AN EXPLORATORY MODEL OF CONSUMERS' PERCEIVED VALUE OF BUSINESS COLLEGE EDUCATION

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ABSTRACT

In this study, we explore the potential dimensions related to value of business college education and build a structural model. We first define the concept of consumers' perceived value of business college education. Then, we develop a scale measuring the benefit and cost elements of the value and present an exploratory structural model explaining the relationships among the antecedents, the value (cost and benefit elements), and the consequences. The result of this study will help business schools to improve their service quality and reputation.

INTRODUCTION

Perceived value is typically conceptualized as the ratio between benefits and sacrifices. For example, Zeithaml defines value as the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given [1]. Likewise, Anderson, Jain, and Chintagunta, focusing on benefits and price, define value as the perceived worth in monetary units of the set of economic, technical, service and social benefits received by a customer in exchange for the price paid for a product [2]. Monroe indicates that consumers' perception of value represents a tradeoff between the quality or benefits they perceive in the product relative to the sacrifice they perceive by paying the price [3]. Other documents focus on quality and price. The consensus among a variety of definitions is that value is a tradeoff between what consumers receive (e.g., quality, benefits, worth, and utility) and what consumers give (e.g., price and sacrifices) [4]. Zeithaml [1] proposes that the benefit components of value include salient intrinsic attributes, extrinsic attributes, perceived quality, and other relevant high level abstractions whereas the sacrifice components of perceived value include monetary prices and non-monetary prices.

The purpose of this study is twofold, applying this concept of value to business education in a college: first, to develop the scale of perceived value of college business education and second, to develop an exploratory structural model which shows the relationship among the antecedents, and benefits and costs. In this study, consumers' perceived value of business college education as the tradeoff between benefits (both intrinsic and extrinsic) and costs (both monetary and non- monetary) involved in college business education.

SCALE DEVELOPMENT AND MODEL OF BUSINESS EDUCATION VALUE

This study attempts to develop a scale of perceived value of business college education which integrates existing dimensions of perceived value with modification to the business education. First, as for the cost elements of value, Sheth, Newman and Gross propose a five-dimension scale including social, emotional, functional, epistemic and conditional values [5]. Kantamneni and Coulson create a four-dimension scale: societal value, experiential value, functional value and market value [6]. Sweeney and Soutar develop a four-dimension scale: quality, emotional response, price and social [7]. Petrick develop a five-dimension scale to measure perceived value of service: behavioral price, monetary price, emotional response, quality and reputation. Eccles et al. introduce emotional cost to improve their prior expectancy-value model and develop a three dimensions cost scale: effort, loss of valued alternatives, and emotion [9]. Flake et al. discover four dimensions of cost: task effort, outside effort, loss of valued alternatives and emotional cost. Finally, the financial cost including tuition, fees, room, board, books, and supplies is a significant factor for

college education [11]. Second, as for the benefit elements, unlike costs, it is not easy to narrow down to specific benefits because the educational outcomes are diverse, complex, volatile, indirect and interrelated and not restricted to a specific outcome at one point in time but generated and accumulated during one's lifetime [12]. But benefit components include quality/performance [1] [7] and social benefits [5] [7]. Bewen suggests that higher education generates non-monetary benefits such as cognitive learning, moral development and health [12]. Bailey measures benefits of education in five domains: physical, lifestyle, affective, social, and cognitive [13]. Sheth et al. suggest epistemic value in their five-dimensional value scale, which pertains to alternatives chosen because of their ability to arouse curiosity, provide novelty or satisfy one's desire for knowledge [5]. Plus, physical and cognitive benefits as well as reputation are regarded benefits of education [8].

In addition to developing the scale of perceived value of college business education, we investigate the antecedents of the value process: particularly, socioeconomic status and individual's ability and motivation. Socioeconomic status is traditionally measured by education, income, and occupation [14]. Campbell and Siegel argue that the demand of higher education enrollment can be explained by family income, parental education and student's ability. Bowen insists that parents' education affects next generation's education level. Other research also proves the socioeconomic status as an indicator affecting the education enrollment decision [16]. Individual's ability and motivation may create various benefits and educational attainment [11]. Motivation is one of the most important psychological concepts in education and related to learning and performance [17]. Eccles et al. recognize motivation as a function of expectancy (i.e., students' perceived judgments of their ability to succeed) and task value (i.e., students' perceived level of task importance) components in education research [9].

