Educational contributions to students' belongingness to the society, neighbourhood, school and family

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Educational contributions to students’ belongingness to the society, neighbourhood, school and family

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\textbf{ABSTRACT}

A way that education is desirable is its integrative function for society and its sectors, according to structural-functionalist theory. This function consists in the promotion of the student’s belongingness to society and its sectors. In consolidating empirical support for the function, this present study analyses survey data on 417 students in Hong Kong, China. Results show that the student’s academic achievement had significant positive effects on belongingness to the society, neighbourhood and school. In addition, the student’s educational level displayed a significant positive effect on belongingness to society. In endorsing the integrative function of education, the results imply the merit of promoting education to enhance the student’s belongingness.

The contribution of education to students’ belongingness or social integration is a supposed function of education (Hwang, 2013; Maurer, 2011). This supposition stems from structural-functionalist theory, which regards education as a structural part of society to fulfil the integrative function (Shaidullina et al., 2015; Woock, 2001). Essentially, students’ belongingness to or social integration into society and its sectors in the neighbourhood, school and family is pivotal for the maintenance of societal functioning (Adcidiacono et al., 2007; Baskin, Quintana, & Slaten, 2014; Cicognani, Menezes, & Nata, 2011; Kuah-Pearce & Fong, 2010). The integrative function of education is therefore vital (Taggart, 2001). Meanwhile, the integrative function is theoretically questionable and empirically uncertain. According to the theoretical critique predicated on empowerment, education empowers and thereby individualizes and disintegrates social bonds in society and its sectors (David, 2014; Forrest, 1999). The critique thus explains findings about the negative effects of education on the student’s social integration in terms of conformity and support for social integration (McLaren, 2004; Rest, Narvaez, Bebeau, & Thoma, 1999). At least, the critique casts doubt on the integrative function of education. This doubt echoes null findings about education effects on the student’s social integration in terms of civic participation and political support (Murray, 2009; Theocharis, 2011). Resolving the conflicting views and empirical uncertainty about the integrative function of education is important for public policy, as education is an expensive and publicly germane enterprise (Baldacci, Guin-Siu, & de Mello, 2003). All these concerns prompt this study.

This study seeks to elucidate thoroughly the effects of education on the student’s belonging to society and its sectors in the neighbourhood, school and family. Education covers the student’s educational
level and academic achievement and his or her parents’ educational levels. Essentially, academic achievement reflects effective education (Ardelt & Eccles, 2001). In addition, academic achievement at higher educational level registers greater educational success. This combination of academic achievement and educational level to form grade-weighted academic achievement is thus another vital indicator of education. The educational levels of both the father and mother are also relevant, given that parents and the child constitute an interdependent family system (Monna & Gauthier, 2008). Notably, parental education is influential on the child (Steele, Nesbitt-Daly, Daniel, & Forehand, 2005). All the parents’ education and child’s education are crucial and costly investments that merit attention (Piotrowski and Paat, 2012). Meanwhile, belongingness, as an indicator of social integration, refers to the student’s feeling to be part of a group or place, which can be the society, neighbourhood, school or family. Belongingness is favourable in view of its benefits to personal development in terms of cognitive competence, well-being and social well-being, for instance (Hansen, Larson, & Dworkin, 2003; Lambert et al., 2013; Ostrove & Long, 2007). Moreover, belongingness is also felicitous because of its contributions to the goodness and performance of the group and society (Noll, 2002; Taylor, Chait, & Holland, 1991).

Promoting students’ belongingness is imperative in the Chinese city of Hong Kong, where the study takes place, as well as other societies (Barrett, 2007; Cicognani et al., 2011; Tse, 2007). Most notable is the expanding of mass education that draws myriad resources and people to the provision and reception of education (Kember, 2010; Post, 2003). Moreover, publicly funded or subsidized education represents a substantial part of education (Chan, 2002). A blatant goal of publicly funded education is to enhance students’ belongingness to the Chinese society, which appears to be deficient (Ho, 2007; Kuah-Pearce & Fong, 2010). The strategy for the goal is to make education funny and lessen the pressure of examination, rote learning and competition, which have been supposedly weakening students’ belongingness (Fok, 2004; Pun, 2013). Moreover, school-based management and enhancing the accountability and democracy in school are proposed means to raise students’ belongingness to school (Cheng & Cheung, 2004; Yu, 2005). Nevertheless, promoting belongingness is not the sole goal in public and private education. An alternative direct and immediate goal is the advancement of students’ competence and competitiveness, particularly to suit the knowledge economy (Kennedy, 2004). For this goal, education is fond of international or cosmopolitan orientation, as exemplified in the preferred use of English in school (Chan, 2002; Lai & Bryam, 2003). This orientation may pose a conflict with belongingness to local society and its sectors (Kuah-Pearce & Fong, 2010). The conflict is common in various places where multiple cultures or orientations challenge students’ belongingness (Barrett, 2007). This challenge, nonetheless, hinges on the impacts of education on students’ belongingness.

