Revisiting Individualism and Collectivism: A Multinational Examination of Pre-service Teachers' Perceptions on Student Academic Performance

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Abstract

This study explores pre-service teachers’ perceptions of academic achievement as related to students’ socioeconomic status (SES). Data were collected from participants in Singapore, Hong Kong, Taiwan, and the United States. Using cultural psychological perspectives, I revisit elements of attribute reasoning that are embedded in individualist and collectivist orientations. Pre-service teachers in Hong Kong, Taiwan, and Singapore tended to attribute academic failure of low SES students to personal factors, such as individual effort, intelligence, and motivation, while participants from the United States placed blame with situational factors such as family, school, and community.

Keywords: individualism; collectivism; teacher's beliefs; low socioeconomic status; student learning

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Introduction

What perceptions do pre-service teachers hold of students from low socio-economic backgrounds (SES), particularly as related to academic failure? Although a growing knowledge base sheds insight into teacher and pre-service teacher perceptions, few empirical studies provide cross-national perspectives. The current study advances the research frontier by querying the matter with future teachers in Singapore, Hong Kong, Taiwan, and the United States. More specifically, I examine how cultural psychological attributes intersect with latent perceptions and the long-standing dichotomy between individualism and collectivism (Lukes, 1973; Brewer & Chen, 2007). The current study helps to discern how cultural beliefs may influence pre-service teachers’ perceptions about student performance and, in particular, challenge the tendency to treat “East Asia” as a uniform category.

Theoretical Framework

The conceptual constructs of Collectivism and Individualism provide useful models for understanding pre-service teachers’ beliefs about learning from a cultural perspective especially as related to contrasts between the East and West (Darwish & Huber, 2003; Hofstede, 1980; Mascolo & Li, 2004; Schimmack, Oishi & Diener, 2005). Recent studies on teacher perceptions stretch beyond analyzing individual practitioners’ experiences and examine how cultural differences influence teachers’ understanding of their work. However, a limited number of studies (Felbrich, Kaiser, & Schmotz, 2012; Laschke, 2013) address cross-national and intercultural differences as related to Individualist and Collectivist paradigms.

Individualism is usually associated with the United States and western countries generally while Collectivism frequently characterizes parts of Europe (e.g., southern Italy, rural Greece) and much of Africa, Asia, and Latin America (Cummings, et al., 2001). Prior work in cross-cultural psychology (Hofstede, 1980; Triandis, 1995; Matsumoto, 2001; Mascolo & Li, 2004) defines individualist and collectivist societies as (a) interdependent where relationships rest on assumptions of common bonds (collectivism) and (b) centralizing personal independence (individualism). Individuals in each society also tend to espouse alternative attribution reasoning when articulating causal explanations (Oyserman, Coon, & Kemmelmeier, 2002). Individualism implies that judgment, reasoning, and causal inference are generally oriented toward the person rather than the situation or social context because the decontextualized self is assumed to be a stable, causal nexus (Choi, Nisbett, & Norenzayan, 1999; Morris & Peng, 1994). In contrast, collectivism suggests that social contexts, interpersonal relationships, and situational factors are prominent in causal reasoning (Miller, 1984; Morris & Peng, 1994). Although Kim et al. (2004), and other researchers have cast doubt on this dichotomous analysis of Western-Eastern cultures, this analytical paradigm has been a powerful force in educational, sociological and cultural studies (Schimmack, Oishi, & Diener, 2005).

In cross-cultural studies of learning, individualism generally means that students learn as separate, autonomous and independent individuals. Collectivism, however, implies that academic learning is boosted by external resources including family, peers, community, school settings, and larger social institutions (Mascolo & Li, 2004; Triandis, 1995). As a consequence, two categories of attributive factors are pinpointed to explain the underlying reasons for student performance—situational factors external to individuals such as family, classroom, school, community, and society, and personal factors that “belong” to individual persons such as cognitive level, motivation, attitude, effort, and so on.

