The Impact of Meaning in Life and Reasons for Living on Suicidal Behaviour in Young Adults: A Systematic Review

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Systematic Review

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Abstract

A systematic review is presented which aims to synthesise relevant literature focused on the influence of Meaning in Life (MiL) and Reasons for Living (RFL) on Suicidal Behaviour (SB) in young adults. Twelve papers of suitable quality were sourced through a rigorous search strategy and a narrative synthesis was performed. This revealed that RFL and MiL act as protective factors against SB in young adults. Additional findings revealed a cultural universality of the protective aspect of MiL/RFL on SB, as well as further insights into the sub-components of life meaning: Search for Meaning in Life and Presence of Meaning in Life. The associated risk factors of SB- Hopelessness, Life Regard and Mental Pain, are also discussed in relation to MiL and RFL. This study paves the way for further research on the same topic and draws attention to something that is frequently neglected in the psychiatric community- consideration of the transcendental aspects of human nature.

Introduction

As modern life becomes more technologically complex and traditional values begin to fade (Browne, 2008), there is an increasing need to develop psychological services with a deeper therapeutic focus on the subjective nature of existence for everyone. This claim is supported by Stephenson and Hale (2017), who suggest that further research is needed into existential approaches, such as Existential–Phenomenological Therapy within NHS services. They state that these approaches are effective psychological treatments that produce reliable and clinically significant changes for clients presenting with distressing psychological symptoms. However, despite promising findings, existential approaches remain underdeveloped in the UK - a fact that puts clinicians at a disadvantage when attempting to understand and resolve a client’s psychological distress or existential anxiety (Stephenson & Hale 2017). There is a need to further understand how these approaches work to provide a wider range of treatments in psychological services, as well as uncover evidence of their effectiveness that supports further integration, funding, and client uptake of these approaches within the NHS.

Moreover, according to Browne (2008), there is a link between traditional values and meaning in life. According to Browne, the ongoing decline in traditional values in the UK is leaving many vulnerable to the adoption of nihilistic attitudes- especially younger generations who have yet to establish a firm sense of self, life direction, and purpose (Damon 2009). Although the nihilist argues that life is devoid of meaning, they still seek and strive towards the fulfilment of meaning. Austrian neurologist and psychiatrist, Viktor Frankl coined this innate human drive to find and fulfil meaning in life a “Will to Meaning”. According to Frankl, the meaning of life can never be stripped from an individual. It is the last of all human freedoms and can be fulfilled through; meaningful action, the experience of something transcendent, or the attitude adopted to unavoidable suffering (Frankl, 2004).

Frankl developed these insights by observing his fellow prisoners struggle for survival in Auschwitz concentration camp. Regarding life meaning, Frankl notes, “Everything can be taken from a man but one thing: the last of the human freedoms—to choose one's attitude in any given set of circumstances, to
"choose one's own way" (Frankl, 2004). In the Franklian view, Meaning in Life needs to be found and actualised in each person. Even in unavoidable circumstances, an individual can still change their attitude to their fate- to their unalterable suffering. This in Frankl's view is our ultimate responsibility and represents our freedom in the face of the deep, dark existential vacuum.

Other definitions of Meaning in Life (MiL) have also been posited since Frankl's work. For example, meaning has been described as either specific or global (Wong, 2012). In other words, global meaning encapsulates overarching beliefs, attitudes, and purpose in life. This is one's overarching narrative in life or sense of duty to one's responsibilities, and/or God. On the other hand, specific meaning deals with how global meaning is embodied and acted upon. Specific meaning tries to make sense of the world via context-driven situations and circumstances.

Steger (2016) also developed a definition of life meaning that rests on three core dimensions- Coherence, Purpose, and Significance (Steger, 2016). According to this definition, coherence refers to the extent to which life makes sense and lacks chaos. Purpose encompasses core goals, dreams, and overall life direction. Significance refers to the importance and value placed on one's life.

Thus, Steger's (2016) definition of MiL refers to the connections, interpretations, aspirations, and evaluations that:

(1) make our experiences comprehensible,

(2) direct our efforts toward a desired future

(3) provide a sense that our lives matter and are worthwhile

(Steger, 2016 in Contanza et al. 2019)

In addition to a comprehensive definition, Steger (2009) outlines a model of life meaning. It separates MiL into two unique elements- search for meaning and presence of meaning. According to this model, presence of MiL engenders various benefits for an individual's life, including resilience to stress and overall psychological well-being. However, the search for MiL is still a vague concept, and it remains unclear whether it is as Frankl asserts, a basic element of the human spirit or if it represents maladaptive psychological functioning (Steger, 2009). Ultimately, MiL or the lack thereof is a salient consideration for mental health, particularly for suicide research.

