

Drug Abuse: Prognostic Role of Sibling Position in Bengali Culture in India-A Study in Kolkata, India

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Abstract

Background: It is commonly believed that birth order is an important determinant of personality, intelligence, and economic success. A number of recently published popular books, each with its own approach to the topic tend to support the belief. In keeping with published studies, we noted strong evidence of race and ethnicity effects. In addition, we find that adolescents who lived with both of their parents are much less likely to have used tobacco, alcohol, or marijuana, whereas household income seems to have an effect on female, but not male, substance use.

Growing up in an urban area is associated with an increase in the probability of having smoked marijuana and, for females only, an increase in the probability of having drunk alcohol. We find that children with older siblings are, on average, more likely to have used tobacco, alcohol, and cannabis than their firstborn counterparts controlling for family size, age, and the other factors in the model.

Males with older siblings are 6.2 percentage points more likely to have drunk alcohol and are 5.1 percentage points more likely to have tried marijuana than their firstborn counterparts. With this intention we observed the influence of birth order of the individual among the siblings on the course and outcome of the drug abused subject in the eastern part of India that is known as West Bengal, and its inhabitant called Bengalis.

Materials and methods: The data were collected on the basis of retrospective study of the records of 225 consecutive Bengali heroin and brown sugar dependents attending at Ashadeep De-Addiction Centre in Kolkata. All the subjects were male, the age spanned 15-35 years; and hailed from low or middle socio-economic status. All the subjects were treated for detoxification and were followed up while they were undergoing the counselling sessions. The subjects were followed up for little over one year.

Results: In Bengali culture the eldest, youngest and the only son, are usually considered to be of much valued position. No such extraordinarily value is attached to any other intermediate ranks. In Bengali, the eldest one usually learns to sacrifice, to tolerate and to be loyal to the hierarchical

value-system, whereas the youngest one usually enjoys the indulgence, given not only by parents but also the other elder siblings, and often exhibit poor frustration tolerance and strong pleasure-seeking attitude. The first-born in having a better prognosis, and less drop-out than the last-borns, are expected to be more amenable to therapy than the latter.

Conclusion: We are fully aware that the cultural influence is much more varied, extensive, intricate and complex. In such broader perspective, the present study is only a modest attempt. However, we hope that this will throw some light on such a vast subject.

Keywords: Sibling position; Bengali culture; Heroin; Brown Sugar; Cultural Influence

Introduction

There is a widespread belief that birth order is an important determinant of personality, intelligence, and economic success. This belief is supported by a number of recently published popular books, each with its own approach to the topic. Leman for instance, argues that firstborns "are more highly motivated to achieve than later-borns" and as a consequence "often fill positions of high authority or achievement." In contrast, Wallace worries that firstborns "go through life feeling like they cannot measure up to the high standards their parents expected lacking in confidence they might drop out and refuse to compete altogether."

Why birth-order effects might exist

Researchers working in this area have long speculated that birth order might be related to child outcomes through parental investments in their offspring. Becker and Tomes posit a model in which parents devote more financial resources to children with lower innate ability. In fact, most researchers working on birth-order issues have assumed that children are particularly sensitive to parental time investments and the home environment at young ages. However, certain nonmonetary parental inputs, such as monitoring and supervision, may

become increasingly important as a child matures, especially in the determination of risky or delinquent behaviors.

Sibling interactions represent another possible route through which birth order might be related to child behavior and subsequent achievement. For instance, older siblings could act as positive role models, their achievements adopted as goals and their failures serving as cautionary examples. Older siblings might also act as caregivers or authority figures, especially when one of the parents is absent from the family unit. Alternatively, older siblings may serve as negative role models or even purposely introduce their younger brothers and sisters to certain behaviors earlier than would otherwise be the case.

