

# Comparing Shanghai and Hong Kong Students' Psychological Sense of School Membership

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The previous study demonstrated that the Chinese version of the PSSM scale was applicable for use by Hong Kong students, and in this study, the scale was also found to be workable for the measurement of Shanghai students' psychological sense of school membership. The only difference found in the 18-item PSSM scale distributed to Shanghai and Hong Kong students was that in Shanghai, simplified Chinese characters were used. Four schools from Shanghai and Hong Kong were chosen to participate in this study. By comparing two hundred and twenty 6<sup>th</sup> grade students of Shanghai and Hong Kong, it was found that Shanghai students had a significantly higher sense of school belonging and lower feelings of rejection.

**Key Words:** psychological sense of school membership (PSSM), Hong Kong students, Shanghai students, comparative study

Much research has been done in the United States to elucidate the psychological sense of school membership (PSSM) of students (Goodenow, 1991, 1992, 1993; Goodenow & Grady, 1993; Hagborg, 1994, 1998). Different studies were also done in western societies to investigate the school membership of students (Arhar & Kromrey, 1993; Brown & McIntire, 1996; Lee & Davis, 2000; Osterman, 2000; Tinto, 1997). Despite the fact that relatively limited studies have been done in eastern societies, there was a study of PSSM done in Hong Kong to compare Hong Kong local students and Mainland immigrant students (Cheung & Hui, 2003). Interestingly, in the study by Cheung and Hui (2003), Mainland immigrant primary students had a significantly higher sense of school belonging but lower feelings of rejection than local Hong Kong primary students.

There is no doubt about the benefits that to students when their sense of school membership is high, for example, being more persistent academically, putting more effort into

learning and studying (Tinto, 1997), making more affective, cognitive, and behavioral connections to school (Arhar & Kromrey, 1993), having better educational outcomes (Goodenow, 1993), having a more positive self-concept, more positive teacher-student relations, and lower social-emotional distress (Hagborg, 1998). Since having a high sense of school membership brings such advantages to students academically, understanding students' psychological sense of school membership becomes an important issue to investigate, especially in the eastern societies where education is seen as the most important issue for children and that PSSM is still a novel topic of discussion.

Goodenow developed an 18-item PSSM scale to investigate school membership of junior secondary school students in the United States (Goodenow, 1991, 1992, 1993). Followed Goodenow's studies, Hagborg (1994) applied the PSSM scale to US middle and upper secondary school students. The 18-item of PSSM scale in Goodenow's study were phrased in terms of individual frames of reference probing for a global factor – the subjective sense of belonging in school, while in Hagborg's study, the items of the PSSM scale were classified into three different factors – belonging, rejection, and acceptance. In Cheung and Hui's study (2003),

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the Chinese version of the 18-item PSSM scale distributed to primary 4, 5, and 6 students in Hong Kong were extracted into two factors, known as school belonging (13 out of the 18 items) and feeling of rejection (5 out of the 18 items). The five items of feeling of rejection were negative items, and when these negative items were changed to positive, the 18 items could be seen as a global factor – subjective sense of belonging in school.

The PSSM scale was found to be reliable for the original English version (alpha value ranged from .71 to .94 for grades 5 to 12 US students) and Spanish version (alpha value was .77 for grade 5 Hispanic students studying in the US) (Hagborg, 1994). The Chinese version of the PSSM scale was also found to be reliable. Amongst the 18 items, 13 positive items made up a factor, known as school belonging, with alpha value of .88. On the other hand, the five negative items, known as feelings of rejection, had an alpha value of .71. However, when these five negative items were changed to positive, the alpha for these 18 items was .89.

### **The Education System of Shanghai and Hong Kong**

In Shanghai, the Chinese government provides 6 years of primary and 3 years of junior secondary school obligatory education to children. Primary 6 students are transferred to junior secondary school to continue their study so that they will be more familiarized with junior secondary education in order to do well on the entrance examination to senior secondary school. Secondary school is usually divided into 3 years of junior secondary school and 3 years of senior secondary school. Junior secondary school includes secondary 1 to 3.