Meaning in Life has also been found to change over time. Younger people tend to gain meaning through the pursuit of goals, whereas older people tend to gain meaning through reflecting on accomplishments and their life gone by (Steger, 2009). Steger's search for MiL and presence of MiL move in opposite directions over the lifespan. In other words, according to Steger's model of MiL, in young people the search for meaning is high, whereas presence of meaning is low. For elderly people, it is vice versa- search for meaning low, and presence of meaning high.
Reasons for Living (RFL) is also an important consideration for suicide research. Reasons for Living (RFL) represent the cognitive element of life meaning. They are the motivating factors that keep an individual alive and striving towards the fulfillment of their needs. For example, a source of meaning in life for someone may be their family, and a reason for living for this person may be "I must stay alive to feed my family". Meaning in Life (MiL) may influence an individual's reasons for living- a point that echoes Nietzsche's famous words, "he who has a why, can bear almost any how".

Therefore, both constructs-MiL and RFL represent salient considerations for clinical psychology and psychiatry- particularly for the treatment and prevention of suicidal behaviour. Given that eight-hundred thousand people die annually by suicide (WHO, 2021), the development of new ways of interpreting and treating suicidal behaviour is vital.

Previous research has demonstrated a relationship between MiL, RFL and suicidal behaviour (SB). For instance, Orbach et al. (2003) suggest that lack of MiL increases the risk of mental pain- a known risk factor for suicidal behaviour. In this study, mental pain had a negative correlation with optimism and life-regard. This led the authors to conclude that a lack of meaning in life creates the desire to end one's suffering through suicide. In addition, Aviad-Wilchek et al. (2018) report that MiL can be developed in a therapeutic context. During this study, risk of suicide and MiL was compared in groups of adolescent girls from normative sociological backgrounds and disadvantaged backgrounds. MiL was found to correlate negatively with suicidal behaviours, with girls from normative social backgrounds (i.e., lack of poverty) showing a greater sense of MiL and as a result lower suicide potential than the disadvantaged group. In addition, the disadvantaged group who engaged with a therapeutic intervention had a greater sense of MiL and a lower risk of suicide than controls by the end of the study. This suggests MiL can be bolstered in therapeutic contexts and has been supported by various other studies (Wilson & Murrell 2003; Tighe et al. 2018; Schulenberg et al. 2014; Ducasse et al. 2014; Lew et al. 2020). Moreover, Bakhiyi et al. (2016) assert that Reasons for Living (RFL) moderate suicidal risk factors and increase resilience due to their associations with MiL.

Standardised assessment tools of both MiL and RFL have also been developed, such as the Reasons for Living Inventory (RFLI) and Meaning in Life Questionnaire (MLQ). Both instruments demonstrate high internal validity and test-retest reliability (Connell and Meyer, 1991; Osman et al. 1996; Steger et al. 2006). These instruments provide an objective assessment of MiL and RFL that is highly advantageous for clinicians and researchers.

In a previous systematic review, Contanza et al. (2019) searched for constructs that could explain meaning in life in suicidal individuals. They included 37 relevant articles and found that the presence of MiL acts as a protective factor against suicidal ideation, attempts, and completed suicide. Thus, this review points to the utility of meaning-centred assessment tools in suicidal risk assessment. However, the findings of this review were inconclusive for the role of the search for MiL. This is a limitation of this review, as it leaves us with an underdeveloped understanding of the process of how meaning is found and later applied to individual life. In addition, the inclusion criteria did not capture the full nuances of
MiL across cultures. The proposed review will attempt to build on the work of Contanza et al (2019) by adding the concept of RFL, and revised inclusion criteria.

In addition, Bakhiyi et al. (2016) undertook a systematic review that focused on the protective role that RFL may play on suicidal behaviours. Most interestingly, they suggest that RFL interact with hopelessness, depression, and clinical suicidality to lessen the effect of these variables on the individual. Thus, this review directly relates the rather philosophical concept of RFL, to objective DSM-V Axis I disorders. This is promising as it suggests that meaning-centred approaches can and should be woven into clinical diagnostic tools in order to better serve a full spectrum of the individual's needs, including biological, psychosocial and spiritual.