**Impacts of education on belongingness**

The impact of education on belongingness to society and its sectors is positive with respect to structural-functionalism theory (Shaidullina et al., 2015; Wocock, 2001). That is, education exerts an integrative effect such that higher education results in greater belongingness. However, the impact is negative according to the empowerment or individualization thesis (David, 2014; Forrest, 1999). These divergent views necessitate the present empirical investigation.

Structural-functionalism theory maintains that education is a structural part of society to fulfil the integrative function for society. The function operates in a generic, holistic, spontaneous and accommodative way that does not rely on specific and thoughtful mediation (Hall, 1991; Snarey & Pavkov, 1991). This way is effective insofar as the integrative effect of education is functional to society, such that the society requires and thereby supports the educational effect (Brown, 2001). The effectiveness hence hinges on the feedback of society to indicate the requirement for the effect (Turner & Maryanski, 1979). That is, when the feedback is supportive, the integrative effect of education is effective. Herein, the integrative effect means that one with higher education has greater belongingness. The integrative effect thus is a stratifying process to integrate educated people (Harper & Leicht, 2011). This effect, according to structural-functionalism theory, results from the requirement of society for its functioning. The elegance of the structural-functionalism explanation is that the explanation does not need to specify
socialization, disciplining and/or other mediating factors for the education effect. Instead, it posits that students, educators and other agents spontaneously gravitate towards conditions that are functional to society and its sectors. Support for the explanation thereby hinges on evidence for the relationship or reciprocity effects between education and belongingness or social integration.

Sporadic research findings showing the positive effect of education on belongingness include the following. First, the student's perceived school influence has indicated a positive effect on belongingness to the country (Fairbrother, 2003). Second, parental education level has shown a positive effect on the child's attachment to the family (Catterello, 2000). Third, the student's valuation of education has displayed a positive effect on family obligation (Fuligni & Zhang, 2004). Fourth, one's education level has generated a positive effect on belongingness to the neighbourhood (de Souza Briggs, Darden, & Aidala, 1999; Mesch & Manor, 1998). Fifth, the student's academic achievement has presented a positive effect on belongingness to school (Fredricks & Eccles, 2005; Glanville, Sikkink, & Hernández, 2008; Ireson & Hallam, 2005; Moody & White, 2003). Sixth, the school achiever has appeared to be more patriotic than have others (Niemi, Hepburn, & Chapman, 2000).

Conversely, some research findings indicating the positive effect of belongingness on education or its functioning are the following. First, the student's belongingness to school has demonstrated a positive effect on academic achievement (Faircloth & Hamm, 2005; Kennedy & Tuckman, 2013). Moreover, the belongingness of students in a school has generated a positive effect on the individual student's academic achievement (Park & Sandefur, 2006). Second, the student's family cohesion maintained a positive effect on academic achievement (Georgiou, 1995). Third, the student's social integration has shown a positive effect on academic achievement (Strage, 1999). Fourth, the student's identification with the father has displayed a positive effect on the student's valuation of education (Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001). Fifth, the student's attachment to parents has manifested a positive effect on the student's academic efficacy (Murdock & Miller, 2003). Sixth, the student's belongingness to school has evidenced a positive effect on the student's educational adjustment (Ostrove & Long, 2007). These findings suggest the functional requirement of belonging for education.

