

# SUICIDAL IDEATION; A Review Analysis

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## **ABSTRACT**

Suicide is a leading cause of death and disability in the world. Recent advances in suicide theory and research, fortunately, promise to make a significant contribution to knowledge and prevention.

Aim is to highlight the recent advances in suicide theories, suicidal behavior, and suicidal ideation to promote awareness and instill prevention. Alongside, identify the possible predictions, and understand the thought process and factors intensifying or buffering the ideation and ideation-to-action framework.

This literature review was conducted to find out the contained literature from the past several years. It highlighted factors such as suicidal ideation, ideation-to-action framework, and theories of suicidal behavior. The research was conducted by a content analysis utilizing the results of searching numerous scholarly journals on suicidal ideation, behavior, and theories with the assistance of various scales, surveys, and so on.

It is becoming clear that depression, hopelessness, most mental disorders, and even impulsivity predict ideation, but these factors struggle to distinguish those who have attempted suicide from those who have only considered suicide. A key development is the proliferation of theories of suicide that are positioned within the ideation-to-action framework. These include the interpersonal theory, the integrated motivational-volitional model, and the three-step theory. These perspectives conclude to inform the next generation of suicide research and prevention.

**Keywords:** Suicide, Suicidal ideation, Depression, Hopelessness, Self-harm.

## **1. INTRODUCTION**

Suicidal behavior is more than just a serious public health issue; in reality, each completed suicide has a long-term impact on families and friends and a significant economic, social, and psychological burden on towns, cities, and even entire countries. Suicide is one of the top 20 main causes of mortality worldwide, with an estimated 788,000 deaths in 2015. (World Health Organization, 2017). Suicide attempts are significantly more common than completed suicides, with experts estimating that there are more than 20 suicide attempts for every completed suicide (WHO, 2016). The number of people considering suicide is considerably higher; according to a survey conducted in 17 nations, the lifetime prevalence of suicide ideation is as high as 9.2%. (Nock et al., 2008). Suicidal behavior encompasses suicidal thoughts, attempts ranging from minor to life-threatening, and suicide deaths (Crosby, Ortega, & Melanson, 2011; Posner, Oquendo, Gould, Stanley, & Davies, 2007; Silverman, Berman, Sanddal, O'Carroll, & Joiner, 2007). Suicidal conduct has a complicated aetiology, involving multiple interconnected components such as personal, social, psychological, cultural, biological, and environmental aspects (Shneidman, 1988; WHO, 2014). Suicidal behavior, on the other hand, is likely to

be influenced most directly by psychological variables, as people make a conscious decision to try to end their own life (O'Connor & Nock, 2014).

Suicidal conduct is a leading cause of mortality and disability around the world. Suicide is the fifteenth most common cause of death worldwide, accounting for 1.4 percent of all deaths (WHO 2014). Every year, more than 800,000 people commit suicide. The global age-standardized death rate was projected to be 11.4 per 100,000 in 2012, and the World Health Organization (WHO) predicts that this rate would remain stable until 2030. (WHO 2013, 2014). Suicidal thoughts and nonfatal suicide attempts, in addition to suicide deaths, need to be addressed.

Suicidal ideation and suicide attempt rates are about 9.2 percent and 2.7 percent, respectively, globally (Nock et al. 2008). Suicide attempts and thoughts are highly predictive of suicide deaths; they can have severe repercussions such as injury, hospitalization, and loss of liberty; and they cost society billions of dollars (CDC 2010; Nock et al. 2008, WHO 2014). Suicide and suicidal behavior together account for the twentieth-largest cause of worldwide illness burden; years lost to disability, ill-health, and early death, as well as the sixth and ninth main causes of global disease burden among men and women aged 15 to 44, correspondingly (WHO, 2008). There is a pressing need to better understand and prevent suicide and suicidal behavior on any scale.

Suicidal behavior constitutes a mental health emergency, with a known indication for prompt intervention due to potential fatality if unattended. It's not surprising, then, that proactively focused suicide prevention measures are preferred to reactive interventions in any population at risk. Suicide is a public mental health issue that accounts for up to 2% of global mortality each year; yet, it is preventable and adds significantly to the number of premature deaths and years of life lost among young adults (Gelder, Lopez-Ibor, et al., 2009).

Given the absence of a unanimous definition for suicide and its related behavior, suicide as used in this work is a self-injurious act with fatal consequences, undertaken with more or less conscious self-destructive intent. Suicidality, on the other hand, is a larger term that refers to a spectrum that includes suicidal ideation, the occurrence of suicidal ideation, and any accompanying communications, as well as suicidal behaviors such as self-harm with a deadly (suicide) or nonfatal (attempted suicide) consequence (Gelder, Andreasen, Lopez-Ibor, et al., 2009; Mann, 2003).

With the publication of the fifth edition of the Diagnostic and Statistical Manual for Mental Disorders, the American Psychiatric Association (APA) has also addressed a major definitional issue (DSM-5; Am. Psychiatr. Assoc. 2013). Non-suicidal self-injury (NSSI) and suicidal behavior disorder are included as "conditions for further study" in Section III of the DSM-5. One of the main reasons for proposing NSSI as a distinct disorder was to distinguish the behavior from suicide attempts, i.e., self-harm with intent to die. Even though NSSI is significantly linked to suicide attempts (Klonsky, et. al., 2013, Wilkinson, et. al., 2011), The behaviors differ in terms of prevalence; NSSI is more prevalent, frequency; NSSI has frequently performed dozens or hundreds of times, whereas suicide attempts are typically performed once or a few times, methods; cutting and burning are more common in NSSI, whereas self-poisoning is more common in attempted suicide, severity; NSSI rarely causes medically severe or lethal injuries, severity; NSSI rarely causes medically severe or lethal injuries, and functions; NSSI is performed

without the intent to die, usually to temporarily relieve overwhelming negative emotion, and sometimes as an attempt to avoid suicidal urges (Klonsky 2007, Klonsky & Muehlenkamp 2007, Muehlenkamp & Gutierrez 2004). NSSI is thought to have a strong link to suicide attempts for two reasons: it correlates with characteristics known to enhance the likelihood of suicidal ideation, such as depression; and it facilitates habituation to self-inflicted violence and suffering, which increases the capacity to try suicide (Klonsky et al. 2013).

Suicide ideation is a significant risk factor for predicting future suicides (Lee and Kim, 2007; Beck et al., 1979; Kessler et al., 1999; Reynolds, and Mazza, 1999; Kuo et al., 2001). Even moderate suicidal ideation can progress to extreme suicide attempts (Simons and Murphy, 1985), but not all individuals who have suicidal ideation will necessarily attempt suicide (Kessler et al, 2005). Suicide ideation has been the focus of numerous previous researches, but for a more comprehensive understanding of the same, suicide ideation and suicide attempts should be considered together, and suicide attempts can then be more elaborately explained by evaluating suicidal ideation and acquired capability for suicide.

## **2. AETIOLOGY**

### **Psychological Theory**

Sigmund Freud reported the first significant psychological insight into suicide. Suicide, he claims, is aggression directed against an "introjected" object. This retroflected murder is either turned inward or used as an excuse for punishment, or self-directed death instincts, which he refers to as Thanatos. The three components of hostility suicide outlined by Freud are a want to kill, a desire to be killed, and a desire to die (Kaplan et al., 1998; Andreason et al., 1995). Suicide, according to Freud, is aggression directed inward against an introjected ambivalently cathected loved object, and he doubts that suicide could occur without a previously suppressed wish to kill someone else. Menninger's theory is based on Sigmund Freud's idea. He perceived suicide as an inverted homicide because of a patient's anger towards another person. This retroflected murder is either turned inward or used as an excuse for punishment or a self-directed death (Andreason, 1995).

### **Social Theories**

Emile Durkheim, a French sociologist, classified social theories into three groups to explain statistical patterns of suicide: Egoistic, Altruistic, and Anomic.

**Egoistic.** This is a term used to describe persons who are not fully integrated into any social group. The lack of familial cohesion explains why single people are more likely to commit suicide than married people. It also explains why couples with children are the best-protected group of all other groups that were studied. According to Durkheim, rural communities have better social integration than urban settings, which explains the low suicide rate. He believes that Protestantism is a less cohesive religion than Catholicism, and consequently, the Protestants have higher suicide rates among their members

**Altruistic.** Philanthropic individuals, according to Durkheim, are more likely to commit suicide due to their excessive integration into a group. Suicide is seen as a natural result of that integration.

**Anomic.** This refers to a breakdown of societal standards and ideals as a result of social instability. This group's absorption into society is thought to be disrupted. As a result, the members of this group are devoid of social rules. This explains why people who face a downturn in their financial situation are more likely to commit suicide.

## Biological Factors

**Genetics Twin.** Studies, done as a landmark study in 1991, show monozygotic concordance of 11.3 and dizygotic concordance of 1.8. (Kaplan, et.al., 1998; Jacobs, et.al., 2003). Suicide risk is eight times greater for first-degree relatives of psychiatry patients than controls, and four times greater among first-degree relatives of psychiatry patients who had committed suicide. In families with heavy genetic loading for mood disorders the suicide rate was higher (Andreasson, et.al., 1995; Brent, et.al., 2004). The genetic factor for suicide may be independent or in addition to the genetic transmission of mental disorders. (National Youth Violence Prevention Resource Centre, 2006; Brent, et.al., 2003)

**Neurochemistry.** Studies done on the relationship between tryptophan hydroxylase and a lifetime history of multiple suicide attempts have revealed that there may be a genetic factor of impulsivity. A polymorphism in humans with two alleles has been found. This may be related to an abnormality in the control of the serotonin system (Andreasson, et.al., 1995). A decrease in serotonin levels leads to a decrease in 5-hydroxy indoleacetic acid (5HIAA) in the cerebrospinal fluid (CSF). This was found in depressed patients who attempted suicide. Studies have shown that there is an association between serotonin decrease in the central serotonin system and poor impulse control. Those who view suicide as an impulsive behavior use this as an explanation. (Kaplan, et.al., 1998; National Youth Violence Prevention Resource Centre, 2006; Brent, et.al., 2003)

**Peripheral Markers.** The peripheral markers may identify patients who are emotionally overwhelmed and vulnerable (Kaplan, 1998). They have increased hypothalamic–pituitary–adrenal axis activity, increased 24-hour urine excretions of cortisol, a blunted plasma thyrotrophic stimulating hormone (TSH) response to thyrotrophic-releasing hormone (TRH), skin conductance abnormalities, altered urinary catecholamine ratios, a decrease in platelet serotonin uptake and low levels of platelet monoamine oxidase (Kaplan, et al., 1998; Mahon, et.al., 2005)

## 3. SOCIODEMOGRAPHIC CORRELATES

The scope of this review paper does not enable a comprehensive examination of the correlates of suicide, suicide attempts, and suicidal ideation; however, the study does briefly demonstrate some essential issues. Suicide rates, in particular, are not fairly distributed between people or geographical areas. High-income countries, for example, have higher suicide rates than low- and middle-income countries (LMICs; 12.7 versus 11.2 per 100,000, respectively). On the other hand, LMICs are responsible for more than 75% of all suicides worldwide. Rates of suicide differ by gender and age (Nock et al. 2008a; WHO 1999, 2014). Men kill themselves roughly three times as often as women, and the disparity is even more prominent in high-income countries. (WHO 2014). Adults aged 70 and older, including men and women, had the greatest suicide rates when stratified by age. Even though overall suicide rates are lower in children and young adults, suicide kills a disproportionately significant number of people in these age groups. Suicide, for example, is the second greatest cause of mortality among people aged 15 to 29, and the first among young women aged 15 to 19. (Patton et al. 2009). Notably, sex and age patterns differ significantly among countries. Middle-aged men in high-income countries, for example, commit suicide at a higher rate than their counterparts in low- and middle-income countries, but young adults and elderly women in LMICs commit suicide at a higher rate than young adults and elderly women in high-income countries.

