



Original Article

Psychological Perspective of Suicidal Behaviour in South Africa

Anisur Rahman Khan¹, S. M. Anowarul Kayes Shimul², Kopano Ratele³

1- (Corresponding author) Associate Prof., Dept. of Sociology, East West University, Dhaka, Bangladesh,

E-mail: arkhan@ewubd.edu

2- Senior Lecturer, Dept. of Sociology, East West University, Dhaka, Bangladesh

3- Prof., Dept. of Psychology, Stellenbosch University, South Africa

Abstract

Background and Objectives: Suicidal behaviour is a complex and wide-reaching concern which brings far-reaching social, psychological, emotional, and economic consequences. Suicidal behaviour can be explained by several theoretical models. Amongst them, the psychological perspective has long been involved as an important academic orientation to analyse suicidal behaviour. This critical review examines the status of South African studies that were found compatible with the psychological perspective of suicidal behaviour. It aims to provide some directives to enrich the works on suicidal behaviour in the context of South Africa.

Methods: This review includes South African scholarly literature on suicidal behaviour published between 2008 and 2018. Scholarly works were searched through PubMed, EBSCO and Google Scholar. Thirteen relevant studies were included in this analysis.

Results: Although several South African studies have apparently been conducted from the standpoint of the psychological aspects of suicide, they eventually do not maintain very sharp relevance to the key theoretical and methodological prescriptions embedded in the broader domain of the psychology of suicide. For example, only a very few South African studies have used scales developed from the major psychological theories of suicidal behaviour. At the same time, the overreliance on measurement scales has made South African studies more positivist in methodological orientations.

Conclusion: The psychological perspective requires robust attention to appropriately tap the complex dynamics of suicidal behaviour in the context of South Africa. Researchers in South Africa must strive to make a meaningful methodological and epistemic development by using the key theoretical and methodological advances in the field of psychology. It is also equally important to integrate multidisciplinary models to investigate suicidal behaviour in South Africa.

Keywords

Literature review,
Psychology of suicide,
South Africa, Suicidal
behaviour

Received: 24/03/23

Revised: 30/04/23

Accepted: 21/06/23

Conflicts of interest: None

Funding: None

Cite this article as:

Rahman Khan Anisur, Shimul S. M. Anowarul Kayes, Ratele Kopano. Psychological Perspective of Suicidal Behaviour in South Africa. *J Suicid Prevent.* 2023 (June): 5: 3-16 . e2023002.

*This work is published under CC BY-NC-SA 3.0 licence.

Introduction

Suicidal behaviour is a complex human phenomenon and a major contributor to the public health burden [1]. It refers to a number of components associated with the yearning to kill oneself [2], and includes not only acts of suicide but also feelings, ideas, thoughts and attempts [3]. Globally, more than 700,000 people die by suicide every year which brings far-reaching social, emotional, and economic consequences [4]. Estimates further confirm that around 77% of global suicides occur in low and middle-income countries [5]. For each suicide, 10–20 times more attempts are made [6], making suicide attempt a more recurring phenomenon. A preceding suicide attempt is the most precarious predictor of suicide death [7].

This analysis is premised in South Africa where suicidal behaviour continued to be a significant public health problem [8]. Suicide is the third leading cause of unnatural death in South Africa [9], comprising a share of 10% of all unnatural deaths [10]. Suicide rates in South Africa range from 11.5/100 000 to 25/100 000 population, and the estimated fatal to non-fatal ratio is estimated at 1:20. The ratio of female to male fatal suicidal behaviour is 1:5 and non-fatal suicidal behaviour is 3:1 [11]. Nonetheless, statistical estimates remain elusive due to the lack of a reliable and wide coverage mortuary surveillance system, underreporting and misreporting of causes of death and absence of comprehensive and focused national suicide research initiatives [2].

Any suicidal behaviour is a multifaceted and multidimensional phenomenon that may be explained from several theoretical perspectives/approaches such as biological, sociological, psychological, epidemiological and philosophical, amongst others [1]. Psychology as an academic discipline provides the most overarching perspective in *suicidology* [12]. It presents

a meaningful understanding of the complex interplay of the factors leading to the increased risk of suicide and also assists to identify specific targets for treatment and prevention [13].

Considering the greater dominance of the psychological perspective, the explicit understanding of the studies under this perspective for any country (e.g. South Africa) will be immensely important for both scholarly accomplishment/enrichment and effective suicide prevention.

This review aims to present the status of the psychological perspective of suicidal behaviour in the context of South Africa. For this purpose, it examines the relevant studies that have used psychological theories/methods in the context of South Africa. Based on the lessons learnt, it will provide some directives for South African scholars to advance their research.

Methodology

The analytical framework of this review includes a synthesis of the major theories and methodological frameworks comprising the psychological perspective of suicidal behaviour, and an overview/critical assessment of the South African literature on suicidal behaviour derived from or relevant to the psychological perspective.