By contrast, the thesis of empowerment or individualization proposes the negative effect of education on belongingness. Accordingly, the thesis reasons that education enables the student to be independent from groups and competing with others (Good & Bruden, 2000; Piotrowski & Paat, 2012). Supportive of the thesis are the following findings about the negative effect of education on belongingness. First, educational level has shown a negative effect on the student's belongingness to the country (Jing, Chen, & Haipeng, 1995). Second, the student has appeared to be lower in belongingness to society than have other young people (Yang, 1996). Third, educational level has displayed a negative effect on the student's belongingness to school (Moody & White, 2003). These findings thereby urge for a test of the following hypotheses based on structural-functionalist theory applied to the student.

Education has a positive effect on belongingness to the society, neighbourhood, school and family. Such education includes the following indicators:

1. The student's educational level.
2. The student's academic achievement.
3. The student's grade-weighted academic achievement.
4. The education level of the student's father.
5. The education level of the student's mother.

A fair test of the hypotheses requires controlling for background characteristics that potentially confound the hypothesized effects. Such background characteristics include the student's gender, age and residency that can affect both education and belongingness, based on the following research findings. First, education level is obviously higher in the older student and immigrant (Peters & Mullis, 1997; Piotrowski & Paat, 2012). Second, academic achievement has tended to be lower in the older student, male student and the immigrant (Hampden-Thompson & Pong, 2005; Lauglo, 2011; Pong & Chen, 2010). Third, belongingness to society has appeared to be lower in the immigrant and younger
student (Jing et al., 1995; Yang, 1996). Fourth, belongingness to the neighbourhood has seemed to be lower in the female student than in the male student (Zani, Cicognani, & Albanesi, 2001). Fifth, belongingness to the family has been higher in the female student, younger student and immigrant (Jing et al., 1995; Phinney, Ong, & Madden, 2000; Shek, 2002). Sixth, belongingness to school has been prone to be higher in the female student than in the male student (Ireson & Hallam, 2005).

Method

Participants

As respondents to a survey, 417 students in Grade 7, Grade 8 or Grade 9 at two secondary schools in Hong Kong were participants in the study. On average, the student had 15.4 years of age, 8.8 years of schooling (i.e. educational level in terms of grade) and 12.6 years of residency in Hong Kong (see Table 1). The father of the student, on average, had 8.8 years of schooling, and the mother, 8.1 years. Among the students, 40.0% were female. The students obtained their parents’ consent to participate in the study voluntarily.

Measurement

The measures of belongingness to the society, neighbourhood, school and family each included multiple items using some rating scales. In contrast, academic achievement was a single item about average marks (rated on a 0–100 scale) obtained from the latest examination result reported by the student.

Belongingness to society was the composite of six items, such as, ‘I have a strong sense of belonging to Hong Kong’ (Chow, 2007). Each items used a five-point Likert scale to generate scores ranging from 0 to 100, for ease of interpretation and comparison (Preston & Colman, 2000). The scores were 0 for the first point, 25 for the second point, 50 for the third point, 75 for the fourth point and 100 for the fifth point. The internal consistency reliability of the composite was .663 (estimated from the confirmatory factor analysis part of structural equation modelling, Bollen, 1989).

Belongingness to the neighbourhood was the composite of five items, such as, ‘I feel like I belong to the neighborhood’ (Buckner, 1988). Each item used a six-point Likert scale to generate scores ranging from 0 to 100. The scores were 0 for the first point, 25 for the second point, 50 for the third point, 65 for the fourth point, 80 for the fifth point and 100 for the sixth point. The internal consistency reliability of the composite was .764.

Belongingness to school was the composite of 13 items, such as, ‘I feel like a real part of this school’ (Cheung, 2004). Each item used a five-point Likert scale to generate scores ranging from 0 to 100. The scores were 0 for the first point, 25 for the second point, 50 for the third point, 75 for the fourth point and 100 for the fifth point. The internal consistency reliability of the composite was .852.

Table 1. Means and standard deviations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Scoring</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (no, yes)</td>
<td>0, 100</td>
<td>40.0</td>
<td>49.1</td>
</tr>
<tr>
<td>Age</td>
<td>years</td>
<td>15.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Education</td>
<td>years</td>
<td>8.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Residency</td>
<td>years</td>
<td>12.6</td>
<td>17.6</td>
</tr>
<tr>
<td>Father’s education</td>
<td>years</td>
<td>8.8</td>
<td>4.1</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>years</td>
<td>8.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>0–100</td>
<td>60.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Belongingness to society</td>
<td>0–100</td>
<td>58.8</td>
<td>16.7</td>
</tr>
</tbody>
</table>
| Belongingness to the
  neighbourhood                | 0–100   | 54.2 | 20.5 |
| Belongingness to school       | 0–100   | 58.9 | 18.7 |
| Belongingness to the family   | 0–100   | 77.3 | 23.4 |
Belongingness to the family was the composite of three items, such as, ‘I feel a sense that I personally belong in my family’ (Hardway & Fuligni, 2006). Each item used a five-point Likert scale to generate scores ranging from 0 to 100. The scores were 0 for the first point, 25 for the second point, 50 for the third point, 75 for the fourth point and 100 for the fifth point. The internal consistency reliability of the composite was .691.