In the area of teacher learning and teachers’ beliefs, these two categories of attributive factors are often discussed in regard to pre-service teachers’ understanding of diverse learners.
American researchers have found that most pre-service teachers attribute student learning differences to personal factors (Tatto, 1996). Few practitioners focus on situational factors based on socially ascribed categories, such as race, class, and gender roles despite their undeniable role in shaping educational experiences (Anyon, 1980; Orenstein, 1995). This finding has been supported by many other more recent studies (Hoy, Davis, & Pape, 2006; Jiang, 2012; Levine-Rasky, 1998; Pajares, 1992) and is referred to as a color-blind perspective in that pre-service teachers only see children as individuals, not as people from diverse backgrounds that are influenced by race, gender, and social class. The current study is helpful in revealing how pre-service teachers think about SES and academic performance across multinational contexts. Although individualism and collectivism provide the theoretical lenses by which participants’ beliefs were probed, the constructs do not represent opposite ends of a clear-cut dichotomy. Rather, the models serve as tools for locating cultural attributes and exploring nuanced meanings.

Methods

In this study, I view language used by the participants as a discourse with the capacity to reveal participants’ beliefs about students’ academic achievement. Special emphasis is placed on the attributive factor of SES. The data were collected in two phases.

During phase one I analyzed responses to one open-ended item from the international survey “Mathematics Teaching in the 21st Century (MT21) (Schmidt, et al., 2007). For more detailed information on sample selection procedures see Blömeke et al., 2008. The particular item used for this study was worded as follows: “Tests of student achievement have shown that, on average, children from lower socio-economic background do less well than children from higher socio-economic backgrounds. What do you consider to be reasonable explanation of this phenomenon?” Answers written by 40 pre-service teachers (20 Taiwanese and 20 U.S. individuals) were randomly selected for inclusion from the MT21 database. Singapore and Hong Kong were not included in the MT21 projects.

During phase two I contacted teacher educators at major teacher training institutions in Singapore and Hong Kong to recruit 40 additional participants (20 mathematics pre-service teachers randomly from each respective location). The participants provided anonymous written responses to the previously-listed survey item. The collected responses were written in the pre-service teachers’ native languages. The responses were then analyzed using Mayring’s (2000) guidelines for qualitative content analysis.

Results

Pre-service teacher respondents in Hong Kong, Taiwan, and especially Singapore tended to attribute academic failure of low SES students to personal factors such as individual effort, intelligence, and motivation. By contrast, the respondents from the United States were most likely to fault situational factors for academic failure.

Despite respondents’ general recognition that academic performance is influenced by a convergence of factors, the responses that emphasized personal factors suggested that participants viewed students from low SES backgrounds as individuals whose deficiencies in cognition, motivation, attitudes, or self-esteem lowered academic achievement. Motivation was the most frequently mentioned personal factor by Singapore respondents while self-esteem and prior-knowledge were most commonly cited by participants from Hong Kong and Taiwan as well as a healthy share of Singaporean students. Respondents from Taiwan and the United States also mentioned that students from low SES backgrounds may not value school. Some respondents from Hong Kong and Singapore stated that low SES students may not be intelligent due to their genetics. Less common responses included opinions that low SES students may not
be well developed cognitively (Taiwan), may lack a “can-do” attitude (United States), and may have unmet emotional needs (Singapore).

For example, some respondents wrote that:

“The children from lower socio-economic backgrounds have narrow[er] horizon[s] than those with higher socio-economic backgrounds. They do not have much curiosity and they lose interest in learning.” (Hong Kong participant)

“Children with higher socio-economic backgrounds can put more emphasis on school and they see the relevance of learning and striving to be successful. The lower socio-economic background kids may not have the pressure from home to succeed.” (United States participant)

“They [students from low SES background] were just as normal as any other students on the surface. But maybe deep inside, they felt slightly inferior.” (Singaporean participant)

As these responses demonstrate, personal factors are mentioned as the direct reason for the achievement gap between students from low and high SES backgrounds.

Responses highlighting situational factors seem to focus on how relationships or other factors that are external to individuals affect learning outcomes. The two situational factors that were most frequently mentioned were adequate study environment/space/time/resource at home and tutoring. Although some respondents from the United States broadened situational factors to include community, school funding resources, school environment, teachers, and teaching, all Asian respondents focused on family factors. A participant from Hong Kong, for instance, wrote that, “Parents of children from lower SES background do not have a good education level and so [they are] unable to help children to learn and do not have enough time to care for them” and a Taiwanese respondent stated that, “High SES students have more resources for learning. Their parents usually buy them books and expensive educational games to play with, while the low SES families cannot afford them.”

