Psychology and Behavioral Science
International Journal
ISSN 2474-7688

Juniper Publishers
key to the Researchers

Research Article
Volume 12 Issue 1 - May 2019
DOI: 10.19080/PBSIJ.2019.12.555827

Psychol Behav Sci Int J

Integrated Motivational Volitional (IMV) Model of Suicide and Suicide in Dir, Khyber Pakhtunkhwa, Pakistan: A Contextual Study

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Submission: May 01, 2019; **Published:** May 31, 2019

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Abstract

O'Conner [1] theorized the act of suicide into an outcome of multiple socio-psychological factors and divided it into three phases known as IMV (Integrated Motivational Volitional) model of suicide. Framed under qualitative research design, the current study aims to study the act of suicide in Khyber Pakhtunkhwa, Pakistan in the context of IMV model of suicide. A total of 11 individuals who attempted suicide were interviewed through an interview guide designed in relevance to the current study. The collected information has been transcribed and linked with the variables of IMV model in order to extract findings. Findings reveal that the act of suicide in Khyber Pakhtunkhwa, Pakistan can be understood in the context of IMV model of suicide. For example, social stress, rumination, impulsivity and empathy are core among such causes.

Keywords: Suicide; IMV (Integrated Motivational Volitional) model; Mental illness; Depression; Stress

Introduction

Background of the Study

History of suicide is old as human society due to the fact that suicide has been discussed, documented and portrayed throughout human history. Suicide has been documented in romantic and glorified manner in human history at numerous historically famous occasions. However, a strong regret, stigmatization and shame are also associated with suicide at numerous occasions in many cultures. Suicide is a universal act i.e. cases of suicide have been documented across each culture, community and in every time throughout the history. In this regard, at times of Greeks such as right Greeks including Aegeus, Lycurgus, Cato, Socrates, Zeno, Domesthenes or Seneca; the Romans including Brutus, Cassius, Mark Anthony or the Egyptian princess, Cleopatra; or Samson, Saul, Abimelech and Achitophel have shown and documented the evidences of suicide. Indian society has a very long history of suicide due to fact that Indian writings and text contains stories about suicide. Indian historians have presented people as heroes who attempted suicide in order to avoid shame and humiliation. The most relevant example in this context is of Ramayana and Mahabharata like stories which provide proofs of the act of suicide in Indian culture [2].

Multiple social factors are involved in the development of suicidality which indicates that the issue is of complex nature, for example, Samaritans [3] argues that suicidal behaviour is a complex phenomenon that usually occurs along a continuum i.e. progressing from suicidal thoughts, to planning, to attempting suicide, and finally dying by suicide. In this context, the first step towards suicide attempt is suicidal ideation which according to Lewinsohn et al. [4], refers to thoughts of death and intent to harm or injure himself along with plan, and justifies that suicidal ideation prevails in about 15 to 25% of adolescents. Literature further enumerates that suicidal ideation paves way for extreme acts such as suicide attempt and dying by suicide. Suicide attempt refers to non-fatal or even fatal, self-inflected and destructive act with explicit or inferred intent to die. Lifetime estimates of suicide attempts among adolescent's ranges from 1.3 to 3.8% in male while 1.5 to 10.1% in females Andrews & Lewinsohn [5].

Existing information regarding suicide suggests that suicide and related issues are severe and are increasing with rapid rates where argues that each year more than one million people lose their lives by suicide throughout the world, and concomitantly loss of life in every forty seconds. Suicidal ideation prevails in

about 14 % of population while among these, 5 % attempts suicide [3].Considering the current statistics, it is predicted that about 1.53 million people will die of suicide by 2020. Hence, these statistics indicates that suicide attempt will increase 10 to 20 times and in every 20 seconds a person will die by suicide [6].

Research and studies show an important association between health and suicide related behaviours. There are numerous socio-psychological factors involved in developing suicidality among individuals. In this context, first, mental illness is vital aspect to be discussed, for example, [7] explains that depressive state increases the risk of suicide attempt and concluded from his study that 95% of suicide attempters have the history of visiting doctors or psychiatrists for some sort of psychiatric issue or a problem (i.e. minor and major depression are the most appropriate examples here).

