

Table of Contents

The Effectiveness of Learning Transfer in Restaurant Entrepreneurship Training (<i>Lee, Lee and Joo</i>)...	2
Tobacco Settlement Bonds: a Critical Analysis of 9 States and 3 Territories (<i>Estes and Astrid</i>).....	21
Changes in the Quality of Accounting Information with the Adoption of IFRS in Korea (<i>Lee, Jin, and Lee</i>).....	35

Editor

Kyung Joo Lee (University of Maryland-Eastern Shore, USA)

Review Board

Heungjoo Cha (Finance, University of Redlands, Redlands, USA)

Albert Chi (Computer Science, University of Maryland - Eastern Shore, USA)

David Choi (Management, Loyola Marymount University, USA)

Cedric E. Daukims (Management, California State Polytechnic University - Pomona, USA)

James Estes (Finance, California State University – San Bernardino, USA)

Sung-Kyu Huh (Accounting, California State University - San Bernardino, USA)

Liang Guo (Finance, California State University- San Bernardino, USA)

Stephen Jakubowski (Accounting, Ferris State University, USA)

Jeein Jang (Accounting, ChungAng University, Korea)

John J. Jin (Accounting, California State University - San Bernardino, USA)

Il-Woon Kim (Accounting, University of Akron, USA)

JinSu Kim (Information System, ChungAng University, Korea)

Young-Hoon Ko (Computer Engineering, HyupSung University, Korea)

Byunghwan Lee (Accounting, Indiana University - Northwest, USA)

Habin Lee (Management Engineering, Brunel University, UK)

Myong Jae Lee (Hospitality Management, California State Polytechnic University - Pomona, USA)

Diane Li (Finance, University of Maryland-Eastern Shore, USA)

Qiang Li (Finance, Shanghai University of Finance and Economics, China)

Frank Lin (Information Systems, California State University - San Bernardino, USA)

Yongsun Paik (International Business, Loyola Marymount University, USA)

Kwangsun Song (Management, SoonChunHyang University, Korea)

Hua Sun (Real Estate, Iowa State University, USA)

Tae Won Yang (Finance, California State University - San Bernardino, USA)

Sehwan Yoo (Information Systems, University of Maryland-University College, USA)

MoonGil Yoon (Management Science, Korea Aerospace University, Korea)

Sung Wook Yoon (Accounting, California State University - Northridge, USA)

1. Topics: All areas of business, economics, and information systems

2. Manuscript Guidelines/Comments:

Pan-Pacific Journal of Business Research (PPJBR) is a double blind peer reviewed Journal focusing on integrating all areas of business, economics, finance, and Information Systems.

PPJBR pursues high quality researches significantly contributing to the theories and practices of all areas of business, economics, and Information Systems. PPJBR is an academic journal listed on Cabell Directory. PPJBR consider for publication the following topics in all areas of business and economics including Accounting, Economics, Entrepreneurship, Finance, Hospitality Management, International Business, Marketing, Human Resource Management, Operation Management, Information Systems, Strategy, and Supply Chain Management:

- Current and new theories.
- New regulations and policies.
- Application of business and economic theories.
- Case studies exploring current issues
- Pedagogical issues in business education

3. Submission:

Authors are required to submit their article or manuscript electronically at jjin@csusb.edu

Before submission, the article or manuscript should not be published in any other journal. The article or manuscript should be in MS Office Word format. It should be written in a single space with a maximum number of 15 pages and 12 font size. Title, the name(s), affiliation(s), address(es), phone number(s), and email(s) of authors should be on the cover page. Contact author should be indicated. Only an abstract of the article or manuscript in 250 words, title, and 4 key words should be shown on the second page.

PPJBR generally follows the American Psychological Association (APA) guidelines. Reference should be presented in a separate sheet at the end of the article or manuscript. Tables, figures, footnotes, and their numbering should appear on the appropriate page. The usage of footnotes should be minimized. The decision of acceptance usually takes three months. After acceptance, PPBRI has a copy right for the accepted article and manuscript.

The article or manuscript should be submitted to: Dr. Kyung Joo Lee, Editor, Kiah Hall Suite 2110, Princess Anne, MD 21853. Phone: 410-621-8738. Email: kjlee@umes.edu.

THE EFFECTIVENESS OF LEARNING TRANSFER IN RESTAURANT ENTREPRENEURSHIP TRAINING

In memory of Dr. Sanggun Lee, 1963-2015

Sanggun Lee

Pai Chai University, Korea

Jungwon Lee*

Shinhan University, Korea

Young Min Joo

Samsung Economic Research Institute, Korea

ABSTRACT

This study examines the causal relationships among psychological traits, motivation to transfer, environment, ability, attitude, training satisfaction, and transfer effect in restaurant entrepreneurship training, adopting the generalized learning transfer system inventory (LTSI). Restaurant entrepreneurs in Korea, who had completed a restaurant entrepreneurship training module within the last six months, provided 271 usable responses to a questionnaire. Structural equation modeling was developed to address the research objectives. Results indicate that psychological traits have a positive influence on motivation to transfer, and ability has a positive influence on attitude. Psychological traits, environment, and attitude were significant determinants of training satisfaction. Lastly, training satisfaction had a positive influence on the transfer effect. Managerial implications on the effectiveness of learning transfer in restaurant entrepreneurship training are discussed.

Keywords: Transfer of learning, learning transfer system inventory, restaurant entrepreneurship training.

JEL classification: M3

*the corresponding author: jwlee@shinhan.ac.kr

1. INTRODUCTION

The changing tastes of restaurant customers in Korea have introduced the challenge of offering new recipes, products, and services. In fact, the demand for more diverse of dining options has continued to change the overall picture of the food service industry in Korea. From 2005 to 2008, full service Korean restaurants grew 9.8%, full service Japanese restaurants 30.1%, institutional feeding restaurants 33.1%, and quick service Western restaurants 20%, while quick service Korean restaurants were down 13%, and other quick service restaurants were down 15.5% (USDA GAIN Report, 2010). In 2010, statistics from the Korea Foodservice Industry Association shows that 298,758 restaurants closed. Statistics show that 16.2% of these closings occurred within one year of opening, and 66.5% within three years.

In Korea, under the Korea Food Sanitation Act, restaurant entrepreneurs must complete restaurant entrepreneurship training before opening a restaurant. The training comprises restaurant operation related subjects like cost control as well as food sanitation. Three organizations (Korea Food Industry Association, Korea Restaurant Association, and Korea Bakery Association) currently offer the training across the country. The goal of restaurant entrepreneurship training is to maximize performance using acquired knowledge, skills, and attitude acquired during the training (Block & Stumpt, 1992). Assessing entrepreneurship training is based on performance during the training process.