Suicide rates fluctuate throughout time in diverse ways depending on who you are and where you live (WHO 2014). Between 2000 and 2012, the global suicide rate fell by 26% on an age-standardized basis. However, the fall was not uniform. Suicide rates declined by 69 percent among women in Malta over this time but increased by 416 percent among men in Cyprus.

Even between nearby countries, there was significant variation. Between 2000 and 2012, suicide rates in Canada decreased by 11%, whereas suicide rates in the United States increased by 24%. The region, age, sex, and sexual orientation all have different rates of nonfatal suicidal behavior. Suicide ideation (15.6 percent), plans (5.4 percent), and attempts (5.0 percent) are all higher in the United States than the global average (Nock et al. 2008a). Furthermore, females had greater rates of lifetime suicidal ideation, suicide plans, and suicide attempts than males (Kessler et al. 1999; Nock et al. 2008a, 2013), and adolescents have higher rates than adults (Nock et al. 2008b).

#### 4. THE THREE-STEP THEORY OF SUICIDE

Klonsky & May (2015) developed the three-step theory (3ST) of suicide, which claims to have the potential to improve understanding and prediction of suicide, suicidal behavior, and suicide ideation. The 3ST utilizes the ideation-to-action framework, is adequately backed by previous research and theory and provides a parsimonious and testable model of suicide. The key constructs of the 3ST are pain and hopelessness, connectedness, and suicide capacity.

**Step 1. Development of Suicidal Ideation.** The first step toward ideation, according to the 3-Step Theory, is pain. Pain is often associated with psychological or emotional distress. Behavioral conditioning has an impact on everyone (Skinner, 1953). Individuals engage in behaviors that are rewarded and avoid those that are punished. If someone's life experience is characterized by suffering, that person is essentially being punished for living, which can reduce their desire to live. The fact that the theory does not specify the nature of the pain is deliberate. Various sources of discomfort in daily life can all lead to a decreased desire to live, just as any sufficiently unpleasant stimulus can effectively punish behavior (Mazur, 2012), whether it be electric shock, a loud noise, or social exclusion. These can include many of the factors emphasized by others as playing roles in suicidal ideation, such as physical suffering (Ratcliffe, et. al., 2008), social isolation (Durkheim, 1897), burdensomeness and low belongingness (Joiner, 2005), defeat and entrapment (O'Connor, 2011), and negative self-perceptions (Baumeister, 1990), as well as numerous other aversive thoughts, emotions, sensations, and experiences.

The first step toward suicidal ideation begins with pain, regardless of its source. However, pain alone will not cause suicidal ideation. If someone in pain has hope that one's situation can improve and that the pain can be diminished, the individual will strive to achieve a future with diminished pain rather than consider suicide. For this reason, hopelessness is also required for the development of suicidal ideation. That is if someone's life includes considerable pain, and he feels hopeless that the pain will improve, he will consider ending his life.

In short, the combination of pain and hopelessness is what leads to suicidal ideation. This first tenet of the 3ST is consistent with some key recent research findings. First, studies on suicide motivations find that suicide attempts are prompted by overwhelming pain and hopelessness more than by other



factors, including burdensomeness, thwarted belongingness, desire for help or to communicate, and impulsivity; moreover, the said pattern has been replicated in both clinical and non-clinical samples, and in both adults and adolescents (May & Klonsky, 2013, May, et. al., 2015).

Importantly, the 3ST emphasizes that it is the combination of pain and hopelessness that brings about suicidal ideation. Someone in pain but with hope for a better future will continue to engage with life. Likewise, someone who feels hopeless about the future but lives without pain will not feel suicidal. To illustrate this latter case, consider the example of a young man who has recently graduated from university and moved back home with his parents. If this young man lacks a marketable degree, strong grades, and career goals, he may feel hopeless about the future. However, if day-to-day he is comfortable and without pain, if his food and shelter are provided and he has ample free time for friends and activities he enjoys, then he is unlikely to consider suicide. Pain and hopelessness in combination are what lead to suicidal ideation.

**Step 2. Strong Versus Moderate Ideation.** According to the 3ST, the second step toward potentially lethal suicidal behavior occurs when pain exceeds connectedness. The term connectedness is used in a broad sense. Connectedness can mean a connection to other people as well as to interest, role, project, or any sense of purpose or meaning that keeps one invested in living. The 3ST stipulates that someone who experiences pain and hopelessness and considers suicide will only have moderate ideation (e.g., “Sometimes I think I might be better off dead”) if connectedness remains greater than the pain. However, ideation becomes strong (e.g., “I would kill myself if I had the chance”) if pain overwhelms any sense of connectedness. Consider the example of a parent who experiences daily pain and hopelessness but who also feels invested in and connected to his or her children. If the parent’s connectedness exceeds the parent’s pain, this individual may still have passive ideation but will not progress to the active desire for suicide. However, if both pain and hopelessness are present, and connectedness is dwarfed by pain, the individual will experience strong ideation and actively consider ending his or her life.

Disrupted connectedness is similar to low belongingness and burdensomeness, as described in Joiner’s interpersonal theory, but operates differently in the 3ST. In interpersonal theory, belongingness and burdensomeness are thought to directly cause suicidal ideation. (Joiner, 2005) In the 3ST, the primary role of connectedness is to protect against escalating suicidal ideation in those at risk due to pain and hopelessness. Although disrupted connectedness can contribute directly to pain and hopelessness, it is not viewed as necessary for the development of pain or hopelessness, or the development of suicidal ideation. From the perspective of the 3ST, many people with suicidal ideation do not have disrupted connectedness, and many with disrupted connectedness do not develop suicidal ideation. Specifically, in a large online sample of ideators and non-ideators, connectedness was protective against ideation in those high on both pain and hopelessness but was negligibly related to ideation in everyone else. Moreover, in the said study of the three-step theory; a new theory of suicide rooted in the “ideation-to-action” framework by Klonsky&May (2015) created a difference variable indexing the extent to which pain exceeds connectedness (i.e., by subtracting the standardized scores on a measure of connectedness from standardized scores on a measure of psychological pain). As predicted by the 3ST, this variable robustly predicted ideation in the combined pain and hopelessness group but was a negligible predictor of ideation in other individuals. In short, findings support the 3ST’s tenet that connectedness is most relevant to

suicidal ideation as a protective factor among those high on pain and hopelessness, especially when one's connectedness exceeds one's pain. It is important to be clear that the 3ST's emphasis on pain, hopelessness, and connectedness does not suggest that other oft-cited suicide risk factors are unimportant. On the contrary, it is emphasized by Klonsky that numerous disorders (e.g., depression), states of mind (e.g., self-criticism), personality traits (e.g., borderline personality), temperaments/dispositions (e.g., negative emotionality) and experiences (e.g., interpersonal loss) are highly relevant to suicidal ideation. However, the 3ST suggests they are relevant in a particular way, through their contributions to pain, hopelessness, and/or connectedness. For example, depression would be expected to contribute to suicidal ideation to the extent it contributes to pain, hopelessness, and/or disrupted connectedness, but not beyond.

**Step 3. Progression from Ideation to Attempts.** The final step of the 3ST addresses the conditions under which strong ideation leads to a suicide attempt, most individuals with ideation do not make a suicide attempt; therefore, as stated by Joiner (2005) that the key determinant is whether the individual can make a suicide attempt. Joiner suggests that fear of death is a powerful instinct that makes it extremely difficult to attempt suicide, even if experiencing strong suicidal ideation; thus, individuals can only attempt suicide if they have developed the capacity to overcome this barrier. The 3ST echoes this point, however, expands it in two ways.

Joiner's theory emphasizes acquired capability. In short, this ability is developed and increased through experiences with painful and provocative events that increase one's tolerance for pain, injury, and death. The 3ST broadens the concept and proposes three categories of variables that contribute to suicide capacity: dispositional, acquired, and practical.

Dispositional refers to relevant variables that one is born with. For example, some individuals are born with higher or lower pain sensitivity (Young, et. al., 2011). Someone born with lower pain sensitivity will have a higher capacity to carry out a suicide attempt. The concept of dispositional contributors to capacity is supported by research from Joiner and others suggesting that the capability for suicide is largely genetic (Smith, et. al., 2012). The second contributor to suicide capacity, acquired variables, refers to the same concept Joiner describes. That is, habituation to experiences associated with pain, injury, fear, and death can, over time, lead to a higher capacity for a suicide attempt.

Finally, practical variables are concrete factors that make a suicide attempt easier. There are many kinds of practical factors. For example, someone with both knowledge of and access to lethal means, such as a firearm, could act on suicidal thoughts much more easily than someone without knowledge of and access to lethal means. Practical contributors to capacity may explain findings that anesthesiologists and other medical professionals have elevated suicide rates (Swanson, et al., 2003). The individuals have both easy access to the necessary drugs and extensive knowledge of how to end one's life painlessly, which makes their practical capacity extraordinarily high.

In summary, dispositional, acquired, and practical factors contribute to the capacity for attempted suicide, and individuals with strong suicidal ideation will only make suicide attempts if and when they can do so. This third step of the 3ST has also been supported by recent research (Klonsky & May 2015). In a US-based online sample, which included large numbers of attempters and ideators, dispositional, acquired, and practical contributors to suicide capacity each related to suicide attempt history, and they

continued to relate to attempting history in analyses controlling for current ideation and past ideation. Thus, consistent with the 3ST, all three components of suicide capacity matter, and they each predict suicide attempts above and beyond ideation.