**Current Study:**

Similar to Contanza et al. (2019), this study will recruit two MiL constructs based on Steger's model of MiL and investigate the relationship between Meaning in Life and Suicidal Behaviour in young adults. These include "Presence of MiL" and "Search for MiL" It will also explore the effect of RFL on Suicidal Behaviour and explore how this construct is related to MiL. It may be that RFL is linked to the specific meaning aspect of MiL and provides an individual with a more concrete form of meaning, in the form of goals or promises.

Moreover, this study also hopes to elucidate the utility of meaning-centred practices for the psychological treatment of adults- in particular, for young and elderly adults. As suicide is a common form of death for young adults, particularly for undergraduate students (Rosiek et al. 2016), the proposed study wishes to investigate this sample and highlight the importance and utility of meaning centred approaches. More than ever before, young people are faced with existential anxiety and frustration, and it is worthwhile to investigate if MiL truly influences the practice of suicidal behaviour in this population. Additionally, as Steger's model of MiL illustrates, MiL changes over time. Therefore, it is worthwhile to compare differences between young and old people's experience of meaning in life. This may provide further insight into this area.

RFL is defined by Bakhiyi et al. (2016) for the purposes of this study and includes protective factors against suicide and reasons for staying alive. MiL is defined using the previously mentioned definition by Steger (2009) for the purposes of this study. Suicidal behaviour (SB) will be considered as one or more of the following: suicidal ideation, suicide attempts or completed suicide, as defined by DSM V (American Psychological Association, 2013). Finally, the term young adult refers to individuals between 18-35 (American Psychological Association Dictionary of Psychology, 2021)

**Review Questions:**
1. Do Reasons for Living and Meaning in Life reduce the risk and frequency of suicidal behaviour in young adults?

This systematic review will examine the role of MiL and RFL in mediating the risk and frequency of suicidal behaviour in adults.

2. Does the presence of meaning subscale offer a protective effect against Suicidal Behaviour in young adults? If so, how does this differ subscale differ from the search for meaning subscale?

As a secondary question, this review will analyse the relationship between the presence and search for life meaning, to further explore their differences.

Aims and objectives:

This review aims to synthesise relevant literature that focuses on the interplay between MiL, RFL and suicidal behaviour. It also hopes to elucidate the utility of meaning-centred practices for psychological treatment of young adults. As suicide is a common form of death for young adults, particularly for undergraduate students (Rosiek et al. 2016), the proposed study wishes to investigate this sample and highlight the importance and utility of meaning centred approaches for this group. It is hoped that this review can further support the growing evidence for the importance of identifying protective factors in suicide prevention for young people and draw attention to something that is frequently neglected in the psychiatric community—consideration of the transcendental aspects of human nature. In addition, the main objective of this study is to capture the current understanding of the influence of meaning in life on suicidality in this population. This will then inform future research on this topic.

Methodology

-Background:

A systematic review research method was chosen as it allows for direct comparison and analysis of existing data in a robust and timely manner. It will also help pave the way for future research in this area. A systematic review aims to establish the current state of knowledge on a research topic and identify gaps in current understanding that need to be filled by further investigation.

-Databases:

1. PsychINFO,

2. PubMed (Medline)

3. EmBase
-Search strategy:

The search will attempt to find these terms within the title and abstract sections of academic research papers. As MiL and RFL are relatively underdeveloped areas in suicide research, it is important that all papers selected for this review are peer-reviewed. This will ensure the best academic practices, and adherence to key terminology. Additionally, a grey literature search will not be performed due to sparsity of relevant investigations into the area of life meaning and suicide in young adults.

The following key search terms will be used, following Boolean logic conventions.

(A) “Meaning in Life AND suicidal behaviour OR suicidality”,

(B) “Reasons for Living AND suicidal behaviour OR suicidality”,

(C) “Meaning in Life AND Reasons for Living AND suicidal behaviour OR suicidality”

-Inclusion and Exclusion Criteria:

All studies may be quantitative in nature and must include an operationalised definition of both MiL and RFL that is grounded in previous research. For instance, Frankl's conceptualisation of MiL. In addition, all studies must measure MiL or RFL in a particular sample, and use reliable instruments to measure these concepts, such as the RFL Inventory (RFLI). Clinical, non-clinical and culturally diverse populations under the age of 35 will also be included in this study. Finally, cross-sectional, longitudinal and survey-based designs will be included in this review.

All studies that are not published in English will be excluded from this systematic review. Studies will also be excluded if they do not include an operationalised form of MiL or use APA (2013) definition of suicidal behaviour and do not make statistical inferences about the relationship between MiL or RFL and suicidal behaviour (i.e., qualitative studies) Additionally, studies with a publication date older than the year 2001 will be excluded to capture the most accurate picture of MiL in modern life. Finally, studies that only investigate the effectiveness of a psychometric tool will be excluded. For example, studies that assess internal consistency reliability of the MILQ.

