The Relationships among the English Learning Motivation, English Learning Barriers and English Learning Behavior of University (Athlete) Students: Social Support as Moderator

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\textbf{ABSTRACT} The purpose of the research was to verify the relationships of the English learning motivation, English learning barriers, English learning behavior and the moderating effect of social support. Seven hundred (700) constructed English learning motivation, barrier and behavior questionnaires were distributed to 14 universities with 649 valid responses. PLS-SEM were used to verify the relationship among them. The results found English learning motivation decreases English learning barriers and increases English learning behavior; English learning barriers decreases English learning behavior; and as for the moderating effect, the study found social support only exacerbate the impact of English learning motivation on learning barriers, but have no significant moderating effect on both motivation and barrier to behavior. Based on the results, appropriate changes are suggested in teaching methods, teaching environment, teaching strategies and learning strategies to improve college athletes’ English proficiency.

\textbf{INTRODUCTION}

Driven by globalization, language ability, English in particular, has become one of the dominant professional skills that companies across the world is looking at when recruiting new employees (Chang 2011; Ipek1 and Yesilbursa 2017). In response to this global trend, Ministry of Education (MOE) in Taiwan has officially introduced English learning to elementary school and junior high school curriculum in 2001. Since the policy was put into practice, students start their English learning journey from their third grade onwards to improve their English communication ability (Shen 2005). Even though the officials tried hard to improve people’s English proficiency, still, people are afraid to speak in English. In a long round, the lack of English proficiency may affect the globalization of the whole nation. Therefore, the enhancement of people’s English proficiency is important for non-English spoken nations. Hence the identification of factors that may affect people’s English learning efficiency is crucial to English education. In this study, the researchers examined the factors which might have direct or indirect impact of English learning especially focusing on college athlete students. Several factors will be discussed in the following and the research infrastructure will be drawn based on the inferences.

\textbf{Learning Motivation}

Learning motivation refers to an internal driving force that changes a learner’s attitude and habit, and directs the learner to consistently move to a specific direction (Liu and Li 2018; Schunk 2003). Without strong motivation, a learner may quit at any time (Liu and Thompson 2018; Rifai...
Literature suggests that the relationship among learning motivation, learning behavior, and learning achievement has been discussed a lot, and the majority of research supports the statement that a learner’s learning motivation is believed to have a tremendous impact on his/her learning behavior and achievement (Hengsadeekul et al. 2014; Wong 2018). As for college student athletes, previous studies showed that there is a huge gap in English language proficiency between university student athletes and non-student athletes, and student athletes are far behind non-athlete ones (Kai 2012). Basically, student athletes are behind in English proficiency due to lack of learning resources, self-confidence, learning motivation and proper learning methods. The lack of learning motivation is the biggest barrier. As a result, the research explores the impact of English learning motivation on learning behaviors.

Learning Obstacles

Obstacles are inevitable in language learning. Anything that can hinder the learning process and reduce the learning motivation is considered learning obstacles (Jackson and Dunn 1988). Personal negative attitude towards learning is one of them (Chang 2011). Chien (2012) discovered that less motivated English learners were less likely to face and tackle learning obstacles. On the contrary, when facing learning obstacles, learners who have developed interests in learning English were more likely to be motivated and continued their learning process. Previous studies also reported that English learning motivation and learning obstacles are negatively correlated, and higher levels of motivation result in better achievement (Hsieh 2015). Therefore, the current research attempts to further understand how English learning motivation affects the learning obstacles.

Learning Behaviors

Any behavior developed through a constant training and maintained for a longer period of time can be described as learning behavior (Hung 2006). According to Shi (2009), some student athletes have basic command in spoken English, but are not quite able to clearly express themselves clearly because they are not confident enough, and are afraid of making mistakes and being laughed at. Besides, English is not the first language in Taiwan; therefore, English learners only passively accept, interpret and finally attempt to respond in English (Chen 2005; Zhang 2007). When developing learning behaviors, language learners face learning barriers (Jackson and Dunn 1988). Chang (2011) indicated that students with academic achievement are more likely to develop active and positive learning behavior as compared to those who have poor academic performance. Moreover, students less successful in school performance tend to face more learning obstacles. Literature suggests a significant negative relationship between learning behavior and learning barrier. Hence, the present research also aims at exploring the relationship between language barriers and learning behaviors among college student athletes.