## **5. THE INTERPERSONAL THEORY OF SUICIDE**

The theory proposed by Tomas E. Joiner Jr. is viewed as the first ideation-to-action theory of suicide (Joiner, 2005; Klonsky & May 2015). The Interpersonal Theory of Suicide proposes explanations for suicidal desire and for acting on suicidal desire. In particular, the theory states that perceived burdensomeness and low belongingness combine to create suicidal desire, whereas the capability to act on desire is acquired over time through exposure to painful and provocative events (Van Orden et al., 2010). The Integrated Motivational-Volitional Model of Suicide Behaviour (IVM) proposed by Rory C. O'Connor represents the second ideation-to-action theory (Dhingra, Boduszek, & O'Connor, 2016; O'Connor, 2011). The Integrated Motivational-Volitional Model suggests the motivational phase describes the factors that govern the development of suicide ideation and intent (mainly defeat and entrapment), whereas the volitional phase outlines the factors that determine whether an individual attempts suicide (e.g., access to lethal means, the capability to attempt suicide, and impulsivity). The Three-Step Theory (3ST) of suicide is the most recent suicide theory rooted in the ideation-to-action framework (Klonsky & May 2015).

The 3ST expands upon the ITS concept of the acquired capability to include dispositional and practical contributors to capability. Dispositional contributors refer to a genetic predisposition for high pain tolerance and low fear of death (Houtsma & Anestis, 2017; Klonsky et al., 2016). Acquired contributors refer to the very same construct conceptualized by Joiner, which is acquired largely through repeated exposure to painful or fearsome experiences that result in habituation to pain and an increased fearlessness about death (Joiner et al., 2009). Practical contributors refer to concrete factors that make a suicide attempt easier, such as access to lethal means (Klonsky & May 2015).

According to the Interpersonal Theory of Suicide, individuals are most likely to experience suicidal ideation when two mental states are jointly present. The first, perceived burdensomeness, refers to an individual's belief of being a burden to others and the sense that those individuals would benefit from his or her death. The second state, thwarted belongingness, refers to an individual's lack of close relationships and feelings of loneliness and isolation. Research has supported this component of the ITS, as the joint presence of perceived burdensomeness and thwarted belongingness has been associated with suicidal ideation in multiple samples including adult civilians (Van Orden et al., 2010) and military personnel (Anestis et al., 2015; Monteith, et al., 2013). Another recent systematic review of the ITS indicated that the interaction of perceived burdensomeness and thwarted belongingness was a significant predictor of suicidal ideation in 66.6% percent of studies examining its association with suicidal ideation (Ma et al., 2016). According to the ITS, the joint presence of perceived burdensomeness and thwarted belongingness is insufficient for individuals to engage in suicidal behavior, as individuals must be able to tolerate the distress and pain associated with making a suicide attempt. Individuals acquire the capability to engage in suicidal behavior through exposure to painful and/or provocative events (PPEs) that prompt a heightened fearlessness of death and pain tolerance. The association between individuals' experiences with various



painful and provocative events (e.g., combat experiences and non-suicidal self-injury) and the acquired capability for suicide has been observed (Bryan et al., 2010; Frankin et al., 2011), providing support for the development of the capability to engage in suicidal behaviors. The experience of a variety of types of specific events considered PPEs has distinguished suicide ideators from attempters, including experiencing physical and dating violence (Stack, 2013) and greater numbers of stressful life events (McFeeters et al., 2015). Furthermore, research indicates that individuals who have previously attempted suicide are at increased risk for future suicide attempts (Forman et al. 2004). Taken together, these findings provide fairly robust support for the potential importance of repeated encounters with PPEs in enabling a suicidal individual to engage in suicidal behavior.

## **6. RATIONALE**

Suicidal behavior is the leading cause of death and disability worldwide. Therefore, needs to be represented, be it impulsive and communicative acts, or long-planned involving high-lethality methods. This is a Literature Review, which is relevant to conduct to find out the contained literature from the past several years highlighting recent developments in suicide theory and research promised to meaningfully advance the knowledge and prevention of the same. This study is needful as the best-studied predictors of suicide are a history of previous suicide attempts and suicidal ideation. Previous research suggests that people engage in suicidal behavior when they are unable to think of alternatives to cope with their distress, i.e., when they are unable to generate solutions to their problems. Therefore, understanding the development of ideation-to-action framework can assist reduce the risk for suicidal thoughts and behavior which is step one in improving interventions to reduce suicide risk among vulnerable people. The present study sought to provide an overview of some of the conceptual and empirical background related to possible relevance to suicidality research. The study will provide a qualitative review of up-to-date findings on suicide attempts, suicidal ideation, and suicide completions which will fill in the gaps in our understanding by describing the ideation-to-action paradigm, which we believe will help to bridge the gap and lead the next generation of suicide theory, research, and prevention.

## **7. REVIEW OF LITERATURE**

Suicide in China has received increasing attention in recent years, especially since Phillips, Li, and Zhang (2002) indicated that the mean annual suicide rate was as high as 23 per 100 000. Based on mortality data in the late 1990s, China is widely recognized to have one of the highest suicide rates in the world. With the rapid economic growth and strong urbanization process over the past two decades, mainland China has experienced a steady decline in the overall suicide rate (Sun, Guo, Zhang, Jia, & Xu, 2013; Wang, Chan, & Yip, 2014; Yip, Liu, Hu, & Song, 2005). The annual national age-standardized suicide rate in China was 7.8 per 100,000 population in 2012 (7.1 for males and 8.7 for females), which has declined by 59.6% ever since 2000 (WHO, 2014). However, more and more scholars have expressed their concerns about the downward trajectory of the suicide rate in China. The decline in the suicide rate may reverse over the next decade because of the social stresses associated with the slowdown of economic growth, the rapid aging of the population, increased economic burdens, and income inequality (Sha, Yip, & Law, 2017; Wang et al., 2014; Xie & Zhou, 2014).

Suicide in adults with anorexia nervosa is eight times more common than in the general population (Bulik et al., 2008). Adults with bulimia nervosa do not differ from the norm in suicides (Franko & Keel, 2006), but they have more attempts across studies (25–30%) than do adults with anorexia nervosa (3–20%; Franko & Keel, 2006). Adults with bulimia nervosa are also more likely to have suicide ideation (32%) than adults with anorexia nervosa (22%; Favaro & Santonastaso, 1997). Studies of the frequency of suicide behavior in adolescents with eating disorders are sorely lacking, and two small studies report strikingly different frequencies (Fennig & Hadas, 2010; Ruuska, Kaltiala-Heino, Rantanen, & Koivisto, 2005). A self-report survey of 1,000 adolescents in Italy found that adolescents with suicide ideation had higher scores on measures of eating disorders than adolescents without suicide ideation (Miotto, De Coppi, Frezza, & Preti, 2003).

Recently, research has begun to further examine differences between ideators and attempters within other theoretical frameworks. The Integrated Motivational-Volitional Model of Suicidal Behavior (O'Connor, 2011) posits that the transition from suicidal ideation to behavior is most likely when volitional mediating factors, including the acquired capability for suicide, impulsivity, and access to means are present. The IMV has been tested and supported in a sample of individuals recently hospitalized for a suicide attempt (O'Connor et al., 2013). In a recent test of the IMV in university students, no significant differences in levels of specific motivational factors related to the ITS (perceived burdensomeness, thwarted belongingness, depression) were observed between those with a history of suicidal ideation and those with a history of attempts. However, higher levels of volitional factors (fearlessness about death, impulsivity, and exposure to suicidal behavior by others) except distress tolerance were observed in those with a history of suicide attempts than in those with a life history of suicidal ideation (Dhingra et al., 2015), providing support that specific volitional factors, notable fearlessness about death, may contribute to the transition from suicidal ideation to suicide attempts. Here again, further research examining these relationships in diverse samples (i.e. non- European university students) is needed.

It is imperative for Chinese society to have a better understanding of suicidal behavior. Recently, some scholars in China have paid attention to the contribution of cultural factors to suicidal behaviors (e.g., Li, Phillips, & Cohen, 2012; Yip, Yousuf, Chan, Yung, & Wu, 2015; Zhang, Liu, & Sun, 2017). Chinese society places high value on social cohesion (Lee, Tsang, Li, Phillips, & Kleinman, 2007), and Chinese people are very collectivistic within the family relationships and family clans (Zhang, Conwell, Zhou, & Jiang, 2004). Consistent with Chinese culture, the 3ST of suicide also emphasizes the role of the interpersonal relationship (i.e. connectedness) in the development of suicidal desire (Klonsky & May, 2015). Connectedness can be a protective factor against suicidal behaviors, while disrupted connectedness may be a risk factor. Their study aims to test the 3ST among Chinese college students. It is helpful for Chinese society to better understand suicide behaviors rooted in the ideation-to-action framework. It also can provide preliminary shreds of evidence for suicide prevention and intervention. According to the 3ST, the key hypotheses they test are: (1) Pain and hopelessness will interact to predict current suicide ideation; (2) Connectedness protects against the escalation of suicide ideation among those high on both pain and hopelessness; (3) Suicide capacity will distinguish lifetime suicide attempters from those with histories of ideation but not attempts.

In year the 1970s, the bulk of the work in suicidology has been targeted two of the three populations, namely, attempted suicides and completed suicides. The primary focus of research on

nonfatal suicide attempts has been the assessment of current suicidal intent (e.g., Beck, Schuyler, & Herman, 1974; Dorpat & Boswell, 1963; Weissman & Worden, 1972) and the prediction of future fatal suicide attempts (see Beck, Resnik, & Lcttieri, 1974; Lester, 1972). The thrust of Beck & Kovacs's (1979) research has also been two-fold: To assess aspects of current suicidal behaviors, and to validate the tripartite, multiaxial classification system and our measurement tools, which had also constructed an intent scale for "suicide attempters."

A remarkable research work by Beck & Kovacs (1979), which states the development, and validation of the Scale for Suicide Ideation (SSI), a 19-item clinical research instrument designed to quantify and assess suicidal intention. The scale developed was found to have high internal consistency and moderately high correlations with clinical ratings of suicidal risk and self-administered measures of self-harm. Furthermore, it was sensitive to changes in levels of depression and hopelessness over time. Its construct validity was supported by two studies by different investigators testing the relationship between hopelessness, depression, and suicidal ideation and by a study demonstrating a significant relationship between a high level of suicidal ideation and "dichotomous" attitudes about life and related concepts on a semantic differential test. Factor analysis yielded three meaningful factors: active suicidal desire, specific plans for suicide, and passive suicidal desire. (Beck, et al., 1972).