Since the Chinese government aims to standardize the basic requirements of all schools, the class hours of all subjects are regulated (Shao & Pei, 1998). The number of academic subjects increased considerably from primary to junior secondary school. Junior secondary school students must study politics, Chinese, a foreign language (English), history, geography, physical hygiene, physical education, music, art, mathematics, chemistry, physics, and biology (Luo & Wendel, 1999). In China, examination success is very important. Admission to the next stage depends heavily on the examination results of students. If students pass in examinations with good grades, the rewards for them may be great. Overall, the link between good examination results and rewards for success is closely related. In addition, many

students desire to get into a key senior secondary school because they believe that the key senior secondary schools can guarantee their entrance to key universities and provide them with a good career future.

In Hong Kong, the SAR government also provides 6 years of primary and 3 years of junior secondary school obligatory education to children who are Hong Kong permanent residents and those who are legally permitted to reside in Hong Kong. Secondary school includes 7 forms with exit points at forms 3, 5, and 7. Schools in Hong Kong generally adopted a 6+3+2+2 system and the education system can also be considered as very competitive.

The primary curriculum is already subject-based and students must study Chinese, a foreign language (English), mathematics, general studies, music, art and craft, and physical education. However, the subjects allocated the most periods per week are Chinese, English, and mathematics (Adamson & Li, 1999). When promoted to junior secondary education, Chinese, English and mathematics are still the core academic subjects for students. Other academic subjects include computer studies, economics, Chinese history, history, social studies, integrated science, and geography, etc. Most primary schools in Hong Kong used Chinese as the medium of instruction, however, when it gets to secondary education, some secondary schools used English as the medium of instruction. Very often, English secondary schools received a higher status than Chinese secondary schools, and this situation makes the Hong Kong education system quite unique.

Economically speaking, Hong Kong and Shanghai are considered very important cities in China. Shanghai is one of the largest and fastest growing cities in China and Hong Kong has been an international city with an established financial infrastructures and a free market economy. However, Shanghai has always been controlled by the government of the People's Republic of China whilst Hong Kong was controlled by the British from around 1841 to 1997. Therefore, people living in the two places are actually quite different culturally and academically. For example, students of both places speak and write Chinese differently, and some schools in Hong Kong used English as the teaching medium whilst Shanghai schools generally used Chinese as the teaching medium. In Shanghai, primary 6 Shanghai students are transferred to a new educational setting (secondary school) to continue their study, and in Hong Kong, primary 6 students are not transferred to a secondary school until the following year, not until they reach secondary 1. Therefore, Shanghai primary 6 students are located in a junior secondary

school one year ahead of Hong Kong primary 6 students. In this study, primary 6 students of Shanghai and Hong Kong were being compared on their psychological sense of school membership so as to reveal whether the PSSM scale was applicable for Shanghai students.

## Method

### Subjects

Four ordinary schools from Shanghai (2 from Shanghai) and Hong Kong (2 from Hong Kong) participated in this study, and there were 220 primary 6 students. This study was conducted near the end of the first academic semester so the Shanghai primary 6 students had only attended the new junior secondary school for about half a year only. There were 125 Shanghai students and 95 Hong Kong students. For Hong Kong primary students, most of them had been studying in the same school for 6 years. Amongst these 220 students, there were 102 boys and 118 girls.

### Instrument

The Chinese version of the PSSM scale was distributed to both Shanghai and Hong Kong students, however, simplified Chinese characters were used in the Shanghai questionnaires. Students were asked to answer each item on a scale of 1 to 6 (1 means strongly disagree and 6 means strongly agree). In the study of Cheung and Hui (2003), the 13-item PSSM scale was extracted into two factors known as school belonging and feeling of rejection. Therefore, the 18 items will also be seen as two factors in this study. The 13 items of school belonging had an alpha value of .93 and the 5 items of feeling of rejection had an alpha value of .85. When factor analysis was run (with principal components analysis as the method for factor extraction, followed by varimax) (Norusis, 2000) for the 13 items of school belonging, only one factor was extracted. The 13 items had an eigenvalue of 7.35, with 56.6% of variance explained.

Again, when the factor analysis was run (with principal components analysis as the method for factor extraction,

followed by varimax) (Norusis, 2000) for the 5 negative items of feeling of rejection, one factor was also extracted. The 5 items had an eigenvalue of 3.14, with 62.8% of variance explained.

