Birth Order and Prevalence of Substance Abuse: A Descriptive Study of Annexe Patients Diagnosed with Substance Related Disorders

S. Magwali, M. Tevera & C. Siwawa

Psychology Counselling Psychologists (Allied Health Practitioners Council of Zimbabwe)

Abstract

The question of whether an individual's personality can be influenced by their birth order has been researched by several professionals in the mental health sector. Most researchers have found the latter variables to be somehow related. The current study focuses on the prevalence of substance use disorders among individuals with different birth orders. A sample of 79 participants were selected randomly with ages ranging from 17 to 48 years. The aim of the study was to describe the birth order and the prevalence of drug abuse. Results showed that substance abuse was more prevalent among first- and last-born children and less prevalent in middle and second born children and this was attributable to personality traits ascribed to each birth order and stressors they are subjected to according to their birth order. Conclusion drawn indicated that first and last-born children were more vulnerable to substance abuse. It is recommended that further studies be carried out ought to include more variables before drawing conclusion.

Keywords: substance use disorders, birth-order and prevalence

Introduction

Substance abuse has been a subject of research for so many years. Many researchers have focused on different aspects that fuel the problem. Despite all the findings and proposed interventions, drug and substance abuse remain a problem causing untold suffering to individuals, families, communities and society at large. The current research hopes to take a different route in understanding the subject focusing on birth order as one of the determinants of substance addiction.

Personality traits and substance misuse

Benzoni (2023) asserts that the study of personality and its formation has interested researchers, psychologists and scientists alike. It is believed that the order in which a child is born influences their personality. One of the proponents of birth order theory, Adler, avers that the desire is to understand how the social factors influence personality development (Benzoni, 2023). According to Benzoni (2023), birth order theory describes how the effect of birth order shapes children's thoughts and behaviours from first born children to the last born. Benzoni

(2023) further asserts that there are certain characteristics associated with individuals in each respective birth order, some of which are supported by research and some of which are seemingly old wife's tales.

Global perspective of drug abuse

Senay (1991) reported that, during the past 20 years, there has been a substantial increase in the data available on the prevalence and consequences of the use of drugs which are liable to abuse. From a global perspective, the evidence reviewed from various regions indicates that drug abuse is on the increase affecting public health and associated with social problems of great magnitude. Saney (1991) states that the commonly used drugs are alcohol, nicotine, cannabis and opioids. First, it was believed to be a problem that only affected men but now appears to affect both.

Drug misuse in Zimbabwe

Zimbabwe has seen a rise in substance abuse among youths. This has resulted in a rise in substance related disorders and admissions in mental health institutions. Common psychoactive substances used include cannabis, crystal meth and codeine, among others. These have become a serious concern as they relate to problems including crime, spouse and child abuse, poor school performance and dropouts, suicide and hospitalisation (Valkov, 2018). The purpose of this study is to investigate the birth order of patients affected by substance use disorder. The construct of birth order is one of the seven major constructs in individual psychology (Valkov, 2018). It has attracted several researchers in the field of psychology.

Aim and objectives of the study

Aim

The aim of the study was to examine whether ordinal birth order was prevalent more than other variables in substance use disorder patients at a Crisis Support Center.

Objectives

i) To determine frequency of substance abuse among different age groups.

ii) To determine birth order variable in relation to substance abuse.

iii) To explore gender differences in patients with substance related disorders.

Literature review

There are many theories of how personality is formed, adapted and affected by one's external environment that cuts across cultures and associations. Though the concept of birth order as a variable has drawn a lot of interest among researchers, not many studies have been carried out

to understand this phenomenon. Those studies that have been carried out have failed to draw conclusions as to whether this phenomenon exists.

According to Hartshone et al. (2009), the study of birth order and related disorders is very important. Furthermore, Hartshone et al. (2009), assert that past research studies in this area were short-lived, creating the need to revive them.

Birth order research studies show that there are several influences shaping personalities, in addition to birth order personalities (Valkov, 2018).

Common factors shaping personalities
Biological, children inherit many traits and features like intelligence, courage, and physical features from their parents. Other variables include the following:

Social factors: Interaction with others in the individual's circle

Cultural factor: Children grow up consciously or unconsciously adopting traits consistent with culture, beliefs and norms.