Other research has expanded upon the construct of the capability for suicide and fearlessness about death and pain. Klonsky and May's Three-Step Theory (3ST; 2015) is the most recent theoretical framework explaining the transition from suicidal ideation to attempts. It posits that individuals with strong suicidal ideation will only make a suicide attempt when the capacity for suicidal behavior (developed through a combination of genetic predisposition, exposure to PPEs, and knowledge about and access to lethal means) is present. Of particular relevance to the ideation-to-action framework and current research, Klonsky and May (2015) found that dispositional (long-term, consistent fearlessness about pain and death), acquired (decreased fear of pain and death across time), and practical (access to and familiarity with lethal means) aspects of the capability for suicide differentiated individuals with a history of suicide attempts from those with a history of suicidal ideation but no attempts.

Jobes (2015) in his clinical assessment study has argued that some contemporary providers may make assumptions about the presumed effectiveness of inpatient care and the use of medicine on suicidal risk. Such presumptions have a major impact on the patient's clinical disposition and even the course of their entire life. Thus, there may be a misguided notion that a "one-size" approach (i.e., a brief hospitalization and medication to treat the disorder) will work for all suicidal patients. (Jobes, et.al., 2015). Another way of understanding the possible insistence by some that these approaches are effective can be explained by Stanford psychologist Carol Dweck's notion of a psychological "mindset." Dweck (2012) empirical work has shown the existence of two distinct mindsets: a "fixed" mindset versus a "growth" mindset. Her research shows how these mindsets are reliably associated with different outcomes for personal and professional success, and a growth mindset is much more adaptive and linked to successful outcomes.

The utility of the ideation-to-action framework has also been expanded to variables outside of these specific theoretical frameworks. Law et al. (2015) reviewed the literature on suicide and emotion dysregulation and proposed that emotion dysregulation - defined by Gratz and Roemer (2004) as difficulties in identifying, understanding, and adaptively responding to acute emotional states - is directly

associated with the desire for suicide and suicidal ideation, but only indirectly associated with suicidal behavior. In support of this contention, research has supported a direct relationship between emotion dysregulation and suicidal ideation (Lynch et al., 2004; Orbach, et al., 2007) but only an indirect association with suicide attempts, with the association, accounted for by specific PPEs such as non-suicidal self-injury (NSSI; Anestis et al., 2014). Furthermore, greater deficits in specific emotion regulation strategies (acceptance of emotional responses and perceived access to emotion regulation strategies) were observed in those who have attempted suicide multiple times than those who have never experienced suicidal ideation (Rajappa et al., 2011). The extent to which emotion dysregulation differentiates those with prior attempts from those with only prior ideation, however, remains a question in need of empirical investigation. Their research has served as preliminary evidence supporting the potential utility of the ideation-to-action framework in better understanding the nature of the relationship between specific risk factors (e.g., depression, emotion dysregulation) and specific aspects of suicidality (e.g., ideation versus attempts). However, as noted by May and Konsky (2016), further research is needed to better understand the differences between individuals who have thought about suicide and those who have made a suicide attempt, as research regarding the ideation-to-action is currently limited. Specifically, little research has examined whether greater levels of ITS constructs, specifically (perceived burdensomeness, thwarted belongingness, and PPEs) differentiate between those with various histories of suicidality, and no research has examined whether emotion dysregulation differentiates between these individuals. Furthermore, much research of correlates of suicidal ideation and suicide attempts utilizes samples of undergraduate students or non-U.S. samples. Therefore, research should examine which correlates differentiate ideators from attempters in diverse samples of individuals with various histories of suicidal ideation and behavior.

The study by David W. Hollingsworth, et. al., (2014) investigates hope as a moderator between both thwarted belongingness and perceived burdensomeness and suicidal ideation in a sample of 107 African American college students and discovered that African Americans who exhibit higher levels of hope (i.e., engage in goal-directed thinking, can identify pathways to achieve goals, and are naturally motivated to achieve their goals) may be buffered against suicidal ideation even in the presence of prominent interpersonal predictors of suicidal desire (i.e., thwarted belongingness and perceived burdensomeness).

One study compared the levels of hope within a college population and found that African Americans had higher levels of hope than Caucasians (Davidson & Wingate, 2011). Given the collective African American familiarity with the hope construct, as well as the positive outcomes of psychological research, hope may be a principle protective factor for suicide in African Americans. The relationship between hope and suicidal ideation has recently been investigated in several different populations. The first study to examine this relationship demonstrated that hope was significantly related to suicidal behaviors in a general sample of college students (Range & Penton, 1994). Additional studies have also found a negative relationship between hope and suicidal ideation in samples of college students (Hansen, 2013; Tucker et al., 2013), African American college students (Davidson et al., 2010; Davidson & Wingate, 2011), and American Indian/Alaska Native college students (O'Keefe, Tucker, Wingate, & Rasmussen, 2011; O'Keefe & Wingate, 2013).

In a study to test the Three-Step Theory (3ST) of Suicide in a sample of college students in China, on questionnaires indexing psychological pain, hopelessness, connectedness, suicide capacity, suicide ideation, and suicide attempt. The prevalence of suicide ideation and suicide attempt among the sample were 21.42% and 3.83%, respectively. The hierarchical regression analysis showed that psychological pain and hopelessness interacted to predict suicide ideation, and that connectedness was the most protective against ideation in those high on both pain and hopelessness (Yang, et.al., 2018).

Suicidal behavior among minors was a study conducted by Bloch, S., et.al., (2010) which hypothesized and proved that suicidal behavior in children stems from a different diagnosis than suicidal behavior in adolescents and thus merits its own investigation by studying all minors who were referred to a psychiatric emergency department (ED) due to a suicide attempt or suicidal ideation over a three-year period. Attention deficit hyperactive disorder (ADHD) was more prevalent among children, whereas Mood disorders were more prevalent among adolescents. The findings of this study highlight the need for a separate approach to suicidal behavior in children as distinct from adolescents.

The Interpersonal Psychological Theory of Suicide (IPTS) proposed by Joiner(2005) is regarded as a comprehensive theory explaining suicide by integrating existing theories and introducing the concept of acquired capability for suicide (Smith and Cukrowicz 2010). This theory emphasizes both the role of social factors (thwarted belongingness, perceived burdensomeness) and personal factors (acquired capability for suicide). The theory also provides a clearer explanation of suicide by applying acquired capability for suicide (Joiner, 2005; Van Orden et al., 2010). IPTS assumes that only those who want to commit suicide and have the ability to commit suicide attempt to go through with it. Joiner (2005) suggested that individuals feel thwarted belongingness when they experience that they are no longer forming meaningful relationships in their family, friends or other valuable groups. Perceived burdensomeness is when one's existence is no longer needed by friends, family, or society, and the individual feels like a burden. According to the IPTS, when an individual feels thwarted belongingness and perceived burdensomeness at the same time, suicide ideation is triggered. Suicide attempts are performed by individuals with both suicide ideation and acquired capability for suicide which gives them the ability to perform fatal suicides (Joiner, 2005; Van Orden et al., 2010). Joiner (2005) argued that attempts to commit suicide require an acquired capability for suicide, because lethal suicide attempts involve significant levels of fear and pain. The acquired capability for suicide consists of two factors: fearlessness about death and pain tolerance, and the lower the fear of death and the higher the pain tolerance, the higher the ability to commit suicide. Joiner (2005) also argued that repeated exposure to painful experiences (e.g. physical abuse, sexual abuse, self-harm, violent games/activities, etc.) may increase acquired capability for suicide through habituation and activation of opponent process.

A group of PhD Scholars in the United States designed a study to evaluate whether collegiate athletes and nonathlete college students differ in nonsuicidal self-injury (NSSI), suicidal ideation, suicide attempt, and help-seeking behaviors. A survey administered to college students of Single-level binary logistic regression with equality of coefficients tests and chi-square analyses. The conclusion was that the models for NSSI and suicide attempt differed slightly between student-athletes and nonathletes. Most notably, stress is a stronger correlate of NSSI for nonathletes, while difficulties with social relationships is a stronger correlate of suicide attempt for student-athletes. The findings highlight the salience of relationship problems as a correlate with suicide attempts in student-athletes. Difficulty in romantic or



other social relationships could be a marker of risk or an identifiable, actionable target for preventing future suicidal behaviors among collegiate athletes. (Anchuri, et. al., 2019)

Ullman & Najdowski (2009) of Chicago, studied the relations between serious suicidal ideation and attempts and demographics, trauma history, assault characteristics, post-assault outcomes, and psychosocial variables were examined among female adult sexual assault survivors. It was concluded in their study that younger, minority, and bisexual survivors reported greater ideation. More traumas, drug use, and assault disclosure related to greater attempts, whereas perceived control over recovery was related to fewer attempts. Child sexual abuse and some assault characteristics predicted suicidal behavior. Depression was related to suicidal behavior until psychosocial variables were accounted for. Specifically, using substances to cope and self-blame predicted greater ideation, whereas receiving information support was related to less ideation.

In an analysis of data from the National Comorbidity Survey (NCS), Ullman and Brecklin (2002) examined the effects of child sexual abuse (CSA) and assault-related psychosocial factors associated with risk of suicidal ideation and attempts in a subsample of women ASA survivors. Demographic risk factors were examined because past research suggests that younger, less educated, and ethnic minority persons are with the University of Illinois at Chicago. (e.g., Hispanics, African Americans) may be This research was supported by a grant at higher risk for nonfatal suicidal behavior (Canetto & Lester, 1995). As predicted, Ullman and Brecklin found that younger age was associated with suicidal ideation. Ullman and Brecklin (2002) found alcohol dependence symptoms associated with suicidal ideation but no research to date has examined the role of illicit drugs used in predicting suicidal behavior in Adult Sexual Assault survivors.

David A. Jobes and Samantha A., (2019) have argued in the literature review article that to move the field of mental health forward in terms of suicidal risk, the approach to move away from a “one-size-fits-all” to working with suicidal people. Rather, an approach that matches different evidence-based suicide-focused treatments, i.e., DBT, CT-SP, BCBT, and CAMS to different suicidal states is clearly needed. Alongside, thoughtful conceptual models and progressive evidence-based policies, e.g., Zero Suicide, to optimally engage those suicidal people who do not seek care. Finally, an array of professional and paraprofessional approaches and various services are needed to better support to people who battle with suicidal thoughts, feelings, and behaviors.

Brezo, Paris & Turecki (2006) in their systematic review study of Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completions discovered the involvement of personality traits in susceptibility to suicidality, because of the diversity of conceptual and methodological approaches, the extent of the independent contribution has been difficult to establish. The conceptual background and empirical evidence investigating roles of traits in suicidal behaviors were investigated for the risk for suicide attempts were hopelessness, neuroticism, aggression, impulsivity, anger, irritability, hostility, and anxiety, and extroversion. The study concluded that hopelessness and neuroticism, and to a lesser extent, extroversion may eventually be useful in screening for risk for suicidal behaviors.