Transfer of learning, however, involves actually applying what participants have learned during the entrepreneurship training program (Broad & Nwstrom, 1992; Ottoson, 1995; Taylor, 2000; Tannenbaum & Yukl, 1992; Wexley & Latham, 1991). Entrepreneurs who are more satisfied with what they have learned show more transfer of learning. The results may include enhanced behavioral change and improved productivity among training participants. In other words, transfer of learning is an important part of entrepreneurship training, actually justifying entrepreneurship training itself.

Understanding what facilitates or prevents the transfer of learning should be identified empirically. What actually affects learning transfer? Developing a generalized transfer system scale may enhance the effect of entrepreneurship training? Reliable measurements for factors affecting learning transfer would provide a conceptual frame to evaluate the effect of entrepreneurship training. Although some extant literature on learning transfer indicates the difficulty of transferring learning outcomes into workplace (Baldwin & Ford, 1988; Goldstein, 1993; Newstorm, 1984; Tannenbaum & Yukl, 1992), comprehensive and systematic research in this field is lacking.

Therefore, our study proposes to determine the effectiveness of the restaurant entrepreneurship training in Korea. Our empirical research adopts the generalized learning transfer system inventory (LTSI) introduced by Holton, Bates, and Ruona (2000). Specifically, we examine the causal relationships among psychological traits, environment, ability, attitude, training satisfaction, and transfer effect through

structural equation modeling. The outcomes of this research show the effectiveness of current restaurant entrepreneurship training programs in Korea as a foundation for training restaurant entrepreneurs.

2. LITERATURE REVIEW

2.1. *Transfer of Learning*

Transfer of learning is a process where participants of a training program apply knowledge, skills, and attitude acquired through training to a job or task (Baldwin & Ford, 1988; Robinson & Robinson, 1989; Wexley & Latham, 1991; Tannenbaum & Yukl, 1992; Broad & Nwstrom, 1992; Milheim, 1994; Ottoson, 1995; Holton, et al., 1997; Ford & Weissbein, 1997; Taylor, 2000; Caffarella, 2002). Noe (2002) defined transfer of learning as effective and sustained application of language, skills, and cognitive strategies relevant to a participant's duty learned by participants of training programs.

Transfer of learning is complex, involving complicated interactions among several factors (Baldwin & Ford, 1988; Ford & Weisbein, 1997; Roulier & Goldstein, 1993; Holton *et al.*, 2000). Noe and Schmitt (1986) found factors influencing transfer of learning by focusing on characteristics and motivation of trainees. Baldwin and Ford (1988) established traits of trainees and working environment as factors of training that directly affect generalizability and training maintenance. Holton (1995) explained that when learning is linked with individual performance, motivation to transfer, transfer design, and transfer climate are mediators. Individual performance in training eventually leads to organizational performance (Holton, 1995).

Kirkpatrick (1976) developed a 4-stage assessment model assessing (1) the level of response of trainees to the curriculum, (2) the levels of achievement among trainees, (3) the level of transfer of learning, and (4) the effect of curriculum on corporate organization. Noe (1986) developed a model to explain the relationships between personal characteristics of trainees, learning motivation, attitude, and expectancy that affect transfer of learning. Baldwin and Ford (1988) suggested the transfer process involved training input, including traits, transfer design, and working environment of trainees, and training output, including transfer conditions in the training period.

On the other hand, Holton (1995) developed an interactive model for evaluating human resource development (HRD) that supplements the shortcomings of Kirkpatrick's (1976) 4-stage assessment model. Holton (1995) developed a learning transfer system inventory (LTSI) as a tool to measure how training transfers to duty. The full model includes ability, motivation to transfer, environment, and secondary influence constructs for learning outcomes. In addition, Holton (2005) established a learning model that integrated transfer using factors relevant to transfer of learning. In his model, factors affecting training performance were divided into learning, individual performance, and organizational performance. Environment and ability affected motivation primarily, and personal traits, learner readiness, and job attitude of trainees were considered secondary (Holton, 2005).

2.1.1. Psychological traits

Entrepreneurship correlates with individual traits, internal and external environment, and organization. In particular, psychological traits of entrepreneurs are important influences for organizational performance and entrepreneurship training (Chandler & Jansen, 1992; Koh, 1996; Mueller & Thomas, 2001; Nga & Shamuganathan, 2010). Previous research has examined the relationship between training satisfaction and trainee psychological traits like locus of control (Ahmed, 1985; Begley and Boyd, 1987; Bonnett and Furnham, 1991), tolerance of ambiguity (Acedo and Jones, 2007; Lorsch and Morse, 1974; Westerberg *et al.*, 1997), risk-taking propensity (Ang and Hong, 2000; Gurol and Atsan, 2006; Koh, 1996), and need for achievement (Hull *et al.*, 1980; Sexton and Bowman, 1985). The focus of previous research has been exploring the characteristics of entrepreneur psychological traits and how they are linked to the transfer of learning.

Locus of control involves the feeling of being able to autonomously control events (Mueller & Thomas, 2001). Individuals with an internal locus of control believe they can influence events in life, whereas individuals with an external locus of control perceive that most events are controlled by luck or other powerful beings. People with an internal locus of control tend to be more satisfied with training because they are likely to believe that they can change their motivation through their own actions (Holton, 2005). Internal locus of control is empirically associated with company performance (Boone, Debrabander, & Van Witteloostuijn, 1996). Individuals with an internal locus of control tend to believe that they can improve their skills and performance through their own efforts (Colquitt *et al.*, 2000; Holton, 2005). Diaz and Rodriguez (2003) argued that those individuals with a higher internal locus of control are more entrepreneurial because they have a stronger will to achieve. Thus, internal locus of control is an important entrepreneurial psychological trait (Begley and Boyd, 1987; Bonnett and Furnham, 1991; Nwachukwu, 1995; Venkatapathy, 1984).

Tolerance of ambiguity involves perseverance in an uncertain situation (Lorsch & Morse, 1974; Westerberg *et al.*, 1997; Acedo & Jones, 2007). Individuals with little tolerance for ambiguity experience stress, react prematurely, and avoid ambiguous situations. On the other hand, people with high tolerance for ambiguity perceive ambiguous situations as challenging and interesting and neither deny nor distort their complexity and incongruity (Okhomina, 2010). Bearse (1982) argued that successful entrepreneurs better confront less-structured, more uncertain possibilities than unsuccessful ones, and they tolerate more ambiguity than conservative managers because they can make decisions with insufficient information, investing time and effort into a venture even when the outcome is uncertain (Cromie, 2000). Tolerance of ambiguity is closely associated with entrepreneurial intent and success (McMullen and Shepherd, 2006). Thus, tolerance of ambiguity is an important psychological trait of successful entrepreneurs.

