The Single-Child's Personality Development and School Adjustments:

Some suggestions for future research

Abstract

The controversial findings on the personality of the single-child has prompted the present writer to take a critical look at the state of the art in this domain. Among the shortcomings detected from research are the lack of coherent theories, heterogeneous sample selection, inadequate research designs, and the problems confronting some new methodology of research in the effort of synthesizing and comparing research findings. A conceptual schema is subsequently developed that outlines critical stages affecting personality development of the only-borns and their performance in school. It is hoped that through the longitudinal analysis, the modifying effects of the significant others on the personality of the single-child can be captured and inconsistent theories and findings can be integrated.

Résumé

Les résultats controversés des recherches sur la personalité de l'enfant unique ont poussé l'auteure à jeter un regard critique sur les dernières parutions dans ce domaine. Citons, entre autres, les lacunes suivantes: manque de théories cohérentes, échantillons de sélection hétérogènes, conceptions de recherche inadéquates, problèmes qui surviennent avec certaines nouvelles méthodologies de recherche dans la synthétisation et la comparaison des résultats, etc. Un schéma conceptuel est développé par la suite qui définit les étapes critiques affectant le développement de la personnalité de l'enfant unique et son comportement en classe. Nous espérons que par le biais de l'analyse longitudinale, les effets modificateurs des "autres de grande importance" sur la personnalité de l'enfant unique peuvent être captés et que les théories et résultats inconsistants peuvent être intégrés.

Among the western industrialized countries, there is a dramatic shift in the child-bearing practices of women such that one-child families assume a higher and higher proportion of the population than in earlier decades (Taffel, 1977; Kasten, 1986). Historically, such a phenomenon was attributed to periods of economic hardship and war (Blake, 1981; Easterlin, 1978; Westoff, 1978) but more recently, to the high divorce rate, increased numbers of women in the labour market, and economic recessions (Westoff, 1978). In a completely different social setting, China in 1979 initiated a one-child policy to ensure greater chances that its recent modernization process would succeed (Poston & Yu, 1985).

Whether family planning is self-motivated, reflecting current social and economic norms, or results from government-sponsored social experimentation, it is important to realize that there has been fundamental change not only in the demographic structure, but also in the nature of the socialization process within the family, in personality development, and in various aspects of school performance and even in future development of adult characteristics (Polit, Nuttall, & Nuttall, 1980). Given the immense ramification that single-children (sometimes termed only-children) have for the future of civilization, there is little wonder that this area receives considerable attention and interest among sociologists, psychologists, and educators around the world.

Common Belief and Research Findings

Popular polls (Fenton, 1928; Cutts & Moseley, 1954) and common conviction all depict single-children in an extremely negative light, and there has been considerable social pressure on parents to have more than one child in the family (Griffith, 1973). Some (i.e., Thompson, 1974; Solomon, Clare, & Westoff, 1956) have long believed that only-children suffer substantial disadvantages because of their lack of siblings in their critical periods of childhood development. They argue this disadvantage accounts for the formation of undesirable personality traits and impaired interpersonal relationships.

Among the list of personality characteristics associated with single-children are: self-centred, self-willed, attention-seeking, dependent, temperamental, anxious, generally unhappy, unlikable (Blake, 1974; Thompson, 1974); selfishness, unsociability, and being spoiled (Polit, Nuttall, & Nuttall, 1980). Magazines and newspapers, describing only-children in China, add to this list with new colourful terms like "little emperors" (Baker, 1987) and "little suns" (Beijing Review, 1986), depicting with utter horror single-children's egoistic, willful, and spoiled characteristics. Thus, the negative stereotype of the only-child in the West as the "cultural truism" or an "unchallengeable given" attains a "universal truism" when parallels can be drawn in another completely different culture.

Contributing greatly to these negative perceptions of single-children are some of the pervasive assumptions that governed the earlier empirical investigations. Foremost in the list is the notion of deprivation. If siblings provide critical learning experiences for each other, it must be inferred that to be the only-child in a family, then, is to be at risk of being deprived of valuable socialization in the early stages of development. Many research studies (e.g., Belmont, Wittes, & Stein, 1976; Fenton, 1928) make this assumption to account for the extent of maladjustment. Others (e.g., Minuchin, 1974) used the assumption to predict only-children's lack of communication skills, autonomy, and identity formation. There are still others who used this assumption to explain IQ discontinuities (Zajonc & Markus, 1975; Zajonc, 1983).