## Results

The correlation result between school belonging and feelings of rejection when Shanghai and Hong Kong data sets were combined was  $-.72$ . When the two data sets were separated, the two factors had correlation results of  $-.46$  (for Shanghai) and  $-.44$  (for Hong Kong). The above correlation results were significant at a 0.01 level.

Regarding school belonging, results of the two-way analysis of variance (based on a 5% level of significance) indicated no significant main effect for sex,  $F(1, 216) = .17$ ,  $p = .68$ , but a significant main effect for place,  $F(1, 216) = 228.15$ ,  $p < .01$ , and no significant interaction effect,  $F(1, 216) = .64$ ,  $p = .42$ . In terms of feeling of rejection, results of the two-way analysis of variance were similar to the above results. There was no significant main effect for sex,  $F(1, 216) = 3.19$ ,  $p = .08$ , but a significant main effect for place,  $F(1, 216) = 207.61$ ,  $p < .01$ , and no significant interaction effect,  $F(1, 216) = 1.47$ ,  $p = .23$ . Therefore, from the above results, an independent sample  $t$ -test was run between Shanghai and Hong Kong students. It was found that Shanghai primary 6 students who attended their school for half a year had a significantly higher sense of school belonging but a lower feeling of rejection in school. Table 1 presents the result.

## Discussion

The results of this comparative study were interesting. Shanghai primary 6 students, who had only attended their school for approximately half a year, had a significantly higher sense of school belonging and lower feelings of rejection than Hong Kong students, who had stayed in the school for several years. The mean of Shanghai students' school belonging was higher than Hong Kong students by

Table 1. *Compared Mean between Shanghai and Hong Kong Primary 6 Students*

Categories	Shanghai Student			Hong Kong Student			Sig. (by $t$ -test)
	N	M	SD	N	M	SD	
School belonging	125	5.39	.33	95	4.21	.77	.00
Feeling of rejection	125	1.40	.33	95	2.71	.93	.00

over 1.0. Similar patterns emerged with the factor of feelings of rejection. The mean of Hong Kong students' feeling of rejection was higher than Shanghai students by over 1.0.

There could be several reasons for Shanghai primary 6 students to have such a high sense of school belonging. First of all, since Shanghai primary 6 students were the freshmen of the junior secondary school, special attention might be given to them by teachers and principals. In primary school, Shanghai students were only required to study academic subjects such as Chinese, mathematics, social studies, and science. However, when they were promoted to primary 6 located in junior secondary schools, they were required to study the following academic subjects – politics, Chinese, mathematics, English, history, geography, and biology. When Shanghai teachers wanted students to adapt well to the educational system and the heavier workload of junior secondary school, teachers might spend more time in looking after them and might also encourage them to join extra curricular or academic activities offered by the school so that students could have a higher sense of school belonging. Furthermore, the classmates of these students were actually old classmates promoted together from primary school. Allowing students to have a good start at the beginning of junior secondary school could have a positive effect to their educational path later on.

Second, Shanghai primary 6 students might be still in the 'honeymoon' stage of this new educational setting. This study was conducted before the first semester ended, and the first semester report results of students were not distributed yet. Therefore, some students still had not reached the 'crisis' stage. Some Shanghai teachers explained that though there were more academic subjects for primary 6 students to study when compared to their workload in primary 1 to 5, the requirements for these classes might be somewhat lower because they did not want to diminish students' academic self-esteem. Furthermore, some students needed more time to adapt to academic life in junior secondary school. Therefore, this might be another reason for Shanghai primary 6 students to have a high sense of school belonging and low feelings of rejection.

Finally, we should not ignore the fact that the junior secondary schools in Shanghai were providing a preferential academic setting for new students to join so that these students would report such a high sense of school belonging in this study. According to the 1998 Shanghai Educational Yearbook (Government of People's Republic of China, 1998), Shanghai was chosen to be the first city to implement the Shanghai education department's short and long term plans for

the development of education and the promotion of first rate education. In addition, Shanghai schools are implementing the policy of small class teaching in primary and junior secondary education.

