



BIRTH ORDER, SUICIDAL IDEATIONS AND PERCEIVED SOCIAL SUPPORT AMONG STUDENTS OF KHYBER PAKHTUNKHWA

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Abstract

The aim of the current study was to examine the effect of birth order on suicidal ideations and the moderating role of perceived social support. The sample consisted of (N=484) BS students, out of which (n=246) were male and (238) were female. Age range of the sample was 20-25 years with (M=23.70,SD= 8.43) and was selected through Convenient Sampling Technique from different universities of Khyber Pakhtunkhwa. Maximum of the sample belonged to middle socioeconomic status. The Urdu version of the Beck Scale for Suicidal Ideation (Beck, Kovasac, & Weissman, 1976) prepared by Ayub (2008) and the Urdu version of the Multidimensional Scale of Perceived Social Support (Zimet et al.,1988) prepared by Jibeen (2010) were administered on the entire sample. Results showed significant difference in terms of suicidal ideations across birth order. The middle born were found to have significantly high level of suicidal ideations as compared to oldest and youngest born. Regression analyses indicate that perceived social support significantly moderates the effect of suicidal ideations. However no significant gender difference was found in terms of suicidal ideations. The results support two hypotheses. The findings have practical implications by suggesting an utmost need on part of the policy makers to arrange counseling programs to educate parents to provide equal social support and attention to their children irrespective of their birth order to overcome their problem of development of suicidal ideations which result in many cases suicide attempts in them.

Keywords: Birth Order, Suicidal Ideations, Perceived Social Support

Birth order the numerical sequence or chronological place of an individual within a family plays an important role in shaping and changing the dynamics of his/her experiences (Dunkel, Harbke, & Papini, 2017; Paulhus, 2008., Joy & Matthew, 2018). The order of birth of an individual in family can impact his/her behavior through ideations which might be suicidal in nature (Breenan,2021). These ideations among other seriously influence thinking which can be observed in behavior (Kaemra & Singh, 2021).

An individual's pattern of thinking or ideations and the way he/she sees the world around varies from person to person which might be shaped not only by chronological order but also by certain other factors including personality traits, child rearing practice used by parents and siblings'

competition for approval and attention of the parents (Debase, 2022). This pattern of thoughts and ideations usually are normal but sometimes are directed in an unhealthy and harmful direction, which may be suicidal also termed as suicidal ideations. Suicidal ideation arouses when an individual feels that he/she is not enough, has no one for hope and thus, help is not being fulfilled. These ideations can also be attributed to the competitive nature of an individual's birth order or to the perception of insufficient parental support available to them (Purse, 2022., Bridge et al., 2012). Numerous researches revealed that birth order makes a person more prone to suicidal ideations (Bridge et al., 2012; Khan, Nawaz, Rouf, Maryam & Tabassum ., 2018). However, the presence of perceived social support can reduce suicidal ideations among individuals (Kleiman & Liu, 2013; Ayub, 2015).

According to the American Foundation for Suicide Prevention (AFSP, 2014) individuals who attempted, or completed suicide had planned it before hand for days, or even weeks to talk about it in advance. It has been observed and documented that individuals with suicidal ideation might occasionally talk about it. This talk regarded as talk approach involves talk of dying, verbal planning of hurting oneself or disappearing altogether by an individual. It might also include direct means of attempt for suicide and planing regarding it (Hamer, Lee, Duong, & Saadabadi, 2021). Approximately, one third of individuals having suicidal ideations are predicted to often make progress from having thoughts of suicide to creating a well-established plan to execute it (Glenn & Nock, 2014).

Research found that the frequency with which adolescents experience suicidal ideations was directly associated their future attempt of suicide (Miranda, Ortin, Scott, & Shaffer., 2014). Numerous researches are in line with this direction. For example, Yu and Chang (2016), found suicide ideation the most prevalent than the suicidal attempts and its completion. Other research found suicidal ideations and suicidal attempts the most prevalent in adolescence than in other phases of life (Miranda, Ortin, Scott, & Shaffer, 2014). Thus suicidal ideations can be considered as an important risk factor of suicidal behavior (Andover, Morris, Wren, & Bruzzese, 2012).