Physical environment: The individual's surrounding often has an impact on the development of traits.

Situational: Children face different situations which help them adapt and change aspects of their personality.

Birth order theory
The study is based on birth order theory by Adler who had a working relationship with Sigmund Freud, and sought to create a psychological movement based on a holistic view of an individual (Valkok et al., 2018). Furthermore, Valkok et al. (2018) observed that, in his theory, Adler illustrates how family environments and dynamics play a role in shaping individual psychology during the child's formative years. Although every family is different, there are many similarities between interactions of parents and children. Adlerians classify birth order in terms of 4 general positions, namely first, middle, youngest and only child. (Stewart& Stewart, 2001). In their study of the theory, Eclestein and Kaufman (2012) noted the following:

First child
The theory posits that first born individuals develop a feeling of special privilege and entitlement. They are anxious to do things, they tend to be responsible and rule oriented. In

their study, Eckstein and Kaufman (2012) found that the oldest children have the highest rate of academic success and are most likely to be leaders.

Second child

By having older sibling as role models, the second child often tries to catch up with the older sibling and is likely to be better adjusted in life. Second children could be more competitive, lacking undivided attention of parents, people pleaser, peacemaker, and developing abilities the first child does not exhibit to gain attention. The second child can also be rebellious, independent and does not need support of others.

Middle child

This group presents may suffer *middle child syndrome*. They can be frustrated and easily resentful. Middle children from bigger families are less competitive since their parents' attention is spread thinner for bigger family dynamics.

They also exhibit other characteristics that include the view that life can be unfair, they can be even tempered, and may feel unloved or left out a lot. They also do not have the rights and responsibilities of the oldest child or the privileges of the youngest, they can treat the younger siblings rougher and feel squeezed in the family environment.

Youngest child

The baby of the family tends to get more attention from parents since the older siblings are developing and becoming more independent. Traits of the youngest include charming and outgoing, attention seeker, can behave like the only child, and may feel inferior because everyone seems bigger or more capable. The child also may expect others to make decisions and take responsibility. However, the youngest child can become speedier in development to catch up with other siblings.

Only child

The only child tends to get more attention from adults than a child with siblings, meaning that many of their early interactions involve individuals significantly older than them. This can make them feel like *tiny adults* and can seem more mature than peers with siblings. Their traits include confidence, sensitive, uses adult language, self-centred, pampered, spoiled, and enjoys being the centre of attention. The only child may also refuse to cooperate with others and can be manipulative to get their way.

Application of the theory

The theory illustrates how family dynamics can shape individual psychology during a child's formative years. Understanding what conditions lead to substance abuse is essential to preventing dangerous drug addiction.

Other researchers interested in the study of birth order have come up with different perspectives with regards to personality traits and how they predispose one to substance abuse (Arbor, 2019). A psychological wellbeing publication, Arbor Behavioural Healthcare, published personality traits that may be influenced by birth order and can have a lasting effect on personal, professional and psychological wellbeing of individuals. Arbor Behavioural Healthcare views the youngest child as having inadequate coping mechanisms and is therefore likely to handle anxiety and depression using drugs. The oldest child feels anxious because of parental pressure to succeed, while middle child feels lost and unsupported. All these pressures can create a vulnerability to addiction under right circumstances. Looking at the vulnerabilities, none clearly points to one birth order being more vulnerable than the other.

In another mental health publication, BetterHelp (2023), stress has been singled out as the greatest influences of substance abuse. Each sibling may face their own kind of stress and resort to drugs and alcohol as a coping strategy. First born children have high expectations placed on them leading to the feeling of obligation to fulfil them thus causing stress. Middle children often struggle to live up to the level of the first born and may not receive as much attention. The youngest child may receive a lot of attention, but may also struggle to prove themselves among older siblings and can face issues in establishing autonomy.

All these levels of stress lead to substance abuse making it difficult to determine if one sibling is more likely to try drugs and alcohol more than the other.