The propensity to take risks involves a will for capturing high opportunity. People tend to exhibit either risk taking or risk avoidance when confronted with uncertainty (Gurol & Atsan, 2006). Empirical studies confirm that entrepreneurs are risk-takers although research shows no consensus on the extent of risk taking in an entrepreneur

(Altinay et al., 2012; Gurel et al., 2010). Empirical findings from other research also reveal that students with more propensity for risk-taking are more inclined to be entrepreneurs (Ang and Hong, 2000; Gurol and Atsan, 2006; Koh, 1996). Thus, risk-taking is the most frequently cited psychological trait of successful entrepreneurs (Hornaday & Aboud, 1971; Sexton & Bowman, 1985).

The need for achievement is the tendency to choose and persist at activities that hold moderate chances of success or a maximum opportunity for personal achievement (McClelland, 1961). Among all psychological traits, the need for achievement has the longest history (Koh, 1996; Shaver and Scott, 1991). Spangler (1992) identified the need for achievement as a determinant of various outcomes like career success, school grades, and firm performance. The need for achievement is normally higher in company founders (Begley and Boyd, 1987; Miner, Smith, and Bracker, 1989). Johnson (1990) reported that the need for achievement had a significant relationship with entrepreneurship.

H1: Psychological traits positively affect motivation to transfer learning.

2.1.2. Motivation to transfer learning

Motivation to transfer learning is the desire to use learned knowledge and skills on the job (Noe & Schmitt, 1986). It involves the drive or inspiration of an individual to reassign knowledge gained from formal or informal learning to a job-specific context (Egan, Yang, & Barlett, 2004). Kontoghiorghes (2001) identified environmental factors that affect the motivation to transfer learning: a motivating job, opportunity for advancement, and rewards for teamwork. Expecting to actually use new knowledge, growth opportunities, the importance of a job, and organization commitment were also related to motivation to transfer learning. Environmental factors like the utility of what is learned and peer/supervisor support much the variance in motivation to transfer learning (Seyler, Holton, Bates, Burnett, & Carvalho, 1998).

H2: Motivation to transfer learning positively affects training satisfaction.

2.1.3. Environment

The effect of environment in transfer of learning is an under-researched area. Review of extant research indicates that transfer opportunity requires the support of superiors and/or colleagues for an effective application of knowledge and skills to tasks. Smith and Offerman (1989) once underlined the connection between environment and staff as well as satisfaction with the content and method of training. Ruben (1995) showed the relationships among organizational members and training satisfaction. He concluded that as the training environment improves, training satisfaction also increases. Moreover, Holton (1996) showed that when an educational environment is similar to real situations, learning transfer is facilitated. Vermeulen (2002) noted that the time that elapsed between learning and working influence learning transfer less when training strongly paralleled the work situation. Thus, both internal and external environments must affect training satisfaction.

H3: There is a positive relationship between environment and training satisfaction.

2.1.4. Ability and Attitude

Extant literature on employee training suggests that individual ability is often related to how much is learned in training (Baldwin & Ford, 1988; Holton, 1995; 2000). Highly capable individuals can better complete assigned tasks, especially the more complex and difficult tasks, leading assigning high-ability trainees to more diverse tasks and supervisory work. Further, these trainees often actively seek out opportunities to perform tasks that maintain and improve performance levels (Ford, Quinones, Sego & Sorra, 1992). Ajzen and Fishbein (1981) defined learning attitude as the propensity to respond favorably or unfavorably to any given task. They found that learning attitude improves when what is learned is actually relevant. Social learning, which takes place through interaction with other people, tends to encourage people to behave arbitrarily in certain situations (Ajzen & Fishbein, 1981). Presumably, job attitude affects both motivation to learn during training and motivation to transfer learning. Individuals with a positive attitude toward their organizations are more likely to be engaged if the training benefits the organization, resulting in improved outcomes (Holton, 2005).

Using ability scales, like the opportunity to use learning, personal capacity to transfer learning, perceived content validity, and learning transfer design, Hutchins and Burke (2007) confirmed the positive relationship between cognitive ability and attitude. Colquitt *et al.* (2000) performed an extensive meta-analysis of training research published over 20 years. Their results showed a correlation between cognitive ability and job attitude that leads to satisfaction with training. Matlay (2005) and Politis (2005) also suggested that individual attitude for entrepreneurship affects satisfaction with training. In addition, Harris and Gibson (1998) proved that, in entrepreneurship training, attitude toward entrepreneurship itself had a positive relationship with satisfaction with training. Thus, cognitive ability must affect attitude, which leads to satisfaction with training.

H4: There is a positive relationship between ability and attitude.

H5: There is a positive relationship between attitude and satisfaction with training.

2.1.5. Satisfaction with training and transfer effect (transfer of learning)

Satisfaction with training focuses on how trainees respond to the level of the training curriculum. In assessing satisfaction with training, expectancy is used as a precursor of post-training satisfaction. Astin (1993) defined satisfaction with training as a subjective response to training experience. Thus, satisfaction is an important indicator defining training quality and service level. According to the Kirkpatrick's (1994) 4-stage assessment model, satisfaction with training relates to the amount of participation in training and trainee satisfaction with what they are learning. Furthermore, Benigno and Trentin (2000) defined training satisfaction as the subjective assessment of the variables relevant to overall curriculum, including