A scholarly search was conducted for a period of 10 years (2008 to 2018) through PubMed, EBSCO, and Google Scholar for the relevant South African literature. It is not to say that there have not been any theoretical and methodological accomplishments or innovations in South African scholarship before 2008, but a deliberate focus on this specific period was aimed to track the most contemporary works and to keep this review more manageable. Overall, thirteen (N=13) empirical publications stemming from the psychological perspective of suicidal behaviour were included in this review. The major search items included suicide/suicidal

behaviour, South Africa, psychology of suicide, psychological theory of suicide, psychological methods of suicide prevalence/risk factors/ causes of suicide in South Africa, amongst others.

Researchers in the field of the psychology of suicidal behaviour have made extensive theoretical and methodological innovations [1]. In this analysis, we have consulted the predominant psychological models elaborated by O'Connor (2011) [14], Leenaars (2010) [15], O'Connor and Nock (2014) [13], Klonsky and May (2015) [16] and Gunn and Lester (2014) [17].

While being a review, no ethical approval was needed. In this analysis, suicide and suicidal behaviour are often used interchangeably.

Synopsis of the Psychological Approach to Suicidal Behaviour

An early psychological understanding of suicidal behaviour began with Sigmund Freud's (1856-1939) psychoanalytic theory. Freud shifted the focus of analysing suicide from the moral, legal, philosophical, or spiritual phenomenon to a problem-associated clinical perspective [14]. Even though Freud's psychoanalytic theory revealed some insightful dynamics of self-destruction, it seemed inappropriate to fully understand suicidality [18]. More relevant theoretical advancements in the psychology of suicide surfaced in the 1950s [13].

Edwin Shneidman (1918-2009) is a key contemporary contributor to the psychology of suicide [15]. He developed *suicidology* as an academic and professional discipline. His works in *suicidology* are categorised into five streams: conceptual or theoretical, suicide notes, administrative and programmatic, clinical and community, and psychological autopsy and postvention [15]. In this analysis, the focus was purposefully restricted to two of his most prominent works: the *psychache theory of suicide* and the *psychological*

autopsy. The former is theoretical and the latter is methodological.

Shneidman postulated that "suicide is caused by *psychache* (*sik-ak*; two syllables)" [19], which is a state of personal anguish, pain, and discontent [15]. It is intrinsically psychological in nature and refers to the hurt, anguish, soreness and pain in the psyche and the mind. When the feeling of excessive shame, guilt or humiliation occurs, reality becomes undeniably introspective. Suicide occurs when the *psychache* is deemed unbearable. When the pain reaches its higher threshold, an individual might be engaged in suicidal behaviour as a means of absconding from the unpleasant state caused by the *psychache*. Hence, suicide acts as a specific means to escape from unbearable pain or suffering [20]. The psychological pain of the individual may only be felt due to deprivation or blocking of any vital needs [21]. Psychological factors such as rage, hostility, depression, shame, guilt or hopelessness could be relevant to suicidality if they only bring unbearable, frustrating or unmanageable psychological pains (*psychache*). Suicidality will not occur if these conditions are not felt by any individual [19].

Shneidman introduced *psychological autopsy* as a systematic procedure to determine the psychological and contextual circumstances preceding equivocal deaths [22-23]. It is the leading method in studying various explanatory factors of suicidal behaviour [24]. It entails intensive retrospective investigation to uncover possible decisions of the intention of the deceased leading to death. In this process, key persons who are competent enough to report the actions, behaviour and character of the deceased are interviewed [25]. While doing so, a psychological autopsy could extricate the complicated nature of *psychache* associated with suicide [19]. The reason for suicide usually remains obscure as the survivor cannot be interviewed. But this technique

provides at least a coherent solution to understand why people killed themselves. In this manner, psychological autopsy reconstructs the biography of the deceased and their suicide intentions through interviewing the closest persons as well as examining the corroborating evidence from other relevant sources such as police investigations, medical reports, coroner records, case-notes and social work reports [23]. Notably, Shneidman (1981) [25] proposed sixteen specific categories of information as autopsy indicators and suggested to ask open-ended questions to explore the necessary details about the deceased from the respondents.

Although several theoretical models conceptualise suicide as an escape, Baumeister's (1990) escape theory is the most comprehensive [1]. This theory assumes that some individuals get engaged in self-destructive behaviour to escape from their painful present life. Escape theory follows a six-stage model [26]. First, a severe experience derived from the present context occurs which falls far below the standards one has set for oneself. Second, such impediment eventually invites negative image about oneself. Third, an aversive condition of high self-awareness, viewing oneself as inadequate, incompetent, unattractive or guilty against the relevant standards, is established. Fourth, negative consequences are developed by such unfavourable comparison of oneself with standards. Fifth, the person tries to achieve, although unsuccessfully, a state of cognitive deconstruction. Sixth, irrationality pushes to suicidality [26]. If at any stage of this causal model the suicidal path is not chosen, suicide will not occur [21]. Thereby, this theory also suggests that despite encountering critical troubles in life, many people do not opt for suicide [21].

