East versus West: The Relationships among Life Experiences-Learning, Trait Resilience, Self-efficacy, and Sense of Coherence

Ming-hui Li
St. John’s University
lim@stjohns.edu

Xiaojun Chen
St. John’s University
chenx@stjohns.edu

Introduction

Academic learning has been extensively studied and learning outcomes (i.e., academic performance) across countries have been studied (e.g., the TIMSS and PISA international data files). Life experience-learning, on the contrary, received relatively little attention from researchers and educational professionals. The purpose of the present study was to explore the outcome of life experience-learning across countries, in a globalized world. Learning from life experiences is a natural part of human life. The experiences of person-environment interactions play a vital role in helping individuals grow, expand perspectives, and promote mental health. Researchers have explored outcomes of the person-environment interactions. For example, Abramson and colleagues (2014) advocated that successful adaptation to stressful situations help develop resilience (the ability to bounce from stressful situations). Thus, learning from life experiences may contribute to the development of one’s resilience-related traits such as trait resilience, self-efficacy, and sense of coherence. The present study tested the hypothesis that life experience-learning could predict trait resilience, self-efficacy, and sense of coherence. Since the world has become more globalized, the relationships among the four variables in this study were hypothesized to be similar across U.S. and Chinese college students.

The Development of Resilience

Early researchers of resilience attempted to identify invincible children and describe their qualities. Later researchers have conceptualized resilience as a process in which many resilience factors contribute to support individuals to adapt to life challenges.
The American Psychological Association (2015) considered the following factors as common resilience factors: (1) caring and supportive relationships, (2) emotional and behavioral self-regulation, (3) good communication and problem-solving skills, (4) a positive sense of self, and (6) the ability to make plans and accomplish them. Although many researchers focused on exploring resilience factors for different types of life challenge, few researchers have discussed how resilience is developed. Seeing resilience from a developmental perspective, Masten (2001) proposed that resilience is developed in the process of successful adaption to developmentally appropriate challenges.

**Resilience in the Context**

Resilience has been found in people of different cultural backgrounds. For example, Alessandri and colleagues (2014) studied resilience in Italy, Poland, Spain, and the United States, based on the Resilient-undercontrolled-overcontrolled (RUO) model. The RUO model suggests that some people are resilient, other are undercontrolled, and still others are overcontrolled. Alessandri and colleagues found that the RUO model can be applied to all four countries. This finding indicated that resilience appears in individuals of different cultural backgrounds. However, qualities of resilience can be culturally dependent (Nishi, et al., 2013). Nishi and colleagues compared the Resilience Scale, an internationally popular measure of trait resilience with the Tachikawa Resilience Scale, a resilience scale that covers Japanese cultural factors. They concluded that a resilience measure that considers local culture is more appropriate for Japanese people than the global measurement. In a study focusing on resilience in Mexican American college students, Morgan Consoli and Lliamas (2013) found that some elements of conventional Mexican American traditional culture could predict resilience. These elements include familismo, respeto, religiosidad, and traditional gender roles. Similarly; DeCou, Skewes, and López (2013) reported that traditional practices and subsistence activities are among the resilience factors against suicide among college students from rural Alaska. These studies indicated that resilience can be culturally dependent.

**The Globalized World as the Context**

One of the main issues related to the globalization is the debate over whether it is a modern trend (e.g., Giddens, 1991; Kim & Bhawuk, 2008; Wallerstein,1979; Sklair, 1999)
or an old event with the origin from an ancient time (Held, 1999; Roberston, 1992; Waters, 2000). Another disagreement is the definition of the term globalization. There are various theories and approaches in this field (e.g., Ahmadi, 2002; Baylis, Smith & Owens, 2005; Fukuyama, 1992; Friedman, 2006; Huntington, 1996; Hobsbawm, 1990; Özegin & Arioz, 2014), making it hard to form a generally agreed-on definition (Mahammadbakhsh, Fathiazar, Hobbi & Ghodratpour, 2012). Nevertheless, the direction of cultural influence in the process of globalization seems to be unanimous among theorists of globalization. For example, as early as 1990's, Giddens (1991) proposed that Western culture seems to be more influential than other cultures in the process of cultural exchange. Ritzer (2002) suggested that the world would become more McDonaldized, in other words, Americanized in the course of time. Rosenau (2003) believed that new technologies play a role in the process of globalization. Given that new technologies are more often developed in Western countries and used by people around the world, the process of choosing to use the new technologies can be considered as accepting the influences from the West. Although Huntington (1996) predicted that resistances and conflicts might occur as cultures interact with each other, he proposed that the resistances mainly would be from the side of the non-Western cultures as they encounter Western influences.