Clark and Fawcett 1992 with regard to prevalence of depression among suicide attempters extracted an interested figure from his study and argued that 15% of patients with depression die by suicide. Similarly, from view point of prevalence of mental illness among people with suicidal behaviors, it is evident that mood disorder [8] schizophrenia [9] Post Traumatic Stress Disorder (Reinherz, 2002) anxiety disorder Pilowsky, Wu & Anthony [10] multiple co-morbid disorders (Bridge et al., 2006) are also key indicators for suicide attempt. Second, from viewpoint of psychology Integrated Motivational Volitional (IMV) model presents complete explanation of suicide. In this regard, self-perfectionism, psychiatric disorder O'Connor, [1] depression, stress hormones i.e. Cortisol, rapid decision making, rumination, low ability to solve a problem, empathy, thwarted belongingness and burdensomeness, impulsivity high capability to tolerate pain, less sensitivity to pain (for further details see the study of Kirtley & O'Conner [1] Hopelessness [11] continuous exposure to emotional and physical pain [12] and are the key factors that leads to suicidal behaviors.

Statement of the Problem

Suicide is a multidimensional phenomenon e.g. the event of suicide can be studied from many perspectives and dimensions [2]. Its causes and consequences vary across cultures and times. The causative factors of suicide vary, for example, there are cultural, social as well as psychological explanations of suicide and related behaviours [1,3]. Psychological dimensions of suicide are eminent while discussing the act of suicide. In this connection, this study aims to analyses suicide in context of IMV (Integrated Motivational Volitional) model of suicide in the study area that is Dir Lower, Khyber Pakhtunkhwa, Pakistan.

IMV (Integrated Motivational Volitional) model of suicide was devised by O'Conner [1]. It explains the act of suicide in three phases including pre-motivational phase, motivational phase and volitional phase. The model is based on the work of many researchers and explains the act of suicide as the outcome multidimensional psychological factors.

Despite the fact that no or less thoughtful attention has been given to the field of suicide, existing studies (newspaper articles, research articles and newspaper reports) whatsoever depict a gruesome and consistently escalating portrait of the problem in Pakistan. Recent reports estimate that there were 1,153 attempted suicides across the country 2010; 2,131 suicides in 2011 with five or six teenagers attempting suicide every day in Karachi. In 2002, the World Health Organization estimated over 15,000 suicides being committed in Pakistan annually while another study estimates the annual suicide numbers that are about 5,000 to 7,000. In addition, there are approximately 50,000 to 150,000 cases of attempted suicides in Pakistan where majority of suicides and attempted suicides are in people under the age of 30 years [13,14].

Objective of the Study

This study is an attempt to explain and analyses the act of suicide in Dir Lower, Khyber Pakhtunkhwa, Pakistan under the umbrella of Integrated Motivational Volitional Model of suicide which is presented by O'Conner [1].

Methodology

Theoretical Framework: The current study follows the model or theory of O'Conner [1]. The model or theory is known as Integrated Motivational Volitional Model of suicide. The mentioned model theorizes the act of suicide as an outcome of various socio-psychological factors.

Study Design: This study is framed under qualitative research design. Qualitative research is a type of research which focuses on in-depth analysis of the issue being researched and represents the information in textual form. For further details see Nueman [15].

Sampling: purposive sampling technique has been used to select samples from the population of interest. The sample size was determined through saturation point whereby a total of 11 individuals were sampled until reaching to saturation point. For details on saturation point see Saunders, Sim, Kingstone, Baker and Waterfield et al. [16].

Tool for data collection: an interview guide was designed in relevance to the current study in order to collect the desired information from respondents. For detailed description on interview guide see Babbie (2012).

Data analysis: the collected information has been transcribed and linked with the literary information in order to extract findings known as thematic analysis. Limitations of the Study and Ethical Considerations: suicide and related behaviors are one of the most understudied phenomena in Pakistan despite of its prevalence. With regard to the current study there are various problems faced by the researcher while conducting the current study. The prominent of such problems is regarding the variables in IMV model. For example, psychiatric disorder is one of the key variables in IMV model; however, in developing

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countries like Pakistan people even don't know about it, and mental illness is considered as a social stigma. People are unaware of the symptoms of any mental illness and there is lack of diagnosis and records regarding mental illness. Therefore, it was a quite difficult for the researchers to determine various variables of IMV model. To tackle such variables, however, the researchers have tried to discuss it with the respondents to get some sort of information, and to provide some insight to the issue.

Further, suicide attempt is highly stigmatized act in the study area, and therefore, anonymity was an important issue for the researchers. To tackle with the issue of keeping the sampled respondents anonymous a coding method has been devised. . Respondents are presented by R for denoting respondents, the first alphabet of their name and then interview number. For example, Adam Zampa whose interview is on second number will be denoted as R-A-2. The complete list of respondents is given in the following Table 1.