Ingels et al. report that a bachelor's degree attainment is positively associated with job satisfaction, use of computers on the job, participation in job training, and volunteer work [18]. Baum and Payea find out the positive relationship between educational attainment and such benefits as earnings, unemployment, poverty rates, and perceptions of health, smoking rates, incarceration rates, school readiness, volunteerism, voting, blood donations, and social programs. Becker state that additional years of education are expected to raise productivity and earnings, mainly by providing knowledge, skills, and a way of analyzing problems [11]. Satisfaction is often conceptualized as a consequence, outcome or summary variable in comparison to value, which is antecedent to it [20]. Thus, satisfaction is universally agreed to be a post-purchase and post-use evaluation [21].

In summary, we propose that the perceived value model of business college education consists of two antecedents (socioeconomic status and motivation to study), benefit components of value (physical, cognitive, social and reputation), cost components of value (emotion, financial, task effort, outside effort, and loss of valued alternatives), and consequences (personal well-being, job satisfaction, and career success).

We borrowed and modified 91 items from the literature to measure the 14 factors discussed above and added ten demographic questions in our online survey. The valid sample size was346 (206 females and 140 males). 98.8% of participants had a bachelor degree or higher (70.5% with business major and 59.2% with graduate business education. After we finished data collection, we ran exploratory factor analysis to identify factors, which resulted in 12 factors and 62 related items. The analysis showed that social and reputation are combined into one factor. Meanwhile, the cognitive skills were split into two factors: we named them language skills and memory skills. The items to measure personal well-being and loss of valued alternatives were not significant, so removed. Other factors were consistent to what we intended to measure. We ran confirmatory factor analysis through LISREL to check the unidimensionality of each factor. After removing problematic items, we retained 43 items for 12 factors: 5 for reputation/social benefits, 3 for emotion, 5 for career success, 5 for task effort, 4 for outside effort, 4 for financial, 2 for physical, 4 for job satisfaction, 2 for language, 2 for memory, 5 for motivation and 2 for socioeconomic status. The minimum t-value of the items was 7.24 and their loadings ranged from 0.69 to 0.89. The reliability of each construct

ranged from 0.74 to 0.90. Variance explained of them was also significant, varying from 0.53 to 0.73. All the results indicate a clear and parsimonious pattern of variables. For the measurement model, the χ^2 was 1236.72 with 794 degrees of freedom (the chi-square/d.f. ratio was 1.56). The goodness of fit index (GFI) was 0.86 and the adjusted goodness of fit index (AGFI) was 0.83. The root mean square residual (RMR) was 0.041 and Standardized RMR (SRMR) is 0.047. RMSEA was 0.040. NFI was 0.93 and CFI, 0.97. Overall, the 12-factore measurement model achieved a satisfactory fit.

After we confirmed the measurement model, the next step was to figure out the interrelations among those variables. We tested this model from an exploratory perspective in the direction to maximize the goodness of the fit of the model as well as the congruency with existing theories. The resulting model would provide useful clues for further investigation in business education. The overall assumption was that antecedents affect the value, whose two dimensions would affect themselves and be linked to the consequences. The following model of Figure 1 was the most fitted model based on the data. The fit was quite satisfactory: χ^2 /d.f. was 1.53; GFI was 0.85 and AGFI was 0.83; RMR was 0.044 and SRMR was 0.051; RMSEA was 0.035; and NFI and CFI were 0.93 and 0.97, respectively.