Deborah M. Stone, et.al., (2010) examined the associations between 2 measures of sexual orientation and 4 suicide risk outcomes (SROs) from pooled local Youth Risk Behavior Surveys, collected the data from 5 local Youth Risk Behavior Surveys from 2001 to 2009 where they defined sexual minority

youths (SMYs) by sexual identity (lesbian, gay, bisexual) and sex of sexual contacts (same- or both-sex contacts). Survey logistic regression analyses controlled for a wide range of suicide risk factors and sample design effects. The Result of the study was compared with non-SMYs, all SMYs had increased odds of suicide ideation; bisexual youths, gay males, and both-sex contact females had greater odds of suicide planning; all SMYs, except same-sex contact males, had increased odds of suicide attempts; and lesbians, bisexuals, and both-sex contact youths had increased odds of medically serious attempts. Unsure males had increased odds of suicide ideation compared with heterosexual males. Not having sexual contact was protective of most SROs among females and of medically serious attempts among males. Conclusions. Regardless of sexual orientation measure used, most SMY subgroups had increased odds of all SROs.

Bo-ram Choi&Sung-Man Bae (2020) of Dankook University, Cheonan, Republic of Korea, attempted to explain suicide ideation and suicide attempts among undergraduate students in South Korea based on the Interpersonal Psychological Theory of Suicide. Data collected through an online questionnaire survey of 402 university students. As a result of a hierarchical multiple regression analysis, while adjusting sex, socioeconomic level, and depression, thwarted belongingness and perceived burdensomeness significantly explained the suicide ideation. Suicide ideation and acquired capability for suicide significantly predicted the frequency of suicide attempts, and the interaction between suicide ideation and acquired capability for suicide had a significant effect on suicide attempt frequency. The study findings suggested that the feeling of being worthless to society and burdensome to others is a major risk factor affecting the suicide rates of undergraduate students in South Korea. It also suggested that in order to assess suicide risk and to prevent and intervene in suicide, the acquired capability for suicide, which is the ability to commit lethal suicide, along with suicide ideation should be considered.

Existing theories explaining suicide suggest that suicide is caused by social or personal factors. Durkheim (1897/2010) suggested that there were four types of suicide (egoistic, altruistic, anomic, and fatalistic) depending on the level of social integration and regulation. Beck(1967) emphasized the role of hopelessness as a key factor in explaining suicide. The previous suicide theories focused on the development process and causes of suicide ideation(Klonsky and May 2015) and shared the hypothesis that the stronger the suicide ideation, the higher the risk of suicide(Van Orden et al., 2010). However, because only a small number of people with suicide ideation attempted suicide(Nock et al., 2008; Miranda et al., 2014), existing theories have had limitations in explaining suicide attempts. Accordingly, a comprehensive theory that integrates social and personal factors affecting suicide was required (Van Orden et al., 2010).

A systematic study conducted by Simon, Chang, Zeng & Dong (2012) examines and aim to identify studies describing the epidemiology of suicidal ideation, suicide attempts, and behaviors among global Chinese communities; conduct a systematic review of suicide prevalence; provide cross-cultural insights on this public health issue in the diverse Chinese elderly in China, Hong Kong, Taiwan, Asian societies and Western countries. Using the data sources of the PRISMA statement, performed a systematic review including studies describing suicidal ideation, attempts, and behavior among Chinese older adults in different communities. The result of the review study turned out that forty-nine studies met inclusion criteria. Whereas suicide in Chinese aging population is a multifaceted issue, a culturally appropriate and inter-disciplinary approach to improve the quality of life for the Chinese older adults is critical. Studies on suicide attempts across all regions in Chinese populations report that compared to older adults without

mental disorders, older adults who were diagnosed with mental disorders exhibited higher rates of suicide attempt, ranging from 60% among women with depression in a clinical setting in Nanjing (Qin & Wu, 2002), to 25% among patients diagnosed with depression in Shanghai, China (Zhang et al., 2006). Risk of suicide attempts also increased with age, and may decrease only after 85 years old (Chiu, Lam, Pang, Leung, & Wong, 1996).

In a Swedish case control registry study; Exposure to parental mortality and markers of morbidity, and the risks of attempted and completed suicide in offspring by Niederkrotenthaler, et.al., (2010) low age at childhood exposure to parental risk factors was associated with increasing risks of suicide and attempted suicide. Adjusted suicide risk was most pronounced in the youngest exposed for parental psychiatric disability pension, parental attempted suicide, and suicide. While in another Swedish population-based study of 14,440 individuals hospitalized due to suicide attempt demonstrated that the strongest independent familial risk factors for youth suicide attempt were siblings', maternal and paternal (OR 1.9) suicide attempt (Mittendorfer-Rutz, 2008). Other identified risk factors associated with parental suicidal behavior are diminished educational performance (Geulayov, 2016), as well as substance abuse, e.g., illicit drugs, tranquilizers and opioids (McManama O'Brien, 2015). Neglecting parenting and sexual abuse are increased among children of patients with attempted suicide and increased risk for suicidal behavior (Hawton, 1985). In turn, both neglecting parenting and being sexually abused in addition to experiencing parental suicidal behavior increases risk of suicide attempt at a young age (Guillaume, 2015).

In a Cross-national prevalence and risk factors for suicidal ideation, plans, and attempts research by Nock, et.al., (2008) findings concluded that Suicidal ideation, self-harm, suicide attempt are more common in young people than suicide. Suicidal ideation can comprise thoughts of death or wishing to die and/or engaging in an suicidal ideation, and is a known risk factor for Suicidal attempts and death by suicide. (Cash & Bridge, 2009). Epidemiological data from community samples in the USA by Miranda, Scott, Ortin, et.al., (2014) indicate that, in the past 12 months, 24% of young people between the ages of 12-17 years have experienced suicidal ideation, and between 10 and 17% have engaged in an suicidal attempts (Nock, 2008) However, this prevalence is higher in clinical samples, with up to 85% of young people experiencing depressive symptoms also reporting suicidal ideation. Furthermore, 32% of clinically referred children and young people will make an suicidal attempts and by adulthood, between 2.5 and 7% will die as a result of suicide. (Kovac, et.al., 1993; Harrington, et.al., 1994)

Among members of the National Guard, suicide rates are higher than age and sex matched civilian counterparts. (Loughrey, 1989) Across many civilian samples, nonsuicidal self-injury has emerged as a particularly strong correlate of suicide risk. The study by Alixis (2018) describes the prevalence and correlates of NSSI and suicidal thoughts and behaviors among National Guard members. In the study the method engaged were of participants of National Guard personnel who were recruited online, completed study measures anonymously. The result was approximately 6% of males and 14% of females reported a history of NSSI. Almost one third of the sample reported suicide ideation and 3% of men and 11% of women reported a suicide attempt. Reliable access to effective interventions is essential for National Guard members in light of their risk for suicidal and nonsuicidal self-injurious behavior.

A study in the US by Jessica M. Lipschitz, Shirley Yen, Weinstock, et.al., (2012) assessed the relationship between perceived family functioning and two indicators of suicidality in an adolescent sample. A total of 103 adolescents psychiatrically hospitalized for suicidal ideation and/or behavior

completed a battery of self-report questionnaires assessing family functioning, negative affectivity, suicidal ideation in the past week assessed by Beck's Scale for Suicide Ideation (BSS; Beck et al., 1979), and past suicide attempts. Participants' primary caregivers also completed a questionnaire on family functioning. A paired sample t-test evaluated overall discrepancy between adolescent- and caregiver-reported family functioning. Results of the study indicated that adolescents' ratings of family functioning were significantly worse than caregivers' ratings, and positively associated with BSS scores and a history of suicide attempt. When negative affect was controlled for, adolescent-reported family functioning was significantly associated with BSS, but only trended toward significance with attempt status. Therefore, the findings suggested that adolescents' perceptions of family functioning may be a key contributing factor to suicidal ideation in adolescents with psychiatric disorders.

According to the 2006, National College Health Assessment (NCHA) survey, 9.3 percent of 94,806 students seriously considered suicide more than once a year, and 1.2 percent of students attempted suicide (American College Health Association, 2007). In other studies, suicide ideation rates among college students have been reported to range from 9% to 24%, with suicide attempts ranging from 1% to 5% (Furr et al., 2001; Kisch et al., 2005; Westefeld et al., 2005). A study of 2,607 college students in South Korea revealed that 14.3 percent of the participants were at risk for suicide crises, with a suicide attempt rate of 2.4 percent in the previous year (Oh et al., 2018).

The research on caregiver-child discrepancies and how they relate to suicidal outcomes consistently find that suicidal behavior in adolescents is associated with family dysfunction (King et al., 1993; Martin et al., 1995; Brinkman-Sull et al., 2000; Bridge et al., 2006). Moreover, research by Brinkman-Sull et al., (2000) evaluating the association between family functioning and suicidal behavior, while controlling for the effects of depression and anxiety or negative affect, is scant. The findings include factors such as depression severity in the predictive model as a covariate eliminates the significance of variables representing family functioning in a predictive model of suicide.

A published research data in the United States by Tracy Gunter, John Chibnall and Sandra Antoniak (2011), about suicidal ideation and self-harm behavior in community corrections with an aim to examine the effects of drug dependence, depression, anxiety, psychopathy, fracture, and child trauma on suicidal ideation, suicide attempts, and self-harm without lethal intent in community corrections. The method used in the study was the Semi-Structured Assessment for the Genetics of Alcoholism Revised (SSAGA II) and the screening version of the Hare Psychopathy Checklist (PCL:SV). The result concluded that prevalences of suicidal ideation, suicide attempt, and self-harm without lethal intent were 41%, 19%, and 14%. Suicidal ideation was predicted by drug dependence, elevated PCL:SV Factor 2 score, and Caucasian race. Suicidal ideation and attempt were both predicted by fractures, depression, and child trauma. Self-harm was predicted by fractures, panic, and child trauma. Conclusions of the research indicated that child trauma and multiple fractures are potent predictors for suicidal ideation, suicide attempts, and self-harm without lethal intent in this community corrections sample. Depression predicted suicidal ideation and attempts, while panic predicted self-harm without lethal intent. Psychopathy was also an important predictor of suicidal ideation and self-harm behaviors without lethal intent.