The interpersonal theory of suicide, proposed by Joiner (2005) [27] and further expanded by Van Orden and colleagues (2010) [28], is the most influential

contemporary theory in *suicidology* [20]. This theory offers a multifaceted understanding of suicidal behaviour [1]. Over the years, it has significantly guided research into the causes of various suicidal behaviour [13]. The interpersonal theory gauges the assumption that suicide can only be commissioned through the desire to die and the capability to act on that desire [27, 28]. According to that assumption, suicidal behaviour happens when three constructs co-occur: thwarted belongingness, perceived burdensomeness, and acquired capability for suicide. The former two situations are related to the suicidal desire of the individuals and the latter situation to their capability [28]. The model for co-occurring these constructions suggests that suicidal thoughts emerge when the forces of perceived burdensomeness (feeling a burden on friends, family members and society) and thwarted belongingness (feeling of social alienation or isolation) are high. Those suicidal thoughts are now directed to suicidal attempts when the acquired capability (reduced fear of death and increased endurance towards pains and suffering) for fatal self-injury is attained through exposure to painful and provocative experiences [13, 29]. In a reconceptualised model, Van Orden et al. (2010) introduced the role of hopelessness as a risk factor for suicide and added that both perceived burdensomeness and thwarted belongingness could lead to the development of hopelessness entailing the provocation for suicide [20, 28].

Integrated motivational-volitional theory of suicidal behaviour (IMV) was proposed by O'Connor (2011), and O'Connor and Kirtley (2014). According to this theory, suicide develops from a complex interplay of several motivational and volitional level factors. This is presented in a tripartite integrated model that maps the relationships between the background factors and triggering events (pre-motivational phase). Then the

motivational phase entails suicidal ideation and the enactment of suicidal behaviour which is expressed in the volitional phase [14]. Pre-motivational phase presents the context expressed in several triggering events. The motivational phase includes defeat/humiliation and entrapment that drives the suicidal ideation. Entrapment bridges between defeat and suicidal ideation. The volitional phase governs the process from ideation to suicide and includes fearlessness about death and impulsivity [30]. IMV includes the key factors from earlier theories and sketches a detailed mapping of the suicidal process that links suicidal thoughts to the occurrence of suicide. Although this theory is relatively new, its usefulness in understanding suicidal behaviour is well documented [13].

One theoretical orientation cannot sufficiently define and explain the multifaceted and multidisciplinary nature of suicidal behaviour [1]. But it may provide some reasonable understanding to extricate the complex dynamics of suicidal behaviour. Keeping that perspective in view, this review carefully examines the positionalities of the psychology of suicide across the relevant studies from South Africa as a case.

South African Literature in the light of the Psychology of Suicide

It appears that the following empirical studies (published between 2008 and 2018) from South Africa have attempted to capture people’s vulnerability to suicidal behaviour from the psychological perspective.

Table A: Thirteen (13) (psychological) studies on suicidal behaviour in South Africa

Researcher (s)	Theme/Focus	Sample	Research Approach/ Methods/Tools	Key Findings	Field
Rodriguez, Mandell, Babayigit, et al. (2018)	Correlates of suicidal ideation	*681 pregnant women living with HIV	*Quantitative *Edinburgh Postnatal Depression Scale 10 (EPDS-10) * Conflict Tactics Scale 18 * Disclosure scale * AIDS-Related Stigma Scale *Male Involvement Index	* Prenatal suicidal ideation was 39% * Intimate partner violence and depression sustained suicidal ideation * Younger age, disclosure of HIV status to partner and greater stigma predicted postnatal cessation of suicidal ideation	*12 community/rural health centres at Gert Sibande and Nkangala districts in Mpumalanga province
Rodriguez, Cook, Peltzer and Jones (2017)	Prevalence and causes of suicidal ideation	*673 pregnant women with HIV infection	*Quantitative *Edinburgh Postnatal Depression Scale 10 (EPDS-10) *Conflict Tactics Scale 18 * Disclosure scale *AIDS-Related Stigma Scale	* 38.8% women endorsed suicidal ideation *Physical violence and stigma strongly associated with suicidal ideation	*12 community/rural health centres at Gert Sibande and Nkangala districts in Mpumalanga province
Bantjes, Kagee and Saal (2016)	Prevalence and risk factors of suicidal ideation and behaviour (plan and attempt)	*500 persons seeking HIV testing	*Quantitative *Structured clinical interview	* Two-week prevalence of suicidal ideation is 24.27%, higher than the national sample * Lifetime prevalence of attempt 5.2%, higher than the national sample *Depressive mental disorder is strongly associated with suicidal ideation	* Three HIV testing sites at peri-urban areas surrounding Cape Town

