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# Effects of Schooling on Personality and Performance of Single Children in China

## Abstract

*Amidst the continued controversial debate in literature on the personality traits and school performance of single children, the present writer collected and analyzed a huge cross-section sample of over 12,000 Chinese students spreading over Grade 1 to Grade 12 and coming from different schools and community settings. Through 12 parallel discriminant analyses, each applied to one grade, it was found that family influences tended to diminish as peer and the less obvious school effect began to take effect. Subsequently, the earlier differences in personality traits and school performance, that were found between single children and children with siblings, and that could be traced to unique family experience began to disappear, as the uniform socialization process began to take root.*

## Résumé

*Au milieu de la controverse qui fait rage dans la littérature sur les traits de caractère et de rendement scolaire des enfants uniques, l'auteur a recueilli et analysé des données sur un important échantillon représentatif de plus de 12,000 élèves chinois inscrits dans toutes les classes de la première à la douzième année dans différentes écoles et milieux communautaires. Après avoir effectué 12 analyses discriminantes parallèles, chacune portant sur une classe, l'auteur a constaté que les influences familiales avaient tendance à s'atténuer tandis que les pairs et les effets moins manifestes de l'école commençaient à prendre le dessus. Par la suite, les différences constatées au chapitre des traits de caractère et du rendement scolaire entre les enfants uniques et les enfants qui avaient des frères et soeurs ont commencé à s'estomper tandis que le processus de socialisation uniforme prenait racine.*

Personality of single children has been one of the research topics that received intense scrutiny and debate. Backed by past research (e.g., Blake, 1974; Minuchin, 1974; Thompson, 1974; Belmont, Wittes, & Stein, 1976), by advocates of the confluence model (i.e., Zajonc & Markus, 1975; Zajonc, 1983), by conventional beliefs (e.g., Fenton, 1928; Cutts & Moseley, 1954; Baker, 1987; *Beijing Review*, 1986) and by recent oriental research (e.g., Jiao, Ji, & Jing, 1986), one prevailing view points to a set of negative personality traits that supposedly characterize single children. Another equally convincing but contradictory perspective, substantiated by more recent western research findings (e.g., Blake, 1981; Falbo & Cooper, 1980; Falbo, 1984; Polit, Nuttall, & Nuttall, 1980; Poston & Falbo, 1990) downplays the negative perception of single children and emphasizes the positive personality traits that are often ignored by literature in the past.

In an attempt to reconcile the conflicting findings, Lam (1991) critically reviewed the existing state of the art related to research in this area and proposed a reconceptualization of the model in accounting for the personality development of single children. A key feature of such a reconceptualization, which is the focus of this paper is the role of significant others in the second stage of personality development for Chinese students. While it is evident that at the beginning stage, children's personality is much the outcome of parents and family experience, it is assumed that as they enter school, another group of influential "significant others", notably teachers and peers, begin to interact with and modify their behaviors and personality traits.

The present undertaking intends to map the degrees of modification that teachers and peers exert on the personality and school performance of single children compared with children having siblings. Specifically, two questions were posed: 1. Were there decreasing differences in terms of personality traits between single children and children with siblings in China as they progressed through the schooling? 2. Were there decreasing differences in terms of school performance between single children and children with siblings in China as they progressed through the schooling?

### Methodology

For lack of reliable tools of measurement on personality, home-room teachers whose duties included monitoring students' behaviors at home and in school and teaching moral education, provided the main source data for the present study. As the existing literature stress differences in personality and school achievement between single children and children with siblings, discriminant analysis was the major statistical technique employed for testing the validity of existing claims.

The impact of school and significant others on the personality development of single children was assessed indirectly. There were two underlying assumptions associated with this approach. First, other than the obvious

relative levels of maturity, there should be basically no fundamental changes in children's personality across class levels. Second, if changes were to occur, these changes must be the outcomes of modification by individuals that are closely associated with the children. These include their teachers and classmates.

In this context, the observed personality traits and school performance of children in their first years can be attributed to the residual effects of family as parental impact and control is still strong. As the children progress through the grades, the initial differences which owe much of their origin to experience and upbringing at home, will dissipate as the effects of school become more prominent.

Based on these assumptions, twelve discriminant analyses, each applied to one class level of schooling from Grade One to Grade Twelve were employed to assess the impact of school on children's personality and school performance. Background information pertaining to their family experiences, i.e., the degree of parent-child interaction, parental concern for their children and parental attitude toward their children's outdoor activities were also secured to serve as supporting reference to the phenomena under the present scrutiny. As longitudinal data are extremely difficult to obtain, it is assumed that a huge cross-sectional sample selected from the same schools and from similar community settings, should serve the same purposes.

### Sample

Some 500 home-room teachers from all types of schools located in urban, suburban, and rural communities were approached for providing data in Shanghai and the neighbouring districts. In total, 17,000 students' personality and school performance data were secured. Removal of those having incomplete information and having data of questionable reliability left data on 12,258 students for the final analysis.

Of the 12,258 students, 7,996 were single children and 4,262 were children with siblings. It was noted that in the elementary grades, single children far exceeded other children. In the junior high classes, the two groups were about equal in number. In the senior high level, children with siblings outnumbered single children. Such a distribution was very typical of other urban cities and suburban regions in China given the fact that the one-child policy was officially decreed in 1978. Interpretation of the analytical results should take such a distribution into account.