According to Center for Diseases Control (2016) suicidal ideations is the 18th most leading cause of death across all groups of age nationwide, the second leading cause of death among adolescents and about 13.5% of the population experience suicidal ideation throughout their lives. The figures might vary because of the different sources being consulted, however, the approximate range can be between approximately 5% to 18%, out of which 33% are planed suicide while the rest (29%) includes suicidal attempts. Generally, in 60% of the cases being recorded, the passage between suicidal ideations and the first suicidal attempt occurs within the initial years from the onset of these ideations (Garcia, Meca, Munzon, Aparicio & Mateo, 2018).

In view of previous researches, it can be deduced that birth order of an individual might prone him/her to suicidal ideations (Bridge et al., 2012; Khan et al., 2018). However, the presence of perceived social support can reduce suicidal ideations among individuals (Kleiman & Liu, 2013; Ayub, 2015).

Perceived social support, feelings of being loved, valued and regarded by others including family and friends has been found to serves as a moderator against suicidal ideations caused either by birth order or by personality traits (Bi et al., 2017 Kleiman & Liu, 2013; Wasserman et al., 2012). If this support is insufficient in any way, then an individual can become vulnerable to both suicidal ideations and ultimately to suicide attempt. Thus, suicidal ideations can be the function of one's personal characteristics/personality, but can also be attributed to the life experiences shaped by the nature of competition within siblings and the perception of ineffective perceived social support by parents. Individuals with suicidal ideations often show detachment and a very low socialization or social support (Arr,iO'Grady, Caldeira, Vincent, Wilcox & Wish, 2009, Sultan & Malik, 2020; Wilcox, Arrie, Caldeira, Vincent, Pinchevsky & O'Grady , 2010).

The suicide rate in Pakistan is increasing at a very alarming rate (Khan & Hyder, 2006). Approximately, 31, 000 suicide cases have been reported in the last 10 years with majority 14–27 years old (Chishti, 2015) even though being a Muslim country Pakistan has condemned suicide by law and religion and most of the cases due to legal taboo, traditional values and social norms are not

reported. Still newspapers report several instances of suicide every day. Keeping in view the above mentioned factors it is essential to examine the effect of birth order and the moderating role of perceived social support in relation to suicidal ideations among university students.

Objectives

To study the effects of birth order on suicidal ideations in university students.

To find out the moderation role of perceived social support on suicidal ideations.

To examine if there would be gender difference in terms of suicidal ideations.

Hypotheses

Following hypotheses were formulated.

H1. Middle born students would score high on suicidal ideation scale than the oldest and youngest born.

H11. Perceived social support would moderate the effect of suicidal ideations among the students.

H111. There would be a significant difference in male and female students in terms suicidal ideations.

Method

Sample

The sample consisted of (N=484) BS students, out of which (n= 246 were male and (n=238) were female. Age range of the sample was 20-25 years with (M=23.70,SD= 8.43). The sample was selected by using the Convenient Sampling Technique from different universities of Khyber Pakhtunkhwa. Maximum of the sample belonged to middle socioeconomic status.

Instruments

Demographic Information Sheet

The demographic information sheet was used to collect such information as age, education, gender, birth order and socioeconomic status. Those participants having twins, step and adopted siblings were not included in the study.

Beck Suicidal Ideation Scale

The Beck Scale for Suicidal Ideation developed by Beck, Kovasac and Weissman (1976) for use with patients of 17 years and over measures severity towards suicidal ideations. The scale consists of 21 items, out of which two function as an internal consistency measure. It is a 3 points Likert type scale. Score on each item range from 0-3 with following response categories: Do not apply to me at all (0), Apply to me to some extent (1), Apply to me to a considerable degree (2), Apply to me very much (3). High score reflects high suicidal ideation. Reliability of the scale determined by the author is 0.90 for inpatients and 0.87 for outpatients. In present study its Urdu version prepared by Ayub (2008) was used. In the present sample the reliability found is 0.82.

Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support was developed by Zimet et al., in 1988 to measure perception of social support. It consists of three subscales namely, Family (items, 3,4,8 & 11), Friends (items, 6,7, 9, 12) and Significant Others (items,1,2,5,&10). The respondent on a 7 point Likert type response format indicates 1 (very strongly disagree) to 7 (very strongly agree) the extent to which he/she perceives social support available to him/her in family, from friends or significant others. The coefficient alphas for the subscales and of the whole scale range from 0.85 to 0.91 with 275 undergraduates. The test retest reliability ranges from 0.72 to 0.55 with same sample. In present study Urdu version of the Multidimensional Scale of Perceived Social prepared by Jibeen (2010) was used. In present study the reliability found is 0.80.

Procedure

Participants were approached individually, their consent was taken and were briefed about purpose of the study. Before administering the scales detailed instructions about how to respond to each item in scale were given. Each scale was administered in an individual setting. The right to withdraw from the study if wished was also declared. The participants were also assured of the confidentiality of their responses. At the end, they were appreciated for their time and cooperation.

Results

Table 1 Reliability of Study Variables (N=484)

Study variables	N items	Mean	S. D	α
BSIS	19	6.16	2.08	.81
MSMSS	12	45.63	7.25	.70

Note: BSIS=Beck Suicide Ideation Scale, PSPSS =Multidimensional Scale of Perceived Social Support

Table 1 shows reliability of the scales used in the study which is satisfactory.

Table 2 Inter- Correlation Among Scales

Variables	1	2
1.BSIS	-	-.38**
2.MPSSS		-

Note: BSIS= Beck Suicide Ideation Scale, MPSSS= Multidimensional Scale of Perceived Social Support

Table 2 indicates a significant negative correlation between the Beck Suicidal Ideations Scale and the Multidimensional Scale of Perceived Social Support.

Table 3 One-Way ANOVA Analysis for Suicidal Ideations among Oldest, Middle and Youngest Born

Variables	Oldest (n=151)		Middle (n=188)		Youngest (n=145)		F	P
	M	SD	M	SD	M	SD		
SI	7.49	1.01	9.29	2.70	7.40	1.13	55.52	.00

Note: SI=Suicidal Ideations

Results in table 3 reveal significant difference in terms of suicidal ideations among participants having different birth order (oldest, middle & youngest). According to the results middle born participants obtain significantly high mean score as compared to first and last born. These results support first hypothesis of the study.

Table 4 Post Hoc Analysis for Comparing Mean Differences for Suicidal Ideations Among Participants Having Different Birth Order

Variable	I	J	Difference I-J	SE	P	95%CI	
						UB	LB
SI	Oldest	Middle	-1.80*	.20	.00	-2.29	-1.32
		Youngest	.08	.21	.92	-.43	.59
	Middle	Oldest	1.80*	.20	.00	1.32	2.29
		Youngest	1.89*	.20	.00	1.40	2.38
	Youngest	Oldest	-.80	.21	.92	-.59	.43
		Middle	-1.89*	.20	.00	-2.38	-1.40

**p<.01, Note: SI=Suicidal Ideations.

Data in table 4 reveal results of post hoc test which demonstrate that middle born obtain significantly high score on the Suicidal Ideations Scale than the oldest and youngest.

Table 5 Regression Analysis Showing Mediating Role of Perceived Social Support in Suicidal Ideations

Variables	B	β	SE
Constant	13.24		.558
PSS	-.11	-.38***	.012
R ² = .15			
p<.001			

Note: PSS= Perceived Social Support Scale.

Results in the above table reveal regression analysis with perceived social support as predictor and suicidal ideations as an outcome variable which shows a significant interactive effect between two variables. These result support second hypothesis of the study which states that perceived social support would moderate the effect of suicidal ideations among the participants.

