	0.2219	0.0050	0.1901	1.4494
		Junior	0.7594*	0.2098	0.0060	0.1641	1.3547
		Senior	1.4340*	0.2196	0.0000	0.8110	2.0571

Sophomore	Freshman	-0.8198*	0.2219	0.0050	-1.4494	-0.1901
	Junior	-0.0604	0.2249	0.9950	-0.6985	0.5778
	Senior	0.6143	0.2341	0.0810	-0.0498	1.2784
Junior	Freshman	-0.7594*	0.2098	0.0060	-1.3547	-0.1641
	Sophomore	0.0604	0.2249	0.9950	-0.5778	0.6985
	Senior	0.6746*	0.2226	0.0310	0.0431	1.3062
Senior	Freshman	-1.4340*	0.2196	0.0000	-2.0571	-0.8110
	Sophomore	-0.6143	0.2341	0.0810	-1.2784	0.0498
	Junior	-0.6746*	0.2226	0.0310	-1.3062	-0.0431

* The mean difference is significant at the 0.05 level.

Scheffe's post-hoc test showed significant differences between the Freshman class and Sophomore class ($M_{diff} = 0.8198$, $p = 0.005$), Junior class ($M_{diff} = 0.7594$, $p = 0.006$), and Senior class ($M_{diff} = 1.434$, $p = 0.000$) and between the Junior class and the Senior class ($M_{diff} = 0.6746$, $p = 0.031$). These differences indicate that the Freshman class had a significantly higher evaluation of the FV variable than the Sophomore, Junior, and Senior class. These differences also indicate that the Senior class has a significantly lower evaluation of the FV variable than the Junior class. Interestingly, as shown in Table 17, for the FV variable, the means decrease the longer students are exposed to the curriculum of the college.

Table 17: Descriptive Statistics for the Functional Value Variable

Class Status	N	Mean	Std. Deviation	Std. Error
Freshman	34	5.7386	0.79320	0.13603
Sophomore	26	4.9188	0.81744	0.16031
Junior	32	4.9792	1.00196	0.17712
Senior	27	4.3045	0.75585	0.14546
Total	119	5.0299	0.98776	0.09055

The p values of the one-way ANOVA and the Scheffe post-hoc test led to a rejection of the second null hypothesis of no difference of perceived value among the students of the college that is dependent upon the exposure levels to the curriculum of that college. As previously

noted, this rejection was significant only between the Freshman class and all other classes, as well as between the Junior class and the Senior class. There was no statistically significant difference between the Sophomore class and the Junior or Senior class. These findings were consistent with LeBlanc and Nguyen's (1999) findings when they developed their original PVM survey. Specifically, LeBlanc and Nguyen found that, in general, "as students progress in their studies, they are less likely to believe that their business degree has functional value" (1999, pp. 191-192). LeBlanc and Nguyen found that there were significant differences between first and third-year students, whereas this project found significant differences between first-year students and every other class.

Applications to Professional Practice

The findings of this project are potentially relevant to other private institutions that would benefit from understanding how their students perceive service quality and value. Therefore, the following sub-section is focused on the applicability of these findings to the greater professional practice. Furthermore, this sub-section discusses the implications of the findings in relation to the established biblical framework.

Professional Practice

Based on the findings of this study, administrators and leaders of private colleges should seek to understand how their students perceive service quality and value at their institutions. The goal should be to understand why Sophomore students identify the quality of services as lower than Freshman, Junior, and Senior students at their various institutions. This understanding may benefit the institution by enhancing student retention and student persistence at the institution. As demonstrated, retention is an important issue that can be predicted by a student's perception of service quality (Dlagic et al., 2014). Further, as shown by Raisman (2013), the loss of annual

revenue from increasing attrition rates in higher education make a focus on the link between service quality and retention an important variable to understand and acknowledge. As such, institutional leaders should consider examining institutional policies and procedures that impact student perceptions of quality.