In addition, having an older sibling may provide more opportunities to interact with, and perhaps copy the behavior of, a different set of friends. This could be especially important when the sex of the sibling is different or when there is a substantial age gap between siblings and, as a consequence, the behavior of the older sibling's peers is markedly different from the behavior of the younger sibling's peers on this point, refer Rodgers et al.

These possibilities suggest that researchers searching for birth-order differences might fruitfully focus attention on adolescent risky behavior as opposed to earnings, education, or test scores. If birth order is indeed related to such behavior, it could have important implications for the health and well-being of adults as well as teens.

Determinants of Substance Use

In keeping with published studies by the National Center on Addiction and Substance Abuse and Pacula et al. we find strong evidence of race and ethnicity effects. In addition, we find that adolescents who lived with both of their parents are much less likely to have used tobacco, alcohol, or marijuana, whereas household income seems to have an effect on female, but not male, substance use.

Growing up in an urban area is associated with an increase in the probability of having smoked marijuana and, for females only, an increase in the probability of having drunk alcohol. As noted, the baseline model includes only a single measure of birth order: the dichotomous variable.

However, this simple specification produces striking results. We find that children with older siblings are, on average, more likely to have used tobacco, alcohol, and marijuana than their firstborn counterparts controlling for family size, age, and the other factors in the model. For instance, females with older siblings are 8 percentage points more likely to have smoked cigarettes than are their firstborn counterparts. Males with older siblings are 6.2 percentage points more likely to have drunk alcohol and are 5.1 percentage points more likely to have tried marijuana than their firstborn counterparts.

A positive relationship between older siblings and substance use is not consistent with the argument that experienced parents provide better guidance for their younger children or with the notion that older siblings serve as positive role models. This result is more in keeping with the argument that adolescents with older siblings are "prematurely" exposed to

behaviors initiated by their older siblings at later ages, although it could reflect differences in parental monitoring and supervision or even a beneficial effect of having younger siblings. In general, family size, as measured by the number of siblings in the household, seems to have little influence on the outcomes examined. The estimated family-size effects are never significant for males, nor are family size a good predictor of smoking or marijuana use among females. However, there is evidence that family size is negatively related to the probability of female alcohol use.

With this intention we observed the influence of birth order of the individual among the siblings on the course and outcome of the drug abused subject in the eastern part of India that is known as West Bengal, and its inhabitant called Bengalis. It is apparent that in India traditional mode of upbringing of children with associate belief-systems has deep-rooted effect on individual and interpersonal relationship and thus had definite effect on personality organization.

Aims and objectives

In view of the importance of the cultural influence on the mode of upbringing and personality formation of siblings of different ordinal position, we intended to observe whether the difference in ordinal position has any significant influence on drug-taking behavior. We have also like to speculate the prognostic merit of individual case on the basis of his ordinal position in the family.

Materials and methods

The data were collected on the basis of retrospective study of the records of 225 consecutive Bengali heroin and brown sugar dependents attending at Ashadeep De-Addiction Centre in Kolkata. All the subjects were male, the age spanned 15-35 years; and hailed from low or middle socio-economic status. All the subjects were treated for detoxification and were followed up while they were undergoing the counseling sessions. The subjects were followed up for little over one year.

The distribution of the subjects on the birth-order scale was noted. The follow-up records of the subjects were scrutinized and divided into three prognostic groups,

The Good-Prognosis Group- that included subject who did not relapse during the one-year follow-up period.

The Relapse Group – that included subjects who relapsed once or several times during the one year follow-up period.

The Drop-out Group – that included subjects who dropped out before completion of the one-year follow-up period, irrespective of whether they relapsed or not.

The distribution of the subjects on the birth-order scale was noted along four categories

- Eldest (first-born)
- Intermediate
- Youngest (last-born)
- Only child

The relation of the three prognostic groups with four types of ordinal position was evaluated in percentile form and chi-square tests performed to find significance in differences.

Results

The findings as seen in the table can be summed up as follows

The distribution of the birth-ranks in sample contained larger number of the last born (26.6%) than the first born (18.6%) (Table 1).