A second important assumption that is widely used to predict negative development of single-children focuses on the specific type of relationships their parents have established with them. In general, parent-child relationships for only-children and firstborns are typified by the high anxiety levels of their parents (Schachter, 1959) due to the parents' lack of child-rearing experience (Waddell & Ball, 1980). Because of this high anxiety, parents of the only-child are supposed to be overly responsive, causing the only-child to exhibit greater affiliativeness (Schachter, 1959). Consequently, undesirable outcomes in these single-children, such as dependency and selfishness, tend to follow.

These are assumptions that are by no means universally accepted, nor are findings from the recent empirical works consistent. The chief proponents of the first assumption, notably adherents of the confluence model (Zajonc & Markus, 1975), which anchors intellectual development on the combined effects of sibling structure, are being critically questioned (Ernst & Angst, 1983; Steelman, 1985). Indeed, following the detailed review provided by Steelman (1985), the confluence model was found to rest on precarious empirical support. Advocates of the confluence model attribute "low ability and achievement decrease" of only-children to a "teaching handicap" which is expected to appear only around age 13. However, Steelman and Mercy (1980) found the phenomenon to be true only if it were confined to families below the poverty line. Page and Grandon (1979) supported the phenomenon when applied to white adolescents but not to their black counterparts. Two studies of Marjoribanks (1976a, 1976b) strongly suggest that parent-child interactions play a major role in cognitive development and mediate the impact of sibling structure. Indeed, if socioeconomic status, race, and the quality of parent-child relationship were controlled (Steelman, 1985), it seems that the first assumption would fall apart.

If we turn our attention to the recent research on single-child/parent relationship, upon which the second assumption is based, we discover that the same responsive behaviours of parents have promoted greater achievement

motivation, internal locus of control (Falbo, 1984), intellectual development, and achievement (Blake, 1981; Falbo & Cooper, 1980).

Based on the meta-analysis of 115 studies, Falbo and Polit (1986) provided a detailed and convincing alternative interpretation of the onlyborns and their relationships with their parents. They argue that parental anxiety motivates parents to have high-quality interactions with their children. They felt that inexperience in child-rearing also might lead parents to have higher expectations for their children; there has been evidence that these heightened expectations have extended beyond this early period (e.g., Clausen, 1966; Kammeyer, 1967). They further reasoned that the recognition that the child is the only one they will ever have motivates them to establish and maintain positive relationships with their child. Additional parental attention apparently aids the child in acquiring more sophisticated intellectual skills, such as vocabulary, as well as more mature behaviour patterns, and for the same reason, their only-child will be encouraged to take greater care of his/her health and participate in extra-curricular activities.

In terms of sociability, Falbo and Polit (1986) further discovered that when the data ("need for affiliation" scales) were secured from self-report, only-borns scored lower than others. However, when they were based on the evaluations of others, e.g., peer-ratings, only-borns scored as high as other children. Claudy (1984) reported that only-borns spent more time in solitary, intellectual, and artistic activities and less time in group-oriented and practical activities than did their peers who had siblings. Conners (1963) explained the lowered need for affiliation among only-children as a result of large amounts of affection they receive from their parents. Nonetheless, the preponderance of evidence suggests that the "onlys" do not suffer as a consequence of their self-reported lowered sociability. Nor do they have lower levels of self-esteem (Falbo, 1981, 1984).

From repeated findings that education is inversely related to repeated pregnancies (Bumpass & Westoff, 1970; Westoff & Ryder, 1977), one may further infer that parents of greater intelligence and education choose to have fewer children or only one. If this inference is correct, there is additional evidence to support the viewpoint of Falbo and Polit (1986) that parent-child relationships in single-child families facilitate the development of achievement, intelligence, and character.