### Results

#### *Personality and performance changes over grades*

*Primary grades:* Discriminant analyses (Table 1) showed that from Grade One to Grade Three, single children were different from other children

in terms of creativity, achievement-orientation, independence, and aggressiveness. References to the mean scores confirmed the fact that single children were more creative, more achievement conscious, less independent, and more aggressive. These characteristics were reflected in their school performance in the sense that single children had a higher academic achievement, more positive attitude towards teachers and classmates, and higher learning ability.

While there were some variations between the elementary grades, it remained clear that single children displayed some noticeably positive features as well as negative features. In this sense, the two prevailing but incompatible viewpoints in literature were both supported. These two sets of features could co-exist side by side and were not mutually exclusive of one another.

Another observation was that the positive features of single children tended to persist over the earlier grades while their negative traits seemed to be curtailed. These positive traits seemed to have strong impacts on their achievement, class performance, attitude, and learning ability.

There seemed to be few differences in family experiences. Only in Grade 3 was it observed that parent-child interaction for single children was significantly different from that of other children in that the parents were more protective of their single child in outdoor activities.

On the whole, in the primary grades, single children were fairly distinct from other children. The discriminant analyses indicated that the two groups of children correctly classified averaged around 64%. Statistically, this implies that the characteristics of the two groups are quite distinct. Conceptually, we can attribute such differences to factors outside the school, i.e., the home environment, where the socialization process has not been unified as is the case in school.

*Intermediate grades:* In this period, single children were found to be different from other children in creativity (Grade 5), achievement-orientation (Grades 5 and 6), self-centredness, and aggressiveness (Grade 4). In one sense, the positive traits – creativity and achievement-orientation – identified in the earlier stage, continued to be the basis for distinguishing single children from children with siblings. Negative traits, however, showed substantial changes. The noted dependence disappeared, but other negative feature such as self-centredness and recurrent features such as aggressiveness reappeared for a brief period (Grade 4) before they disappeared as distinguishable features.

References to their school performance showed that single children continued to achieve better compared to their peers. Further they continued to display greater positive attitudes to teachers and peers and, to a lesser extent, learning abilities. There was a noted short improvement of single children's



sociability (in Grade 5) but that lapsed into normality again when they were in Grade 6.

Family experiences underwent by single children tended to be more distinct from the other group of children. Reference to the raw mean scores suggested that parents of single children continued to pay far more attention to the welfare of their sons and daughters than those having children with siblings. Subsequently, there was much more parent-child interaction in the families of single children, where greater parental concerns for the welfare of their children were observed. Parallel to these concerns was the more conservative attitude they had regarding their children's participation in outdoor activities.

On the whole, the number of areas in personality development and school performance that distinguished single children from children with siblings decreased. The discriminant analysis indicated that the two groups of children correctly classified was 62%, a slight drop from the first stage. Apparently, the more uniform socialization process of the school began to take effect rendering single children less distinguishable from other children.

*Junior high grades:* Close scrutiny of this period indicated that once again there were substantial differences existing between single children and children with siblings. While the amount and frequency of occurrence of positive personality traits (i.e., creativity and achievement-orientation) of single children decreased, their relative dependence on others seemed to be a persistent feature throughout the junior high grades. Self-centredness and aggressiveness remained in check in that the two groups did not differ from each other with the exception of Grade 8.

In terms of school performance, single children continued to outperform their peers throughout the junior high years. While their positive attitudes towards teachers and peers and learning ability remained sporadic, a strong awakening of their sociability seemed to occur. Throughout this period, it became more evident to the teachers that single children were actively seeking friendship, a phenomenon that is not uncommon at this age range.

Family experiences at this stage tended to diminish in degree of difference. While the parent-child interaction remained strong in the families of single children, parental concern as well as their conservative and protective attitude towards what activities their children were engaging in outdoors decreased.

Perhaps with increasing socialization in school and decreasing family influence, single children, while still retaining areas of distinctiveness, were less distinguishable in terms of personality than that of other children. The discriminant analysis of junior high students indicated that only 60% of the

groups were correctly classified, a further drop of 2% from the intermediate grades.

*Senior high grades:* At this stage, both the positive and negative traits that were distinguishable between the two groups of children further decreased. Only in Grade 10, did we find that creativity, self-centredness, and stubbornness of single children were different from the other group. At higher grades only dependence, as a negative trait, persisted.

In the area of school performance, single children still performed well, particularly in Grade 12 where they were found to be statistically better than children with siblings. In addition, single children still displayed a more positive attitude towards teachers and peers in Grade 11. Other than these two areas, however, the two groups of children were increasingly similar.

The areas where family experiences distinguished the two groups remained few as in the junior years. And the discriminant analysis correctly classified the two groups remained at 60%, unchanged from the previous period.

### Conclusion

By applying twelve discriminant analyses to a large cross-section of Chinese children from different types of schools and community settings in Greater Shanghai and neighbouring districts, the present researcher found that in the initial stage, both positive personality and negative traits exhibited by single children greatly affected their performance in school. If socialization in class had started as soon as children entered school, it certainly had not modified the initial experience single children underwent at home.

When single children entered higher grades, however, some unifying socialization began to exert its influence so that toward the end of their schooling, there were far fewer areas of differences that distinguished single children from other groups of children. Thus, even with the resurgence of some characteristics typical of single children at the junior high level, the urge to socialize was strong, rendering the discriminant function of the analysis to lose its ability to differentiate.

Within the confines and limitations of a cross-sectional sample, which cannot take the place of longitudinal data, the modifying effects of school in general and those of the second set of significant others (teachers and peers) in particular, became more obvious as children progressed from one grade to another. The exaggerated concerns and claims related to only-children in the Chinese press seems somewhat premature. The perspective on the single children's personality development and school performance will become more balanced when their changes during the entire schooling is taken into account.

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