To continue, the findings of this study are also supported with the findings of Li and Kaye (1999) who conducted a longitudinal study regarding student expectations and perceptions of service quality. Li and Kaye found that, over time, students become more critical of the service they receive, which indicates a need to understand why student perceptions change. Li and Kaye suggested that changing student perceptions may be due to changes within students as they become increasingly discriminatory and demanding as a result of their educational career. Hill (1995) further suggested that this change in perception may not be completely related to actual changes in service quality. Hill pointed out that students undergo a physical and mental transition during their time at college and that, as a result, these students may become increasingly discerning over time. Because of this propensity for students to become increasingly critical of the services they receive, it is essential that college administrators seek to more holistically understand which components of the educational process the students identify as important in their perception of service quality at the institution.

Another potential application for professional practice is in the need for college administrators to understand how students identify functional value, especially in light of how functional value is the primary driver for consumer choice (Sheth et al., 1991). If students are increasingly disillusioned with the perceived value of their educational career, administrators should find ways to enhance the “get” portion of Zeithaml’s (1988) give versus get understanding of perceived value. Zeithaml’s “get” portion of perceived value refers to the

benefits students receive in relation to the costs of higher education and is particularly important in the increasingly consumer-driven environment of higher education. In fact, as previously discussed, marketization appears to be an inevitable conclusion in light of the findings that students find less value in their education as they are transformed through the educational process. As shown by Vajda et al. (2015), increased marketization appears to be inevitable due to the short-term, transactional nature students expect from their degrees. While more research is needed to identify the nature of a student's desired learning outcomes in higher education (degree versus transformation), it is shown in this study that a student's perception of value diminishes as they move through the educational process. Therefore, understanding the nature of this decline in student perceived value is of paramount importance.

Building on marketization and consumerism in higher education, while Farnsworth (1979) argued that educators viewed consumerism as a negative influence on the relationship between the student and the teacher, it appears that increased consumerism has actually heightened the need for better student/teacher relationships. This need for better student/teacher relationships is shown in the demonstrated importance of the Access variable in this study. Freshmen enter college with high expectations for faculty access, and, at the target institution, have high perceptions of access, which appears to correlate with their perception of functional value. Conversely, seniors at the institution perceive low functional value while simultaneously demonstrating high levels of perceived access. This inverse relationship for seniors indicates that, while seniors perceive less functional value as they near the end of their undergraduate career, they still desire high levels of access to faculty and staff, which appears to augment retention at the college. Further, because Dlacic et al. (2014) found that service quality is an important component of perceived value, it would seem likely that seniors at the target college

would have even lower perceptions of functional value were it not for the high perceptions of access at the institution. This observation is important in that it implies a need to further enhance access to faculty and staff at the institution in order to offset the diminishing perception of functional value at the institution.

This study appears to support the notion that cost is not the sole determinant of initial college selection and continued college enrollment. This is evident in how students at the target institution persisted in their educational career despite their diminishing perception of functional value declines at the institution. The implication of this observation is that administrators need to strive to offer quality services within an acceptable price range for the student. This acceptable price range is important as retention could be enhanced by focusing on the price/quality dimension as observed by LeBlanc and Nguyen (1999), which is dependent on the school convincing the student that the quality services they receive are appropriate in light of the tuition fees those students pay.

To continue, because of the importance of class status in this study, there are implications related to retention and educational persistence that need to be addressed. First, as observed by Peterson et al. (1997) and Bowles et al. (2014), there are exogenous service quality enablers that college administrators can exploit that will enhance educational persistence for their students. These outside-the-student factors might include school sponsored social events, orientation activities, or better school facilities, which ultimately enhance social, academic, and extra-institutional integration at the school. Further, nearly half of all attrition happens after the first-year college experience and 30-40% of students in postsecondary education drop out or fail to complete their studies (Willcoxson et al., 2011; Wintre, Bowers, Gordner, & Lange, 2006). Wintre et al. found that 64.7% of the freshmen in their study cited issues related to the normal

student maturation process, which include issues related to career options, enhanced student mobility, and interest in finding a better academic or program fit.