Problems Related to Existing Research

What emerges from this literature review is that the effect of sibling structure and the associated first assumption may not have much credibility. Challenges to the second assumption are silent on the possibility that closer relationships between parents and their single-children could also lead to the

undesirable characteristics like dependability, egocentricity, self-willedness, and temperamentality that are commonly observed. The accumulating evidence against the second assumption amounts to primarily a drastic overhaul of the unfair, one-sided, negative interpretations of single-children. Past efforts to bring to order the chaotic body of conflicting literature tend to be side-tracked into the testing of minor hypotheses, as exemplified by theoretical debates between those who are for or against the confluence model.

Aside from the tendency of side-stepping the major issues, there are several plausible reasons that account for the confusion of findings in this critical area.

Lack of coherent theories

First and foremost of the reasons for the confusion is the absence of a macro-theory that integrates the multitude of factors already studied but which have been given inconsistent interpretations. One finds that the existing empirical investigations fall into three categories:

First, those who dwell on formal theories tend to derive conceptualizations dealing with restricted concerns. Thus people entrenched in social-comparison theory (e.g., Zimbardo & Formica, 1963) focused their attention on the relation between self-esteem and birth order. Second, those that advocate the confluence model (Zajonc & Markus, 1975) are primarily interested in confirming the negative correlation between family size and intelligence.

Worse than the narrow frames is a considerable amount of literature in this area that is based on some conventional assumptions (as witnessed in the earlier sections) which collect data simply to justify their entrenched assumptions. This accounts for a high degree of inconsistency in their findings.

Third, worst of all is a large number of works that were motivated by either curiosity (Burke, 1956; Fenton, 1928) or convenience (e.g., Schooler, 1972). Totally unconcerned about the theoretical origins, these studies appear to be prompted by curiosity concerning selected aspects between single-children and those with siblings, and researchers proceeded to investigate these. Or, it so happened that in their samples, information on the family size was already obtained and it was a matter of convenience to undertake additional analysis.

Heterogeneous sample selection

Close scrutiny of the samples selected provides clues to the inconsistency of findings reported. The study completed by Nuttall, Nuttall, Polit, and

Hunter (1976) on effects of family size and birth order on academic achievement, for instance, drew samples of 553 boys and girls primarily from white, intact, middle- to upper-middle class families. Ernst and Angst (1983) drew their samples from 19- and 20-year-old males and females who live in Zurich, Switzerland. Page and Grandon (1979) obtained their sample from a U.S. national sample of high school seniors in 1972. Velandia, Grandon, and Page (1978) secured their sample from 17- and 18-year-old college applicants in Colombia, South America. Gailbraith (1982) selected his sample from one American university. Poston and Yu (1985) extracted their sample of 1069 from Changsha, Hunan Province, China.

Within this small sample of studies, one notes readily not only the wide latitude of age ranges of subjects, but also the diversity of ethnic origins from which the subjects were extracted. If by a miracle, some consistency of findings were reported, a universal law would be in the making. In reality, comparison of results from the heterogeneity of samples amounts to a comparison of apples and oranges. Any attempt to integrate the findings only confuses rather than clarifies the issue at hand.

Poor quality of research designs

It seems evident that the quality of research done on the only-borns is not high. When Falbo and Polit (1986) attempted to do a quantitative review of the only-child, they based their findings on five criteria: large sample size (i.e., greater than 500), use of probability sampling, controls for extraneous variables, sophisticated analytic approach, and use of established instruments. Only 115 out of 200 studies managed to pass the test. Of the total sample, 85 (or 43%) were eliminated for failing to satisfy all the criteria.

Problems confronting new methodology of research

With the arrival of meta-analysis (Glass, Macaw, & Smith, 1981) which utilizes study findings as a secondary order of analysis, and has much potential to make sense of research results, there are some fundamental problems that still await to be overcome. Quantitative comparisons of different studies depend heavily on the calculation of effect size. Given older studies tended to rely on analysis of variance, t-tests, and chi-square tests, more recent studies often use regression procedures, producing results in aggregated, correlation form, so that no effect size can be computed. As Falbo and Polit (1986) admitted, their generalized findings tended to be based more on older studies than new. This failure to include recent studies creates a bias and some fundamental weakness that is difficult to rectify.