-Quality Assessment:

The National Institutes of Health (NIH) Quality Assessment (QA) Tool for Observational Cohort and Cross-Sectional Studies will be used for this systematic review. This includes a series of 14 questions,
aimed at assessing the quality of a study design. It explores aspects of study design such as the population, outcome measures, analysis, and presence of confounders. The papers can receive a ranking ranging from poor, fair or good based on the answers to the QA questionnaire. These rankings reflect the strength or weakness of the study and its overall reliability. This tool was chosen for its compatibility with the studies included in this review. All the included studies are cross-sectional, survey-based designs, with one exception which uses a longitudinal survey-based design. In addition, this QA tool was selected for its ease and efficiency of use. It clearly lays out the requirements in an easy-to-follow guide and is easily available online.

-Data Synthesis:

A narrative synthesis design will be employed for this review. This will begin with extraction of relevant papers. These papers will be summarised in a table with information on the objectives, population, method, and outcomes. Then, the information will be analysed for patterns, assessed for quality, and synthesised in a way that highlights their utility to the field of study.

Results

A total of 721 papers were identified during the initial search. These were sourced from all three databases using the aforementioned search terms. Out of the 721 papers, 32 duplicates were removed. Then, the title of each study was screened to further reduce the overall number of papers and create a more concise and relevant list of papers. Studies that were not in English were also screened out at this stage. In total, 406 papers were removed at this title and language screening stage. 283 papers remained after the title screening stage and were subject to further analysis. The next stage involved screening papers by abstract. At this stage, as well as the title screening stage, keywords were searched including MiL, suicidal behaviour, suicide, suicidal and RFL. All papers judged to be irrelevant were deleted, in accordance with keywords chosen. 254 papers were removed at this stage, which left 29 papers remaining. These papers were read in-full to establish their relevance to the current study. Once again, the inclusion and exclusion criteria determined which papers were selected to be reviewed in this present study. In total, 12 papers were selected for inclusion in the full systematic review. This information is summarised in Figure 2.

Data Extraction

Data from twelve relevant papers was extracted for this study. Four studies focused on the influence of RFL on suicidal behaviour, seven studies focused on the impact of MiL on suicidal behaviour and two studies examined both factors- RFL and MiL. All papers used either a cross-sectional survey design (12 papers) or longitudinal methodology (1 paper)-with various instruments employed to measure aspects of suicidal behaviour, MiL and RFL. The population samples used for all studies included young
adults/students (9 papers), clinical populations (3 papers) or elderly adults (1 paper). All papers reported that RFL or MiL mediated the tendency to engage in SB. For a full extraction report, refer to Figure 3.

Initial Analysis

Participants:

There were large differences in the number of participants in each of the included studies. The number of participants in each study ranged from 61-2074. The mean ages of participants in years were as follows: 16.11 (1), 19.28 (2), 19.2 (3), 19.27 (4), 32.21 (5), 21.2 (6), 19.79 (7), 27.0 (8), 19.66 (9), 27.26 (10), 20.55 (11) and 20 (12). This led to a combined mean age of 21.79 for all studies included in this review.

Objectives:

All studies aimed to determine whether Meaning in Life or Reasons for Living act as protective factors against suicidal behaviour in young adults. These studies also aimed to uncover certain risk factors involved with the practice of suicidal behaviour, such as hopelessness, negative thinking, and mental pain. Seven studies focus on how MiL interacts with suicidal behaviour, four studies investigate RFL and suicidal behaviour, and one study investigated both. MiL and RFL are thus proposed as ways to ameliorate these risks, and prevent the development and continuation of SB. This is an interesting observation and suggests that MiL and RFL can hypothetically be used to treat and prevent SB.

Instruments used and methods:

Twelve studies used a cross-sectional survey-based research design. Participants in all studies were invited to complete certain measures relating to MiL, RFL, SB, or risk factors associated with SB (hopelessness, religiousness). There was overlap in the instruments used in the studies. The Meaning in Life Questionnaire (MiLQ) was used in four of the twelve studies. The Reasons for Living Inventory for Young Adults (RFLI) was used in two of the studies, and the Beck Hopelessness Scale (BHS) was also used in five of the included studies.