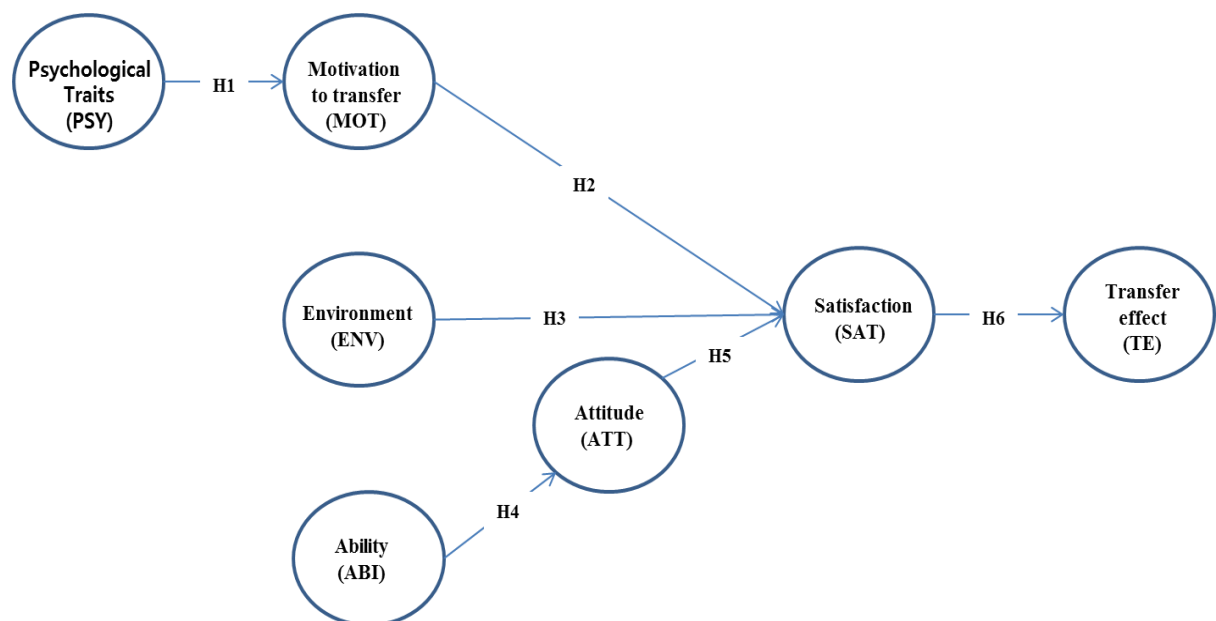
training environment, lecturers, and training assessment itself as well as satisfaction with the training program. Huang (2000) and Koohang (2004) concluded that the physical environment also affects training satisfaction.

Transfer effect involves changes in and/or development of trainees who received training and, as a result, the knowledge and skills acquired from training. Transfer effect corresponds to learning assessment (Kirkpatrick, 1994). Alliger et al. (1997) evaluated training outcomes by segmenting achievement levels based on trainee performance. Based on their categorization, the transfer effect is the ability to infer from the training and then perform correctly in the workplace (Roulier & Goldstein, 1993). Merriam and Merriam (2001) pointed out that effective learning can be achieved by absorbing and integrating training content into one's own knowledge. Therefore, if trainees themselves are satisfied with the content of training, satisfaction with training is an important part of transfer of learning or knowledge acquisition. Therefore, satisfaction with training should positively affect the transfer of learning.

H6: There is a positive relationship between satisfaction with training and transfer of learning.

Figure 1 presents a proposed research model that hypothesizes causal relationships between antecedents of training satisfaction (psychological traits, motivation to transfer, environment, ability, and attitude), satisfaction with training, and its consequence (transfer of learning).

Figure 1. Proposed research model



3. METHODOLOGY

3.1. Measurement development

All latent constructs in the proposed research model were assessed using multiple measurement items identified and modified through a review of previous training research (Acedo & Jones, 2007; Colquitt *et al.*, 2000; Harris & Gibson, 1998; Mueller & Thomas, 2001; Ruben, 1995; Westerberg *et al.*, 1997). Specifically, multiple measurement items for psychological traits (locus of control, need for achievement, tolerance of ambiguity, risk-taking propensity) were identified for analysis. Locus of control was measured using six items introduced by Rotter (1966) and verified by Begley and Boyd (1987) and Mueller and Thomas (2001). Need for achievement was measured using seven items adapted from Kahl's (1965) achievement values and validated by Altinay, Madanoglu, Daniele and Lashley (2012). Four items for tolerance for ambiguity were adapted from Altinay *et al.* (2012) and Teoh and Foo (1997). Finally, risk-taking propensity was measured using six items adapted from Hisrich and Peters (1991) and validated by Teoh and Foo (1997). In sum, a total of 23 items were used to measure psychological traits of restaurant entrepreneurs (See Table 2 in Results). All items were measured using a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree).

Multiple measurement items for motivation to transfer learning (Egan *et al.*, 2004; Machin and Fogerty, 1997; Noe, 1986; Seyler *et al.*, 1998), environment (Holton *et al.*, 1997; Seyler *et al.*, 1998), ability (Holton *et al.*, 2000), and attitude (Seyler *et al.*, 1998) were identified through a thorough literature review. Lastly, satisfaction was measured using four items (Huang, 2000; Koohang, 2004), and transfer effect was assessed using four items (Rouiller and Goldstein, 1993). All measurement items were slightly modified to fit the context of restaurant industry (See Table 3 in Results). A 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree) was adopted to assess measurement items for each latent construct. Finally, some demographic questions, such as age, gender, marital status, and the level of education, were included in the survey instrument to identify demographic profiles of respondents.

3.2. Data collection and demographic profile

The target subjects of this empirical research are restaurant entrepreneurs who took entrepreneurship training within the last six months. Data collection was conducted in Daejeon, a metropolitan area in South Korea. Four hundred thirty survey instruments were distributed to restaurant entrepreneurs by mail/telephone/email/on-site. A total of 300 responses were collected. Through thorough data screening, 29 incomplete responses were deleted from the data analysis, resulting in a 63% useable response rate. As shown in Table 1, of the 271 restaurant entrepreneurs, 57.2% of the respondents were male, and 42.8% were female. About 44.6% were in their 40s, 30.6% were in their 50s, 21.4% were in their 20s, and 3.3% were over 60. Most respondents were married (86.7%), and 55.4% of the respondents had high school diplomas while 44.6% were held 2-year or 4-year higher education degrees.

Table 1
Demographic Characteristics of Respondents

Characteristic	No.	%	Characteristic	No.	%
Gender			Marital status		
Male	155	57.2	Single	31	11.4
Female	116	42.8	Married	235	86.7
Age			Others	5	1.8
30's below	58	21.4	Education		
40's	121	44.6	High school	150	55.4
50's	83	30.6	Two/four year college/univ	121	44.6
60's over	9	3.3			

3.3. Data analysis

Prior to the structural equation modeling (SEM), an exploratory factor analysis (EFA) was performed to identify the underlying dimensions of psychological traits. Using varimax rotation, the latent root criterion of 1.0 and a factor loading of .40 were used for factor inclusion. Then, the items included within a factor were calculated to create a composite factor. Subsequently, these composite factors were treated as indicators to measure a construct of psychological traits. This procedure helped decrease multicollinearity or error variance correlations among indicators (Bollen, 1989). The results of EFA analysis determined significantly correlated factors, including four psychological traits (see Table 2). Composite means of identified factors were calculated for the SEM.

