



### **Short Research Report**

## **Birth order and its relatedness to substance use disorder: an empirical research in Bulgaria**

**Petar Valkov<sup>1</sup>**

*Faculty of Education, Trakia University, Bulgaria*

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### **Introduction**

Addiction to psychoactive substances is a serious problem, involved in a variety of social problems, such as crime, highway deaths, suicide, accidental deaths, hospitalization, poor school performance and dropout, job absenteeism, child and spouse abuse, low self-esteem, depression and anxiety. The purpose of this study is to investigate the significant relationship between substance use disorder (SUD) and ordinal birth order. Birth order is one of the seven major constructs in Individual Psychology and it has attracted the attention of many researchers. Adler, (1946) states that children born into the same family environment form their personalities and lifestyle approach in a different manner. Originally, the construct of psychological birth order was classified in terms of five general positions: first, second, middle, youngest, and only child (Adler, 1946; Ansbacher & Ansbacher, 1956). Contemporary Adlerians classify birth order in terms of four general positions: first, middle, youngest, and only child (Campbell, White, & Stewart, 1991; Stewart & Stewart, 2001).

According to Adler (1927), first-born individuals develop a feeling of special privilege and entitlement. Anxious to do things right, they tend to be responsible and rule-oriented. In their survey of over 200 statistically significant birth order studies, Eckstein & Kaufman (2012) found that oldest children have the highest rate of academic success, are most likely to be leaders and are overrepresented among learned groups.

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<sup>1</sup> Corresponding author. Email address: [petervilkov@gmail.com](mailto:petervilkov@gmail.com)

The position of the middle-born child is slightly better. This order pushes him/her constantly to compare himself/herself with the older child and is guided by a desire to reach him/her. This situation stimulates him/her to beat their records. Due to this position, the pace of his/her development may be much higher than that of the older child. The middle-borns are usually oriented towards achievement (Stoykova & Walton, 2011). They often feel like they are in a race with the first-born so as to take over the privileged position of their older sibling, whilst still staying ahead of the youngest child (Kalkan, 2008).

In contrast to the first-borns, Adler (1927) theorized that the last-born individual never has to share or change position within the family and, therefore, never has to deal with dethronement (in contrast to first-borns). Last-born children are less likely to be forced to separate from their parents, and they are often spoiled and pampered. Adler stated that, "a spoiled child can never be independent" (Adler, 1931/1980, p. 151). Numerous empirical studies have found that the youngest children have the highest social interest and agreeableness, are most rebellious, most empathic, most likely to abuse alcohol and are overrepresented among psychiatric populations (Eckstein & Kaufman, 2012).

The only child retains all the attention of both parents. Only children have the privilege (and the burden at the same time) of having all their parents' support and expectations on their shoulders. Persons who grow up as the only child in the family can be overprotected and spoiled. They like being the center of adult attention, and they often have difficulty sharing with peers and other people. Eckstein & Kaufman (2012) have delineated the most reoccurring characteristics for only children as having the greatest need for achievement, being highest achievers (except for oldest children) and most likely to attend college, having the highest rate of behavior problems and the lowest general need for affiliation.

### *Birth order and addiction*

Adler stated that alcoholics "have built up their original character in a situation of great pampering, in which they were dependent upon others. Usually this involved exploiting the mother" (as quoted in Ansbacher & Ansbacher, 1956, p. 423). Analyzing the data from the National Longitudinal Survey of Youth, Argys, Rees, Averett and Witoonchart (2006) found that last-born persons are much more likely to use substances and be sexually active than their first-born counterparts. In their study with a large sample in Sweden (over 770 000), Barclay, Myrskylä, Tynelius, Berglind and Rasmussen (2016) found that later born siblings were hospitalized for alcohol use at a higher rate than first-borns, and there is a monotonic increase in the risk of hospitalization with later birth order.