Outcomes:

All studies included in this study found a relationship between SB, MiL and RFL. Both MiL and RFL were negatively correlated with SB. When the frequency of SB was high, MiL/RFL were low, and vice versa. Moreover, hopelessness and negative thinking showed a negative correlation with Meaning in Life and Reasons for Living. In one study, religious practice predicted strongly held Reasons for Living.
Primary Findings

From the twelve studies presented here, the following conclusions have been reached:

(A) Meaning in Life and Reasons for Living reduce the risk of Suicidal Behaviour:

All studies reported that either Meaning in Life or Reasons for Living lowered the risk and frequency of Suicidal Behaviour, or the associated risk factors of SB (hopelessness, mental pain, negative thinking, and depression). MiL was found to reduce the risk and frequency of Suicidal Behaviour in eight studies (1,4,5,6,7, 9, 10 and 11). In these studies, MiL was measured by the Meaning in Life Questionnaire (MILQ) or Purpose in Life Test (PIL). Reasons for Living were found to reduce the risk and frequency of Suicidal Behaviour in 5 studies (2,3,8, 9 and 12). RFL was measured using the Reasons for Living Inventory-Young Adult (RFL-YA) and Reasons for Living Inventory. Interestingly, hope in life also seemed to interact with RFL in study eight to decrease the risk of suicide attempts. Religious faith also predicted the strength of RFL in study twelve. In addition, one study found that when acting together RFL and MiL reduce the risk and frequency of SB (9). Finally, study one notes that participants who were engaged in a therapeutic program had higher MiL than those that did not. This suggests psychosocial rehabilitation programs may be used to bolster MiL and prevent SB. Study seven also distinguishes between search for meaning and presence of meaning in life, both of which mediated the relationship between SB and MiL, as well as MiL and all sub-dimensions of the future-disposition scale.

(B) The subscales of MiL- Search for Meaning and Presence of Meaning, provide varying degrees protection against Suicidal Behaviour, and act in different ways:

Two studies revealed that the protective effect of Search for Meaning in Life differs from that of Presence of Meaning in Life. In study nine, Moscardini et al. (2021) found that the Search for Meaning in Life provides less protection against suicidal ideation severity than the Presence of Meaning in Life. They also found that when reasons for living were low, the protective aspect of Search for Meaning in Life was further reduced. On the other hand, Presence of Meaning in Life moderated the impact of entrapment on Suicidal Ideation when RFL are also present and high.

Similarly, Lew et al. (2020) (7) found that both Presence of Meaning in Life and Search for Meaning in Life subscales of MILQ offer protection against SB but do so in disparate ways. Only the Presence of Meaning in Life mediates the relationship between hopelessness and Suicidal Behaviour, whereas search for MiL and Presence of MiL mediate the relationship between the subscales of the Future Disposition Inventory- Positive focus (PF), suicidal-orientation (SO), and negative focus (NF). Thus, taken together, both studies reveal important differences between presence of meaning in life and search for meaning in life in young adults.

(C) Meaning in Life and Reasons for Living impact the relationship between Suicidal Behaviour and Hopelessness:
Two of the included studies in this review studied the relationship between either Meaning in Life (4,5,10) or Reasons for Living (2) and Hopelessness. Hopelessness engenders feelings of low mood, powerlessness, and isolation. It is also a known risk factor for suicidal behaviour (Bagge et al. 2014). Lew et al. 2020 (4) suggest that the presence of Meaning in Life subscale of the MILQ is involved in the relationship between Meaning in Life and Hopelessness. Similarly, strongly held Reasons for Living also positively influenced the relationship between hopelessness and suicidal behaviour in study two. Mental Pain and Life Regard may also interact with Hopelessness as Orbach et al. (2003) suggest.

\[(D) \text{Cultural differences do not affect the relationship between Meaning in Life and Suicidal Behaviour:}\]

All the included studies assessed strikingly different populations. Despite these culturally disparate samples, the relationship between SB and MiL remained unchanged across studies. This suggests that Meaning in Life and Reasons for Living are innate and culturally universal. Human beings no matter their cultural background or nationality are all driven to seek and discover meaning in life and reasons to stay alive despite life’s suffering. This aligns with the previously discussed Franklian view of life meaning as innate and universal. This information is summarised in Fig 5:

\[(E) \text{Meaning in Life AND Reasons for Living can be used to predict suicide potential in young adults:}\]

Meaning in Life, Reasons for Living or both, along with their associated risk factors (hopelessness, mental pain, and negative thinking) were associated with Suicidal Behaviour in each of the studies included for this study. Thus, low Meaning in Life and reasons to stay alive can predict a higher risk of Suicidal Behaviour in young adults.