**Learning to Become Resilient in the Globalized World**

As the world becomes more globalized, some researchers (Doutsche, 1966; Hobsbawm, 1990) predicted that there will be eventually a unified global culture. Others such as Huntington (1996) predicted cultural resistance and cultural conflicts. Still others (Özegin & Arioz, 2014; Pieterse, 1994) suggested that local cultures and the global culture may integrate together to form hybrid cultures. For many people, especially those who live in developing countries, going through the process of globalization is not an easy task. There is a great demand for adaptation. Nevertheless, experiences of successful adaptation help people develop resilience (Masten, 2001). Since experiential learning is the key to adaptation (Kolb, 1984) and experiences of adaptation help shape resilience (Masten, 2001), experiential learning may contribute to the development of resilience.

There are few, if any, studies that explored the relationship between life experience-learning and resilience in the globalized world. The present study addressed
this issue. If this relationship is found to be significant across cultures, we may help people enhance their resilience by promoting the ability to learn from life experiences, regardless of their cultural backgrounds.

Hypotheses

This study tested the hypothesis that life experience-learning can predict trait resilience, self-efficacy, and sense of coherence (See Figures 1 and 2).

Because the resilience process can involve different resilience factors, this study focused on three of them: trait resilience, self-efficacy, and sense of coherence. All the three have been proved by studies to be closely related to successful adaptation to difficult life experiences. Therefore, in this study, we treated them as indicators of resilience. In addition, since the world has become more globalized, the relationships among the four variables in this study were hypothesized to be similar across U.S. and Chinese college students. Results of the study may provide information to enhance resilience in people of different cultural backgrounds.

Figure 1 (U.S. Sample). The Path Model Involving Life Experience-Learning Predicting Trait Resilience, Self-Efficacy and Sense of Coherence

Note 1: lifeexperiencelearning = life experience-learning, tot_res = trait resilience, tot_eff = self-efficacy, tot_soc = sense of coherence

Note 2: e1, e2, e3 are error terms in Structural Equation Modeling
Methods

There were two samples for this study. The U.S. sample contained 264 college students enrolled in a university located in the East coast of the U.S. The Chinese sample included 311 college students enrolled in a university in the South coast of China. The rationale for using samples from the U.S. and China was that these two countries represent Western and Eastern cultures, respectively. The participants’ tendencies to learn from life experiences and levels of trait resilience, self-efficacy, and sense of coherence were evaluated by the Life Experience-Learning Scale (Li & Chen, 2015), the Resilience Scale (Wagnild & Young, 1993), the General Efficacy Scale (Schwarzer & Jerusalem, 1995), and the Orientation to Life Questionnaire (Antonovsky, 1987), respectively. All the measures were translated into Chinese for the Chinese participants, following a translate-and-back translate procedure.

The Life Experience-Learning Scale (Li & Chen, 2015) is a 7-point scale for measuring individuals’ tendency of learning from life experiences. It has 6 items developed based on Skinner’s (1938) operant learning, Piaget’s (1970) association and accommodation learning, Bandura’s (1977) vicarious learning, and Jacobson and
Ruddy's (2004) 5-question experiential learning model. Li and Chen (2015) have demonstrated construct validity of the LELS and reported adequate reliability for this scale (the coefficient alpha = .76 for a U.S. sample, and .79 for a Chinese sample).

The Sense of Coherence Scale (SOCS: Antonovsky, 1987) has good reliability and validity. Cronbach's alpha of this scale ranged between .86 and .95 (Antonovsky, 1993). The convergent validity of the SOCS has been demonstrated by Smith and Meyers in 1996.

The Resilience Scale (RS: Wagnild & Young, 1993) was reported by its developers to have adequate reliability (Cronbach's alpha ranging from .76 to .91) and validity (concurrent validity).

The General Self-efficacy Scale (GSS: Schwarzer and Jerusalem, 1995) has adequate validity and reliability. In 2003, the Free University of Berlin reported convergent validity and reliability (Cronbach’s alpha ranged from .76 to .90) of the GSS.