Social Support

Researchers have shown great interest in the phenomena of social support, particularly in the context of social connection. Social support is typically thought to be emotional and instrumental, and can be offered through intimate relationship, social networks and professionals (Shan 1989). Liu et al. (2015) stated that social supports offered to student athletes are mainly from family, teammates, coaches, friends and teachers. Social support has been studied in many other disciplines, such as elderly nursing homes, medical ethics, educational psychology, business administration, human resources, and counseling (Ku et al. 2010). In recent years, social support is also found in athletics researches, and the majority of studies focus on learning adaptability, perceived stress, learning fatigue (Chung 2012; Lo 2012), athletic identity (Chang et al. 2015), and athlete career development (Hung 2012). Literature evidence suggested that support from family, coaches, teammates, and social instrument has significant positive effects on career development (Chang et al. 2015). Moreover, social support works as a driving force which keeps student athletes continuing the sports of their choice (Fawcett et al. 2009). In addition, research has shown that social support is a predictor of the learning adaptability, and peer support creates more predictability. Based on previous studies, the research explores the moderating effects of social support on the relationship among learning motivation, learning behaviors, and learning barriers of student athletes learning English.
In many cases, professional athletes have limited career in terms of longevity. Job insecurity, injuries, illness, accidents may happen to athletes any time and they can lose all abilities. Becoming a professional athlete requires sustained commitment and rigorous training, and constant pursuit of exceptional athletic performance. However, student athletes sometimes have trouble managing their commitment to education because of their total commitment to the sport of their choice (Hsiao 2006). Besides, English is the most common language people speak in international games, and thus has become the second language the majority of student athletes choose to study. As a result, the research primarily intends to verify the relationship among English learning motivation, learning behaviors, and learning barriers, and further analyzes the moderating effects of social support on the relationship.

Based on previous inferences, relationships among English learning motivation, barriers, behaviors and social support were established and the hypotheses are listed in the following:

**Hypotheses**

**H1:** Students’ English learning motivation has a negative impact on their learning barriers.

**H2:** Students’ English learning motivation has a positive impact on their learning behaviors.

**H3:** Students’ English learning barriers have a negative impact on their learning behavior.

**H4:** Social support has a moderating effect on the relationship between English learning motivation and English learning barriers.

**H5:** Social support has a moderating effect on the relationship between English learning barriers and English learning behaviors.

**H6:** Social support has a moderating effect on the relationship between English learning motivation and English learning behaviors.

Figure 1 presents the relationship among them.

**METHODOLOGY**

**Data Collection**

Subjects were student athletes selected from 14 different universities, all of whom are learning programs related to physical education. There were total 700 questionnaires, and 50
questionnaires were distributed to each university. The researchers contacted individual faculty of each university prior to questionnaire distribution. The researchers explained the purpose of the study, and with consent of university faculty the researchers distributed questionnaires. A total of 649 questionnaires were collected for data analysis, with the returning rate of 92.7 percent.

Subjects were comprised of 31.6 percent (N=205) of freshmen, 26.7 percent (N=173) of sophomores, 24.2 percent (N=157) of juniors, and 17.6 percent (N=114) of seniors. There were 413 (63.6%) male subjects and 236 (36.4%) female ones. Three hundred and twelve (312) (48.1%) subjects were categorized as professional student athletes, and 337 (51.9%) subjects were amateur athletes. When being asked about recognition on any competition, 176 (27.1%) subjects reported no records at all, while 54 (8.3%) subjects were recognized in some international games.

Although the majority of research subjects reported to have not participated in any international competitions (N=456, 70.3%), the majority of subjects believed English is very important (N=591, 91.1%). However, only 63 (9.7%) participated in English learning programs outside school.

Measurements

Background Variables

Variables included sex, school year, athlete status, participation in English programs outside school, opinion about importance of English language, participation in international competitions, and recognized level of athletic performance.

English Learning Motivation Scale

The scale used in the current study was a revision of Kai’s (2012). Variables “intrinsic motivation” and “extrinsic motivation” were indicators of English learning motivation of college student athletes. The scale comprised two dimensions and 10 items focusing on internal goal orientation and external goal orientation. Each item was measured on a 5-point Likert scale, ranging from 1 “strongly disagree” to 5 “strongly agree”.

English Learning Barriers Scale

The scale was modified from Learning Barrier in Foreign Language Promotion Scale originally introduced by Yeh (2013). The scale had 13 items which comprised of four dimensions: physical factors, mental factors, situational factors, and curriculum/teaching factors. All items were measured by 5-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”.

Social Support Scale

The scale was a modification of Social Support for College Athletes Scale initially proposed by Liu et al. (2015). The scale has 13 items and comprises four dimensions including family support, peer support, teacher support, and coach support. All items were measured by 5-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”.

Measurement Model

This study adopted a partial least squares model and the Warp PLS version 5.0 statistical software developed by Kock (2015) to verify all scales’ validity and reliability. According to the suggestion by Hulland (1999), an analysis of the validity and reliability of all relevant scales in a model shall examine reliability, convergent validity, and discriminant validity.