Pronostic Group	Eldest	Inter mediate	Youngest	Total	P	Only	Total
Good Prognosis	13	33	10	56	0.02	10	66
	-5.78 %	-14.67 %	-4.44 %			-4.44 %	-29.22 %
Relapse	25	37	36	98	0.05	20	118
	-11.11 %	-16.44 %	-16.00 %			-8.89 %	-52.44 %
Drop-out	4	16	14	36	NS	7	14
	-1.78 %	-7.11 %	-6.23 %			-3.11 %	-18.23 %
Total	42	86	60			37	225
	-18.60 %	-38.20 %	-26.60 %			-16.40 %	-100 %

Table 1: A bi-variate distribution and comparison of the samples as falling in prognostic groups according to birth-order.

When the ordinal position is evaluated against the prognostic groups, the last-born or youngest sibs seem to have proper recovery (16.67%) higher relapse (60%) and higher drop-out rates. The association of birth-ranks with recovery and relapse rates were statistically significant

Since the population sample will perform contain a higher number of first-born than any other rank and discounting the intermediate position which is a summed up figure of different ranks, the higher number of last-born in our data is considered to be utmost significance.

The eldest position in the sib-rank showed better recovery, which is found statistically significant. They also showed better compliance with treatment that is less drop outs, though not statistically significant. The case of eldest, which their better recovery and less dropouts is, thus, positively suggestive.

In Bengali culture the eldest, youngest and the only son, are usually considered to be of much valued position. No such extraordinarily value is attached to any other intermediate ranks. In Bengali, the eldest one usually learns to sacrifice, to tolerate and to be loyal to the hierarchical value-system, whereas the youngest one usually enjoys the indulgence, given not only by parents but also the other elder siblings, and often exhibit poor frustration tolerance and strong pleasure-seeking attitude.

The first-born in having a better prognosis, and less drop-out than the last-borns, are expected to be more amenable to therapy than the latter. To appreciate the difference between the two groups, one needs to consider that

Though both the first-borns and last-borns have low frustration tolerance, the former have a higher achievement motivation and a greater loyalty to family than the later (vide Supra). Moreover, as has already been discussed, low frustration tolerance in the first-borns and last-borns stem from different parental attitude, the former having always been aided by adults in difficult tasks and the later having a relaxed and tolerant parental discipline.

A consideration of the nature or qualitative aspect of the differences may allow one to presume that in the setting of Indian culture, where counselors are more easily expected to fit in parental or quasi-parental (viz. elder sister) roles, counseling may influence the first-borns and last-borns in different ways.

It is interesting that the prognostic figures of the 'only child' sometimes approach that of the first-borns and sometimes that of the last-borns. This might not be unexpected as usually the 'only child' is either overprotected or allowed to socialize freely and thus he can develop two entirely different personality traits; either he is self-centered, dependent and shows inadequacy in social situations or he is mature, capable of assuming leadership roles and making good social adjustments. Naturally, the prognosis of the 'only child' addicts would be influenced by such background factors. In the strict sense of the term the 'only child' is not an ordinal position and hence it lacks the specific characteristics.

In a sample of 845 male psychiatric patients attending an Out Patient Department in Kolkata, there were 28.9% first born compared to 22.2% last born, whereas the present data shown 22.3% and 31.9% of first born and last born respectively (excluding only child) Further exploration is needed to find out the possible reasons for such disparity. However this finding again stress on the point that the sub-rank factors vis-à-vis prognosis has some unique bearing on treatment of addicts.

Conclusion

We are fully aware that the cultural influence is much more varied, extensive, intricate and complex. In such broader perspective, the present study is only a modest attempt. However, we hope that this will throw some light on such a vast subject. We earnestly believe that in the future, many such cultural and personality factors influencing the drug-use habits will be explored and the knowledge will have immense impact on the mode of treatment and counseling in our cultural context.

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