Table 1: The complete list of respondents.

S. No	First alphabet of Respondent's name	Code
1	G	R-G-1
2	L	R-L-2
3	K	R-K-3
4	N	R-N-4
5	I	R-I-5
6	S	R-S-6
7	A	R-A-7
8	A	R-A-8
9	H	R-H-9
10	B	R-B-10
11	L	R-L-11

Data Analysis

The role of socio-psychological factors can be understood in best way through IMV (Integrated Motivational Volitional) model presented by O'Conner [1]. This model explains suicidality in three phases.

Pre-Motivational Phase

This phase of suicidal behavior is primarily based on psychological factors and stressors which are the outcome of social stress. For example, social stressors including loss of loved one, relationship breakdown, social deprivation, unemployment and financial difficulties lead to psychological problems (O' Connor, 2011) [1]. Psychological problems e.g. psychiatric disorders are significantly associated with suicidality [1,17]. In this regard, Kosidou et al. [1] argues that psychiatric disorders are also co-related with employment where those men who are unskilled suffer from depression leading to three times higher risk of suicide than normal. Further, rapid financial decisions increase problems in life such as financial worries and relationship issues that ultimately leads to stress and thus increasing the risk of suicide attempt [18].

Social perfectionism is another important component of pre-motivational phase in IMV model. Social perfectionism refers to the perception that one must always meet the expectations of others, which often are unrealistic. Thinking-perfectionism leads to depression and anxiety, which paves way towards an attempted suicide [19]. An important aspect related to social perfectionism is the perfect self-presentation and failure in perfect self-presentation leads to self-criticism paving way for suicide attempt. Failure in perfect self-presentation is linked with self-criticism in many important ways. For instance, prestigious profession and job, successful intimate and marital relationships are eminent components of perfect self-presentation. Thereby, failure in getting into good profession and job as well as unsuccessful intimate and marital relationships is strongly associated with self-criticism. Self-criticism on the other hand is in significant correlation with stress which in many cases leads to suicidality [1,18]. In addition to it, self-criticism is also associated with rapid decision making leading to further financial and relationship problems which further intensifies stress which is the key cause of suicide according to IMV model [20].

Field information shows similarities to the mentioned literary information. Majority of the respondents argued that there were social stressors that made them suicidal i.e. unemployment and financial problems, low socio-economic status, loss of loved ones and most importantly failure in perfect self-presentation. In terms of unemployment as a social stressor, a respondent argued that: "….unemployment made me extremely stressed. It is a word which does not allow one to face the society with pride. It hurts one's social status and, in my case, similar was the situation. I was unemployed and was unable to face the community with pride like my brothers. They were employed and have prestigious jobs that made me further stressed. They were living a perfect life whereas I was failing despite of struggle…." (R-K-3).

With regard to failure in intimate relationships and its link with failure in prefect self-presentation, a respondent revealed that: "….Yes, I accept that I want certain things to be perfect particularly because I am socialized in such a way. I wanted the boy I loved, and, in a sense, it seemed as a perfect life to me. I failed to maintain relationships with him that made me stressed and suicidal…. (R-A-7).

In terms of rapid decision making as an outcome of social perfectionism or perfect self-presentation it is evident from the interviews of many respondents that failure in perfect self-presentation leads to rapid decision making about one's life. Rapid decision making in many instances leads to intensification of the problems rather than its solution. This further intensifies the level of stress making an individual suicidal. For instance, a respondent stated that:

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"....Off course, I make decisions very quickly and without thoughts when I fail in doing things perfectly. Failure in doing things perfectly makes me stressful such as I am unable to get financial success as well as I failed to marry a girl that I love. Actually, at times I don't realize the seriousness of situation i.e. I quarrelled several times with parents and left the home which further created problems for me such as financial as well as they lost trust on me...." (R-H-9).

Motivational Phase Variables

This phase has its own dimensions where, firstly, rumination which refers to a very deep thinking about situations and events. Such an unrealistic and deep thinking about situations and events leads to suicidal behavior [21]. Rumination further has two dimensions; first, reflection which refers to introspective problem solving; and second, brooding which refers to focus upon problem rather than its solution [22]. Rumination acts as mediator between suicidal ideation and social perfectionism, psychological distress and depression. For example, rumination is a risk factor when an individual has the low ability to solve a problem [1,23]. In addition to it, the means and methods of problem solving is an important component in rumination [24]. Means and methods of problem solving (problems such as low income, marital problems etc.) can be solved through friendship, through family members and positive future thinking (PFT) [25]. Positive future thinking (PFT) helps one to think in positive way about certain events and situations [25]. Lack of PFT is associated with hopelessness which creates negative thinking about future events and may lead to suicidal behavior [26] .