Additionally, as observed by Kilburn et al. (2014), positive perceptions of value accounts for nearly 60% of a student's loyalty to an institution. These observations, combined with the findings of the study, show that college administrators need to pay particular attention to the control they exert over the exogenous service quality enablers at their institution, particularly amongst sophomore, junior, and senior students. The high perceptions of service quality cited by the freshman class indicates that the college does a good job of exploiting exogenous enablers for first-year students. However, the steady decline in perceptions of service quality amongst the sophomore, junior, and senior students shows a need for better exploitation of social, academic, and institutional exogenous enablers.

Biblical Framework

In addition to the implications for professional practice, it is also important to discuss the findings in the context of the previously identified biblical framework. First, as noted by Chewning et al. (1990), God is primarily concerned with quality over price. One verse that points to this idea is Isaiah 1:22 (ESV), which says, "Your silver has become dross, your best wine mixed with water." The context of this verse discusses the wickedness of Judea and how the people were contaminating their silver and their wine with junk that diminished the quality of these items. The goal of these dishonest merchants was to make it appear as if the silver and wine were quality items, when, in reality, the silver and wine were cheaper imitations. The findings of this study suggest that school administrators should build actual quality into the offerings of the institution without sacrificing excellence at the institution. The goal should be to focus on student-consumer desire for short-term, transactional objectives at the college while

simultaneously working toward affective, life-long academic objectives that allow for the student-consumer to both gain knowledge and become a better functioning member of society. This focus would allow the school to offer quality services while, at the same time, enhance the students' commoditized desire for college credentials.

To continue, another verse that supports the dual function of simultaneous short-term and long-term objectives for college administrators is Proverbs 11:3 (NCV), which says, "Good people will be guided by honesty; dishonesty will destroy those not trustworthy." The literary tool of repetition that used in this verse serves to provide a sense of moral balance for the reader. In the context of this study, this moral balance is found in the need for the administrator to highlight the institution's long-term noble goal of life-long learning alongside the student's short-term, transactional goals found in the economic utility of a college diploma.

Finally, in the context of Proverbs 11:3, this study also makes contributions to the field of marketing. There is a need for integrity and honesty in marketing because student-consumers are increasingly bombarded with claims from different colleges, with each college claiming that their institution is superior in some way. Upshaw (2007) stated that, in this type of competitive environment, integrity is more than something virtuous and instead acts as a primary driver of choice for consumers. Upshaw further claimed that marketers need to strategically and tactically integrate integrity into everything they do and to not just use the illusion of integrity as a ploy to influence consumers. In this way, marketers find a way to operationalize integrity into their everyday actions as well as their consumer-driven advertisements. Furthermore, Feltenstein (2007) viewed marketing as the building of relationships and not as a way to get customers to buy more services. Feltenstein stated that this view puts things into proper perspective because consumers are not prized for what they can give you and are instead treasured simply because

they are human beings who, by their nature as God's creation, have intrinsic value. Put another way, students should be viewed correctly by administrators in that they are not just another number added to the institution's full time enrollment but are instead viewed as valuable additions to the educational milieu of the college.

Recommendations for Action

The findings of this study could be relevant to any private, religious institution of higher education. From this study, it can be concluded that, as students progress through their educational career, there is a gradual decrease in perceived functional value. Additionally, during the first and fourth year of study, students perceive high levels of service quality, as observed through the access dimension. Furthermore, there is a significant slump during the sophomore year of college in the access dimension of service quality.

Because of these findings, the institution needs to explore these differences in an effort to understand why these differences exist and in order to capture and retain as much value as possible from the student-consumers. While college administrators do not have direct control of student perceptions, they can implement policies that enhance student expectations of service quality. In the context of this project, these policies might include required office hours for faculty, training on FERPA laws regarding the need for faculty confidentiality with both students and faculty, encouraging student engagement through student government, and by soliciting student feedback that can perceptibly be linked to new college initiatives and proposals.