Researcher (s)	Theme/Focus	Sample	Research Approach/ Methods/Tools	Key Findings	Field
Rochat et al. (2013)	Risk factors of suicide for pregnant women	*109 pregnant women	*Mixed-methods approach * Major Depression Section of the Structured Clinical Interview for DSM-IV diagnoses *Edinburgh Postnatal Depression Scale (EPDS) *Qualitative interview	* HIV-positive causes considerable distress that stands as a risk factor for suicide * Among HIV-negative women, unplanned and unwanted pregnancies are important risk factors for suicide ideation	*A rural area of KwaZulu-Natal
Lückhoff, Koen, Jordaan and Niehaus (2014)	Prevalence and risk factors of suicidal behaviour	*974 Xhosa schizophrenia or schizoaffective disorder sample population (784 males and 190 females)	*Quantitative *Questionnaire	* 137 (115 males and 22 females) participants had a history of previous suicide attempts. The majority of the participants (84.7%) (n = 116) with suicidal behaviour are single * Cannabis use or abuse or dependency and lifetime bizarre behaviour are the risk factors for suicidal behaviour * Most common psychiatric symptoms during the most serious attempt was psychosis (85%), followed by depression (13%; n = 111)	*Hospitals and community treatment centres in Cape Town Metropole
Joe et al. (2008)	Prevalence and causes of suicide ideation, planning and attempts (nonfatal)	*4351 adults (15-44) * Both male and female *All races	*Quantitative * Survey	* Lifetime prevalence rates of suicide ideation, plans, and attempts are 9.1%, 3.8%, and 2.9%, respectively *Colored race with the highest prevalence of suicidal attempts (7.1%) and ideation (33.4) * Younger, female, and less educated persons are at higher risk for suicide attempts *Risk for attempted suicide is highest in the age group 18-34 *Females tend to attempt 2 times more than males *DSM-IV disorders were significant risk factors for a lifetime suicide attempt	*Nation-wide *Both rural and urban areas *Households and hostels
Khasakhala et al. (2011)	Risk factors of suicidal behaviour	*4351 South African (SASH respondents)	*Quantitative *Composite International Diagnostic Interview (CIDI)	*Mental disorders are strong predictors of suicidal behaviour *61% people reported having suicidal ideation in their lifetime having a prior DSM-IV disorder	*Both rural and urban areas *Households and hostels
Stein, Pretorius, Stein and Sinclair (2016)	Risk factors of suicide	32 males and 58 females	*Quantitative *Several measurement scales	* Suicidality with pathological gamblers are associated with clinical factors and a family history of psychiatric disorder	*South African Gambling Helpline

Researcher (s)	Theme/Focus	Sample	Research Approach/ Methods/Tools	Key Findings	Field
Vawda (2014)	Prevalence and causes of suicidal plan, ideation, and attempt	*222 eight (8) grade students	*Quantitative *Questionnaire *Psychometric assessment scales	*22.5% students reported suicidal ideation, 5.9% suicidal plans and 5.4% suicidal attempts * Only 2.8% of the attempters sought help or taken to doctors *Peers' or friends' suicidal ideation, acute stress and mood disorders are significantly associated with suicidal behaviour * 63.4% students are exposed to the suicide of a friend	*A government-run, co-educational school at a low-socio-economic area in Durban
Naidoo et al. (2015)	Causes of suicidal behaviour	*688 adults (both male and female) who have attempted suicide	*Quantitative *Questionnaire	* Depression is an important co-morbid risk factor in suicidal behaviour	*Two community-based public hospitals in Durban
Shilubane et al. (2014)	Risk factors of suicidal behaviour	*591 8-11 grade school-going adolescents (male and female) * 291 boys (49.7%) boys *295 girls (50.3%) with girls (5 gender status was missing) *86.2 % of the total sample are Black	*Quantitative *Questionnaire	*Suicidal ideation is prevalent among the adolescents *Psychosocial factors such as social support and negative feelings about the family and the behavioural factors such as forced sexual intercourse and physical violence by the partner are strongly associated with the risk of suicidal ideation	* 9 secondary schools at Mopani, Vhembe, Capricorn, and Sekhukhune districts in Limpopo province
Cluver, Orkin, Boyes and Sherr (2015)	Prevalence and prospective predictors of child suicidality	* 3515 adolescents aged 10 to18 years * 1926 (56%) females and 1475 (44%) males	*Quantitative *Questionnaire (one-year repeated interview)	*Past-month suicide attempt was 2.2% for males 4.1% for females *Past-month suicide planning was 3.0% for males and 6.3% for females *Past-month suicide ideation was 5.6% for males and 8.5% for females *Severe childhood adversities are strongly associated with suicidality	*Rural and urban areas of Mpumalanga and the Western Cape
Bantjes, Kagee and Meissner (2017)	Cases of suicides (Masculinity and suicide)	13 young university male students	*Qualitative *Semi-structured interview	* Failure to attain and practice traditional hegemonic masculinity is the major cause of suicide	*A university at Western Cape

Rodriguez, Mandell, et al. (2018) and Rodriguez, Cook, et al. (2017) investigated the perinatal correlates of suicidal ideation among South African women living with HIV (WLHIV) in the rural setting of Mpumalanga province [31-32]. This study (two publications of one study) did not adopt any psychological theories to frame its theoretical framework. Alternatively, it used several psychological scales such as the Edinburgh Postnatal Depression Scale 10, Conflict Tactics Scale 18, Disclosure scale and the AIDS-Related Stigma Scale for measuring the variables. The findings resonated with the three tenets of the interpersonal theory of suicide proposed by Joiner (2005) namely, thwarted belongingness, perceived burdensome and capability for suicide [27].

Another study by Bantjes, Kagee and Saal (2016) on HIV patients around Cape Town found depressive disorders, anxiety disorders, trauma and stress-related disorders, and alcohol use disorder as significantly associated with suicidal ideation [33]. It used several measuring instruments including the Household Food Insecurity Scale, Socio-demographic Information Questionnaire, the Structured Clinical Interview Schedule, and the Beck Depression Inventory (BDI). But this study did not use any prominent psychological theories.