Procedure

The survey collected self-reported data from the students during class time, after obtaining the consent of their parents and class teachers. With the use of quality control and data cleaning measures, the resultant data were suitable for statistical analysis. The primal analysis employed structural equation modelling to fit a confirmatory factor model to identify trait factors for examining their structural relations, using the maximum-likelihood estimation (Kline, 2005). That is, the modelling incorporated the analysis of the confirmatory factor model and structural relation model. The confirmatory factor model identified four trait factors pertaining to belongingness to the society, neighbourhood, school and family, in the presence of a method factor to represent the acquiescent response set of all ratings. This model thereby disentangled each of the four trait factors from the other factors to establish convergent validity and discriminant validity (Podsakoff, MacKenzie, & Podsakoff, 2003). More importantly, the model identified trait factors that were free of measurement error for structural relation analysis. This analysis involved education indicators and background characteristics as predictors of the four trait factors of belongingness. Notably, the indicator of grade-weighted academic achievement was the product of education level and academic achievement, using their standard scores to circumvent the difficulty of multicollinearity (Brambor, Clark, & Golder, 2006). Findings from all the analyses in structural equation modelling would be credible when the modelling manifested favourable goodness-of-fit statistics. These statistics included a high comparative goodness-of-fit index (CFI > .92), a low standardized root mean square of residuals (SRMR < .05) and a low root-mean-square error of approximation (RMSEA < .07) for a model involving 36 input variables (Marsh, Hau, & Wen, 2004).

Results

Based on the simple averages of items, the student’s belongingness to the society, neighbourhood and school, on average, was at modest levels ($M = 54.2$ to $58.9$, see Table 1). In contrast, the student’s belongingness to the family was at a quite high level, on average ($M = 77.3$).

The structural equation modelling that incorporated both the confirmatory factor model and structural relation model evidenced favourable goodness-of-fit statistics ($CFI = .949$, $SRMR = .037$, $RMSEA = .035$, $L^2(594) = 5362$). This goodness of fit meant the validity of the whole model and thus factor loadings and effects estimated for the model.

The confirmatory factor analysis part of the structural equation modelling identified the four trait factors of belongingness, based on their 27 indicators. These factors had substantial factor loadings ($\lambda > .3$) to demonstrate convergent validity (see Table 2). The trait factors also had discriminant validity endorsed by the goodness of fit of the model, which distinguished each of the trait factors from other trait factors and the method factor. Notably, many loadings on the method factor were also substantial ($\lambda > .3$), and this meant the need for disentangling the trait factor from the method factor in order to distil the trait factor for structural relation analysis. Meanwhile, the correlations ($r = -.071$ to $.530$) among the trait factors were sufficiently low to show their distinctiveness from each other (see Table 3).

The structural relation analysis part embraced the test of the hypotheses. Concerning Hypothesis 1.1, the student’s education level showed a significant effect only on belongingness to society ($\beta = .072$, see Table 4). Thus, Hypothesis 1.1 got partial support. Regarding Hypothesis 1.2, the student’s academic achievement exhibited significant effects on belongingness to the society, neighbourhood and school ($\beta = .044$ to $.231$). The effect on belongingness to the family was insignificant, albeit not too weak ($\beta = .117$). Hence, Hypothesis 1.2 attained a great deal of support. As regards Hypothesis
1.3, the student’s grade-weighted academic achievement, as an interaction between education level and academic achievement, displayed a significant effect on none of the four belongingness factors ($\beta = -0.025$ to $0.028$). This hypothesis therefore found no support. Hypotheses 1.4 and 1.5 concerning the

Table 2. Standardized loadings on four traits factors and one method factor.