Data were analyzed by Structural Equation Model using the AMOS 17.0 statistical package. The criteria for determining the level of model-data fit for this study included (1) root mean squared error of approximation (RMSEA) < .08, (2) a standardized root mean square residual (SRMR) < .08, (3) a Bentler-Bonett normed fit index (NFI) ≥ .95 (4) a comparative fit index (CFI) ≥ .90, and (5) an insignificant chi-squared ($\chi^2$) test at the $p < .05$ level. The criteria were suggested by researchers such like Bentler and Bonett (1980), Kline (2005), Loehlin (1998), Hu and Bentler (1999), MacCallum, Browne, and Sugawara (1996), and Weston & Gore (2006).

**Results**

Procedures of multiple regression were applied to analyze data. Results supported the hypothesis that life experience-learning could predict trait resilience, self-efficacy, and sense of coherence in both the U.S. and Chinese samples. The results indicated that the ability to learn from life experiences could influence individuals' resilience-related traits, regardless of their cultural backgrounds. In order to further explore the relationship among life experience-learning, trait resilience, self-efficacy, and sense of coherence, we applied Structural Equation Modeling to test the hypothesized path models (see Figures 1 and 2) that involves all the four variables. The model for the US sample is presented in figure 1 and for the Chinese sample is in figure 2. The models were evaluated in AMOS 17.0 by
applying the maximum likelihood estimation method. Table 1 presents model chi-square and fit indices for the model for each sample.

Although all the paths in the model for both the U.S. and Chinese samples were significant, the model fitted the data poorly for both the samples, indicating that the model needed to be improved. Modification indices provided information for revising the model. The information leads to adding a path linking self-efficacy to resilience (self-efficacy $\rightarrow$ resilience) and a path linking resilience to sense of coherence (resilience $\rightarrow$ sense of coherence) for both the U.S. and Chinese samples. The suggestion of adding these two paths made sense because self-efficacy has been reported to be closely related to trait resilience (Li, Eschenauer & Yang, 2013) and trait resilience has been reported to be closely associated with sense of coherence (Streb, Häller & Michael, 2014). Consequently, these two paths were added to the model for both samples. The revised models, presented in figures 3 (US sample) and 4 (Chinese sample), were evaluated in AMOS 17.0. Results showed that the revised models fitted the data well for both samples. Table 1 presents model fit indices for the revised models.

Table 1. Fit Indices of Models

<table>
<thead>
<tr>
<th>Model</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Hypothesized Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. (Figure 1)</td>
<td>.390</td>
<td>.385</td>
<td>.348</td>
<td>.17</td>
</tr>
<tr>
<td>China (Figure 2)</td>
<td>.437</td>
<td>.462</td>
<td>.358</td>
<td>.21</td>
</tr>
<tr>
<td>Revised Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. (Figure 3)</td>
<td>.991</td>
<td>1.0</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>China (Figure 4)</td>
<td>.999</td>
<td>1.0</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>
Figure 3 (U.S. Sample). The Revised Path Model Involving Life Experience-Learning Predicting Trait Resilience, Self-Efficacy and Sense of Coherence

See notes for Figure 1.

Figure 4 (Chinese Sample). The Revised Path Model Involving Life Experience-Learning Predicting Trait Resilience, Self-Efficacy and Sense of Coherence

See notes for Figure 1.

**Conclusion**

Results of the two studies supported the hypotheses that the Life Experience-Learning Scale has adequate validity and reliability and that life experience-learning could predict trait resilience, self-efficacy, and sense of coherence in both the U.S. and Chinese
samples. The results indicated that the ability to learn from life experiences could influence individuals' resilience-related traits, regardless of their cultural backgrounds. The world is becoming globalized and, in the process of globalization, the direction of cultural influence is more from the West to the East than the opposite direction (Ritzer, 2002); therefore, the results of this study seem to imply that (1) Western theories about life experiences-learning and its contribution to the development of resilience-related traits can be applied to the East and (2) students in both samples can benefit from enhancing life experience-learning. However, the influence of local culture cannot be neglected. Approaches to enhancing life experience-learning should take into consideration cultural factors.

The significance of this research project includes (1) it is perhaps the first research that tested the relationship between life experience-learning and resilience factors across the East and West cultures and (2) results of the study project suggested that life experience-learning can be an important component of resilience promotion programs, regardless of the clients' cultural backgrounds (Eastern or Western culture).

References