Gender and drug addiction

According to Anderson (2019), for so many years research on drug addiction mainly focused on men only as subjects. However, things changed after the second wave of feminist movement of 1960s and 1970s when women became the subject of research as well. The issue of gender was brought into the equation even though the results proved that more males abused drugs than females.

According to Benzoni (2019), many gender researchers now explain gender difference to be a result of the impact of society, for example, childcare, addiction, stigma and relationship

dynamics. In America, a national survey on drugs carried out in 2013 showed that more men were involved in drug and substance misuse (Benzoni, 2019).

Furthermore, Benzoni (2019) attributes the reason for that to the view of women as a gentler sex throughout many cultures around the world. Women are expected to adhere to their strictly outlined gender roles, and when they do not, they are judged harshly for breaking societal norms.

Women face societal stigmas in every area of life, for example, at work, home, school, in the community and even regarding drug and alcohol abuse.

Related studies
Birth order and addiction
According to Adler, alcoholics have built up their original character in a situation of great pampering in which they are dependent upon others. Usually this involves exploiting the mother. Analysing data from the National Longitudinal Study Survey of Youth, Argys, Rees, Averett and Witoonchart (2006) found that last born persons are much more likely to use substances and become sexually active than their first born counterparts. In Sweden, a study recruited over 770 000 participants to determine the connection between birth order and substance abuse. The findings showed that later born siblings were hospitalised for substance use disorder at a higher rate than first born children and there was a monotonic increase in the risk of hospitalisation with the later birth order (Barclays et al., 2016).

Valkov (2018) did an empirical study in Bulgaria to explore the relationship between birth order and substance abuse. The study used a sample of 166 participants who were both out-patients and in-patients. Results from the study showed that the majority of participants with substance use disorder were last born children followed by only child and first born, respectively. There was also statistically significant correlation between birth order and substance abuse (Chi-square – 12,340, p = 0,006). These results were constant with the work of preceding researchers, with last-born children involved in higher alcoholic use than first-born participants (Laird & Shelton, 2006).

In another study, Aslam (2015) explored the frequency of crime among individuals with drug addiction with respect to birth order. A sample of 332 male participants were selected from an in-patient facility. Percentages and frequency distribution were used to compute results. The

study established that the prevalence of substance abuse among first born was 21.98%, 56.63% among middle born, and 21.4% among last born.

Methodology

This study employed a quantitative approach (descriptive research) using secondary data. The method was chosen because the present study focused on birth order and prevalence of drug abuse which would not necessarily need any elaboration for participants.

Data collection

Data was collected from case notes of patients who were attending out-patient therapy sessions and were being managed for substance use related disorders. These included substance induced psychosis, alcohol use disorder, substance use disorder and any condition related to drug use. Notes for both males and females were used.

Inclusion criteria

i) Clients who were captured according to their birth orders in the case notes.

ii) Clients with a substance use related disorder.

iii) All age groups.

Data analysis

Data was analysed using the Statistical Package for Social Studies (SPSS 23). Data was analysed using descriptive statistics and presented using tables, bar graphs and pie charts.
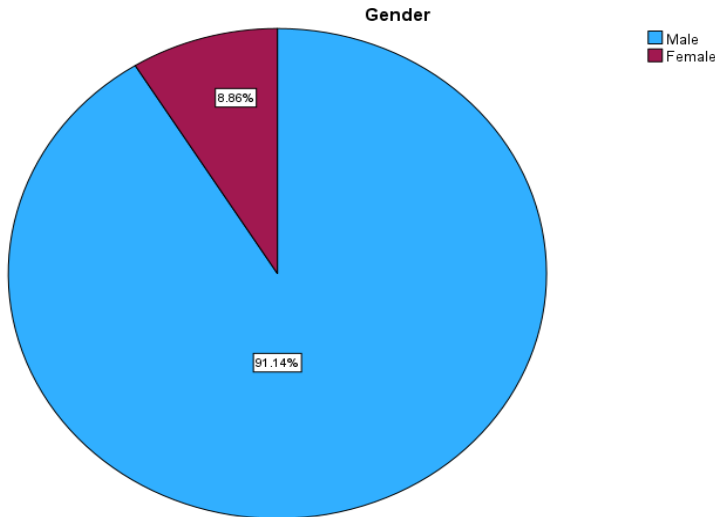
Ethical consideration

Permission to carry out the study was sought from relevant authorities at Annexe. Clients' notes were treated with confidentiality.