<table>
<thead>
<tr>
<th>Factor/indicator</th>
<th>Trait</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belongingness to society</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am very interested in issues, events or affairs concerning Hong Kong</td>
<td>.337</td>
<td>.312</td>
</tr>
<tr>
<td>I have a strong positive feeling about being Hongkongese</td>
<td>.547</td>
<td>.327</td>
</tr>
<tr>
<td>I have a strong sense of belonging to Hong Kong</td>
<td>.664</td>
<td>.340</td>
</tr>
<tr>
<td>I feel a strong attachment towards my own ethnic group</td>
<td>.504</td>
<td>.368</td>
</tr>
<tr>
<td>I am active in organizations or social groups that include mostly people of my own ethnic group</td>
<td>.469</td>
<td>.351</td>
</tr>
<tr>
<td>I find it easy to make friends with Hongkongese who are not of my own ethnic group</td>
<td>.444</td>
<td>.296</td>
</tr>
<tr>
<td><strong>Belongingness to the neighbourhood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel like I belong to the neighbourhood</td>
<td>.555</td>
<td>.374</td>
</tr>
<tr>
<td>I feel loyal to the people in my neighbourhood</td>
<td>.709</td>
<td>.409</td>
</tr>
<tr>
<td>I would be willing to work together with others on something to improve my neighbourhood</td>
<td>.506</td>
<td>.451</td>
</tr>
<tr>
<td>I like to think of myself as similar to the people who live in this neighbourhood</td>
<td>.687</td>
<td>.438</td>
</tr>
<tr>
<td>Overall, I am very attracted to living in this neighbourhood</td>
<td>.670</td>
<td>.398</td>
</tr>
<tr>
<td><strong>Belongingness to school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel like a real part of this school</td>
<td>.589</td>
<td>.323</td>
</tr>
<tr>
<td>People here notice when I’m good at something</td>
<td>.557</td>
<td>.440</td>
</tr>
<tr>
<td>Other students in this school take my opinions seriously</td>
<td>.370</td>
<td>.337</td>
</tr>
<tr>
<td>Most teachers here are interested in me</td>
<td>.543</td>
<td>.431</td>
</tr>
<tr>
<td>There is at least one teacher or adult in this school I can talk to if I have a problem</td>
<td>.350</td>
<td>.298</td>
</tr>
<tr>
<td>People at this school are friendly to me</td>
<td>.538</td>
<td>.306</td>
</tr>
<tr>
<td>I am included in lots of activities at this school</td>
<td>.416</td>
<td>.316</td>
</tr>
<tr>
<td>I am treated with as much respect as other students</td>
<td>.596</td>
<td>.306</td>
</tr>
<tr>
<td>I feel very different from most other students here</td>
<td>.496</td>
<td>.439</td>
</tr>
<tr>
<td>The teachers here respect me</td>
<td>.546</td>
<td>.369</td>
</tr>
<tr>
<td>People here know I can do good work</td>
<td>.580</td>
<td>.414</td>
</tr>
<tr>
<td>I feel proud of belonging in this school</td>
<td>.510</td>
<td>.407</td>
</tr>
<tr>
<td>Other students here like me the way I am</td>
<td>.448</td>
<td>.475</td>
</tr>
<tr>
<td><strong>Belongingness to the family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My family is important to the way I think of myself as a person</td>
<td>.559</td>
<td>.359</td>
</tr>
<tr>
<td>I feel a sense that I personally belong in my family</td>
<td>.622</td>
<td>.332</td>
</tr>
<tr>
<td>I do not feel like an important part of my family (reversed)</td>
<td>.771</td>
<td>-.113</td>
</tr>
</tbody>
</table>

Table 3. Correlations among belongingness factors.

<table>
<thead>
<tr>
<th>Correlate</th>
<th>Society</th>
<th>Neighbourhood</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>.194*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>.530***</td>
<td>.249**</td>
<td>1.000</td>
</tr>
<tr>
<td>Family</td>
<td>.252*</td>
<td>-.071</td>
<td>.177**</td>
</tr>
</tbody>
</table>

Note: All correlations were statistically significant at the .05 level.