A remarkable research by Wilcox, et.al., (2010) examined the prevalence and predictors of one-time and persistent suicide ideation, plans, and attempts reported during college. Method employed for the research were data collection prospectively over four years. Face-to-face interviews were conducted

with 1253 first-year college students at one large mid-Atlantic university. Risk factors were measured in Year 1. The results estimated 12%wt of individuals experienced suicide ideation at some point during college, and of those individuals, 25% had more than one episode of ideation ten individuals had a plan or attempt during college (0.9%wt of the sample). Risk factors for persistent suicide ideation included low social support, childhood or adolescent exposure to domestic violence, maternal depression, and high selfreported depressive symptoms. Persistent ideators were no more likely than one-time ideators to have made a suicide plan or attempt during college (8% vs. 9%, respectively). The results of the study have implications for programs aimed at identifying college students at risk for suicide.

In a population based study, by Stenager (2008), it was studied that parental psychiatric history constituted a substantial risk factor for suicide in young people, in particular if the mother was hospitalized for psychiatric illness. The findings supported by the study that showed an overall suicide attempt rate of 7.8% in the children of depressed parents as compared with 1.4% in the children of non-depressed parents (Weissman, 1992). Further in a one-year follow-up of suicidal adolescents study by King, et.al., (2010), it has been shown that adolescents are almost twice as likely to make a suicide attempt if they have at least one biological parent with mental health problems. In addition to these childhood environmental exposures, it is also conceivable that personality traits like, e.g., hopelessness, neuroticism, and extroversion that are known predictors of suicidal behavior, are transferred from parent to child (Camarena, 2014).

Research to investigate the prevalence and correlates of suicidal behaviors among youth with insulin-dependent diabetes mellitus for up to 12 years after disease onset conducted by Goldston, Kovacs, Parrone and Stiffler (1994), employing the continuous assess of the occurrence of suicidal ideation and suicide attempts shortly after disease onset and repeatedly thereafter as part of a longitudinal study of diabetic children. Initial psychiatric status and symptomatology, characteristics of the medical illness, and sociodemographic variables considered were potential correlates of suicidal behaviors. The result of the study indicated that young patients evidenced higher than expected rates of suicidal ideation, but relatively few attempted suicide over the follow-up. Among those who did attempt suicide, diabetes-related methods commonly were used. Suicidal ideation shortly after 100M onset was related only to concurrent severity of depressive symptoms. Suicidal ideation over the follow-up was associated with later noncompliance with the medical regimen. In conclusion, the researcher claimed that the clinicians should be alert to the possibility of suicidal ideation among youth with 100M because of the prevalence of those cognitions, the potential lethality of attempts due to insulin misuse, and the relationship of suicidal thoughts to later non-compliance with the medical regimen.

A group of researchers of City University of New York, Quinones, Jurska, Fener, and Miranda (2015) suggests that being unable to generate solutions to problems in times of distress may contribute to suicidal thoughts and behavior, and that depression is associated with problem-solving deficits. Therefore, the study they conducted examined active and passive problem solving as moderators of the association between depressive symptoms and future suicidal ideation among suicide attempters and nonattempters. Method: Young adults with and without a suicide attempt history completed a problem-solving task, self-report measures of hopelessness, depression, and suicidal ideation at baseline, and a self-report measure of suicidal ideation at 6-month follow-up. Astonishingly the result was that passive problem solving was higher among suicide attempters but did not moderate the association between depressive symptoms and



future suicidal ideation. Among attempters, active problem solving buffered against depressive symptoms in predicting future suicidal ideation. The research concluded that suicide prevention should foster active problem solving, especially among suicide attempters. (Linda, Marroquín, & Miranda, 2012; Pollock & Williams, 2004)

Lunde, Reigstad, Moe and Grimholt (2018) in their research on exposure to parental suicide attempt associated with higher risks of adverse outcomes like lower educational performance, drug abuse and delinquent behavior. The existing literature on follow-up measures for children subjected to parental suicide attempt. Line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement, conducted a systematic literature search. The search resulted after screening out 72 full text papers and a final four articles were included. Three of the included papers described parts of the same study from an emergency department in The Hague, where a protocol was implemented for monitoring and referring children of parents attempting suicide. The fourth article described the association between maternal attempted suicide and risk of abuse or neglect of their children. The circumstances surrounding a parent's suicide attempt call for appropriate familial care.

A suicide attempt is often associated with psychiatric problems, drug abuse and psychosocial problems (Bjornaas, et.al., 2010). A literature review by Hawton K., Saunders K., Topiwala A., and Haw, C. (2013), found that more than 80% of admitted patients had a psychiatric diagnosis. In the literature review paper, it was concluded that five percent reported that they were a single parent, and children growing up in a single household have been shown to have increased risk for serious suicide ideation (Grimholt, 2015).

## **8. OBJECTIVE**

- To highlight the recent advances in suicide theories, suicidal behavior, and suicidal ideation to promote awareness and instil prevention.
- To identify the possible predictions, and understand the thought process and factors intensifying or buffering the ideation and ideation-to-action framework.

## **9. METHODOLOGY**

### **Case Definition.**

For the purpose of this paper, the case definitions have been used based on the current literature available from the World Health Organisation (WHO), which states that suicidal behavior is a global cause of death and disability. Worldwide, suicide is the fifteenth leading cause of death, accounting for 1.4% of all deaths. In total, more than 800,000 people die by suicide each year. The annual global age-standardized death rate for 2019 is estimated to be 11.4 per 100,000, and the World Health Organization (WHO) projects this rate to remain steady through 2030. Suicidal ideation means having thoughts, ideas, or ruminations about the possibility of ending one's own life. On suicide risk scales, the range of suicidal ideation varies from fleeting thoughts to detailed planning. Passive suicidal ideation is thinking about not wanting to live or imagining being dead. Active suicidal ideation is thinking about different ways to die or forming a plan to die (WHO, 2007). Suicidal ideation has a very significant role in guiding preventive interventions against suicide, especially because it is recognized as a state that precedes suicide planning and attempted suicide. (Kessler, Borges, Walters et al., 1999)

**Research Design.**

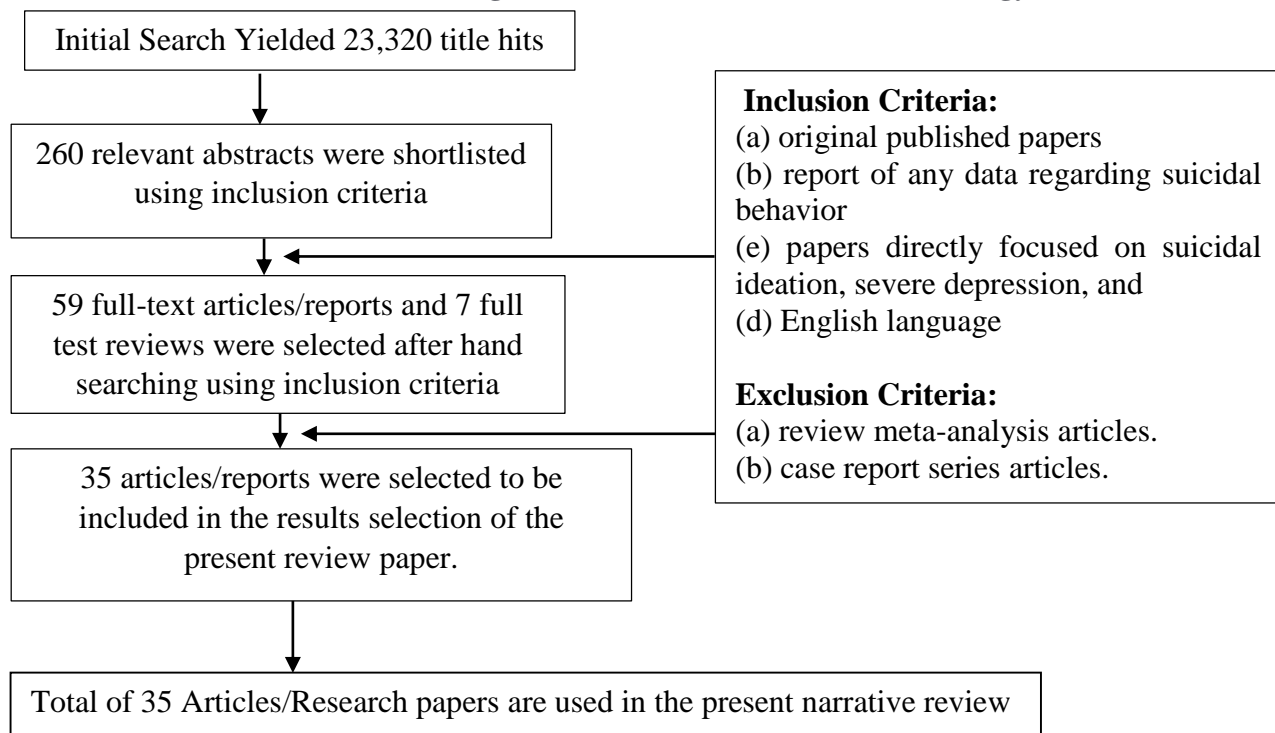
A digital review of the literature was performed to identify all studies reporting suicidal ideation, ideation-to-action framework, and theories of suicidal behavior. A narrative review format was chosen. The research was conducted by a content analysis utilizing the results of searching 35 scholarly journals that have researched suicidal ideation, behaviour, and theories with the assistance of various research papers and surveys.

**Search Strategy.**

The search strategy was created in the GOOGLE SCHOLARS, PUBMED database, SCOPUS database, COCHRANE LIBRARY database, and PUBPSYCH database. The following keywords were used: "suicide," "suicidal ideation," "suicide attempts," "hopelessness" and "depression." Additional articles were manually identified by reviewing article references.

This study was conducted by reviewing existing literature on suicidal ideation, the prevalence of suicidal ideation in masses, ideation-to-action framework, and theories of suicide. Numerous studies and research papers on the concept of suicidal ideation were evaluated to understand the thought process, factors intensifying or buffering the ideation and ideation-to-action framework. Majorly, Google scholar and Academia were used to acquire a substantial portion of this study. Additionally, journal and web articles were also referred to as significant. The resulting narrative review includes - The developments in suicide theory: suicidal ideation and suicidal behaviour, and the significant factors responsible for it, and meaningful advanced research and knowledge to understand and prevent the same.

**Figure 1:- Flow Chart Of Search Strategy**



## 10. RESULT

From over 260 articles identified initially; 35 articles were selected for inclusion in the final review. Results of the systematic review follow an overview of the conceptual background relevant to investigations of Suicide, suicidal ideation, and suicidal behaviors.