Moreover, as study one suggests, MiL can be employed in a therapeutic setting to firstly predict SB, and then as a treatment approach during therapy (Aviad-Wilchek & Ne’eman-Haviv, 2018).

**Quality Assessment:**

All papers received a ranking of “Good” on the National Institutes of Health (NIH) Quality Assessment (QA) Tool for Observational Cohort and Cross-Sectional Studies. This indicates that these studies are of a high standard and reliable. By examining some key criteria of the QA tool, we see the following. Firstly, all twelve studies included in this review had a clearly stated research question that guided the course of the investigation. All included studies also clearly reported the target population for the study and a participation rate of over 50 percent. In addition, participants in each of the included studies were recruited from similar populations and the inclusion and exclusion criteria were uniformly applied. These studies also indicated variance and effect estimates. Finally, potential confounding variables were measured and adjusted accordingly in all studies where this was required. For instance, Aviad-Wilchek and Ne’eman-Haviv (2018) identified any confounding variables by controlling for correlations between the research variables (SB and MiL), the age of the adolescent girls, and the degree of their religiosity.
Discussion

-Overview of findings:

This review aimed to synthesise relevant literature focused on the interplay between Meaning in Life, Reasons for Living and Suicidal Behaviour. It also aimed to elucidate the utility of meaning-centred practices for psychological treatment of suicidality in young adults. Twelve papers of suitable quality were analysed and revealed that both RFL and MiL act as protective factors against Suicidal Behaviour. In other words, when Meaning in Life is high, Suicidal Behaviour is reduced, and when an individual has strong RFL, Suicidal Behaviour is also reduced. This finding supports previous research (Contanza et al. 2019; Bakhiyi et al. 2016) that also observed the protective action of MiL and RFL on SB.

This review also revealed interesting findings in relation to Steger’s Search for Meaning in life and Presence of Meaning in life subscales. Both subscales appeared to provide different levels of protection against SB, and act in different ways. Search for Meaning in life provides less protection against Suicidal Behaviour. This supports Steger’s (2009) assertion that Search for MiL is anxiety provoking and may engender maladaptive behaviour. However, further research is needed to understand the link search for meaning in life and suicidal behaviour, as well as how these constructs can be used in clinical practice. Moreover, Presence of Meaning in Life was associated with greater protection against SB, and a reduced sense of entrapment. As suggested by Li et al. (2018), entrapment is an important symptom to focus on during treatment for suicidality. Entrapment engenders feelings of powerlessness and lost autonomy. If one feels trapped in a bad situation, they will be more likely to assume that their pain is endless and unavoidable. This aids in the development of suicidal intent, and subsequent behaviour. Thus, Presence of Meaning in life offers clinical utility by identifying a key clinical marker of risk. It also links MiL to RFL via entrapment and demonstrates the close relationship between these two constructs.

Additional findings emerged in this study that were notably striking. It emerged that the relationship between hopelessness and SB was influenced by both Meaning in Life and Reasons for Living. This draws attention to a possible shared mechanism of action between these two constructs. Perhaps via hopelessness MiL and RFL equally reduce the risk of SB. In this way, by increasing feelings of hope in one’s life, MiL and RFL may also positively impact SB. Future research may explore this link further to determine whether hopelessness acts as an intermediary variable between these constructs. It may also explore the link between hopelessness, mental pain, and life regard. These constructs are salient considerations for suicide research. Although it is clear that MiL and RFL at as protective factors against suicide, further exploration is needed as to how this effect is achieved. Risk factors such as Hopelessness and Life Regard may hold the key to understanding this.

Cultural aspects of Meaning in Life and Reasons for Living also emerged from the analysis. In the papers cited for this review, cultural variations did not produce differences in the protective action of Meaning in Life on Suicidal Behaviour. However, as these studies used quantitative survey designs, some nuanced aspects of culture were potentially not identified. It may be that there is a shared universal
protective effect of MiL, but how meaning is interpreted and lived cross-culturally varies. The countries where participants came from in these studies, USA, Israel, Canada, China, Netherlands, Spain all have varying religious, political, and historical-cultural contexts. Individuals embedded in these cultures may experience completely unique forms of Meaning in Life and Reasons for Living. These experiences are a product of their culture and own individuality. For instance, as numerous cultural and value-based differences exist between the USA and China, the way meaning in life is sought and ultimately lived may be fundamentally different. In the West, there is traditionally a focus on the individual and the pursuit of self-actualisation, whereas in the East people remain more family orientated and base their societies on more of a collectivist philosophy (Goziev, 2014). Despite these potential differences however, this review found a universal influence of MiL and RFL on SB.