Only the researchers had legal access to the notes at Annexe and all careful considerations were taken to ensure safe keeping of the case notes and information collected.

Data analysis and results

This section aims to present analysed data and show research results. Data was analysed using statistical package for social sciences (SPSS 23).
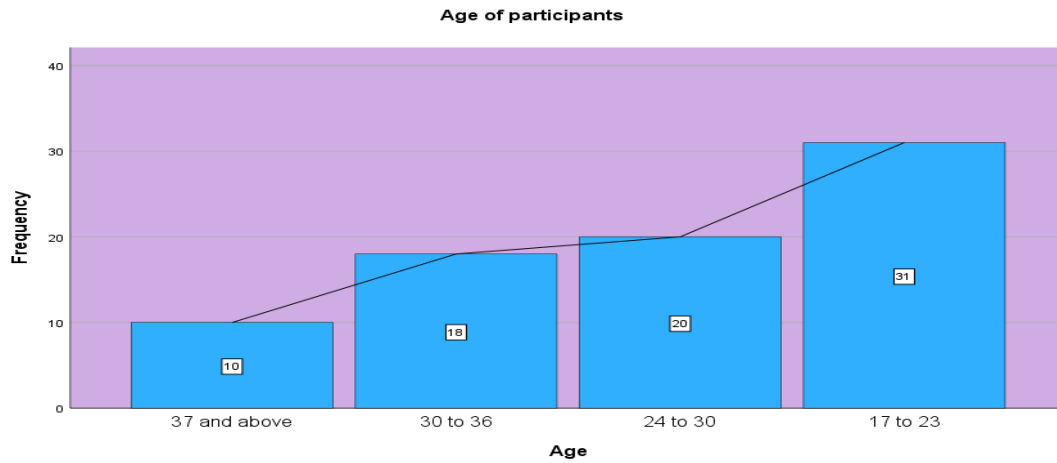
Figure 1: Gender of participants