The proposed research model was then tested through the confirmatory factor analysis (CFA) and SEM, using AMOS 18.0. Following the two-step approach recommended by Anderson and Gerbing (1988), a CFA was first conducted to determine whether the measured variables reliably reflected the hypothesized latent constructs. In the next step, the structural model was estimated to examine the causal relationships among the latent constructs. Overall model fit measures were used to evaluate the structural model fit. The standardized path coefficients were then used to report the causal relationships among the constructs. In the SEM process, the proposed structural framework was tested using covariance matrices with maximum likelihood estimation.

Table 2
Confirmatory Factor Analysis of Psychological Traits

Psychological traits	Factor loading	Explained variance	Composite mean
Factor 1: Need for achievement		20.970	5.276
I have a strong desire to achieve my business goals	0.837		
I work hard to accomplish the goal I set up	0.829		
I do my best to succeed in business	0.829		
I try to win a competition	0.768		
I try to develop innovative ways of doing business	0.709		
I try actively to solve the intricate problems of my business	0.653		

I try to do the most of business for myself.	0.599		
Factor 2: Risk-taking propensity		17.753	4.309
I tend to support experimental research or development projects	0.796		
I tend to take an aggressive stance to gain some of the potential opportunities.	0.790		
I would invest in a big business with high risk rather than a small business with low risk.	0.779		
I would actively perform a wide range of business activities even in a new environment in order to achieve my goals.	0.744		
I would enter a new business area, if I could.	0.727		
I prefer to choose growth rather than stability	0.667		
Factor 3: Locus of control		14.445	5.153
I think a business depends on the ability of the CEO	0.721		
I believe in my capability rather than luck	0.707		
I blame myself If my business does not show performance.	0.689		
I believe that people get their desired outcome only when they work hard	0.677		
I think that my success has been achieved so far mostly from my efforts	0.639		
I think that I can do anything, if I try.	0.575		
Factor 4: Tolerance of ambiguity		11.881	4.880
I take time to solve difficult problems	0.808		
I am calm with even a high degree of uncertainty	0.789		
I try to accommodate uncertain situations positively	0.718		
I work hard to overcome challenges	0.532		
Total variance explained		65.049	

1=Strongly disagree, 7=Strongly agree

Kaiser-Meyer-Olkin measure of sampling adequacy = .926

Bartlett's test of sphericity $p < .001$

4. RESULTS

4.1. Results of measurement model

A CFA of the measurement model specifying the posited relationships of the observed indicators to the latent constructs, with all constructs allowed to inter-correlate freely, was tested. A total of 30 measurement items for seven latent constructs were tested for the overall measurement model, including four items of psychological traits, four items of motivation to transfer, four items of environment, five items of ability, five items of attitude, four items of satisfaction, and four items of learning transfer. The results of the initial estimation of the CFA did not show a well-fitting model, with an unacceptable Chi-square value and other fit indices. Since an item having a coefficient alpha below .30 is unacceptable, so it was be deleted from further analysis (Joreskog, 1993). Consequently, one indicator from satisfaction was removed before further analysis.

With the re-specified model having 29 observed indicators, a CFA was rerun to re-estimate the overall measurement model. The results indicated that the model had

improved and produced an acceptable level of fit indices as shown in Table 3 (Chi-square=577.204, $p<.001$, NFI=.915, NNFI=.961, CFI=.965, RMSEA=.048). The review of these goodness-of-fit indices for the overall measurement model also indicated a better fit between the model and the data. As shown in Table 4, the composite construct reliability values for all constructs ranging from .908 to .975 exceeded the minimum requirement of .60, suggested by Bagozzi and Yi (1988). This result provided evidence of internal consistency among multi measurement items for each construct. Values for the average variance extracted (AVE) were all greater than the recommended minimum standard of .50, ensuring convergent validity. These AVE values were greater than the squared correlations between two constructs, thus supporting discriminant validity (Fornell & Larcker, 1981). Thus, the hypothesized measurement model was reliable for testing the structural relationships among the constructs.

Table 3
Convergent Validity of Constructs

Factor	factor loading	t-value
<i>Psychological traits (PSY)</i>		
Locus of control	0.719	12.755
Tolerance of ambiguity	0.739	13.249
Need for achievement	0.809	14.990
Risk-taking propensity	0.624	10.640
<i>Motivation to transfer (MOT)</i>		
I expected the training would be beneficial to my business.	0.766	14.617
I believed the training would help me do my business successfully.	0.780	15.008
I planned to apply what I learned to my business	0.883	18.178
I wanted to learn something new for my business	0.906	18.991
<i>Environment (ENV)</i>		
People doing restaurant businesses encouraged me to apply the knowledge learned in the training to my business.	0.737	13.803
My business is capable to allow me to use skills acquired in training	0.864	17.530
The resources I need to use which I learned will be available to me.	0.786	15.144
My financial resources are available which will allow me to use skills acquired in training.	0.873	17.794
<i>Ability (ABI)</i>		
I have the ability to apply the knowledge learned from the training to my business.	0.843	16.914
I have the ability to understand the training thoroughly.	0.804	15.726
I have the ability to run my business successfully with the knowledge from the training.	0.855	17.295
I have the energy to run my business	0.853	17.242
I have time to apply the knowledge learned from the training to my business.	0.753	14.283
<i>Attitude (ATT)</i>		
It is practical information which can be applied directly to the business	0.838	16.742

The training is composed of a variety of useful information.	0.829	16.465
The training provides up-to-date information	0.864	17.570
The training addresses practical business issues.	0.827	16.410
The training is important to success in business	0.757	14.383

Satisfaction with Training (SAT)

I was satisfied with the contents of the training	0.836	16.538
Overall the training met my learning expectations.	0.745	13.974
Overall the training instructors met my expectations.	0.817	15.974

Transfer effect (TE) or Transfer of Learning

Overall the training helped me to start my restaurant business	0.869	17.816
The training helped me to understand food sanitation act	0.870	17.844
The training helped me to understand business taxes.	0.915	19.428
The training helped me to understand customer service	0.880	18.191

Note: fit indices: $\chi^2 = 577.204$, $df = 356$, $p = .000$, $\chi^2/DF = 1.621$, $NFI = .915$, $NNFI = .961$, $CFI = .965$, $RMSEA = .048$ All standardized factor loadings are significant at $p < 0.001$.