Other participants commented on topics such as tutoring and community factors by writing that “I think that it could be because children from higher socio-economic backgrounds have more monetary resources to get private coaching from the private tutors and [their] parents may also be more educated as their parents will hold better-paid jobs through a high educational backgrounds” (Respondent from Singapore) and “Students from a lower SES most likely live in a bad neighborhood, which leads to many other stressors. Also, if the students in struggling, they will not be able to hire a tutor when needed. Additionally, if they are from a low SES family, their parents probably did not have a higher education, which makes it more difficult for them to help the children with homework” (Respondent from the United States).

The data analysis also revealed that some participants saw personal and situational forces as intertwined as noted in the following example:

The subject math requires a “can do” attitude. It is integral and requires a lot of practice, discipline and focus. Students from lower SES backgrounds are more likely not to develop those skills because of different sociological burdens. They need more encouragement to stay on track, which is not available to them in our school system. (United States)
The data’s emergent findings prompt a natural question: When do participants use situational factors as attribute reasons for learning and when do they rely on personal factors? The data analysis suggested that participants did not necessarily consider the issue of low SES students’ academic performance independently but relied on comparative factors involving relative academic success of high SES students. Although the participants did not see Individualism and Collectivism as mutually exclusive categories, the responses did suggest that pre-service teachers in the United States were more likely to stress situational factors when discussing students from low SES backgrounds; less emphasis is placed on such factors when discussing academic achievement among students from high SES backgrounds. Rather, personal factors were cited when respondents were discussing academic success, not failure. This finding appears to confirm previous researchers’ claims regarding success explanations (Kelly, 1973, cited in Lalljee, 1988) and deficit perspectives (Tatto, 1996).

Although the U.S. respondents seemed to attribute success to personal factors, the respondents from Taiwan attributed both success and failure to personal factors such as learning habits, effort, and so on. The discrepancy may be due to the surge in teacher and multicultural education research in recent decades which has pushed pre-service teachers in the U.S. to develop an awareness of the varied social forces that explain depressed academic performance. Given that the researchers leading the MT21 research project identified homogenous components in the general pedagogy courses that participants completed in teacher education program across the societies represented, this hypothesis merits further investigation in future comparative studies including Hong Kong and Singapore (Schmidt, Blömeke, & Tatto, 2011). The data indicate that participants from Singapore applied similar interpretations as participants from Taiwan. Many Singaporean respondents identified personal factors (n=11), such as “lack of effort, not intelligent enough, and unmotivated,” when discussing academic failure whereas academic success was never attributed to personal factors. Simultaneously, respondents acknowledged that situational factors (n=7), such as “family support, tutoring, resources” were important for academic success; none cited personal factors.

The Westernized societies of Singapore and Hong Kong show a mixed pattern when compared with other countries/regions. Similar to U.S. respondents, participants from the two regions believed situational factors (n=11) contributed to academic success for students from high SES backgrounds. Yet, as with Asian counterparts, they attributed academic failure to personal factors (n=4), and also thought that academic success was due to situational factors (n=3).

Although the findings from the data set reveal important nuances, the results should be viewed cautiously. The data set employed was very small and the findings merely reveal some possibilities regarding how pre-service math teachers perceive academic performance based on student SES.

**Discussion and Conclusion**

The current study adds nuances to the distinction between collectivism and individualism when examining pre-service teachers’ beliefs, and challenges the unitary stance that assumes homogeneity within collectivism and individualism—that is, collectivists always resort to situational factors and individualists prefer personal factors when aiming to understand educational trends. As previously discussed, however, personal and situational factors are used in combination to explain success and failure in academic achievement. To be more specific, people in the cultures traditionally deemed as collectivist, such as Asian societies, cite personal
factors when attempting to explain failure while societies traditionally regarded as individualist, such as Western nations, attribute failure to situational factors.

The findings in this study accord with Triandis’ (1995) observation that, “Success is often attributed by collectivists to the help of others, and by individualists to their own abilities….Collectivists tend to explain failure by lack of effort, and individualists by task difficulty or bad luck….Collectivists should learn that individualists try to change social situations into which they do not fit….Conversely, individualists should know that collectivists try to change themselves to fit into social situations” (pp.157-158). If Triandis’ (1995) is correct, the distinction between individualist oriented and collectivist oriented understanding of students’ learning achievement in relation to SES may be useful in exploring differences between traditionally deemed individualist cultures and collectivist cultures (Laschke, 2013).