A mixed-method study by Rochat et al. (2013) from the rural setting of KwaZulu-Natal province also found that suicide ideation was significantly associated with depression and HIV-positive status among pregnant women [34]. This study did not test any psychological theory but used the Edinburgh Postnatal Depression Scale (EPDS).

A study by Lückhoff et al. (2014) examined the correlation between attempted suicide and schizophrenia, where Schizoaffective Disorder patients

were recruited from hospitals and community treatment centres around Cape Town [35]. This study also did not adopt any broader psychological theoretical model but used the Diagnostic Interview for Genetic Studies 2.0 and the Scales for the Assessment of Positive and Negative Symptoms.

The South Africa Stress and Health Study (SASH) published by Joe et al. (2008) and Khasakhala et al. (2011) used the World Mental Health Composite International Diagnostic Interview (CIDI) and Suicidality Module of the CIDI and found respondents with DSM-IV disorders and comorbid disorders were more likely to attempt suicide and develop suicidal ideation than those without psychiatric disorder [36-37]. This nationwide survey did not draw any linkage with the key psychological theories.

Stein et al. (2016) explored the association between suicidality and pathological gambling (PG) with participants who partook in the South African National Responsible Gambling Programme's (NRGP) gambling helpline [38]. It was found that psychiatric disorders, depression and increased severity of gambling are associated with suicidal risks. This study also did not make any connection with the theoretical models rather used several scales such as the Structured Clinical Interview for Pathological Gambling, the Yale-Brown Obsessive-Compulsive Scale Adapted for Pathological Gambling, the MINI and the Sheehan Disability Scale (SDS).

Vawda (2014) studied the associated risk factors of suicidal behaviour in grade eight learners in Durban and found higher levels of depression, perceived stress, hopelessness, peers' suicidal ideation and anger to be strongly associated with suicidal behaviour [39]. This study also did not use any psychological theories. Instead, it utilised several measurement scales such as

the Beck's Depression Inventory, the Beck's Hopelessness Scale, the Perceived Stress Scale, the Aggression Scale, the Mastery Scale and the Perceived Support Social Scales.

A study by Naidoo et al. (2015) on suicide attempts in Durban hospitals found depression is an important comorbid risk factor in suicidal behaviour [40]. Although this study specified several existing psychological models associated with the causation of suicidal behaviour, it did not mention the theoretical relevance of those models to the study. Instead, it used several validated scales including the WHO SUPRE-MISS questionnaire, the Beck Depression Inventory and the WHO Well-Being Index-5.

Shilubane et al. (2014) traced a strong correlation between behavioural and psychosocial factors and suicidal ideation among school-going adolescents in Limpopo province [41]. This research also had no theoretical reliance on the major psychological models. Alternatively, it adopted the Suicide Ideation Questionnaire.

Cluver et al. (2015) found childhood adversities such as parental death, abuse and violence increased the likelihood of suicidal behaviour of participants across several rural and urban sites in Mpumalanga and the Western Cape Province [42]. Instead of using a theoretical model, it adopted the MINI International Psychiatric Interview for measuring suicidal behaviour.

A qualitative study by Bantjes, Kagee and Meissner (2016) with a racially mixed group of university students from the Western Cape found students' perceived failure to attain traditional hegemonic masculinity stimulated suicidal behaviour [43]. This study is a good example of the combination of sociological and psychological approaches where Durkheim's (2005) sociological perspective on suicide and Joiner's (2005) interpersonal theory of suicide

(psychological) were analysed in line with hegemonic masculine ideals [27, 44].

Discussion

This review confirms that South African studies do not maintain any engaging connection with the theoretical and methodological models proposed under the dominant stream of the psychology of suicide. The arguments and explanations in favour of this statement are as follows.

Notably, the broader psychological models are embedded in relevant measurement scales. For example, Psychological Pain Assessment Scale (PPAS) was developed by Shneidman based on his conceptual model of *psychache* experienced by individuals [45]. Holden, Mehta, Cunningham and McLeod (2001) further devised a *psychache* scale to directly measure and test Shneidman's concept of *psychache* [46]. Consistent with Baumeister's (1990) escape theory, Dean, Range, and Goggin (1996) and Dean and Range (1996) administered this theory through the Life Event Questionnaire, the Multidimensional Perfectionism Scale, the Zung Self-Rating Depression Scale, the Beck Hopelessness Scale, the Reasons for Living Inventory, and the Beck Scale for Suicidal Ideation [26, 47–49]. The Interpersonal Needs Questionnaire for thwarted belongingness and perceived burdensomeness and the Acquired Capability for Suicide Scale for the acquired capability are typically used to measure the co-occurring constructs of interpersonal theory of suicide [28]. The Defeat Scale, Entrapment Scale, Suicide Resilience Inventory 25, the Discomfort Intolerance Scale and the Discomfort Intolerance Scale are used to measure the constructs embedded in the integrated motivational-volitional theory of suicidal behaviour [50].