Table 4
Measurement correlations and squared correlations

Construct	PSY	MOT	ENV	ABI	ATT	SAT	TE
PSY	1.000						
MOT	0.586(.343)	1.000					
ENV	0.594(.353)	0.780(.608)	1.000				
ALI	0.538(.289)	0.746(.557)	0.791(.626)	1.000			
ATT	0.512(.262)	0.595(.354)	0.676(.457)	0.755(.570)	1.000		
SAT	0.556(.309)	0.645(.416)	0.697(.486)	0.725(.526)	0.785(.616)	1.000	
TE	0.486(.236)	0.609(.371)	0.693(.480)	0.724(.524)	0.747(.558)	0.795(.632)	1.000
Cronbach's	0.795	0.902	0.884	0.911	0.914	0.883	0.934
CR	0.911	0.943	0.928	0.954	0.955	0.908	0.975
AVE	0.720	0.806	0.764	0.807	0.810	0.767	0.906
Mean	4.904	4.950	4.801	4.748	4.733	4.779	4.739
S.D.	0.763	1.022	0.986	0.946	0.954	0.950	1.036

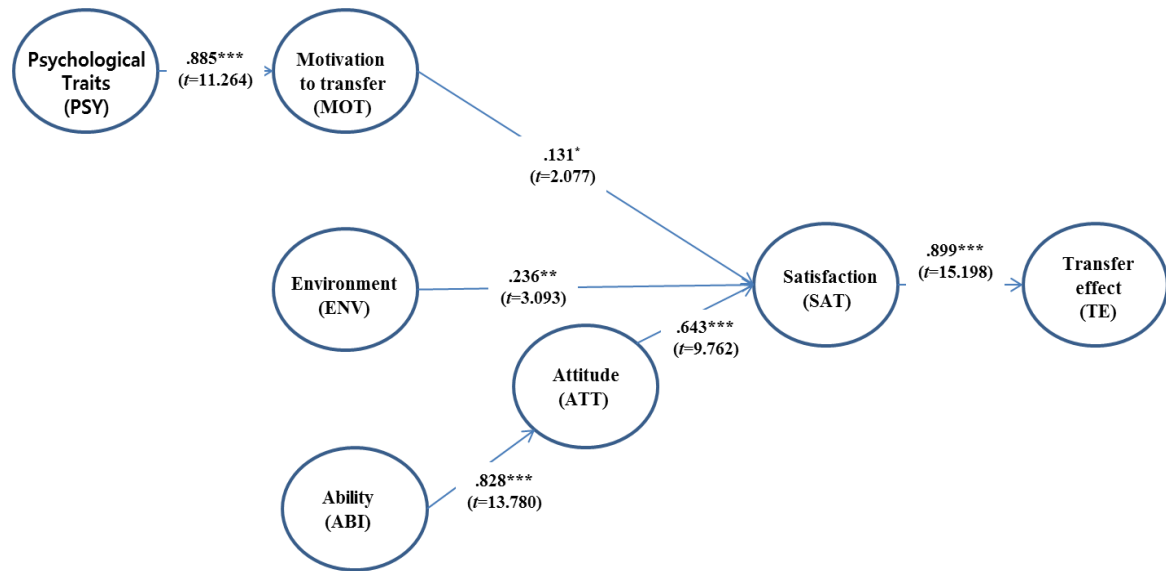
Note: Note: PSY = psychological traits; MOT = motivation to transfer; ENV = environment; ALI = ability; ATT = attitude; SAT = satisfaction; TE = transfer effect; CR = composite reliability; AVE = average variance extracted. All correlations are significant at $p < .01$. The values in the parenthesis indicate squared correlation among latent constructs.

4.2. Results of structural modeling

As shown in Figure 2, the goodness-of-fit indices (Chi-square=708.581, $p=.000$, $NFI=.896$, $NNFI=.941$, $CFI=.947$, $RMSEA=.059$; see Figure 2) indicate that the proposed structural model fits the data well. The analyses of causal relationships among constructs revealed that psychological traits ($\gamma=.885$, $t=11.264$) positively affect motivation to transfer, supporting H1. Both motivation to transfer ($\gamma=.131$, $t=2.077$) and environment ($\gamma=.236$, $t=3.093$) affected satisfaction positively, supporting both H2 and H3. Ability ($\gamma=.828$,

$t=13.780$) also affected attitude, supporting H4, which causes satisfaction with training ($\gamma=.643$, $t=9.762$), supporting H5. Furthermore, a positive causal relationship was found between satisfaction with training and transfer of learning ($\gamma=.899$, $t=15.198$), supporting H6. In sum, as shown in Table 5, all hypotheses in the proposed structural model were supported.

Figure 2. Results of Structural Equation Modeling Test



Note: fit indices: $\chi^2 = 708.581$, $p = .000$, $\chi^2/DF = 1.925$, NFI = .896, NNFI = .941, CFI = .947, RMSEA = .059

* $p < .05$, ** $p < .01$, *** $p < .001$

Two-tailed test: standardized coefficient (t-value)

Solid line: significant path

Table 5
Structural parameter estimates of the research model

				Standardized	S.E.	C.R.	p-value
H1	psychological traits	→	motivation to transfer	0.885	0.101	11.264	***
H2	motivation to transfer	→	satisfaction	0.131	0.072	2.077	0.038
H3	environment	→	satisfaction	0.236	0.077	3.093	0.002
H4	Ability	→	attitude	0.828	0.061	13.780	***
H5	Attitude	→	satisfaction	0.643	0.069	9.762	***
H6	Satisfaction	→	transfer effect	0.899	0.059	15.198	***

5. DISCUSSION

The results of this empirical research support previous research (e.g. Harris & Gibson, 1998; Hutchins & Burke, 2007; Merriam & Merriam, 2001) that psychological traits, environment, ability, and attitude have a positive relationship with training satisfaction and transfer of learning (transfer effect). Furthermore, this study suggests that high locus of control, strong desire for achievement, and tolerance of ambiguity generate high levels of satisfaction among trainees as well as successful

transfer of learning. Attitude mediated between ability and training satisfaction in transfer of learning.

Notably, the results of this empirical research indicate that psychological traits play an important role in the learning transfer system. Particularly, need for achievement strongly affects motivation to transfer learning. The relative importance of antecedents of satisfaction shows that ability is the most important indicator of satisfaction. That means training programs must focus on how to enhance hands-on skills and knowledge among trainees, which affects trainee attitude toward the training and satisfaction.

6. CONCLUSION

The research examined the effectiveness of learning transfer in restaurant entrepreneurship training using psychological traits, motivation to transfer, environment, ability, and training satisfaction. The proposed research model accurately predicted the role of attitude and training satisfaction in learning transfer. The research model introduced in this study could serve as a framework for researchers in organizational behaviors inquiring into systematic approaches to effective entrepreneurship training in the restaurant industry.