Furthermore, policies geared toward capturing functional value of students should be of paramount importance. Administrators should work to ensure that students understand what they get in relationship to what they give. This understanding could be enhanced as administrators work to inform students of industry needs in the students' field of study. Additionally,

administrators should boost ties to alumni by highlighting alumni success stories, which will allow the school to demonstrate career potential to existing students within the various programs offered by the school. Further, college administrators should encourage strong relationships with potential employers in order to position the college as a career building, opportunity-focused institution. Finally, administrators need to work to highlight the connection between the tuition paid compared to the services received by the student, which should enhance the students' perception of functional value.

The findings of this study can be disseminated in a wide variety of ways in order to ensure that it is seen by the appropriate parties. The findings of this project could be circulated through academic and professional journals. Additionally, the findings could be presented at conferences held by the Christian Business Faculty Association, the Association of Biblical Higher Education, or the Alliance for the Assemblies of God Higher Education. Finally, the findings of this project could be presented to the faculty and staff at the target institution.

Recommendations for Further Study

While this study showed quantitatively that there are differences in perceived service quality and perceived value the longer students are exposed to the curriculum of the college, the study does not address why the differences exist. Therefore, college administrators should use the findings of this study to examine why functional value declines across the class status variable. Furthermore, college administrators should explore what factors lead to a significant decline in perceptions of service quality in the sophomore class at the college.

In addition to the need to qualitatively explore the observed differences at the target institution, it might also be beneficial to repeat this study at other colleges in order to test the reliability of these findings. As noted previously, the findings of this study are specific to the

individual classes at the target institution so it would be interesting to observe other classes of students to see if those students perceive different levels of service quality and value.

Additionally, it might be helpful to add a qualitative component to repeated studies so that, if differences are found, administrators would be able to better understand why those differences exist. This would help broaden the context of this study.

Along with the desire to replicate this study at other institutions, there is also an opportunity to develop an experimental research design in order to see if an intervention at the institution would enhance perceptions of service quality and value. In particular, the target institution is initiating an annual cross-cultural experience where, for one week during the Spring semester, students are required to participate in week-long “Go Trips”. It is believed that these trips may enhance perceptions of value amongst the students at the institution, which administrators believe will aid in recruitment and retention. With quantitative data regarding current perceptions of value, it would be beneficial to see if these trips actually enhance perceptions of value amongst the various classes of students.

Furthermore, while the literature review suggested that Access and Functional Value were the most appropriate determinants of service quality and value in higher education, it might be helpful to examine the other determinants identified by Firdaus (2005) and LeBlanc and Nguyen (1999). For instance, Firdaus suggested that Non-Academic Aspects, Academic Aspects, Reputation, Access, Program Issues, and Understanding all contribute to student perceptions of service quality. Further, LeBlanc and Nguyen proposed six value determinants including Functional value (want satisfaction), Epistemic value, Image, Emotional value, Functional value (price/quality), and Social value. Future studies might dissect each of these determinants in order to more fully investigate service quality and value at the target institution.

Finally, this study solely focused on the perceptions of the students, as the primary consumer, at the target institution. Consequently, this study did not measure the perceptions of other potential stakeholders at the institution. As noted in the literature review, there are a variety of other stakeholders in higher education, which include families of students, faculty, future employers, academic staff, the government, and accreditors (Judson & Taylor, 2014; Owlia & Aspinwall, 1996; Taylor & Judson, 2011). Each of these stakeholders are believed to have differing viewpoints regarding value and service quality in higher education. As a result, it would be advantageous to conduct similar studies with different stakeholders in order to identify how those stakeholders perceive service quality and value at the target institution, which could then be compared with the findings from this study.