Some Suggestions

To bring this chaotic situation into some order, we must recognize that some conceptual reorganization is the most fundamental and the most crucial task. It is, evidently, after a more comprehensive model has been defined, that we can begin to worry about the specific analytical methods that need to be adopted.

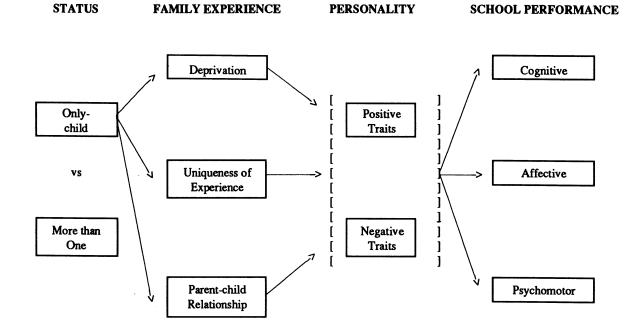
The conceptual model proposed here (see Figure 1 on following page) encompasses two assumptions and three accompanying principles. While not breaking new ground, these assumptions and principles encourage us to reorder what we already know as well as to broaden our consideration so that a conflicting conceptual framework can be accommodated.

The first assumption adopted in the model is that, in every stage of children's personality development, there are primary and secondary sources of influence from "significant others," a fact well documented in literature (e.g., Saltiel, 1986; Wilcoxon, 1987). The determination of which is a "primary" and which is a "secondary" source of influence on a child's early stage of development rests, to a large extent, on the frequency of contact as well as the relative degrees of power being exercised in dispensing encouragement and discipline for shaping the characters of children. In a typical family structure, parent(s) are the primary source of influence and the sibling influence is secondary. This is a situation which allows alternative interpretations of positive impact of parents through quality interaction and anxiety, or parental indulgence. On the other hand, in large families or families below the poverty line, not all children receive equal, if any, attention from parents, and these are likely the situations where sibling influence becomes predominant. The only-borns in the poverty-stricken families are usually left in isolation which benefits what the confluence model terms "deprivation".

The second assumption is that, as children mature (i.e., entry to school) more "significant others" enter the sphere of influence vying for predominance. In addition to the parent(s), and at times siblings, there are now teachers, school administrators and classmates. Amidst the divergent pulls and pushes, personality development is the outcome of accommodation and assimilation of values and expectations that approximate those already acquired in their first stage of development. In other words, children's personality gravitates towards the set of expectations that children are most accustomed to or that requires the least adjustment. Where there is a conflict of values and expectations from the "significant others," between the family and school sources, for instance, it is assumed there will likely be problems of maladjustment on the part of the children in the school setting.

Within the broad context of these two assumptions where almost infinite combinations of family and school experiences might exist, it is crucial, as a first principle, to avoid a piece-meal approach, as are most of the cases in existing research. In other words, all the crucial stages in children's development (only-borns as well as those with siblings) have to be encom-





Extraneous Factors: Age, Sex, Grade, Parental Income/Occupation, Type of School, Religion

passed. As a second principle, all these crucial stages have to be chronologically connected, given that personality development is assumed to be cumulative in nature. This requires our analysis of children's personality and educational development to be undertaken in a longitudinal perspective, which is enigmatically missing from most of the research done on this topic. As a third principle, all the extraneous factors affecting the personality and academic developments of children within any single culture must be taken into consideration. Otherwise, inappropriate comparisons and contamination of results will follow when these variables are not statistically controlled.

Within this given paradigm, we can begin to explore the experiences of children (both only-children and those with siblings) in the family more fully. When we take into consideration the various types of parental expectations, the presence or absence of strict guidelines for children's behaviours, the amount and quality of parent-child interaction in the family, contradictory explanatory mechanisms such as deprivation, uniqueness of experiences, and the more recent interpretation of the positive effects of anxiety and attention on parent-child relationship can all co-exist, and should be examined and compared. This is definitely superior to the employment of one explanatory mechanism or another on an *ad hoc* basis as is typified by the current research. Indeed, *a priori* presumptions, while at times essential for the formulation and testing of hypotheses in the quantitative analysis, tend to blind researchers to alternative perspectives and is now strongly criticized by qualitative researchers. In the present framework, however, no such problem exists.