The sample for this study was limited to restaurant entrepreneurs in a particular metropolitan area in Korea. In future research, therefore, the sample should be expanded, thus increasing the generalizability of the findings in this research. Also, applying the research model introduced in this study to the other sectors of hospitality industry could be meaningful.

REFERENCES

- Altinay, L., Madanoglu, M., Daniele, R., & Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. *International Journal of Hospitality Management*, 31(2), 489-499.
- Acedo, F. J. & Jones, M. V. (2007). Speed of internationalization and entrepreneurial cognition: Insights and a comparison between international new ventures, exporters and domestic firms. *Journal of World Business*, 42, 236-252.
- Ahmed, S. U. (1985). nAch, risk-taking propensity, locus of control and entrepreneurship. *Personality and Individual differences*, 6(6), 781-782.
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, New Jersey, Prentice-Hall.
- Alliger, G. M., Tannenbaum, S. I., Bennett, W., Jr., Traver, H., & Shotland, A. (1997). A meta-analysis of the relations among training criteria. *Personnel Psychology*, 50, 341-358.
- Altinay, L., Madanoglu, M., Daniele, R., & Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. *International Journal of Hospitality Management*, 31, 489-499.
- Ang, S. H. & Hong, D. G. P. (2000). Entrepreneurial spirit among East Asian Chinese. *Thunderbird International Business Review*, 42(3), 285-309.
- Astin, A. W. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. New York: American Council on Education/Macmillan.
- _____ (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Baldwin, T. T. & Ford, J. K. (1988). Transfer of training: a review and directions for future research. *Personnel Psychology*, 41, 63-105.
- Bearse, P. J. (1982). A study of entrepreneurship by region and SME size. In K Vesper (ed.). *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College pp. 78-112.
- Becherer, R. & Maurer, J. (1999). The proactive personality disposition and entrepreneurial behavior among small company presidents. *Journal of Small Business Management*, 37, 28-37.
- Begley, T. M. & Boyd, D. P. (1987). Psychological characteristics of associated with performance in entrepreneurial firms and small businesses. *Journal of Business Venturing*, 2, 79-83.
- Benigno V. & Trentin, G. (2000). The evaluation of online courses. *International Journal of Computer Assisted Learning*, 16(3), 259-270.
- Block, Z. & Stumft, S. A. (1992). Entrepreneurship education research: Experience and challenge. In D. J. Sexton & J. D. Kasarda. (Eds.), *The state of the art of entrepreneurship* (pp. 17-45), Boston: PWS-Kent Publishing.
- Bollen, K. A. (1989). *Structural equation with latent variables*. New York: Wiley.
- Bonnett, C. & Furnham, A. (1991). Who wants to be an entrepreneur? A study of adolescents interested in a young enterprise scheme. *Journal of Economic Psychology*, 12(3), 465-478.

- Boone, C., DeBrabander, B. & Van Witteloostuijn, A. (1996). CEO locus of control and small firm performance: An integrative framework and empirical test. *Journal of Management Studies*, 33, 667-699.
- Broad, M. L. & Newstrom, J. W. (1992). *Transfer of training: Action packed strategies to ensure high payoff from training investments*. Reading, MA: Addison-Wesley.
- Caffarella, R. S. (2002). *Planning programs for adult learners: A practical guide for educators, trainers, and staff developers* (2nd ed.). San Francisco: Jossey-Bass.
- Chandler, G. N. & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3), 223-236.
- Chen, C., Greene, P. & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers. *Journal of Business Venturing*, 13, 295-316.
- Colquitt, J. A., LePine, J. A. & Noe, R. A. (2000). Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, 85(5), 678-707.
- Cromie, S. (2000). Assessing entrepreneurial intentions: some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*, 9(1), 7-30.
- Díaz-García, M. C. & Jiménez-Moreno, J. (2010). Entrepreneurial intention: the role of gender. *The International Entrepreneurship and Management Journal*, 6(3), 261-283.
- Egan, T. M., Yang, B. & Bartlett, K. R. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly*, 15(3), 279-301.
- Ensley, M. D., Garland, J. W. & Carland, J. C. (2000). Investigating the existence of the lead entrepreneur. *Journal of Small Business Management*, October, 32-45.
- Ford, J. K., Quinones, M. A., Sego, D. J. & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. *Personnel Psychology*, 45, 511-27.
- Ford, J. K. & Weissbein, D. A. (1997). Transfer of training: An updated review and analysis. *Performance Improvement Quarterly*, 10(2), 22-41.
- Goldstein, I.L. (1993). *Training in organizations* (3rd Ed.). Pacific Grove, CA: Brooks/Cole.
- Gupta, V. & Fernandez, C. (2009). Cross-cultural similarities and differences in characteristics attributed to entrepreneurs. *Journal of Leadership & Organizational Studies*, 15(3), 304-318.
- Gurol, Y. & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: some insights for entrepreneurship education and training in Turkey. *Education and Training* 48(1), 25-38.
- Gurel, E., Altinay, L. & Daniele, R. (2010). Tourism students' entrepreneurial intentions. *Annals of Tourism Research*, 37(3), 646-669.

- Harris, M. L. & Gibson, S. G. (1998). Examining the entrepreneurial attitudes of US business students. *Education + Training*, 50(7), 568 – 581.
- Hisrich, R. D. & Peters, M. P. (1991). *Entrepreneurship: Starting, Developing and Managing a New Enterprise*. Homewood, IL: Irwin.
- Holton, E. F. III (1995). In search of an interactive model for HRD evaluation, *Human Resource Development 1995 Conference Proceedings*.
- _____ (1996). The flawed four-level evaluation model. *Human Resource Development Quarterly*, 7, 5-21.
- _____, Bates, R., Seyler, D. & Carvalho, M. A. (1997). Construct validation of a transfer climate instrument. *Human Resource Development Quarterly*, 8, 95-113.
- _____, Bates, R. A. & Ruona, W. E. (2000). Development of a Generalized Generalized Learning Transfer System Inventory. *Human Resource Development Quarterly*, 11(4), 333-360.
- Holton, E. F. III (2005). Holton's Evaluation Model: New Evidence and Construct Elaborations. *Advances in Developing Human Resources*, 7(1), 37-54.
- Hornaday, J. A. & Aboud, J. (1971). Characteristics of Successful entrepreneurs. *Personal Psychology*, 24, 141-153.
- Huang, H. M. (2000). Instructional technologies facilitating online courses. *Educational Technology*, 40(4), 41-46.
- Hull, D., J. Bosley & Udell, G. (1980). Renewing the hunt for the heffalump: Identifying potential entrepreneurs by personality characteristics. *Journal of Small Business Management*, 18, 11-18.
- Hutchins, H. M. & Burke, L. A. (2007). Identifying trainers' knowledge of training transfer research findings- closing the gap between research and practice. *International Journal of Training and Development*, 11(4), 236-264.
- Johnson, B. R. (1990). Toward a multidimensional model of entrepreneurship: the case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice*, 14, 39-54.
- Kirkpatrick, D. L. (1976). Evaluation of training. In R. L. Craig (Ed.), *Training and development handbook: A guide to human resource development*. New York: McGraw Hill.
- Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: a study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11(3), 12-25.
- Kontoghiorghes, C. (2001). A holistic approach towards motivation to learn. *Performance Improvement Quarterly*, 14(4), 233-246.
- Koohang, A. (2004). A study of users' perceptions toward e-learning courseware usability. *International Journal on E-Learning*, 3 (2), 10-17.
- Li, C., Miao-miao, Y. & Ying, Z. (2009). Empirical study on the effects of entrepreneurial traits on entrepreneurial orientation. *2008 International Conference on Management Science & Engineering*, September, 1386-1391.
- Lorsch, J. W. & Morse, J. J. (1974). *Organizations and their Members: A Contingency Approach*. Harper & Row, New York.
- McClelland, D. C. (1961). *The achieving society*. Princeton, NJ: Van Nostrand .