S.No .	Author, Year of publication	Origin	Purpose	Sample	Study design	Results/Proposed
1.	Phillips, Li, and Zhang (2002)	China	To find and study the mean annual suicide rate of the year 1999.	Adults	Qualitative Research	The mean annual suicide rate was as high as 23 per 100,000.
2.	Bulik et al., (2008)	USA	To study suicide in adults with anorexia nervosa	Adolescents	Cross-sectional design	Adults with bulimia nervosa have more suicide attempts (25–30%) than adults with anorexia nervosa (3–20%).
3.	Miotto, De Coppi, Frezza, & Preti, (2003)	USA	To establish a relationship between suicidal ideation and eating disorders.	College Students	Cross-sectional survey	Students with eating disorders were statistically significantly higher in suicidal ideation than students without any eating disorder.
4.	O'Connor, (2011)	USA	To examine differences between ideators and attempters within other theoretical frameworks	In-patient young adults for suicide attempts	Cross-sectional Survey	The Integrated Motivational-Volitional Model of Suicidal Behavior
5.	Lee, Tsang, Li, Phillips, & Kleinman, (2007)	China	The contribution of cultural factors	Adults	Cross-sectional Survey	Connectedness can be a protective factor of suicidal

			to suicidal behaviors			behaviors, while disrupted connectedness may be a risk factor.
6.	Weissman & Worden, (1972)	USA	To assess aspects of current suicidal behaviors, and to validate the tripartite, multiaxial classification system and measurement tools constructed for "suicide attempters."	Suicide attempters	Cross-sectional Survey	nonfatal suicide attempts and or self-harm has been the assessment of current suicidal intent and a future prediction for suicide behaviour.
7.	Beck & Kovacs (1979)	USA	The development, and validation of the Scale for Suicide Ideation (SSI)			SSI studies the relationship between hopelessness, depression, and suicidal ideation by demonstrating a significant relationship between a high level of suicidal ideation and "dichotomous" attitudes about life and related concepts on a semantic differential test.
8.	Klonsky and May (2015)	USA	Development of the most recent			It posits that an individual with strong suicidal

			theoretical framework explaining the transition from suicidal ideation to attempts; Three-Step Theory (3ST)			ideation will only make a suicide attempt when the capacity for suicidal behavior is developed through a combination of genetic predisposition.
9.	Jobes (2015)	USA	To argue that some contemporary providers make assumptions about the presumed effectiveness of inpatient care and the use of medicine on suicidal risk.		Clinical assessment	Rejects the notion that a “one-size” approach (i.e., a brief hospitalization and medication to treat the disorder) will work for all suicidal patients.
10.	Law et al. (2015)	USA	To assess suicide and emotion dysregulation, and proposed that emotion dysregulation in correlation with suicidal behavior.		Literature Review	proposed that emotion dysregulation - as difficulties in identifying, understanding, and adaptively responding to acute emotional states – is directly associated with the desire for suicide and suicidal ideation, but only indirectly associated with suicidal behavior.



11.	Rajappa et al., (2011)	USA	To study the extent to which emotion dysregulation differentiates those with prior attempts from those with only prior ideation	In-patient for suicide attempt	Cross-sectional design	Greater deficits in specific emotion regulation strategies were observed in those who have attempted suicide multiple times than those who have never experienced suicidal ideation
12.	David W. Hollingsworth, et. al., (2014)	USA	investigates hope as a moderator between both thwarted belongingness and perceived burdensomeness and suicidal ideation	African American college students	Cross-sectional survey	African Americans who exhibit higher levels of hope may be buffered against suicidal ideation even in the presence of prominent interpersonal predictors of suicidal desire.
13.	Yang, et.al., 2018	China	To study the prevalence of suicide ideation and suicide attempt in college students in China, Indexing psychological pain, hopelessness, connectedness, suicide capacity, suicide ideation, and suicide attempt.	College students	Cross-sectional survey	The hierarchical regression analysis showed that psychological pain and hopelessness interacted to predict suicide ideation and that connectedness was the most protective against ideation in those high on both pain and hopelessness.

14.	Bloch, S., et.al., (2010)	USA	Hypothesized that suicidal behavior in children stems from a different diagnosis than suicidal behavior in adolescents	Minors in-patient to a psychiatric emergency department (ED)	Personal Interviews	ADHD is more prevalent among children, whereas Mood disorders are more prevalent among adolescents. The study highlights the need for a separate approach to suicidal behavior in children as distinct from adolescents.
15.	Anchuri, et. al., (2019)	USA	To evaluate whether collegiate athletes and nonathlete college students differ in non-suicidal self-injury (NSSI), suicidal ideation, suicide attempt, and help-seeking behaviors.	College students	Cross-Sectional Survey	Difficulty in romantic or other social relationships could be a marker of risk or an identifiable, actionable target for preventing future suicidal behaviors among collegiate athletes.
16.	Ullman& Najdowski (2009)	USA	studied the relations between serious suicidal ideation and attempts and demographics, trauma history, assault characteristics, post-assault	female adult sexual assault survivors	Cross-Sectional Design	The study found that younger, minority and bisexual survivors reported greater suicidal ideation. Substance abuse and self-blame was also accounted for.

			outcomes, and psychosocial variables			
17.	Ullman and Brecklin (2002)	USA	To examine the effects of child sexual abuse (CSA) and assault-related psychosocial factors associated with risk of suicidal ideation and attempts	women ASA survivors	Cross-Sectional Design	younger age women were associated with higher suicidal ideation. Alcohol dependence and the role of illicit drugs act as a predictor of suicidal behavior in Adult Sexual Assault survivors.
18.	David A. Jobes and Samantha A., (2019)	USA	Argued to move away from the approach “one-size-fits-all” to working with suicidal people		Literature review	Identified need for the use of approach that matches different evidence-based suicide-focused treatments, i.e., DBT, CT-SP, BCBT, and CAMS to different suicidal states.
19.	Brezo, Paris & Turecki (2006)	Canada	Study of Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completions discovered the involvement of personality		Literature Review	Hopelessness and neuroticism, and to a lesser extent, extroversion may eventually be useful in screening for risk for suicidal behaviors.

			traits in susceptibility to suicidality.			
20.	Deborah M. Stone, et.al., (2010)		To examine the associations between 2 measures of sexual orientation and 4 suicide risk outcomes	Locals of sexual minority youth	Cross-sectional survey	Regardless of sexual orientation measure used, most Sexual Minority Youth subgroups had increased odds of all Suicide Risk Outcomes.
21.	Bo-ram Choi&Sung-Man Bae (2020)	Korea	Attempt to explain suicidal ideation and suicide attempts among undergraduate students in South Korea based on the Interpersonal Psychological Theory of Suicide.	Under-graduate students	Survey Method	The feeling of being worthless to society and burdensome to others is a major risk. In order to assess risk and to prevent suicide, the acquired capability for suicide, which is the ability to commit lethal suicide, along with suicide ideation should be considered.
22.	Durkheim (1897)	UK	To argue over existing theories explaining suicide to be caused byby social or personal factors.		Literature Review	There were four types of suicide (egoistic, altruistic, anomic, and fatalistic) depending on the level of social integration and regulation.

23.	Simon, Chang, Zeng & Dong (2012)	China	to examine and aim to identify studies describing the epidemiology of suicidal ideation, suicide attempts and behaviors among Adults in Global Chinese communities		Literature Review	Compared to older adults without mental disorders, older adults who were diagnosed with mental disorders exhibited higher rates of suicide attempts, ranging from 60% among women with depression in a clinical setting.
24.	Niederkrötenhale r, et.al., (2010)	Sweden	To study the exposure of parental mortality and markers of morbidity, and the risks of attempted and completed suicide in offspring	In-patient children for suicide attempt	Cross-Sectional design	In childhood exposure to parental risk factors is associated with increased risks of suicide and attempted suicide
25.	Nock, et.al., (2008)	USA	In a Cross-national prevalence and risk factors for suicidal ideation, plans, and attempts research.	in-patients admitted for attempts	Cross-sectional design	Suicidal ideation, (like thoughts of death or wishing to die) self-harm, and suicide attempt are more common in young people than suicide.
26.	Alixis (2018)	USA	To describe the prevalence and correlates of nonsuicidal self-injury (NSSI) and	participants of National Guard personnel	Cross-sectional design	Approximately 6% of males and 14% of females reported a history of NSSI. More Women than men



			suicidal thoughts and behaviors among National Guard members			reported suicide ideation and 3% of men and 11% of women reported a suicide attempt.
27.	Jessica M. Lipschitz, Shirley Yen, Weinstock, et.al., (2012)	USA	To assess the relationship between perceived family functioning and two indicators of suicidality in an adolescent sample.	Adolescent	Cross sectional survey	Adolescents' ratings of family functioning were significantly worse than caregivers' ratings. Suggesting that adolescents' perceptions of family functioning may be a key contributing factor to suicidal ideation in adolescents with psychiatric disorders.
28.	Oh et al., (2018).	South Korea	To find out the prevalence of suicide risk and suicide attempts in college students of South Korea in one year	College student	Cross sectional survey	In total, 14.3% of the college students were at risk for suicide crises, with a suicide attempt rate of 2.4% in the previous year.
29.	King et al., (1993) & Martin et al., (1995)	USA	To examine the caregiver-child discrepancies and how they relate to suicidal outcomes.	Adolescent s	Cross sectional survey	Suicidal behavior in adolescents is associated with family dysfunction. The association between family

						functioning and suicidal behavior, while controlling for the effects of depression and anxiety or negative affect, is scant.
30.	Gunter, T., Chibnall, J., and Antoniak, S., (2011)	USA	To examine the effects of drug dependence, depression, anxiety, psychopathy, fracture, and child trauma on suicidal ideation, suicide attempts, and self-harm without lethal intent.	Adults from the community correction facility	Cross sectional survey	Child trauma and multiple fractures are potent predictors for suicidal ideation, suicide attempts, and self-harm without lethal intent. Depression predicted suicidal ideation and attempts, while panic predicted self-harm without lethal intent.
31.	Wilcox, et.al., (2010)		examined the prevalence and predictors of one-time and persistent suicide ideation, plans, and attempts reported during college.		Longitudinal Cohort study	More than 25% prevalence of suicidal ideation and risk factors include low social support, childhood or adolescent exposure to domestic violence, maternal depression, and high self-reported depressive symptoms.