Reflections

As a Christian and an educator, I began this study with the belief that college students experience value confusion with the process of higher education. I further assumed that value confusion amongst students leads to substandard recruitment and retention policies at institutions of higher education. Through the iterative process of this project, my desire to explore educational value shifted and, subsequently, I added the variable of service quality to my study. Once I settled on service quality and value, I began to explore determinants of these two concepts, which is demonstrated in the extensive literature review section.

At the onset of the study, I believed that students at the target institution would display significantly different perceptions of both service quality and value. Once I determined to use class status as the independent variable in the study, my initial assumption was that perceptions of service quality would correlate to perceptions of value amongst the classes of students. Put another way, I believed that if the class of students had high perceptions of service quality, that

the class would also have high perceptions of value. Conversely, if the class of students had low perceptions of value, it was my assumption that the class would have low perceptions of value. Furthermore, it was my belief that, Freshmen at the target institution would have the lowest perceptions of service quality and value and that, these perceptions would progressively increase through the Sophomore, Junior, and Senior class. This assumption was based on my belief that a student only persists at the college if that student finds quality and value. Further, the longer the student persists at the college, the higher his or her perception of quality and value must be.

The findings of the study were somewhat surprising and were not as straightforward as I would have liked. For starters, I was surprised at the high levels of perceived service quality for both the Freshmen and Senior class. In fact, both Freshmen ($M = 5.4379$) and Seniors ($M = 5.4156$) were surprisingly similar. Further, while the Sophomore ($M = 4.6282$) class was significantly lower than both the Freshman and Senior class, the Junior ($M = 4.9826$) class, while lower, was not significantly lower. Additionally, for the Value variable, the Senior class ($M = 4.3045$) indicated significantly lower perceptions of value than Freshmen ($M = 5.7386$) and Juniors ($M = 4.9792$). Unfortunately, while the Sophomore class was lower ($M = 4.9188$), the Sophomore class was not significantly lower. The finding for Value was surprising in that I had assumed that Seniors would have higher perceptions of value, especially considering their high perceptions of service quality. This finding is interesting in that it shows that, for this Senior class, persistence at the institution is not heavily dependent on their perception of value.

This study also enhanced my biblical understanding of service quality and value. For faculty and staff in higher education, the most appropriate biblical perspective for service quality and value should be motivated by an unmitigated love for students. Biblically speaking, 1 John 4:7-8 (NLT) states, “Dear friends, let us continue to love one another, for love comes from God.

Anyone who loves is a child of God and knows God. But anyone who does not love does not know God, for God is love.” The implication of this verse is fulfilled in 1 John 4:12, which says, “No one has ever seen God. But if we love each other, God lives in us, and his love is brought to full expression in us.” Put another way, our love for God is shown by our love for those around us and, therefore, the quality of our service to God is a direct reflection of the love we show those around us. In the context of this study, faculty and staff should be driven to be accessible out of their love for students, and the quality of their relationship with God is a direct reflection of that accessibility.

To continue, Galatians 5:13-14 (NCV) states, “My brothers and sisters, God called you to be free, but do not use your freedom as an excuse to do what pleases your sinful self. Serve each other with love. The whole law is made complete in this one command: ‘Love your neighbor as you love yourself’.” Contextually this verse suggests that nothing provides freedom in Christ like serving other people in love. Paul suggests that we cannot find freedom in the law (circumcision) and that true freedom can only be found in how we love and serve one another. Again, in the context of this study, this passage suggests that service to students should be the result of love for students and not the result of administrative decree. Put another way, faculty and staff give access to students out of a genuine love for students and not out of any sort of contractual obligation owed to the institution.

Finally, while there were aspects of this iterative process that were frustrating, I believe that I am a better educator and researcher because of this study. The progression of this study sharpened my thinking and gave me a better perspective on the process of research and writing. Furthermore, I am motivated to continue to research higher education and student perceptions of service quality and value.