As seen from the correlation results, it is important for teachers, principals and educators to increase students' sense of school belonging because as such feelings of school belonging increase, feelings of rejection tend to decrease. Having a high sense of belonging in school is beneficial for students since this factor is inversely related to depression, social rejection, and school problems (Anderman, 2002). This study also demonstrated that Shanghai primary 6 students (who were studying in a new educational setting) had a higher sense of school belonging and a lower feeling of rejection than Hong Kong primary 6 students (who had been in the same educational setting for several years). This result allows people in the educational field to understand that, in fact all students require teachers and principals to pay attention to them even though students have been studying in the same school for a long time and are very accustomed to the educational setting. Teachers and principals should also think of ways to let students feel as though they "belong" in their school, for example, encouraging students of all levels to join different school activities, decreasing the class size so each student can get more attention from teachers, and providing a supportive learning environment for students. It is important for educators to provide a "refreshing" educational experience for students of different grade levels, similar to the experience of new students when they first attend their school. Overall, this study has demonstrated that the Chinese version of the PSSM could be applied to different Chinese school cultures and settings for investigating students' sense of belonging and feelings of rejection in school.

## Limitations

This study has only chosen a limited number of schools and students as participants, and it could not totally represent the situation of Shanghai and Hong Kong. Additionally, the students who participated in this study were only primary 6 students and of course could not represent students of other grade levels. Moreover, this study should be followed by a qualitative study so as to further understand the reasons why Shanghai students reported a significantly higher sense of school belonging than Hong Kong students. On the other hand, it is equally important to find out the factors that cause Hong Kong primary 6 students to have higher feelings of

rejection than Shanghai students.

## References

- Adamson, B., & Li, S. P. T. (1999). Primary and secondary schooling. In M. Bray & R. Koo (Eds.), *Education and society in Hong Kong and Macau: Comparative perspectives on continuity and change* (pp. 35-57). Hong Kong: Comparative Education Research Center.
- Anderman, E. M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology, 94*(4), 795–809.
- Arhar, J. M., & Kromrey, J. D. (1993, April). *Interdisciplinary teaming in the middle level school: Creating a sense of belonging for at-risk middle level students*. Paper presented at the Annual Meeting of the American Educational Research Association. Atlanta, GA.
- Brown, D. W., & McIntire, W. G. (1996, October). *Sense of belonging in rural community high school and boarding of belonging magnet high school students*. Paper presented at the Annual Meeting of the National Rural Education Association. San Antonio, TX.
- Cheung, H. Y., & Hui, K. F. S. (2003). Mainland immigrant and Hong Kong local students' psychological sense of school membership. *Asia Pacific Educational Review, 4*(1), 67–74.
- Goodenow, C. (1991). *The sense of belonging and its relationship to academic motivation among pre- and early adolescent students*. Paper presented at the American Educational Research Association Convention. Chicago, IL.
- Goodenow, C. (1992). *School motivation, engagement, and sense of belonging among urban adolescent students*. Paper presented at the Annual Meeting of the American Educational Research Association. Ann Arbor, MI.
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*, 79–90.
- Goodenow, C., & Grady, K.E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education, 62*(1), 60–71.
- Government of People's Republic of China. (1998). *Shanghai Educational Yearbook: Shanghai Municipal Education Commission..* Shanghai: Shanghai Educational Publishing House.
- Hagborg, W. J. (1994). An exploration of school membership among middle- and high-school students. *Journal of Psychoeducational Assessment, 12*, 312–323.
- Hagborg, W. J. (1998). An investigation of a brief measure of school membership. *Adolescence, 99*(130), 461–468.
- Lee, R. M., & Davis, C. (2000). Cultural orientation, past multicultural experience, and a sense of belonging on campus for Asian American college students. *Research in Brief, 41*(1), 110–114.
- Luo, J. L., & Wendel, F. C. (1999). Junior high school education in China. *Clearing House, 75*(2), 279–285.
- Norušis, M. J. (2000). *SPSS 10.0: Guide to data analysis*. New Jersey: Prentice Hall.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323–367.
- Shao, Z. J., & Pei, W. M. (1998). *Jiaoyu Xue* [Education]. Shanghai: Hua Dong Normal University Press.
- Tinto, V. (1997). Classrooms as communities. *Journal of Higher Education, 68*(6), 599–623.

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