Table 6 Mean Standard Deviation and t-test values on Beck Suicidal Ideation Scale in Male and Female

Variables	Male (n=246)		Female (n=238)		t	p	95 % CI	
	M	SD	M	SD			LL	UL
Suicidal Ideation	8.14	1.60	8.19	2.48	-.26	.78	-.42	.32

Note: CI=Confidence Interval; LL=Lower limit; UL=Upper Limit.

Table 6 demonstrates no significant mean difference between male and female participants as both scored approximately same on the suicidal ideation scale. This result does not support third research hypothesis which assumed a significant difference between male and female in terms of suicidal ideation.

Discussion

Suicidal thoughts if not treated at initial stage is one of potential cause of many cases of suicide attempts. As a global phenomenon suicide emerged a second major cause of death among every age of individuals (Suma, 2022). Each year around one million people die due to suicide according to a report of Center for Disease Control (CDC, 2016). The ratio still has seen to be increasing in recent years (Rostilla et al., 2014). According to the World Health Organization (2014), around 800,000 people commit suicide each year. Thus, nearly one person dies every 40 seconds. In Pakistan rate of suicide in 2019 recorded was 8.90% (World Bank, 2022). Researchers have tried to identify risk factors associated with suicide. Among other, suicidal ideations is one of the common causes in all ages specifically in adolescents.

In current study an effort was made to investigate the effect of birth order, moderating role of perceived social support in buffering suicidal ideations and difference between male and female students in their suicidal ideations they develop in the course of their critical period of life. Data shown in table 3 and 4 revealed significant difference among students having different birth order. Middle born participants obtained significantly high mean score on the Suicidal Ideation Scale as compared to first born and last born. These results are in accordance with our expectations based on previous studies which demonstrate a strong association between middle born (birth order) and suicidal ideations.

Numerous research demonstrate an association between birth order and suicidal ideations. For example, Kirkcaly ,Vejlgaard and Siefen (2009) investigated in 2553 children and adolescents in a psychiatric clinic using structured interview inventory included history of self injurious behavior, suicidal ideation and socially disruptive and threatening behavior and diverse sociodemographic variables. Results showed birth order to be associated with both suicidal ideations and self injurious behavior in middle born children. Female middle born children were more likely to had attempted suicide than oldest and youngest, while male middle born were significantly more likely to had self injurious behavior than first, the only children and last born. Number of siblings in family was significantly correlated with both suicidal history and self injurious behavior. Results further demonstrated that the more middle born in a family the high was the risk of suicidal ideation and suicidal history. These results are consistent with the findings of Lester (2001) who reported high rate of suicide ideation and suicide attempts in middle born children. Similar results were also reported by Bjorngaard et al., (2015).

In another follow up study continued from 1980 to 2002 Rostila Sareela, and Kawachi (2014) studied suicidal ideation as risk factor associated with birth order and relationship between birth order and suicide within families in adults born from 1932 through 1980. After variously adjusted for age, economic and marital status and marital age at the time of birth it was found that middle born children were 70% more likely to die due to suicidal ideations followed by actual suicide attempt than the oldest and youngest. In view of these findings, it may be reasoned that middle born children receive limited parental attention and are more weakly attached to them than the first and last born who usually get more attention from their parents. It can also be attributed to competitiveness with siblings.

Perceived Social support a cognitive variable an individual's sense of being loved, cared for and esteem by their family, friends, and significant other is an important variable in the development of normal pattern of thinking. The need to belong, in particular, is a central factor in most of the research on social support which suggests that the maintenance of strong relationships with parents while concurrently establishing an independent network of close friends and community connections within school settings is needed for normative socio-emotional growth (Steinberg, & Morris., 2001). When this key developmental task is not successfully achieved and youth perceive low social support, this make them more vulnerable to develop depression and later to suicidal ideations and suicidal attempts (Czyz, Liu, & King, 2012 Rueger, Chen, & Jenkins, 2014).