Summary and Study Conclusions

This project was designed to see if various classes of students perceive differing levels of service quality and value at their small, Midwestern Bible college. To help accomplish this objective, the researcher discovered numerous determinants of service quality and value, which were eventually narrowed down to the respective variables of Access and Functional Value. Once the variables were identified, the researcher extracted questions that loaded onto these variables from two established surveys found in the literature. Finally, the survey was disseminated to the students at the target institution and, once completed, the researcher coded the data, performed statistical tests, and analyzed and discussed the results.

This research project helps to address a gap in the current body of literature related to student perceptions of service quality and value in higher education. Despite an extensive literature review, the researcher could find no survey that addressed both service quality and value in the context of education. Further, the researcher found no other studies conducted the unique environment of a Bible college. Finally, while there are extensive studies related to service quality in higher education, no other study examined the determinants of service quality compared to exposure levels to a college's curriculum.

Overall, this study found that the current classes of students at the target institution had differing perceptions of service quality and value, as seen through the Access and Functional Value variables. While there were differences discovered between the groups, post-hoc tests were conducted in order to see which groups were different. These post-hoc tests showed mixed results. For the Access variable, Scheffe's test showed significantly lower perceptions of access between the Freshman and Sophomore class and between the Senior and Sophomore class at the target institution. For the Functional Value variable, Scheffe's test showed significant

differences between every group except for between the Sophomore and Junior class and between the Sophomore and Senior class. Again, these results were mixed in that the Freshman class showed a higher evaluation of Functional Value than every other class while the Senior class showed a lower evaluation of Functional Value than the Junior class. Put another way, the means for Functional Value diminished the longer that students of the college were exposed to the curriculum of the college. Finally, these differences were all statistically significant at the $\alpha = 0.05$ level.

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Appendix A: Firdaus' (2005) HEdPERF Model

- 1 Academic staff have the knowledge to answer my questions relating to the course content
- 2 Academic staff deal with me in a caring and courteous manner
- 3 Academic staff are never too busy to respond to my request for assistance
- 4 When I have a problem, academic staff show a sincere interest in solving it
- 5 Academic staff show positive attitude towards students
- 6 Academic staff communicate well in the classroom
- 7 Academic staff provide feedback about my progress
- 8 Academic staff allocate sufficient and convenient time for consultation
- 9 The institution has a professional appearance/image
- 10 The hostel facilities and equipment are adequate and necessary
- 11 Academic facilities are adequate and necessary
- 12 The institution runs excellent quality programs
- 13 Recreational facilities are adequate and necessary
- 14 Class sizes are kept to minimum to allow personal attention
- 15 The institution offers a wide range of programs with various specializations
- 16 The institution offers programs with flexible syllabus and structure
- 17 The institution has an ideal location with excellent campus layout and appearance
- 18 The institution offers highly reputable programs
- 19 Academic staff are highly educated and experienced in their respective fields
- 20 The institution's graduates are easily employable
- 21 When I have a problem, administrative staff show a sincere interest in solving it
- 22 Administrative staff provide caring and individual attention
- 23 Inquiries/complaints are dealt with efficiently and promptly
- 24 Administrative staff are never too busy to respond to a request for assistance
- 25 Administration offices keep accurate and retrievable records
- 26 When the staff promise to do something by a certain time, they do so
- 27 The opening hours of administrative offices are personally convenient for me
- 28 Administrative staff show positive work attitude towards students
- 29 Administrative staff communicate well with students
- 30 Administrative staff have good knowledge of the systems/procedures
- 31 I feel secure and confident in my dealings with this institution
- 32 The institution provides services within reasonable/expected time frame
- 33 Students are treated equally and with respect by the staff
- 34 Students are given fair amount of freedom
- 35 The staff respect my confidentiality when I disclosed information to them
- 36 The staff ensure that they are easily contacted by telephone
- 37 The institution operates an excellent counseling service
- 38 Health services are adequate and necessary

- 39 The institution encourages and promotes the setting up of Student's Union
- 40 The institution values feedback from students to improve service performance
- 41 The institution has a standardized and simple service delivery procedures