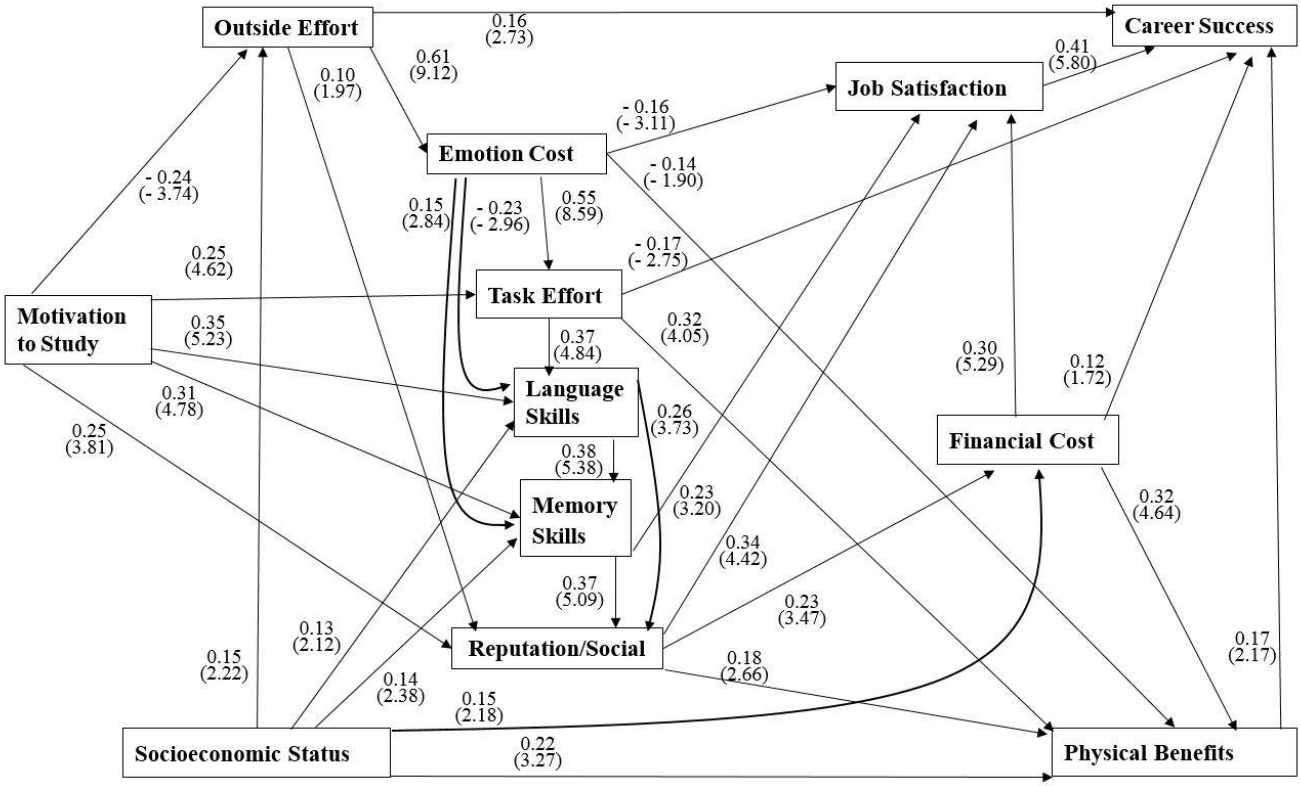

Figure 1. Perceived value of business college education: the final structural model

THE MODEL EXPLAINED

In our model, motivation to study causes outside effort cost, task effort cost, language skills, memory skills and reputation/social benefits. Effort is defined by Parsons as the means by which motivation turns into accomplished work [22]. This view indicates that effort plays as a mediator between motivation and achievement (career success in our study) [23]. Another latent variable, socioeconomic status, causes outside effort cost, financial cost, language and memory skills and physical benefits. Sandler implies that