Table 4. Standardized effects on belongingness.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Society</th>
<th>Neighbourhood</th>
<th>School</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>-.030</td>
<td>.006</td>
<td>-.019</td>
<td>.017</td>
</tr>
<tr>
<td>Age</td>
<td>-.041*</td>
<td>.051</td>
<td>-.077***</td>
<td>-.065</td>
</tr>
<tr>
<td>Education</td>
<td>.072***</td>
<td>.004</td>
<td>.001</td>
<td>.086</td>
</tr>
<tr>
<td>Residency</td>
<td>.065</td>
<td>.004</td>
<td>-.011</td>
<td>-.038</td>
</tr>
<tr>
<td>Father’s education</td>
<td>.073</td>
<td>.060</td>
<td>.082</td>
<td>.105</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>-.004</td>
<td>-.009</td>
<td>-.009</td>
<td>.025</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>.060*</td>
<td>.044***</td>
<td>.231***</td>
<td>.117</td>
</tr>
<tr>
<td>Academic achievement $\times$ Education</td>
<td>.028</td>
<td>-.025</td>
<td>.012</td>
<td>.017</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.020</td>
<td>.008</td>
<td>.069</td>
<td>.042</td>
</tr>
</tbody>
</table>

Note: The male was the reference category.

*p < .05. **p < .001.

1.3, the student’s grade-weighted academic achievement, as an interaction between education level and academic achievement, displayed a significant effect on none of the four belongingness factors ($\beta = -0.025$ to $0.028$). This hypothesis therefore found no support. Hypotheses 1.4 and 1.5 concerning the
effects of the father’s education level and mother’s education level also witnessed no support, as the levels did not generate a significant effect on any of the belongingness factors ($\beta = -0.009$ to $0.105$). In all, Hypothesis 1 obtained some partial support from the significant effects of the student’s education level and academic achievement on belongingness.

The structural relation analysis also showed some significant effects of background characteristics, which served as control factors to clarify the effects of education. Eventually, age manifested significant negative effects on belongingness to society and school ($\beta = -0.041$ & $-0.077$, see Table 4).

**Discussion**

Results lend some selected support to the hypotheses based on structural-functionalism theory that education contributes to the student’s belongingness. Importantly, results gave no support to the empowerment or individualization thesis that education weakens the student’s belongingness. Thus, structural-functionalism theory is more useful than is the alternative to explain the effect of education on belongingness. Of particular concern are those education effects found to be significant.

Among the significant education effects, those of the student’s academic achievement are the most important, because of its pervasive effects on belongingness to the society, neighbourhood and school. These effects illustrate the import of effective education in fostering the student’s academic achievement. According to structural-functionalism theory, effective education sustains the student’s belongingness to represent an integrative function that the society, neighbourhood and school require and support. Consequently, students’ belongingness to society and its sectors would generate feedback effects to facilitate the function of effective education for enabling students’ academic achievement. This is possible when the student’s belongingness to the society, neighbourhood and school enhances the student’s acquisition of support from there to accomplish academic achievement (Bernardon, Babb, Hakim-Larson, & Gragg, 2011; Rosenfeld & Richman, 1997). Meanwhile, the society, neighbourhood and school are likely to provide the support, because the achiever’s belongingness is functional or desirable. This is likely because the achiever is more competent, socially responsible, ethical and helpful, and getting more support (Mackinnon, 2012; Moore & Keith, 1992; Power & Khmelkov, 1999; Tompson & Dass, 2000). Nevertheless, the student’s academic achievement did not engender a significant effect on belongingness to the family. Viewed from structural-functionalism theory, the student’s academic achievement is not functional to the family and thus the family does not require and support the academic achievement. This echoes the notion that family support is gratuitous and obligatory (Rothbaum, Kakinuma, Nagaoka, & Azuma, 2007). Moreover, the student’s academic achievement needs not depend on family support (Román, Cuestas, & Fenollar, 2008).

Apart from effective education reflected in academic achievement, the student’s education level manifested a significant effect on belongingness to society, but not on belongingness to the neighbourhood, school and family. In the light of structural-functionalism theory, the significant effect suggests that the student’s education level is functional to society in general but not to its specific sectors, through the enhancement of belongingness. The function, for instance, operates in the promotion of economic development and life chances in society (Conley & Bennett, 2000; Piotrowski & Paat, 2012). That is, when the student with higher education has greater belongingness to society, the student can offer more contributions that are effective to society (Finkel & Ernst, 2005; Hughes, 2001). Consequently, society is likely to lend support to raising the education level of young citizens to perpetuate the integrative function of education (Brighouse, 2006). Nevertheless, the effect of the student’s educational level was not pervasive enough to apply to the neighbourhood, school and family. The effect is thereby weaker than is that of academic achievement, which registers effective education. Obviously, effective education is more functional than is education in general.