Finally, the findings of this study suggest that Meaning in Life and Reasons for Living assessment tools can be useful in predicting risk of SB. This points to the utility of these constructs in clinical psychology for individuals at risk of SB. For instance, assessment tools such as the MILQ, Reasons for Living Inventory and Beck Hopelessness Scale may be useful screening measures for all individuals reporting current or past suicidal ideation during their initial psychological assessment. As previously mentioned, Aviad-Wilchek et al. (2018) suggest that meaning-centred approaches can assist psychosocial recovery and reduce SB. Given the current global emergency with COVID19, where hope, MiL and RFL may be hard to find, it is now more important than ever to address these issues head-on in psychological services in the UK and elsewhere to effectively aid clients with their distress. Whether or not isolation and lockdowns are causing or exacerbating psychological distress, psychological services around the world should be equipped to cope with these new presentations, which includes an understanding of the existential issues they generate. This is especially important for young adults, who are more at risk of psychological distress, including anxiety, depression, and uncertainty, during the pandemic than older adults (Glowacz & Schmits 2020).

**Strengths and Limitations:**

Overall, the findings of this systematic review set the stage for future studies on Meaning in Life and Reasons for Living- including the associated risk factors hopelessness, Life Regard and Mental Pain. This paper is the first of its kind to explore the influence of MiL and RFL in combination on SB. It has presented a clear and effective narrative synthesis of twelve studies that corresponded to carefully selected inclusion and exclusion criteria. The included studies were also of good quality and recently published within the last twenty years. This study highlighted the important role of MiL and RFL on suicidality, and the potential of utilising these constructs in clinical risk assessment/treatment. Overall, this is a very exciting area of psychological research that remains under researched. It is hoped that meaning-centred approaches to the treatment of SB are further researched and developed in the future so that they become go-to assessment and treatment tools in clinical practice.
Despite the strengths of this study, there are several limitations that must be addressed. Firstly, the Quality Assessment of the included studies was conducted by one researcher only, which may have increased the likelihood of bias in the responses. It is recommended by the NIH that two or more researchers conduct a QA assessment to minimise bias, however this was not possible given the time and budget constraints of this study. Moreover, another limitation of this study can be found in the search strategy. As an individual researcher was involved in this review, it was not possible to search in all databases available online and identify all relevant studies. In this way, there is a risk of accidentally excluding some relevant studies. In order to reduce the effects of this limitation, the sourcing strategy was repeated three times. This aimed to avoid accidental exclusion of any relevant studies. Additionally, only two of the twelve included studies mentioned the subscales of MiL - “Search for Meaning” and Presence of Meaning’. This was disappointing as a higher presence of these constructs in the included studies would have further bolstered the conclusions reached. Finally, only one of the twelve studies explored MiL in elderly adults, which made it impossible to draw comparisons with younger adults.

It is interesting that most of the studies on MiL, RFL and Suicidal behaviour tend to recruit young adults and undergraduate students. This is most likely because it is easier to locate and recruit young university students than elderly adults. However, future research into MiL/RFL needs to focus on elderly populations in more detail, as well as middle aged adults. This will provide a more holistic picture as to what MiL and RFL are, and how they change over time. It would also be useful for future research to explore gender differences in how MiL and RFL influence Suicidal Behaviour. This would again provide a broader overview of these constructs.

Conclusion

The conclusion that MiL and RFL offer universal protection against SB is promising for the psychological treatment of suicidal young adults. Future investigations will reveal if this effect is evident to the same extent across older age groups and different genders. Finally, although MiL and RFL may seem like vague philosophical concepts, they have major implications for psychology. They describe a lasting state of purpose in life or duty to somebody or to God. The key is that meaning is always to be found outside the individual- within the Transcendent values of life. If navigated effectively in a therapeutic space, the suffering that drives people to engage in SB may in fact be useful to guide the realisation of meaning. The meaning of life is not found in suffering, but it is perhaps best revealed in the lessons we learn from suffering.

Declarations

Competing interests: The author declares no competing interests.