What is noted is that only a few South African researchers have used the above-mentioned scales developed from the key theoretical models. For

example, Vawda (2014) made experiments with the Beck Hopelessness Scale and the Beck's Depression Inventory scale [39]. Naidoo, Naidoo and Naidoo (2015) and Bantjes et al. (2016) utilised the Beck's Depression Inventory scale [33, 40]. Under such a context, it may be assumed that the empirical literature in South Africa neither utilised the predominant psychological theoretical models nor maintained a sharp logical connection with the relevant scales associated with those theories.

Conversely, the extensive use of psychological scales by South African scholarly publications made them slightly biased towards the positivistic paradigm. If a broader understanding of suicidal behaviour is the purpose of research, mere statistical reliance cannot or should not be the endpoint of suicidal research [51]. To advance the knowledge base, it is imperative for South African scholars to take a paradigmatic research shift. Researchers should navigate their focus from the traditional positivistic approach to the interpretive approach. Traditionally, the psychology discipline had somewhat been sceptical of a research approach that is subjective or interpretive. Yet, since the 1980s, there has been a gradual shift as psychologists have increasingly adopted qualitative methods to enrich their knowledge [52-53]. South African psychological research approach to suicidal behaviour must strive to make a meaningful methodological and epistemic development by using qualitative research relying on the major (psychological) theoretical and methodological models discussed in this analysis.

Specifically, the methodological necessity placed in the preceding paragraph may be linked to the application of psychological autopsy. Again, South African literature does not maintain any methodological connection with the psychological autopsy and seems not well-intended to explore the retrospective

investigation of suicide. The psychological autopsy is the most validated and authoritative approach to explicate the psychological and contextual circumstances causing suicide [14]. On the other hand, a qualitative psychological autopsy can produce rich and complex data about the lives of suicidal individuals in many important ways [54]. Shneidman, the proponent of the psychological autopsy, was a strong advocate of using qualitative methods in *suicidology* [15]. By using qualitative psychological autopsy, South African psychologists can meet two purposes. Firstly, they can conduct research on different modes of suicidal behaviour. Secondly, they can make a retrospective analysis of suicide. Efforts as such might lessen overwhelming reliance on statistical tools.

This review is the first attempt that categorically highlights the flow of psychological approach to suicidal behaviour in South Africa. Given the fact psychology provides the most meaningful understanding of suicidal behaviour, South African scholars should apply the major psychological theories and methodological models to substantially understand the dynamics of suicidal behaviour. While doing so, South African scholars may contribute to advancing, refining or refreshing the psychological approach to suicidal behaviour.

This review has some implications in terms of suicide prevention also. In particular, lessons learnt from it may be imperative to develop intensive and appropriate mental health care. Despite some theoretical and methodological drawbacks, these studies have explored some critical psychological causes of suicidal behaviour in South Africa. Any existing or future mental health intervention must prioritise the factors traced by these studies for effective intervention. At the same time, any further refreshing study (as suggested by this review) must attempt to explore psychologically distracting

events leading to suicidal behaviour. Findings as such should also be seriously taken care of by future interventions.

There are several limitations to this review. Firstly, it included only a ten-year period for searching relevant literature. Any literature published before and after that period has not been included here. Hence, it is not unlikely that some scholarly developments are missed out. Secondly, arguments for a particular (psychological) model may seem to be biased or selective for some readers since several disciplinary theories and explanatory frameworks have significant potential to investigate suicidal behaviour. Thirdly, the scope of psychological perspective to search for the most appropriate literature was exclusively based on the discretion of the reviewers. The authors of these studies have not categorically treated them as psychological. There might be a possible mismatch between what is defined as a psychological approach by the reviewers and what is intended by the original researchers.

Conclusion

It is to state further that suicide is a multidimensional context. So, it is usually impossible for a particular discipline to fully grasp the complexities associated with the behaviour [23]. Suicidal behaviour can be more accurately understood if it is analysed from numerous theoretical perspectives [12]. Contemporary researchers strappingly suggest applying the theoretical perspectives embedded in biological, environmental, sociological and psychological perspectives to comprehensively internalise the correlates of suicidality [14, 55-56]. However, this review substantiates such arguments in a manner that attaining some inclusive understanding at least from one (psychological) perspective on a specific country (South Africa) where suicide is a public health problem seems worthwhile.

It is also not to conclude that suicidal behaviour will be perfectly explained by the psychological perspective. A multi-disciplinary understanding of suicidal behaviour often seems more appropriate. Good examples are available within the Durkheimian sociology of suicide. According to this approach, suicide is not entirely dependent on an individual's motivations rather it is instigated by complex social contexts [57]. Interestingly, by going beyond the classical/conventional Durkheimian sociological sense of suicide, several post-Durkheimian sociologists have suggested integrating both sociological and psychological perspectives into suicide research [57]. In this regard, scholars of different disciplinary orientations including psychology, psychiatry, public health and sociology should work together to extend a multimodal understanding of suicidal behaviour. This type of understanding may also be more effective for suicide prevention in any country including South Africa.

With regard to methodological issues of conducting suicide research, several sociologists are now influenced by the sophistication of psychological autopsy. They have developed a new methodological approach called sociological autopsy that integrates both qualitative and quantitative and also individual and social contexts [58]. Taking note of such methodological advances in the sociology of suicide, South African scholars may also use both sociological and psychological methods in suicide research. Again, this is a very important approach to extend the domain of suicide research.