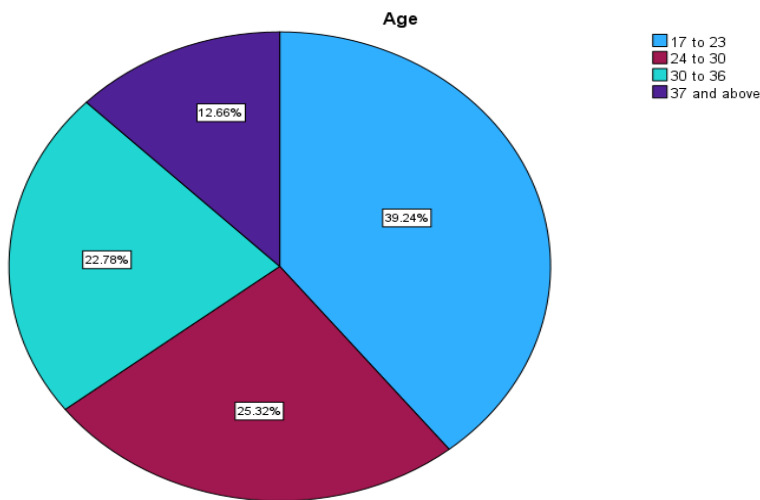**Table 1: Gender of participants**

Gender

	N	%
Male	72	91%
Female	7	9%
Total	79	100%

Figure 1 and Table 1 above show the gender of participants. Total number of participants was 79 (n= 79). A greater number of participants (72) were males (91%) and 7 were females (9%). This shows that there were more males diagnosed with substance use related disorders compared to females.
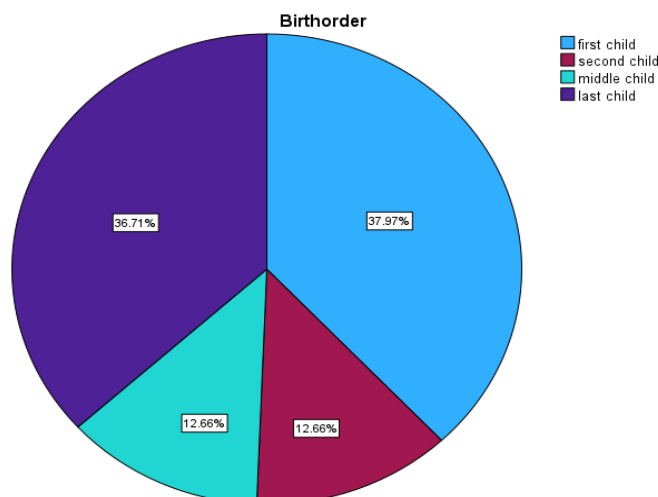
Figure 2: Age of participants

Figure 3: Age of participants

Figures 2 and 3 above show the age of participants. Participants' age ranged from 17 to 48. Out of 79 (n= 79) participants, 31 were between17 to 23 years (39%), 20 were between 24 to 30 years (25%), 18 were between 30 to 36 years (23%), and 10 were 37 years and above. This shows that there were more adolescents who were diagnosed with and being managed for substance use related disorders compared to older adults.

Figure 4: Birth order and prevalence of substance abuse related disorders

Table 2: Birth order and prevalence of substance abuse related disorders

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	first child	30	38%	38.0	38.0
	second child	10	13%	12.7	50.6
	middle child	10	13%	12.7	63.3
	last child	29	37%	36.7	100.0
	Total	79	100%	100.0	

Figure 4 and Table 2 above show birth-order and the prevalence of substance related disorders. The frequency distribution shows that substance related disorders are more prevalent in first-born and last-born children compared to second born and middle child. Out of 79 participants (n=79) who were diagnosed with substance use disorders, 30 were first born children (38%), 29 were last born (37%), 10 were middle children (13%), and 10 were second born children (13%).

Discussion

The findings of the study shows that drug addiction in the 17-23 years age range, followed by 24-30 years, 31-36 years and, lastly, 37 to 48 years. Age group distribution shows that age of

initiation into drugs is mainly at adolescence, which is the most volatile and vulnerable stage of development.

Birth order distribution

Percentages and frequency distribution done showed that substance abuse was more prevalent among first born children followed by last born children, and an equal number among second and middle children. This study was guided by Adler's theory of birth order which claims that the order in which a child is born shapes their development of personality.

Even though various studies have shown some variation in frequency distribution of substance abuse among different birth order positions, the results of this study seem to concur with other researchers that first and last-born children had a high frequency rate compared to the second, middle and only child. This may be because the last-born children are brought up mostly when other siblings are either grown up and working; and are therefore exposed to the use of alcohol and other drugs from older siblings. This is worsened if the siblings live away from parental household where they can easily influence each other.

The other reason which has also been found by other researchers about the last-born children could be related to their inadequate coping mechanism which is brought about by their position in the family. Lastborn child is protected by parents and older siblings and may fail to develop their own autonomy and coping skills. Due to that, they may resort to using drugs once they are faced with life stressors.

However, there are many other factors to be considered before drawing conclusions about the correlation between birth order and substance abuse.

Gender and substance abuse

The second objective which sought to examine gender differences among the study participants showed that more males were found to be users of drugs and other addictive substances. Males accounted for 91% of all the cases with females accounting for only 9%. There are many factors that may explain this outcome, for example, the boy child is unrestricted in socialisation compared to the girl child. Traditionally, there is a belief that alcohol is meant for men; any woman found to be using alcohol is generally looked down at and labelled with all sorts of names. Women who abuse/misuse drugs are judged harshly by society and they lose their respect in the community compared to men. True to the previous studies, the trend of having more males abusing drugs continue to show and the gap is quite wide.

Conclusions

The following conclusions were drawn from the study:

Substance abuse is more prevalent in first born, last born, second, and middle child, respectively, and the issue of birth order could apply. In addition, substance abuse continues to be a problem which is more prevalent in men than women.

Recommendations

It is recommended that further research be conducted qualitatively and include interviews and focal group discussions.

Further research could also include variables such as biological, social and environmental factors as determinants of substances abuse.

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