Secondly, thwarted belongingness and perceived burdensomeness significantly contributes to suicidal ideation and behaviors. Feelings of social disconnection and isolation make one incapable of dealing with events and situations which leads to stress (Ribeiro & Joiner et al., 2011). For example, the study of Davidson and his colleagues revealed that men who show thwarted belongingness and burdensomeness are at six time higher risk of attempting a suicide (Davidson et al., 2011). In the context of motivational phase variables, field information reflect significant similar results where all of the respondents agreed with at least one of the motivational phase variables as a contributing factor to their suicide attempt i.e. R-I-4 and R-S-35 agreed that they think very deep about situations and problems (referred as rumination) while R-Z-1, R-T-7 and R-S-22 argued that they are not confident to take decision in order to solve their problems where an extract from an interview is:

"....in any stressful situation I am unable to make a right decision. My friends and family criticize me about my decisions, and later on I realized that they were right. In addition, there are numerous occasions where I failed to solve a problem because of the fact that I thought a lot about the problem rather than sorting it out through friends and family....". The respondent further argued that:

"....the most stressful situation I faced was failure to engage to a girl I love due to financial difficulties. Later on, I realized that such problems can be tackled if friends and family get involved..." (R-L-11).

Further validating the argument a respondent revealed that:

"....I accept the fact that I react to difficult and stressful situation with anxiety and often unrealistic approach. For instance, religion and firm belief on fate is suitable solution of confronting financial hardships. It is obvious that everyone cannot get a good financial status. But at times we don't consider the mentioned facts which lead to further stress and thinking about suicide just like me...." (R-S-6)

In terms of hopelessness and lack of positive future thinking as a contributing factor to suicide, a respondent elucidated that:

"I didn't saw any other way to get rid of tension and stress besides attempting a suicide. I was hopeless and was sure that it is now almost impossible for me to get a job. For a long time, I was struggling to get a job and the stress was increasing day by day...." (R-A-7).

Besides, validating lack of positive future thinking as contributing factor to the development of suicide and related behaviors, a respondent during his interview said that:

"I didn't see anything good in future and thought that things will become worsen probably because my relations with parents and family which were worsening day by day...." (R-G-1).

Data and information obtained through in-depth interviews also reflects similar result to literary information in context of thwarted belongingness and perceived burdensomeness. All of the respondents supported that they feel socially isolated and disconnected. In this context, an extract from an interview is:

"I felt lonely and thought that I have no one in the world. I decreased the time spending with family and friends and thought that no one thinks about my best interests. The time I attempted suicide, I was suffering from strange feelings i.e. I reacted too much to problems and listened to no one...." (R-N-4).

Thus, field and secondary information concludes that thwarted belongingness and perceived burdensomeness are one of the leading causes of suicide attempt among youth.

Volitional Phase Variables

Discussing the dimensions of volitional phase variables, the foremost risk factor for suicide is impulsivity. Different dimensions such as socio-demographic factors, psychiatric disorders, life events and substance abuse contribute to impulsivity which significantly contributes to developing suicide related behaviors. Further, men have higher capability to tolerate pain and are less sensitive to pain than women (Gratz et al., 2011) thereby, making men to easily develop suicide related behaviors as well as to use dangerous and lethal means for DSH

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(deliberate self-harm) and attempting a suicide (Samaritans, 2012) [2]. Recent research in the field of neuroscience has examined sensitivity to emotional pain. The study concluded that continuous exposure to physical pain makes one less sensitive to emotional pain resulting in making an individual vulnerable to develop suicide related behaviors [12]. In addition to it, empathy strongly correlates with sensitivity to emotional pain. Another study found that reduction in sensitivity to emotional pain affects social problem-solving ability (see motivational phase variables). Hence, an individual does not think and consider others and their position which increases burdensomeness and increases vulnerability to suicide attempt [2]. Field information revealed a significant resemblance to the above discussion. In this context, majority of the respondents were impulsive in particular before attempting a suicide. Respondents elucidated about symptoms of impulsivity as well as their causes. For instance, a respondent stated that:

"....I lack rational thinking about events and situations. I was aggressive about taking decisions, and once my friend told me to think and take logical decisions. I fought with my brothers on financial matters whereby a friend told me that I was wrong. But still I didn't care about his suggestion. So, yes I am aggressive and impulsive....". Further, regarding developing such impulsivity the respondent argued that:

"....there are many reasons for my impulsive and aggressive behavior. The most important among such reasons is familial neglect and drug use (marijuana)...." (R-I-5).