Conflict of Interest: The authors declared no conflict of interest related to this paper.

Reference

- [1] Mukherjee S, Kumar U. Theorising suicide: Multiple perspectives and implications for prevention. *Handbook of Suicidal Behaviour*. 2017; 3–22.

- [2] Bantjes J, Kagee A. Epidemiology of suicide in South Africa: Setting an agenda for future research. *South African Journal of Psychology*. 2013; 43: 238–251.
- [3] Schrijvers DL, Bollen J, Sabbe BGC. The gender paradox in suicidal behaviour and its impact on the suicidal process. *J Affect Disord*. 2012; 138: 19–26.
- [4] Naghavi M. Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study. 2016. *BMJ* 2019; 194.
- [5] World Health Organisation. Suicide worldwide in 2019: global health estimates. *World Health Organisation, Geneva*. 2021; Licence: CC BY-NC-SA 3.0 IGO.
- [6] Bachmann S. Epidemiology of suicide and the psychiatric perspective. *Int J Environ Res Public Health*. 2018; 15: 1425.
- [7] Yuodelis-Flores C, Ries RK. Addiction and suicide: A review. *Am J Addict*. 2015; 24: 98-104.
- [8] Khuzwayo N, Taylor M, Connolly C. High risk of suicide among high-school learners in uMgungundlovu district, KwaZulu-Natal Province, South Africa. *South African Medical Journal*. 2018; 108: 517.
- [9] Kazi TB, Naidoo S. Does religiosity mediate suicidal tendencies? A South African Study of Muslim Tertiary Students. *J Relig Health*. 2016; 55: 1010–1023.
- [10] Mars B, Burrows S, Hjelmeland H, et al. Suicidal behaviour across the African continent: A review of the literature. *BMC Public Health*. 2014; 14: 606.
- [11] Schlebusch L. Suicide prevention: A proposed national strategy for South Africa. *Afr J Psychiatry (Johannesbg)*, 2012; 15: 436–440.
- [12] Shneidman ES. *Definition of suicide*. 1985; 256.
- [13] O'Connor RC, Nock MK. The psychology of suicidal behaviour. *Lancet Psychiatry*. 2014; 1: 73–85.
- [14] O'connor RC, Platt S, Gordon J. Towards an integrated motivational-Volitional model of suicidal behaviour. In: *International Handbook of Suicide Prevention*. 2011; pp. 182–189.
- [15] Leenaars AA, Edwin S. Shneidman on suicide. *Suicidology Online*. 2010; 1: 5–18.
- [16] David KE, May AM. The Three-Step Theory (3ST): A new theory of suicide rooted in the “Ideation-to-Action” framework. 2015; 8: 114–129.
- [17] Gunn JF, Lester D. Introduction. In: *Theories of suicide: past, present and future*, 2014; pp. 3–5.
- [18] Goldblatt MJ. Oxford handbooks online psychodynamics of suicide psychodynamic models of suicide. 2017; 1–21.
- [19] Shneidman ES. Commentary: Suicide as psychache. *J Nerv Ment Dis*. 1993; 181: 145–147.
- [20] Gunn JF, Lester D. The interpersonal psychological theory of suicide. In: *Theories of suicide: past, present and future*. 2014, pp. 23–36.
- [21] Gunn JF, Lester D. Suicide as escape: Baechlar, Shneidman and Baumeister. In: *Theories of suicide: Past, present and future*. 2014, pp. 9–22.
- [22] Conner KR, Beautrais AL, Brent DA, et al. The next generation of psychological autopsy studies. *Suicide Life Threat Behav*. 2011; 41: 594–613.
- [23] Jacobs D, Klein-Benheim M. The psychological autopsy: A useful tool for determining proximate causation in suicide cases. *Journal of the American Academy of Psychiatry and the Law Online*. 1995; 23: 165–182.
- [24] Hjelmeland H, Dieserud G, Dyregrov K, et al. Psychological autopsy studies as diagnostic tools: Are they methodologically flawed? *Death Stud*. 2012; 36: 605–626.
- [25] Shneidman ES. The psychological autopsy. *Suicide Life Threat Behav*. 1981; 11: 325–340.
- [26] Baumeister RF. Suicide as escape from self. *Psychol Rev*. 1990; 97: 90–113.
- [27] Joiner TE. *Why people die by suicide* Harvard University Press. 2005; 1–288.