Despite its apparent utility, the binary of individualism versus collectivism may hinder scholarly understanding of the complexities of teachers’ perceptions about learning and teaching. Historically, Taiwan, Singapore, and Hong Kong are heavily influenced by both Western cultures and Oriental cultures. For example, some personal factors seem to be invested with an awareness of situational factors such as when respondents tried to explain how collective factors affected individual cognition, attitudes and motivations. Additionally, traditional reliance on individualism and collectivism at the macro level may constrain our understanding of processes that transpire within the cultural arena. That is, too great of an emphasis may be placed on national context and too little on other factors such as the ethos of the teacher education program in which students are enrolled and personal narratives. Without information regarding individuals’ life histories or supplemental explanations regarding answers, cultural assumptions may be unwarranted. By revisiting the constructs of individualism and collectivism, this paper suggests a more nuanced understanding of pre-service teachers’ perceptions of students’ academic success and failure in a cross-cultural setting. Further research could be carried out to investigate pre-service and in-service teachers’ beliefs on students’ learning in order to arrive at fine-grained understandings.

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References:


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Appendix A: Coding Procedures

Step 1: The codes for academic success, academic failure, personal factors, and situational factors contributing to students’ learning were identified and defined based on a variety of sources, including the literature on attribution theory, collectivism and individualism, research on teacher’s beliefs about students’ diversity, and the readings of the participants’ responses.

Step 2: The pre-service teachers’ beliefs about the relationships between social economic status and students’ academic achievement are analyzed by referring to the attribution of situational and personal factors.

For each of the categories of the personal factors and the situational factors, prototypical examples from the survey responses were identified, and some sub-categories were created. The coding scheme can be found in the Appendix A.

Step 3: The surveys were coded based on the category system. Coders (the authors, and a research assistant fluent in both English and Chinese) read through each of the instruments independently, and coded for the categories listed. The codes were compared, and the coders met twice to resolve discrepancies.

Step 4: The coding of all surveys was completed and reviewed by both readers.

Step 5: The frequency of responses was examined and the percentages of categories were compared with each other. By means of this method, the patterns of the assumed relationships between the cultural contexts and the attribution factors are tested and reconstructed.

During this process of coding and analysis, the patterns of contributing the success of high SES students to factors and those identified as contributing to the failure of the low SES students in different countries stood out.
Appendix B: Statistical findings by coding schema

Taiwan (in percentage)

Hong Kong (in percentage)
Appendix A: Coding scheme

<table>
<thead>
<tr>
<th>CODE</th>
<th>SES— Explanation given</th>
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<tbody>
<tr>
<td>S</td>
<td>Responses that identify <em>situational factors</em></td>
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*Remark: Code for the explanation given in the responses in light of individualism and collectivism. Code as many as apply for a response.*
| S1   | **Community environment** (such as support of the community, resources in the neighborhood) |
| S2   | School funding and resources available to students at the school (including schools differ in the material resources they have, access to technology, tracking by school, etc.) |
| S3   | School environment (e.g., student safety and comfort) |
| S4   | **Teacher and teaching**  
|      | S4-1: lower expectations from teachers,  
|      | S4-2: lower salaries, etc. |
| S5   | **Parent’s support and family life including**  
|      | S5-1: parents’ education;  
|      | S5-2: parent participation of school-related activities  
|      | S5-3: social capital  
|      | S5-4: cultural capital  
|      | S5-5: adequate study environment/space/time in the home (e.g. study space, computer, etc.)  
|      | S5-6: family resources that allow (or do not allow) participation in tutoring  
|      | S5-7: family members (do not) offer role models  
|      | S5-8: parents' understanding and attitudes of school education  
|      | S5-9: parents’ expectations of students’ learning outcome |
| S6   | **Peers** |
| P    | Responses that identify **students’ personal characteristics** |
| P1   | Students often seen as less intelligent [note: NOT that they are] |
| P2   | Students are genetically less intelligent |
| P3   | Students (do not) have broad horizon or more prior knowledge |
| P4   | Students (do not) think or behave in way schools value |
| P5   | Students (do not) value school |
| P6   | Students have low or high self-esteem |
| P7   | Students (do not) have the “can-do” attitude |
| P8   | Students lack interest or motivation |
| P9   | Students (do not) have the ability to adapt to school |
| P10  | Students (do not) work hard |
| S11  | Students have unmet emotional needs |
| Other| Other responses |
| NA   | No valuable statement (including “I don’t know”, crossed out, erased, stray marks, illegible, or off task etc.) |