In terms of exposure to emotional pain as a contributing factor to suicide attempt, an extract from an interview is:

"My home environment was just like a torture room where no one cared about each other. There was persistent tension in our home due to interpersonal and economic problems. The members of my family had forgotten the word 'care'. Due to such problems I as well as the family members remained continuously disturbed (emotional problem)...." .Further, the respondent illustrated that:

"....exposure to the continuous emotional pain made us tolerant. We didn't care for each other as well as we didn't care about doing certain things. Such a situation made me able to attempt a suicide...." (R-B-10).

Further, validating the argument, an extract from another interview is:

"Persistent tension and loneliness have made me careless about myself and others. I just don't care that whatever happens to me or people around me because I haven't experienced enough good events in life...." (R-S-6).

Thus, field information shows similar results as compared to literary information where it indicates that continuous exposure to physical and emotional pain leads to decrease in sensitivity to pain causing suicide and related behaviors. Further, field information also reflects that increased ability to tolerate emotional and physical pain leads to suicide. In this context, majority of respondents agreed that due to stressful life events they have developed more capability to tolerate pain as compared to their family members and people in their surroundings. A respondent stated that:

".... for attempting a suicide, one must be mentally strong, and such strength develops when one become tolerable to pain. I must admit that difficulties in my life made me insensitive to physical and emotional pain and it played key role in making me suicidal....". The respondent further explicated that: "....by tolerance to physical and emotional pain I meant that ignoring injuries resulting from fights with brothers and becoming insensitive to emotional ties with siblings etc...." (R-A-8).

Discussion

Integrated Motivational Volitional (IMV) is one of the socio-psychological models for explaining suicide and related behaviours. This model has been devised by O'Conner (2011) [1]. According to IMV model of suicide there are three major phases of the process of suicide attempt. First, the pre-motivational phase whereby social stress is the major indicator for suicide attempt. Social stress results from loss of loved one, relationship breakdown, social deprivation, unemployment and financial difficulties. Failure in perfect self-presentation and rapid decision making are outcome of social stress which in many cases leads to suicide and related behaviors. These findings are supported by the studies of Whitte et al. [27], O' Connor 1, Kosidou et al. [17], Barth et al., Hewitt and Flett, Rasmussen et al., Lighthall et al., Varnik et al. and Windsor et al. [1,18-20, 27,28].

Secondly, motivational phase variable, for instance, very deep thinking about situations and events termed as rumination is key indicator in developing suicide related behaviors. In this context, first, reflection which refers to introspective problem solving; and second, brooding which refers to focus upon problem rather than its solution are important to be considered. Rumination is also linked with Positive Future Thinking (PFT) which helps one to think in positive way about certain events and situations. Lack of PFT is associated with hopelessness which creates negative thinking about future events and may lead to suicidal behavior. For further details see the studies of Fairweather et al., Treynor et al., O'Connor et al., Pollock and William and Hirsch et al. [1,21-23,25]. Besides, thwarted belongingness and perceived burdensomeness are important indicators in developing suicide related behaviors. In explanation, thwarted belongingness and perceived burdensomeness results in stress through feelings of social disconnection and isolation make one incapable of dealing with events and situations, and it is evident that stress significantly contributes to suicide and related behaviors. These findings are supported by the studies.

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Third, volitional phase variables are key components of IMV model of suicide. In this phase, impulsivity is the major indicator. Impulsivity is the outcome of psychiatric disorders, life events and substance abuse. In addition to it, impulsivity is also associated with tolerance to pain (both physical and emotional) as well as empathy. This makes an individual less capable of understanding others position in a given situation leading to burdensomeness. These factors alone or in combination leads to suicide related behaviours. These findings are in line with the studies.

Conclusion

This study concludes that various socio-psychological factors explained by Integrated Motivational Volitional (IMV) model of suicide can be successfully applied while explaining suicide in Dir Lower, Khyber Pakhtunkhwa, Pakistan. The core among such socio-psychological factors are social stress (e.g. from failure in intimate relationships and perfect self-presentation, unemployment etc.), rumination (for instance, intense thinking about problems and inability to solve a problems), and impulsivity and empathy leads to suicide and related behaviors.

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