- [28] Van Orden KA, Witte TK, Cukrowicz KC, et al. The interpersonal theory of suicide. *Psychol Rev.* 2010; 117: 575–600.
- [29] Ribeiro JD, Joiner TE. The interpersonal-psychological theory of suicidal behaviour: current status and future directions. *J Clin Psychol.* 2009; 65: 1291–1299.
- [30] O'Connor RC, Kirtley OJ. The integrated motivational–volitional model of suicidal behaviour. *Philosophical Transactions of the Royal Society B: Biological Sciences.* 2018; 373: 20170268.
- [31] Rodriguez VJ, Cook RR, Peltzer K, et al. Prevalence and psychosocial correlates of suicidal ideation among pregnant women living with HIV in Mpumalanga Province, South Africa. *AIDS Care.* 2017; 29: 593–597.
- [32] Rodriguez VJ, Mandell LN, Babayigit S, et al. Correlates of suicidal ideation during pregnancy and postpartum among women living with HIV in rural South Africa. *AIDS Behav.* 2018; 22: 3188–3197.
- [33] Bantjes J, Kagee A, Saal W. Suicidal ideation and behaviour among persons seeking HIV testing in peri-urban areas of Cape Town, South Africa: a lost opportunity for suicide prevention. *AIDS Care.* 2017; 29: 919–927.
- [34] Rochat TJ, Bland RM, Tomlinson M, et al. Suicide ideation, depression and HIV among pregnant women in rural South Africa. *Health N Hav.* 2013; 05: 650–661.
- [35] Lückhoff M, Koen L, Jordaan E, et al. Attempted suicide in a Xhosa schizophrenia and schizoaffective disorder population. *Suicide Life Threat Behav.* 2014; 44: 167–174.
- [36] Joe S, Stein DJ, Seedat S, et al. Prevalence and correlates of non-fatal suicidal behaviour among South Africans. *British Journal of Psychiatry.* 2008; 192: 310–311.
- [37] Khasakhala L, Sorsdahl K, Harder V, et al. Lifetime mental disorders and suicidal behaviour in South Africa. *Afr J Psychiatry (Johannesbg).* 2011; 14: 113–139.
- [38] Stein GN, Pretorius A, Stein DJ, et al. The association between pathological gambling and suicidality in treatment-seeking pathological gamblers in South Africa. *Ann Clin Psychiatry.* 2016; 28: 43–50.
- [39] Vawda N. The prevalence of suicidal behaviour and associated risk factors in grade 8 learners in Durban. *South African Family Practice.* 2014; 56: 37–42.
- [40] Naidoo SS, Naidoo U, Naidoo A. Unmasking depression in persons attempting suicide. *South African Family Practice.* 2015; 57: 83–87.
- [41] Shilubane HN, Ruiter RAC, Bos AER, et al. Psychosocial correlates of suicidal ideation in rural South African adolescents. *Child Psychiatry Hum Dev.* 2014; 45: 153–162.
- [42] Cluver L, Orkin M, Boyes ME, et al. Child and adolescent suicide attempts, suicidal behaviour, and adverse childhood experiences in South Africa: a prospective study. *Journal of Adolescent Health.* 2015; 57: 52–59.
- [43] Bantjes J, Kagee A, Meissner B. Young men in post-apartheid South Africa talk about masculinity and suicide prevention. *South African Journal of Psychology.* 2017; 47: 233–245.
- [44] Durkheim E. *Suicide: A study in sociology, translated by John Spaulding and George Simpson.* 2005th ed. Routledge, 2005.
- [45] Shneidman ES. The Psychological Pain Assessment Scale. *Suicide Life Threat Behav.* 1999; 29: 287–294.
- [46] Holden RR, Mehta K, Cunningham EJ, et al. Development and preliminary validation of a scale of psychache. *Canadian Journal of Behavioural Science.* 2001; 33: 224–232.
- [47] Dean PJ, Range LM, Goggin WC. The escape theory of suicide in college students: Testing a model that includes perfectionism. *Suicide Life Threat Behav.* 1996; 181–186.
- [48] Dean PJ, Range LM. The escape theory of suicide and perfectionism in college students. *Death Stud.* 1996; 20: 415–424.
- [49] Dean PJ, Range LM. Testing the escape theory of suicide in an outpatient clinical population. *Cognit Ther Res.* 1999; 23: 561–572.

- [50] Dhingra K, Boduszek D, O'Connor RC. A structural test of the Integrated Motivational-Volitional model of suicidal behaviour. *Psychiatry Res.* 2016; 239: 169–178.
- [51] Hjelmeland H, Knizek BL. Why we need qualitative research in suicidology. *Suicide Life Threat Behav.* 2010; 40: 74–80.
- [52] Forrester M. This book and how to use it. In: *Doing qualitative research in psychology: A practical guide* London: Sage, 2010, pp. 1–12.
- [53] Willig C, Rogers WS. Introduction. In: *The SAGE handbook of qualitative research in psychology.* London: Sage 2017, pp. 1–14
- [54] Owens C, Lambert H, Lloyd K, et al. Tales of biographical disintegration: how parents make sense of their sons' suicides. *Sociol Health Illn.* 2008; 30: 237–254.
- [55] Selby E, Joiner TE, Ribeiro JD. Comprehensive theories of suicidal behaviors. In: Nock MK (ed) *The oxford handbook of suicide and self-injury* Oxford: Oxford University Press, 2014, pp. 286–307.
- [56] De Beurs D, Fried EI, Wetherall K, et al. Exploring the psychology of suicidal ideation: A theory driven network analysis. *Behaviour Research and Therapy.* 2019; 120: 103419.
- [57] Khan AR, Ratele K, Dery I. (Re) animating sociology of suicide in Bangladesh. *Italian Sociological Review.* 2020; 10: 55–75.
- [58] Fincham B, Langer S, Scourfield J, et al. *Understanding suicide: A sociological autopsy* Palgrave Macmillan, 2011.