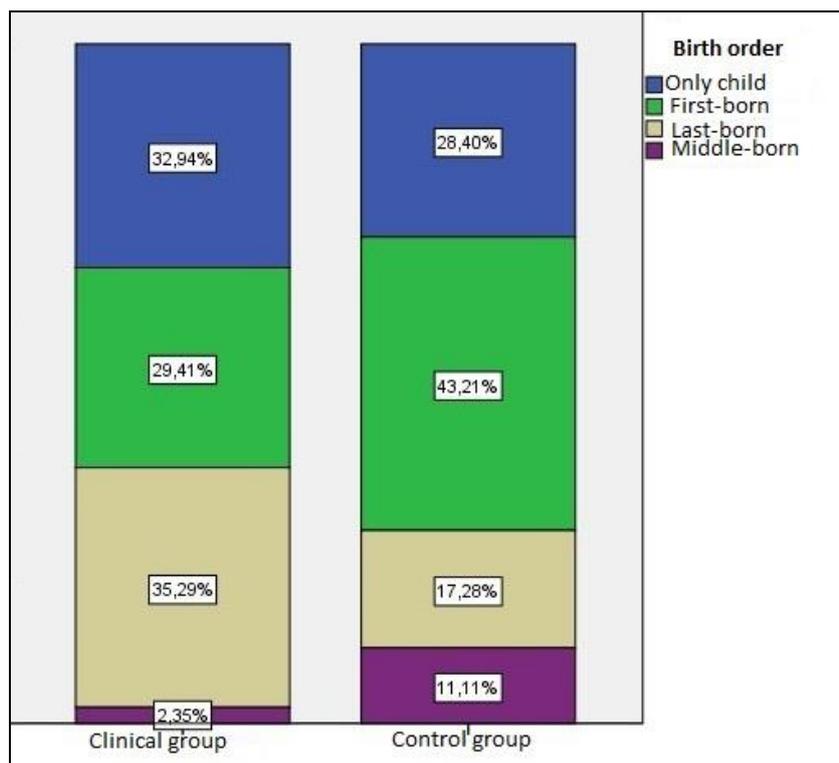
### **Method**

The aim of this study was to investigate whether substance-related disorders were more prevalent in particular ordinal birth orders than others. The sample is comprised of 166 subjects, recruited from both outpatient treatment facilities and the general population. Specifically, 51.2 % (n=85) were subjects with a history of substance use disorder and currently in remission/continuous abstinence from a primary drug usage. The comparison subjects (48.8%, n=81) were drawn from the same general population as those with SUD in the past. Participants in the clinical group consisted of 64 males and 21 females and the ages ranged from 22 and

68 years (average age 37.3). The control (comparison) group (n 81) included 40 males and 41 females, between ages 19 and 68, (average age 29.02). All participants were asked to complete a 15-item questionnaire that had them rate only children, firstborns, middleborns or lastborns. With this instrument, participants identified their ordinal birth order. Data analysis included Chi-square tests to evaluate the association between birth order and substance addiction. The results from the clinical group were compared to those of the control group. SPSS cross tabulation analyses were used to generate prevalence rates for each of the four categories of birth order.

### Results

Figure 1 illustrates the frequencies of the birth orders for both groups. The majority of the participants with substance use disorder in the past described themselves as lastborns (35.3%) followed by only child and first born respectively. In the comparison group first-borns are prevalent and the number of lastborns is half of that in the clinical group – 17.3 % (n=14). The results of the Chi-Square show statistically significant correlation between birth order and substance use disorder (Chi-square – 12,340, p = 0,006). These results were consistent with the work of previous researchers, with last-born participants engaging in higher alcoholic use than first-born participants (Laird & Shelton, 2006).



**Figure 1. Frequency of Ordinal Birth Order in both groups.**

### Discussion

Several reasons could account for these results. Firstly, there is a somewhat increased probability that last-born children will have been raised by only one parent or by some other person or persons – a separate risk factor for substance use (Hemovich & Crano, 2009). Another possible explanation is related to the personality

traits of lastborns. Lastborns are often in the position of the ‘baby in the family’. Often, they are more spoiled than others, and according to Adler, “a spoiled child can never be independent” (Ansbacher & Ansbacher, 1956, p. 381). Spoiling involves depriving a child of independence (Lundin, 1989). Such psychological dependence can transform into substance addiction or into other forms of addictive behavior. Lastly, the later born children may be exposed to alcohol and other substances at younger ages through older siblings (Barkley, et. al., 2016). Consequently, adolescents with older siblings who use alcohol, tobacco and other drugs are more likely to be exposed to these substances at a younger age.

The correlation between birth order and substance use disorder does not necessarily imply causation – that birth order causes substance use disorders. A study with a larger sample is also needed in order to check the findings of this study as well as whether these findings will be confirmed in other countries. Finally, we have not been able to test the specific mechanisms that potentially link birth order to substance use, and this will be an important dimension for future studies in this area. Substance use disorder is a result of biological, psychosocial and spiritual factors, contributing to the variation in the risk for and severity of the disorder. Birth order is only one part of a complex combination of etiopathogenic factors.

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