Implicitly and explicitly, the quality of family experience that children (only-borns as well as those with siblings) undergo depends largely on their parents' background factors. Included in the list of variables are parents' socio-economic status (occupation, income, and social prestige), their educational levels, their ethnic origins, and the choice of residential locations (inner-city, suburban, or rural). These factors have been cited again and again in sociological research since child-rearing patterns are now firmly associated with social classes. As well, children's sex and age, which at times precondition their family experiences and their subsequent I.Q. development, are all critical extraneous factors accounting for the variation of family experiences and children's initial stage of personality development.

In the same vein, given that each society exerts a considerable influence on what is an acceptable practice of child-bearing and what is not, samples selected for the study should be drawn from one socio-cultural setting. In this context, additional extraneous factors such as national norms, and historical and cultural factors, can be controlled and preserved for cross-cultural comparisons.

Only after all the crucial factors identified in literature that account for children's family experiences have been studied, and after the various condi-

tions to which children have been exposed have been detected, can the personality development of children with or without siblings begin to be meaningfully explored. Indeed, in-depth qualitative analysis should supplement quantitative analysis to help researchers extract and account for the specific and the generalized patterns upon which positive and negative personality traits develop over time.

Conceptually, in the next stage, the types of impact that effect the personality children bring when they arrive at school should be examined, as well as all aspects of children's performance in school where personality is bound to generate differential effects, i.e., cognitive, affective, and psychomotor.

In terms of the cognitive domain, not only should the achievements of only-borns be examined, but attention should be paid as to whether they are under- or over-achievers. In this fashion the relative roles personality traits such as achievement-orientedness, intelligence, creativity, maturity, attention-seeking tendency play in shaping the academic performance and problem-solving abilities of the only-borns versus those with siblings can be verified.

In the affective domain, how the presence or absence of other aspects of personality traits, such as aggressiveness, dogmatism, dependency, self-conceit, internality affects the socialization process of the only-borns compared with those with siblings, and how these influence their perception and attitudes towards peers, teachers, and school can be detected. At the same time the compatibility of values and expectations between the family and school, and the relative degree of adjustment problems only-born children and those with siblings encounter can be detected through the assessment of their teachers.

Placing the adjustment problems on a longitudinal basis, or cross-sectional comparison, covering a wide span of grades, another valuable piece of information can be derived, i.e., the modification effects of teachers and classmates on the initial personality of children with and without siblings. Intuitively, this provides a critical area to reexamine and perhaps refine the second assumption regarding the relative ascendency of "significant others" as they increase in number in the second stage of the life of children. Through such a longitudinal analysis, the complex personality development of the single-child can be captured and more properly explained.

The psychomotor domain provides another observable area where personality traits of the only-borns versus other children are manifested through their overt behaviours. Indeed, through their relative dependence or independence in task-completion, their social skill or lack of such a skill in

making friends, their ability or lack of ability in self-discipline, and their various work habits, single-children's personality can be better ascertained. This satisfies the explicit principle of the model to be more comprehensive and all-encompassing, allowing internal validation to take place.

Conclusion

In face of the confusion and inconsistency of findings related to onlyborns and children with siblings, the author agrees with contemporary observers (Ernst & Angst, 1983; Schooler, 1972) to call a moratorium on birth order research. To their voice, it should be added that until such time as conceptual reconstruction has been completed, it will be futile to pursue issues in this critical area in a piecemeal approach. In preparation of a more comprehensive conceptual framework, a model which propounds the omnipotent roles of significant others in children's personality development has been proposed. By integrating the key components identified in current literature as essential stages of children's personality development, divergent perspectives are accommodated. The model provides a longitudinal linkage so that developmental paths and crucial intervention factors can be identified and accounted for. This implicitly requires a large scale national sample to be drawn specifically from one single culture so as to ensure that all possible explanatory mechanisms within that particular culture can be exhausted. This is deemed essential before cross-cultural comparison or integration of findings from diverse socio-cultural settings take place.

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