- Machin, M. A. & Fogarty, G. J. (1997). The effects of self-efficacy, motivation to transfer, and situational constraints on transfer intentions and transfer of training. *Performance Improvement Quarterly*, 10(2), 98-115.
- McMullen, J. S. & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31(1), 132-152.
- Matlay, H. (2005). Researching entrepreneurship and education: What is entrepreneurship and does it matter? *Education Training*, 47(8), 665-676.
- Merriam, S. & Merriam, S. B. (2001). *The new update on adult learning theory*. San Francisco: Jossey-Bass.
- Milheim, W. D. (1994). A comprehensive model for the transfer of training. *Performance Improvement Quarterly*, 7, 95-114.
- Miner, J. B., Smith, N. K. & Bracker, J. S. (1989). Role of entrepreneurial task motivation in the growth of technologically innovative firms. *Journal of Applied Psychology*, 74(4), 554-560.
- Mueller, S. L. & Thomas, A. S. (2001). Culture and entrepreneurial potential: a nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16, 51-55.
- Newstrom, J. W. (1984). A role-taker time differentiation integration of transfer strategies. Paper presented at the meeting of the American Psychological Association, Toronto: Ontario.
- Nga, H. K. J. & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics*, 95, 259-260.
- Noe, R. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. *Academy of Management Review*, 11, 736-749.
- Noe, R. A. & Schmitt, N. (1986). The influence of trainee attitudes on training effectiveness: Test of a model. *Personnel Psychology*, 39, 497-523.
- Noe, R. A. & Colquitt, J. A. (2002). Planning for impact: principles of training effectiveness. In Kraiger K. (eds), *Creating Implementing and Managing Effective Training and Development*(pp.10-52). San Francisco: Jossey-Bass.
- Nwachuckwu, O. C. (1995). CEO locus of control, strategic planning, differentiation, and small business performance: A test of path analytic model. *Journal of Applied Business Research*, 11, 9-14.
- Okhomina, D. (2010). Entrepreneurial orientation and psychological traits: the moderating influence of supportive environment. *Journal of Behavioral Studies in Business*, 2, 1-16.
- Ottoson, J. M. (1995). Reclaiming the concept of application: from social to technological process and back again. *Adult Education Quarterly*, 41(1), 17-30.
- Politis, D. (2005). The process of entrepreneurial learning: A conceptual framework. *Entrepreneurship Theory & Practice*, 29(4), 399-424
- Robinson, D. G. & Robinson, J. C. (1989). *Training for Impact*. Jossey-Bass, Inc.
- Rotter, J. B. (1966). Generalised expectancies for internal versus external control and reinforcement. *Psychological Monographs*, 80(1), 1-28.

- Rouiller, J. Z. & Goldstein, I. L. (1993). The relationship between organizational transfer climate and positive transfer of training. *Human Resource Development Quarterly*, 4(4), 377–390
- Ruben, B. D. (1995). *Quality higher Education*. New Brunswick: Transaction Publisher.
- Sexton, D. L. & Bowman, N. (1985). The entrepreneur: a capable executive and more. *Journal of Business Venturing*, 1, 129 - 140.
- Seyler, D. L., Holton, E. F. III, Bates, R., Burnett, M. F. & Carvalho, M. A. (1998). Factors affecting motivation to transfer training. *International Journal of Training and Development*, 2(1), 2–16.
- Shaver, K. G. & Scott, L. R. (1991). Person, process, choice: the psychology of new venture creation. *Entrepreneurship Theory and Practice* 16(2), 23–45.
- Smith, D. H. & Offerman, M. J. (1989). The management of adult and continuing education. In S. B. Merriam, & P. M. Cunningham (Eds.), *Handbook of adult and continuing education* (pp. 246-259). San Francisco, CA: Jossey-Bass.
- Spangler, W. D. (1992). Validity of questionnaire and TAT measures of need for achievement: two meta-analyses. *Psychological Bulletin*, 112(1), 140–154.
- Taylor, M. C. (2000). Transfer of learning in workplace literacy programs, *Adult Basic Education*, 10(1), 3-20.
- Tannenbaum, S. I. & Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology*, 43, 399–441.
- Teoh, H. Y. & Foo, S. L. (1997). Moderating effects of tolerance for ambiguity and risktaking propensity on the role conflict-perceived performance relationship: Evidence from Singaporean entrepreneurs. *Journal of business Venturing*, 12(1), 67-81.
- USDA GAIN Report (2010). Korea food service–hotel restaurant institutional biennial sector brief 2010. USDA Foreign Agricultural Service.
- Venkatapathy, R. (1984). Locus of control among entrepreneurs: a review. *Psychological Studies*, 29(1), 97–100.
- Vermeulem, R. (2002). Narrowing the transfer gap: the advantages of “as if” situations in training. *Journal of European Industrial Training*, 26(8), 366-374.
- Westerberg, M., Singh, J. & Hackner, E. (1997). Does the CEO matter? An empirical study of small Swedish firms operating in turbulent environments. *Scandinavian Journal of Management*, 13(3), 251–270.
- Wexley, K. R. & Latham, G. P. (1991). *Developing and Training Human Resources In Organizations*, Harper Collins, New York.