Appendix B: LeBlanc and Nguyen's (1999) Perceived Value Model

- 1 When considering the price I pay for tuition, I believe that the price/quality ratio is good at my business school.
- 2 The knowledge I have acquired at my business school will allow me to get promotions.
- 3 I believe that a degree in business administration will guarantee future employment.
- 4 It is better to obtain a post-secondary degree than to enter the work force immediately after high school.
- 5 I believe employers would have positive things to say about my business school.
- 6 In my opinion it is worthwhile to invest four years to obtain a business degree.
- 7 I learn new things in many of my courses.
- 8 A degree in business will allow me to achieve my career goals.
- 9 I believe employers are interested in hiring students from my business school.
- 10 A degree from my business school is a good investment.
- 11 A degree in business will allow me to earn a good salary.
- 12 I find courses more interesting when friends are in my classes.
- 13 I am happy when friends are in my classes.
- 14 Working in groups has a positive effect on the value of my education.
- 15 The areas of specialization offered by my business school satisfies my needs.
- 16 Social activities at my business school make my studies more interesting.
- 17 My parents believe that my business school offers good programs.
- 18 The value of my education depends on my personal effort.
- 19 I am glad that I chose courses in business administration.
- 20 I like taking courses in business administration.
- 21 I find courses interesting.
- 22 The image projected by my business school has an influence on the value of my degree.
- 23 The reputation of my business school influences the value of my degree.
- 24 I have heard positive things about my business school.
- 25 I believe that my business school can adapt to the needs of industry.
- 26 The number of students in my classes influences the value of my education.
- 27 The size of my business school has an effect on the value of my education.
- 28 The quality of education received from my professors influences the value of my degree.
- 29 Course contents influence the value of my education.
- 30 The guidance received from professors has an effect on the value of my education.
- 31 The fact that my business school is small has a positive effect on the value of my education.
- 32 I believe that my business school offers quality services.
- 33 When considering the price I pay for tuition, I believe that my business school offers sufficient services.

Appendix C: Combined HEdPERF/PVM Survey (Access and Functional Value)

A1	Class status	Freshman, Sophomore, Junior, Senior
A2	Gender	Male, Female
A3	Degree program	Biblical Studies, Business Administration, Exercise Science, General Studies, Intercultural Studies, Ministerial, Teacher Education

		Strongly disagree							Strongly agree	
B1	Students are treated equally and with respect by the staff	1	2	3	4	5	6	7		
B2	Students are given a fair amount of freedom	1	2	3	4	5	6	7		
B3	The staff respect my confidentiality when I disclosed information to them	1	2	3	4	5	6	7		
B4	The staff ensure that they are easily contacted by telephone	1	2	3	4	5	6	7		
B5	The institution operates an excellent counseling service	1	2	3	4	5	6	7		
B6	Health services are adequate and necessary	1	2	3	4	5	6	7		
B7	The institution encourages and promotes the setting up of a student's union (student government)	1	2	3	4	5	6	7		
B8	The institution values feedback from students to improve service performance	1	2	3	4	5	6	7		
B9	The institution has standardized and simple service delivery procedures	1	2	3	4	5	6	7		
B10	A degree will allow me to earn a good salary	1	2	3	4	5	6	7		
B11	A degree will allow me to achieve my career goals	1	2	3	4	5	6	7		
B12	The knowledge I have acquired at my school will allow me to get promotions	1	2	3	4	5	6	7		
B13	I believe employers are interested in hiring students from my school	1	2	3	4	5	6	7		
B14	A degree from my school is a good investment	1	2	3	4	5	6	7		

B15	It is better to obtain a post-secondary degree than to enter the workforce immediately after high school	1	2	3	4	5	6	7
B16	When considering the price I pay for tuition, I believe that my school offers sufficient services	1	2	3	4	5	6	7
B17	When considering the price I pay for tuition, I believe that the price/quality ratio is good at my school	1	2	3	4	5	6	7
B18	I believe that my school offers quality services	1	2	3	4	5	6	7