household income as a socioeconomic determinant of students' attitudes and persistence has a strong effect on intent to persist, inferring that socioeconomic status can positively influence cognitive skills, physical benefits and financial cost. In a practical application, if a student wants to study hard, s/he has to focus on task, so that s/he would feel s/he does not have enough time and energy for other things outside education. This logic explains why motivation is negatively correlated to outside effort but positively correlated to task effort. It also makes sense that if s/he wants to study, her or his cognitive skills (language and memory) would increase. That is why motivation has strongly correlated to language and memory skills. The strong relationship between motivation and reputation/social benefits are resulted through language and memory skills. In addition, if someone wants to study hard, the cognitive abilities will be used to increase their skills in the social environment to enjoy reputation/social benefits. A better socioeconomic status indicates better parental education and higher annual income and social environment. Therefore, it makes sense that socioeconomic status is positively related to cognitive skills, outside effort, financial cost, and physical benefits. In a practical situation, if one owns a better socioeconomic status, the family environment and parental education level would influence his or her cognitive development. They afford to spend more time on other things (e.g. interests or social networking). A comfortable environment and better educational awareness makes them pay more attention on physical health and behavior. The model also indicates that a better socioeconomic status makes consumers invest more money (financial cost) on education, and better education would increase physical benefits. So the financial cost can explain the direct correlation between socioeconomic status and physical benefits.

Among cost and benefit dimensions, a strong correlation is observed from cost to benefit, in order: outside effort to emotion cost, to task effort, to language skills, to memory skills, to reputation/social benefits, to financial cost, and to physical benefits. All the causal paths in the model make sense in practice. Outside effort positively causes emotions cost and reputation/social benefits, indicating that if someone spends too much energy and time on other activities (e.g. serving social communities or taking internship), s/he might become popular and sociable; meanwhile, s/he might feel anxious or worried (emotion cost) about learning; then s/he would think about it and start to focus more on schoolwork (task effort); finally, the cognitive abilities (language and memory) would be significantly increased, resulting in reputation/social benefits. For emotion cost, in our study, mostly measured by negative items, research shows that negative mood can enhance mood-congruent memory processes [25] and enhance more focused, analytical and detail-oriented information processes [26]. And academic emotion is significantly related to cognitive resources [26], which explains its negative (positive) correlation with language (memory) skills. It is obvious that negative emotion (e.g. pressure and anxiety) hurts health and reduces job satisfaction. People who own good reputation/social benefits would value more investment on education, and then has an impact on physical health. Financial cost acts as a mediator to explain the relationship between reputation/social and physical benefits. House et al. suggest that the association between social relationships and health is comparable with risk factors such as smoking and blood pressure [27]. In addition, financial cost has a positive effect on job satisfaction and career success: job satisfaction causes career success. Job satisfaction can act as a mediator to explain why higher price for education can increase probability of success. Consumers believe higher price can reflect higher service quality [1]. Good education helps them to have a better job and higher satisfaction. Thus, higher job performance would positively influence career success. Financial cost can also explain the direct correlation between reputation/social benefits and job satisfaction. Reputation can increase job satisfaction because reputation can positively affect education's monetary investment, thus strengthen job satisfaction. As for the consequences, almost all the cost and benefit dimensions finally direct to career success. It is directly linked by outside effort, task effort, financial cost, physical benefits and indirectly connected through job satisfaction by emotion cost, memory skills, reputation/social benefits and financial cost. Physical benefits would help a person to succeed because, if someone wants to have career success, physical body should be kept healthy for a long term. Research indicates that differences in personal investment (e.g. emotional and physical health) can result in differences in productivity [11].

Burgeson suggests students who participate in physical activities experience more success throughout school years and adulthood [28].

CONCLUSION AND IMPLICATIONS

Overall, the structural model fits the data well as evidenced in the fit indices. Emotion cost and financial cost are pretty outstanding. Emotion cost can almost affect all the other cost, benefits and effects dimensions. Financial cost can act as a mediator to explain many other parameters and link the only causal path from benefits variables. The educational institutions should pay more attention to students' emotion and offer greater value pertaining to their monetary investment so as to increase the perception of value of business college education. The model is exploratory in sense that it was developed to maximize the fit with the data rather than to test theoretical hypotheses. So, further research is called to investigate deeper and more systematic relationships between perceived value of business college education and related variables.

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