Reliability

According to Fornell and Larcker (1981), the composite reliability and the Cronbach’s α were acceptable if they were equal to or greater than .70. In this present study, the Cronbach’s α of English Learning Motivation Scale, of English Learning Barriers Scale, of English Learning Behavior Scale, and of Social Support Scale were .945, .935, .922, and .917, respectively. In addition, the Cronbach’s α was .898. The composite
reliability and the Cronbach’s α all exceeded .70, showing the reliability of each scale was acceptable (See Table 1 for details).

Table 1: Reliability analysis

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>Composite Cronbach’s α</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Learning Motivation Scale</td>
<td>.945</td>
<td>.935</td>
</tr>
<tr>
<td>Internal goal orientation</td>
<td>.921</td>
<td>.893</td>
</tr>
<tr>
<td>External goal orientation</td>
<td>.917</td>
<td>.887</td>
</tr>
<tr>
<td>English Learning Barriers Scale</td>
<td>.922</td>
<td>.908</td>
</tr>
<tr>
<td>Physical factors</td>
<td>.896</td>
<td>.825</td>
</tr>
<tr>
<td>Mental factors</td>
<td>.926</td>
<td>.893</td>
</tr>
<tr>
<td>Situational factors</td>
<td>.897</td>
<td>.827</td>
</tr>
<tr>
<td>English Learning Behavior Scale</td>
<td>.917</td>
<td>.898</td>
</tr>
<tr>
<td>Learning behavior inside School</td>
<td>.900</td>
<td>.851</td>
</tr>
<tr>
<td>Learning behavior outside school</td>
<td>.915</td>
<td>.860</td>
</tr>
<tr>
<td>Learning through social interaction</td>
<td>.917</td>
<td>.864</td>
</tr>
<tr>
<td>Social Support Scale</td>
<td>.914</td>
<td>.898</td>
</tr>
<tr>
<td>Family support</td>
<td>.920</td>
<td>.870</td>
</tr>
<tr>
<td>Peer support</td>
<td>.905</td>
<td>.860</td>
</tr>
<tr>
<td>Teacher support</td>
<td>.910</td>
<td>.852</td>
</tr>
<tr>
<td>Coach support</td>
<td>.912</td>
<td>.856</td>
</tr>
</tbody>
</table>

Table 2: Latent variable correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Learning Motivation</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barriers (1)</td>
<td>-.13</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Learning Behavior</td>
<td>.64</td>
<td>-.01</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>Social Support (4)</td>
<td>.49</td>
<td>.04</td>
<td>.52</td>
<td>.67</td>
</tr>
</tbody>
</table>

Note: Diagonals represent the average variance extracted (the square root of the average variance extracted in the parentheses) while the other entries represent the correlations.

Convergent Validity

Convergent validity examines the extent to which measures of a latent variable shared their variance and how they are different from others. When the factor loading of items to their corresponding latent variables is all higher than 0.5, it indicates that this scale has a considerable convergent validity (Hair et al. 2010). The factor loading of assessed items of the English Learning Motivation Scale exceeded .50 and fell between .80 and .87. The factor loading of items of the English Learning Barrier Scale was between .80 and .90 (> .50). The factor loading of items of the English Learning Behavior Scale fell within .78 and .91 (> .50). Finally, the factor loading of assessed items of the Social Support Scale was between .82 and .91 (> .50). The factor loadings of the study variables were all greater than the acceptable standard suggested by Hair et al. (2010), indicating a good convergent validity.

Discriminant Validity

Discriminant validity, according to Chin (1998), is assessed by demonstrating the average variances extracted (AVE) among the latent variables. It is determined by comparing the square root of the AVE to the correlation of the latent variables. Moreover, Venkatesh et al. (2012) suggested that the AVE should be equal to or greater than .50. As shown in Table 2, the square root of the AVE of all latent variables exceeded .50 and fell between .67 and .80, and also higher than correlation coefficients in the same column and row of the same construct. It is evident that the measurement model has demonstrated a very good convergent validity.

Data Processing

Data was analyzed using SPSS 21.0 and Warp PLS 5.0. The research hypotheses were tested using partial least squares (PLS) to evaluate the impact of learning motivation and learning barriers on learning behaviors. The moderating effect of social support on the relationship among learning motivation, behaviors, and barriers were also examined.

RESULTS

Reliability and validity of measurements were confirmed in the previous section. Hence PLS was used to test the hypotheses established in the study. The following section presents the test results and comparisons with previous studies are presented in the discussion section.