Theories have proposed lack of perceived social support as a risk factor for development of suicidal ideations and the resulting suicidal behavior (Miller, Smythers, & Leichtweis, 2015). The sociological theory (Durkheim, Simpson, 1951) the psych-ache theory (Shneidman,1993) and the inter personal psychological theory of suicide (Joiner,2005) suggest that inadequate social support and strong interpersonal relationships increase risk for suicidal ideation and consequently suicidal attempts. These theories complement developmental research, which suggests that the maintenance of strong relationships with parents while establishing an independent network of close friends and close community connections within school settings is needed for normative socio-emotional growth (Steinberg, & Morris., 2001).

Numerous research report findings are in line with these theories. For example, Miller, Smythers, and Leichtweis (2015) examined the effects of perception of social support from parents, close friends and school on current suicidal ideation and suicidal attempts in 143 (64% female and 81% male) in 12-18 years clinical sample of adolescents. Results from linear regression analyses revealed that perception of lower school support independently predicted greater severity of suicidal ideation accounting for parent and close friends. Further relationship between lower perceived school support and suicidal ideation was strongest among those who perceived lower parental support. Results from logistic regression revealed that perception of lower parental support

independently predicted history of suicidal attempts. In addition, those who perceived lower support from school and close friends reported greatest suicidal ideation and suicidal attempts. The author concluded that perception of parent and school support are relatively more important compared to peer support in understanding suicidal thoughts and history of suicidal behavior.

In a more recent study the researchers examined relationship between suicidal risk and adolescents' perception of stressful life events impact and possible role of perceived family functioning in this relationship. The sample consisted of 247 adolescents in the age range of 11 to 17 years taken from the outpatients of Child and Adolescents Mental Health Services. In addition clinical record of these participants such as number of appointments and duration of follow up was also obtained. Results showed that perception of stressful life events reported by adolescents was related to an increased risk of suicide and more intense psychiatric follow up. Findings concluded that adolescents' perception of lack of social support was a key determinant of their suicidal thoughts and suicidal attempts (Canizares, Colorado, Garcia, & Carballo, 2024).

Moving along these line Takwin and Naila (2017) investigated the role of social support as a predictor of suicide ideation in 260 high school students of Gunung Kidul with a high rate of suicide in Indonesia. Results of regression analysis showed that perceived social support decreased suicidal ideations in these students. Similar findings were found by others (Bjorngaard et al., 2015., Galindo, & Iglesias, 2023., Rostila et al., (2014) Scardera et al., 2020, Tan, Xia, & Reece, 2016, Teismann, Forkmann, Glaesmer, Egeri & Margraf, 2016).

The available evidences strongly support results of the present study and the two hypotheses of the study concerning the effect of birth order and the moderating role of perceived social support on the suicidal ideation in university students. However, results could not support third hypothesis regarding gender difference in terms of suicidal ideations. This might be due to the fact that in the current critical financial crises all over the world and specially in our country Pakistan male as a sole bread winner of the family are more prone to develop depression and suicidal thought due to a lot of financial burden, which in some cases make them more vulnerable to suicide attempt.

Implications

In view of findings of numerous researches mentioned above birth order and lack of perceived social support are potential risk factors in many cases of suicide ideations and suicidal attempts specifically in adolescents. The findings of the study have practical implications by suggesting an utmost need on part of the policy makers to arrange effective counseling programs to educate parents to provide social support and to pay equal attention to their children irrespective of birth order in order to overcome the development of suicidal ideation which according to numerous research (mentioned above) are important in preventing suicidal attempt.

Suggestions

Future researchers need to investigate the issue in diverse age of sample. Besides, the effect of certain demographic variables, such as parental education, and employment, need to be studied. The effect of personality characteristics of the parents and child rearing techniques used either of both parents or separately by mother and father on the development of suicidal ideations need to be investigated by future research.

Limitations

The sample was not large enough, therefore results can not be generalized confidently. The parents of the students could not be examined which could give more comprehensive picture of the issue. Personality characteristics of the sample could not be examined, which would add more knowledge.

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Maria Shoaib collected the data.

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Nighat Shaheen make interpretation and did work in drafting.

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