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**Figures**

| Presence of Meaning | Search for Meaning |
|---------------------|--------------------|
| Positive            | Mixed              |
| Resilience to stress| Basic motivational need |
| Increased overall psychological well-being | May be a sign of maladaptive psychological functioning and anxiety |
Figure 1

Steger’s MiL Model

| Inclusion criteria                                      | Exclusion criteria                                      |
|--------------------------------------------------------|--------------------------------------------------------|
| 1. Quantitative study design                           | 1. In any language other than English                   |
| 2. Uses operationalised form of MiL/RFL                | 2. More than 20 years since publication                 |
| 3. Clinical, non-clinical and culturally diverse       | 3. Does not make statistical inferences about the       |
|   populations under the age of 35                      |   relationship between Mil or RFL (Qualitative studies) |
| 4. Cross sectional, longitudinal or survey-based       | 4. Investigates the effectiveness of a psychometric     |
|   design                                               |   tool only. E: G: Internal consistency of MILQ.       |

Figure 2

Summary of Inclusion and Exclusion Criteria
**Figure 3**

CONSORT flow diagram illustrating the selection process of papers:
| Study | Population | Objectives | Measures | Outcomes |
|-------|------------|------------|----------|----------|
| 1. Abarca & Monroy (2018) | Is to identify and explore the factors that influence the decision to take a counterproductive action. | 1. Explore and compare how different factors influence the decision to take a counterproductive action. | 1. Demographics | 1. The results indicate that the factors that influence the decision to take a counterproductive action are complex and multifaceted. |
| 2. Bagge et al. (2013) | American undergraduate psychology students n=127 | To determine whether stress can explain the association between mental health problems and suicidal thoughts and behaviours. | 1. Beck Depression Inventory (BDI) | 2. The results suggest that stress is a significant predictor of suicidal thoughts and behaviours. |
| 3. Christensen et al. (2020) | American undergraduate students with a lifetime history of TB n=218 | To investigate the role of self-esteem and self-efficacy in the prediction of suicidal ideation. | 1. Beck Depression Inventory | 2. The results indicate that low self-esteem and low self-efficacy are significant predictors of suicidal ideation. |
| 4. Emmons & Sorrentino (2000) | Canadian University Undergraduate students n=228 | To investigate the relationship between social support and suicidal ideation. | 1. Social Support Questionnaire | 2. The results suggest that low levels of social support are associated with an increased risk of suicidal ideation. |
| 5. García-Medina et al. (2019) | Spanish Bobes et al. (2019) | To explore the relationship between depression and suicidal ideation. | 1. Beck Depression Inventory | 2. The results suggest that depression is a significant predictor of suicidal ideation. |
| 6. Harkins & Bever (2018) | American undergraduate students n=39 | To investigate the relationship between social support and depressive symptoms. | 1. Social Support Questionnaire | 2. The results suggest that social support is associated with lower levels of depressive symptoms. |
| 7. Lew et al. (2000) | Chinese university students n=170 | To investigate the role of social support and social skills in the prediction of suicidal ideation. | 1. Social Support Questionnaire | 2. The results suggest that social support and social skills are associated with lower levels of suicidal ideation. |
| 8. Lee et al. (2016) | Patients with depression at a Chinese outpatient department n=115 | To investigate the relationship between social support and depressive symptoms. | 1. Social Support Questionnaire | 2. The results suggest that social support is associated with lower levels of depressive symptoms. |
| 9. Mancilla et al. (2003) | University students n=115 | To investigate the relationship between social support and suicidal ideation. | 1. Social Support Questionnaire | 2. The results suggest that social support is associated with lower levels of suicidal ideation. |
| 10. Oertlie et al. (2018) | Suicide/heterosexual patients n=61 | To investigate the relationship between social support and suicidal ideation. | 1. Social Support Questionnaire | 2. The results suggest that social support is associated with lower levels of suicidal ideation. |
| 11. Oertlie & Metals (2020) | Study 1: Danish undergraduate psychology students n=24 | To investigate the relationship between social support and suicidal ideation. | 1. Social Support Questionnaire | 2. The results suggest that social support is associated with lower levels of suicidal ideation. |
| 12. Rogers et al. (2018) | Students from a Canadian university n=1200 | To investigate the relationship between social support and suicidal ideation. | 1. Social Support Questionnaire | 2. The results suggest that social support is associated with lower levels of suicidal ideation. |

Figure 4

Data summary of all papers selected for study:
| Israeli Adolescent Girls | University Undergrad. USA | Clinical Populations | University Undergrad. Canada | University Undergrad. China | University Undergrad. Dutch |
|-------------------------|---------------------------|----------------------|-----------------------------|-----------------------------|-----------------------------|
| Study 1                 | Study 2,3,6, 9, 11        | Study 5, 8, 10       | Study 4 and 12               | Study 7                     | Study 11                    |

**Figure 5**

Populations Included in the Review