Models Hypotheses Tests

Figure 2 presents the standardized path coefficients of overall model and Figure 3 presents the standardized path coefficients of overall model with social support as the moderator. The test results of hypotheses were described as following:

H1: English learning motivation of college student athletes were found to have a
significant negative impact on their learning barriers ($\beta_1=-.19$, $p<.05$), suggesting when they were motivated, they were more likely to overcome barriers to English learning.

**H2:** English learning motivation of college student athletes were found to have a significant positive impact on their learning behaviors ($\beta_2=.61$, $p<.05$), indicating that they were more likely to exhibit more learning behaviors if they were motivated.

**H3:** English learning barriers of college student athletes were found to have a significant negative impact on their learning behaviors ($\beta_3=-.15$, $p<.05$), evidencing that higher level of perceived learning barriers resulted in their not showing active learning behaviors.

**H4:** The moderating effect of social support was found to have significant impact on the relationship between learning motivation and learning barriers ($\beta_4=.13$, $p<.05$). In other words, when college student athletes perceived high level of social support, the negative impact of their learning motivation on learning barriers were buffered.

**H5:** The moderating effect of social support was reported to have no significant impact on the relationship of learning barriers to learning behaviors ($\beta_5=.02$, $p>.05$).

**H6:** The moderating effect of social support was reported to have no significant im-
impact on the relationship between learning motivation and learning behaviors ($\beta = 0.1, p > 0.05$).

**Explanatory Power**

Explanatory power refers to the ability to generate testable predictions of the research model. It is the percentage of the variance of the endogenous explained by all exogenous. High value indicates a better predictability. As shown in Table 2, learning motivation of college student athletes explained five percent of the overall variance of learning barriers. The learning motivation, learning barriers and social support explained thirty-three percent of the overall variance of learning behaviors.

**DISCUSSION**

Study results reported a significant negative impact of English learning motivation on learning barriers among college student athletes, suggesting they perceived low barriers when they were highly motivated to learn. Furthermore, the impact of their learning motivation on their learning behaviors was found to be significant and positive, indicating their high motivation to learn resulted in proactive learning behaviors. Study results were consistent with early research that motivation, either intrinsic or extrinsic, is very important if anyone wants to learn English effectively (Liu and Thompson 2018; Rifai 2010). According to Kai (2012), the majority of college student athletes in Taiwan were reported to have lower academic performance and lower English language proficiency than their non-athlete classmates mainly because they were less motivated. Teachers and team coaches, therefore, should emphasize that English is an official language in many international sporting events and encourage students to improve their English proficiency.

Many studies discovered that most learners are extrinsically motivated learners (Chang 2005; Chen and Wang 2010). Based on research findings, coaches may offer student athletes frequent training and more opportunities to participate in competitions if student athletes are able to demonstrate their English language proficiency (Deci and Ryan 2000). In addition, instrumental motivation introduced by Gardner (1985) should be applied by sports coaches building the team. Student athletes who learn English with instrumental motivation are more likely to develop a sports-related career such as international referees and professional athletes, and to get a salary bonus.

Deci and Ryan (2000) stated that intrinsic motivation is usually a natural tendency and is necessary in cognitive development. People acquire knowledge and develop skills when they are intrinsically motivated. The current research thus suggested student athletes to combine their passion with their English learning experience. For example, if they are interested in sports, they should learn more about English language of sports and watch sports television shows.

The current research findings also reported that learning behaviors can be inhibited by learning barriers. According to Chang (1997), student athletes’ strong commitment to training and games directly and indirectly resulted in their lower academic performance. In fact, some of them are just not confident enough and are afraid of mistakes, although they have good command of spoken English already (Shi 2009). To counter such problems, student athletes can speak English to themselves in the mirror, learn vocabulary and sentences via downloaded English learning apps, record their own practice session, and talk to English-speaking people when participating in international games. All these tips should help them notice their progress and boost their confidence.

Attribution theory suggested that individuals interpret future events based on their past experience (Weiner 1992). Change of attribution can affect achievement. In other words, student athletes should believe their hard work will pay off. They can take notes in class, review lessons after school, visit some English learning websites and teach themselves without paying any money, and practice spoken English with classmates. Their commitment to academic performance gradually builds up their confidence and encourages learning behaviors.

The moderating effect of social support on the relationship between English learning motivation and learning barriers was found significant, indicating that support from family, peers, teachers and coaches increases learning motivation and reduces barriers to learning. The findings were consistent with literature that social connection improves learning motivation and academic achievement (Alizadeh 2016; Cirik
CONCLUSION

This study found English learning motivation had significant positive impact on English learning behavior and with high motivation, it can also overcome English learning barrier. Social support enhances the reduction of learning barrier from learning motivation.

RECOMMENDATIONS

The study recommends the increase of social support to promote English learning.

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