The student’s grade-weighted academic achievement did not show a significant effect on belongingness to society or its sectors. Given the significant effect of academic achievement, the insignificant effect of grade-weighted academic achievement indicates that the effect of academic achievement did not significantly escalate with higher education level. This may be due to the limitation of the study to
junior secondary grades from Grade 6 to Grade 8. That is, academic achievement in one junior grade and in another junior grade does not make a discernible difference, notably in belongingness and thereby social functions in this case.

The educational levels of the father and mother of the student did not display significant effects on the student’s belongingness to society and its sectors. From the perspective of structural-functionalism theory, the insignificant effects suggest that the parental influences are not functional and desirable to society and thus not requisite. One issue or hurdle to the influences is the disfavour for nepotism or the intergenerational transmission or reproduction of status (Fukuyama, 1995). Apparently, nepotism is responsible for corruption and thus dysfunction in society (Inglehart & Welzel, 2005). Instead of parental influence, schooling is desirable for rendering the integrative effect to sustain the functioning of society (Brighouse, 2006; Stevens, Armstrong, & Arum, 2008). Hence, the student’s own achievement in school, rather than benefit from parental education, determines belongingness.

The student’s age exhibited significant negative effects on belongingness to society and school. Essentially, given the control for education level, the older student in a grade is likely to have repeated the grade. Grade repetition tends to be undesirable and dysfunctional to society and school, as it divulges a failure (Gil & Molina, 2007). Thus, the effect of grade repetition is just contrary to that of education, with respect to structural-functionalism theory.

Limitations and future research

The study suffers from the limitations of the cross-sectional research design, sampling in only two secondary schools in the Chinese society of Hong Kong, and reliance on self-reported measures. First, the design cannot ensure the causal impact of academic achievement on belongingness, which can happen concurrently or stem from some common underlying causes. At best, the design only allows for the examination of effects that occur within a short time. To facilitate causal analysis over a long time, a panel research design is preferable. Second, the limited sampling constrains the generalization of findings from the study. Probably, the study in Hong Kong is peculiar in view of the special features of Hong Kong in exposing its students to an authoritarian education system, traditional obligation, family orientation, competitive ethos, dual Chinese and Hong Kong identities, and international or cosmopolitan outlook (Kam, 2012; Kuah-Pearce & Fong, 2010; Pun, 2013). As these features possibly moderate the impacts of education on the student’s belongingness, the impacts found in the study would differ from those in other places. Crucially, future research needs to sample from societies with diverse sociocultural backgrounds are necessary to enhance the generality of research findings. Such research also allows for the investigation of the possible moderation due to societal features in order to estimate variations among different societies. Third, the student’s self-report measures do not guarantee the accuracy of measured factors. Future research can glean information from the student’s teachers, classmates, and parents and school documents to corroborate the student’s self-report measures.

To substantiate the explanation of structural-functionalism theory, future research can incorporate the examination of the feedback loop that is central to the theory. This loop includes requirement and support given from the society, neighbourhood, school and family for the integrative function of education. Specifically, the integrative function refers to the generation of belongingness through education, particularly effective education that propels the student’s academic achievement. In addition, future research can demonstrate the function of belongingness for the society, neighbourhood, school and family. That is, the research can elaborate how the student with high belongingness benefits the society and its sectors.

Implications

Results imply that raising the student’s educational level and particularly academic achievement escalates the student’s belongingness to society. According to structural-functionalism theory, the educational effect occurs because escalating the student’s belongingness is favourable to societal functioning.
Hence, the implication warrants the expansion and optimization of education to make it effective in upgrading the student's education level and academic achievement as a way to boost societal functioning. The implication also refutes suspicion that the integrative effect of education is unlikely and useless when education empowers, individualizes and liberates the student from society.

**Compliance with ethical standards**

The study proceeds with (1) no conflict of interest, (2) institutional ethical approval for research on human participants and (3) informed consent from participants and their parents.

**Disclosure statement**

No potential conflict of interest was reported by the authors.

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