32.	Stenager (2008)		To examine if parental psychiatric history constituted a substantial risk factor for suicide in young people, in particular if the mother was hospitalized for psychiatric illness.	in-patients admitted for attempts		Suicide attempt rate of 7.8% in the children of depressed parents as compared with 1.4% in the children of non-depressed parents
33.	Goldston, Kovacs, Parrone and Stiffler (1994)		to investigate the prevalence and correlates of suicidal behaviors among youth with insulin-dependent diabetes mellitus	Diabetic in-patient children	Longitudinal Cohort study	Young patients evidenced higher than expected rates of suicidal ideation, but relatively few attempted suicide over the follow-up. Among those who did attempt suicide, diabetes-related methods were commonly used.
34.	Quinones, Jurska, Fener, and Miranda (2015)	USA	examined active and passive problem solving as moderators of the association between depressive symptoms and future suicidal ideation among suicide	Young adults with and without a suicide attempt history	Cross sectional	Passive problem solving was higher among suicide attempters but did not moderate the association between depressive symptoms and future suicidal ideation. Among attempters, active

			attempters and nonattempters			problem solving buffered against depressive symptoms in predicting future suicidal ideation.
35.	Hawton K., Saunders K., Topiwala A., and Haw, C. (2013)	USA	To examine the exposure of parental suicide attempts associated with higher risks of adverse outcomes like lower educational performance, drug abuse, and delinquent behavior.		Literature review	A suicide attempt is associated with psychiatric problems, drug abuse, and psychosocial problems. 5% in total reported that a single parent and children growing up in a single household have been shown to have an increased risk of suicide ideation.

## 11. DISCUSSION

Suicide is multi-factorial. The main focus of this study was to bring forward the contained literature from the past several years of research promised to meaningfully advance the knowledge and prevention of the same, while focusing on the recent developments in suicide theory, the associated risk factors for suicide, that are, demographic factors, psychiatric disorders, terminal or chronic medical conditions, and recurrent unresolved psychological stressors (Andreason, 1995).

One of the most obvious findings in the present review is that most of the research done so far has focused its attention on suicide attempts, acts of self-harm motivated by varying levels of suicidal intent. Traits that appear to be most useful in predicting accurately the history of attempts are aggression, anxiety, neuroticism, extroversion, impulsivity, hostility, and psychoticism (Brown, 2000).

The key development of the Ideation-To-Action Framework, which stimulates the development of suicidal ideation and the progression from ideation to suicide attempts, has distinct phenomena with distinct explanations and predictors. The study is a narrative review format, that of an up-to-date digital review of the literature performed to identify all studies reporting suicidal ideation and more. The research was conducted by a content analysis utilizing the results of searching numerous scholarly journals that have researched suicidal ideation, alongside psychological, physical, and emotional perspectives and

factors contributing to suicidal ideation and prevention of the same. The study makes a better understanding of the extent to which fatal suicide attempts have different predictors and risk profiles.

As discussed already in a remarkable study of 2016 by May and Klonsky which highlighted that although thousands of studies have identified many risk factors for suicidal ideation and behaviors, relatively few studies have focused on distinguishing between ideators and attempters. The research gap in the suicide literature is significant, as considerable evidence suggests that out of the relatively high percentage of individuals who contemplate suicide, only one-third make a suicide attempt, underscoring the severe lack of specificity of these risk factors.

It has been discussed time and again that suicide ideation has been the focus of numerous previous researches, but for a more comprehensive understanding of the same, suicide ideation and suicide attempts should be considered together, and suicide attempts can then be more elaborately explained by evaluating suicidal ideation and acquired capability for suicide.

Thus, keeping up with May & Klonsky (2013), it's been hypothesized that the combination of pain and hopelessness is what leads to suicidal ideation. Studies on suicide motivations find that suicide attempts are prompted by overwhelming pain and hopelessness more than by other factors, including burdensomeness, thwarted belongingness, desire for help or to communicate, and impulsivity.

However, pain alone will not cause suicidal ideation. If someone in pain has hope that his situation can improve and that the pain can be diminished, the individual will strive to achieve a future with diminished pain rather than consider suicide. For this reason, hopelessness is also required for the development of suicidal ideation. That is if someone's life includes considerable pain, and he feels hopeless that the pain will improve, he will consider ending his life. In short, the combination of pain and hopelessness is what leads to suicidal ideation.

Likewise, someone who feels hopeless about the future but lives without pain will not feel suicidal. To illustrate this latter case, consider the example of a young man who has recently graduated from university and moved back home with his parents. If this young man lacks a marketable degree, strong grades, and career goals, he may feel hopeless about the future. However, if day-to-day he is comfortable and without pain, if his food and shelter are provided and he has ample free time for friends and activities he enjoys, then he is unlikely to consider suicide. Pain and hopelessness in combination are what lead to suicidal ideation. Suicide ideation is a significant risk factor for predicting future suicides. Even moderate suicidal ideation can progress to extreme suicide attempts, but not all individuals who have suicidal ideation will necessarily attempt suicide (Kessler et al, 2005). Suicide ideation has been the focus of numerous previous researches, but for a more comprehensive understanding of the same, suicide ideation and suicide attempts should be considered together, and suicide attempts can then be more elaborately explained by evaluating suicidal ideation and acquired capability for suicide.

So far, given the lack of data available to identify suicidal ideators who are most likely to act on their suicidal ideas, this study agrees with May & Klonsky (2016) that using an ideation-to-action framework in future suicide research will be critical. Novel factors that can more effectively discriminate between ideators and attempters must be developed quickly, and caution should be exercised in operationalizing



and measuring both ideation and action. However, despite the many promising treatment and prevention options, suicide remains the world's greatest cause of death and is expected to stay so through 2030 (WHO, 2013). Inadequate understanding, particularly regarding why and when suicidal thoughts advance to potentially lethal attempts, is deemed to be one of the main reasons for the limited success in reducing suicides. This study aimed to fill in the gaps in our understanding by describing the ideation-to-action paradigm, which this study believes will help to bridge the gap and lead the next generation of suicide theory, research, and prevention.

As discussed previously, it is becoming increasingly clear that most oft-cited risk factors for suicide—including depression, hopelessness, mental disorders, and even impulsivity—predict suicidal ideation but do not distinguish those who have made suicide attempts from those who have experienced ideation without attempts. This pattern is apparent both in large epidemiological studies and in a recent meta-analysis. For example, a large epidemiological study in the United States by Kessler (1999) found substantially higher rates of mental disorders in suicide ideators compared to those who had never been suicidal; however, the same study found that mental disorders minimally or negligibly distinguished suicide attempters from ideators without attempts.

The fact that most oft-cited risk factors for suicide predict ideation but not behavior is of great import because most individuals with suicidal ideation do not go on to make attempts (Nock et al. 2008). It thus becomes critical for both theoretical and clinical purposes that the field better understand suicide and suicide risk, in particular the progression from suicidal ideation to behavior.

The ideation-to-action framework, which states that (a) the progression of suicidal ideation and (b) the passage from ideation to suicide attempts are two separate phenomena with separate causes and predictions, is a major advancement. Another important breakthrough is a growing collection of research that distinguishes characteristics that predict suicide attempts from those that predict ideation.

To summarise it all, the assessment of suicide risk can be categorized into four following steps,

**Step I: Assessment of suicidality.**

- Evaluating suicidal thoughts, purpose, and plan. This covers the technique, the availability of means, the patient's conviction in the method's lethality, the possibility of rescue, the measures taken to carry out the plan, and the patient's readiness for death. (Curry, 2000)
- Creating a therapeutic relationship with the patient by demonstrating empathy and asking respectful questions regarding suicidal behavior. (Kutcher, 2007)
- Evaluating the reasons for suicide, such as rage, relief from pain, a desire to reconcile with loved ones, hopelessness, loss of a relationship, and so on. (Jacobs, 2000)
- Evaluation of previous suicide attempts, lethality, type, and severity, intent to die, context/triggers for the attempt, method chosen, and consequences
- Evaluation of previous suicide attempts, lethality, type, and severity, intent to die, context/triggers for the attempt, method chosen, and consequences

Step 2: Assessing suicide risk factors. Clinicians should do a full suicide risk assessment on any patient who exhibits suicidal inclinations such as ideation, intention, intent, or attempt, especially if they exhibit any risk indicators. (Kutcher, 2007)

Step 3: Determining the problem. Investigate the following questions: why, why now, and what is happening. This will aid the doctor in comprehending the intricacies of causes underlying or causing suicidal behavior and in identifying therapeutic targets. The majority of comments are divided into three categories: mental diagnoses/symptoms, distressing psychosocial situations, and character flaws.

Step 4: Choosing intervention targets.

- Psychiatric diagnosis and symptoms, to treat the disease and alleviate symptoms.
- Managing distressing psychosocial conditions by addressing changeable stressors or causes
- Character issues, such as maladaptive characteristics and the development of coping skills. (Shader, 1994)

## 12. CONCLUSION

The study identified several factors which impact suicidal ideation and ideation-to-action framework, and significant reasons why it is crucial to study suicidal ideation to concur knowledge on suicide risks, predictors, and preventions of the same. Also unfolds to better understand the extent to which fatal suicide attempts have different predictors and risk profiles.

This study claims positively that the combination of pain and hopelessness is what leads to suicidal ideation and is much more prompted by overwhelming pain and hopelessness than by other factors, including burdensomeness, thwarted belongingness, desire for help or to communicate, and impulsivity.

Suicide remains a serious cause of mortality worldwide. Not all suicides are preventable but a methodical approach, like this study itself, brings into light, suicide risk assessment which can enable healthcare providers to manage the patients who are at risk of committing suicide. Comprehensive risk assessment helps healthcare providers reduce their liabilities. Although errors of judgment are inevitable, errors of omission are preventable if healthcare providers take the time to perform a thorough risk assessment.

So far, it is appropriate to conclude that the motivation for research on suicidal ideation and attempts is that attempted suicide is both one of the strongest predictors of completed suicide and an important indicator of extreme emotional distress and psychological suffering. Moreover, identification of both the risk of suicide, ideation, and suicide attempts nationwide and prevention of suicide based on risk factors, have proven to be difficult. Thus, in this review analysis study, it is concluded that risk factors for morbidity preceding suicide, especially depressive mood, suicidal ideation, and attempted suicide should be studied further with greater impact and significance. It is promising that a better understanding of the pathways that lead to suicide as well as the early identification and treatment of suicidal ideation may reduce rates of both attempted and completed suicide.

**Limitations.** This study is limited in details of the overall research strategy, the selection and exclusion of articles, the limitations of the search method, the quality of the search process, and details on how the analysis was conducted due to a lack of objectivity.

**Recommendations.** Suicidal thoughts and suicide attempts require further research to better understand when and why they occur. The study should effectively define the time course of suicidal ideation and behavior, including the types of variables that raise suicide risk throughout the years/months, weeks/days, hours/minutes, and minutes/hours/minutes leading up to a suicide attempt. More evidence-based suicide theories should be used to guide and enhance therapies for those who are at risk of suicide.

**Future Implications.** The persistent gaps limit our ability to comprehend and prevent suicide and should be the focus of intensive research efforts in the coming years by adopting to study further the promising developments of the ideation-to-action framework and the proliferation of ideation-to-action theories of suicide to advance stages.

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