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Abstract

Suicide is a gendered phenomenon, where male deaths outnumber those of women virtually everywhere in the world. Quantitative work has dominated suicide research producing important insights but only a limited understanding of why more men die by suicide. We conducted a qualitative meta-synthesis and systematic review of 20 years of narratives both from men who are suicidal and from people who are bereaved by male suicide to identify putative risk and recovery factors. We identified 78 studies that encapsulated insights from over 1,695 people. Using Thomas and Harden's Thematic Synthesis Method, our analysis is built on 1,333 basic codes, 24 descriptive themes, and four analytical themes. We noted an association between cultural norms of masculinity and suicide risk in 96% of studies. Norms relating to male emotional suppression, failing to meet standards of male success, and the devaluing of men's interpersonal needs appeared to be associated with dysregulated psychological pain and suicide risk. Although masculinity is not pathological, we speculate that the interaction and accumulation of cultural harms to men's emotions, self, and interpersonal connections may potentially distinguish men who are suicidal from men who are not. Supporting men to understand and regulate emotions and suicidal pain, expanding possibilities for masculine identity, and building meaningful interpersonal connections were reported as helping support recovery from suicidal crises. Though our sample was predominantly White, cis-gendered, and English speaking, and the underlying research designs prevent strong causal inferences, we discuss possible implications of these findings for male suicide intervention and suggestions for future research.

Keywords: male suicide, risk factors, recovery factors, systematic review, qualitative metaanalysis, meta-synthesis, suicide prevention *Public Significance Statement.* This systematic review synthesizes the worldwide English language qualitative research literature on suicide risk and recovery factors in men. Findings suggest a novel framework for understanding the key dynamics involved in suicide risk and recovery, based on the reciprocal relationship between masculine norms, emotions, selfconcept, interpersonal connections, and psychological pain.

Male suicide risk and recovery factors: A systematic review and qualitative metasynthesis of two decades of research

Suicide is one of the most complex human behaviors to understand, transgressing our biological drive to survive and reproduce, and the cultural idea of existence as sacred (Aubin et al., 2013; Perry, 2014; Ringel, 1976; Soper, 2018). An estimated 703,000 people die by suicide each year (WHO, 2021), with millions more attempting, planning, or thinking about suicide (Centers for Disease Control and Prevention, 2021). It is estimated that 9.2% of adults have had serious thoughts of suicide, 3.1% have made suicide plans, and 2.7% have attempted (Glenn & Nock, 2014). Suicide has painful ripple effects across communities, with each suicide estimated to affect as many as 135 people (Cerel et al., 2019). Male suicides outnumber female suicides in virtually every country in the western world, with the ratio of male-to-female suicides at 1.7 (Aubin et al., 2013; Lengvenyte et al., 2019). The male:female suicide ratio is more pronounced in high-income countries, with suicide rates closer to three times higher in men and more equal in low- and middle-income contexts (WHO, 2021). In the United States, 37,256 men died by suicide in 2019 (Centers for Disease Control and Prevention, 2021), and death by suicide was 3.63 times more common in men than women in 2019 (American Foundation for Suicide Prevention, 2021). In the UK, three-quarters of all suicides in 2018 were male (Samaritans, 2019). Canetto and Sakinofsky (1998) described a gender paradox in suicidal behavior whereby more women attempt, but more men die by suicide. This paradox is not well understood (Möller-Leimkühler, 2003). The scale of male suicide means investigations into its causes and ways to reduce its prevalence, are urgent.

Psychological Theories of Suicide

Suicide is a complex behavior that emerges in response to multiple, interacting factors ranging from the epigenetic, such as changes to DNA methylation and histone modifications in response to early life adversity (Turecki et al., 2019); to structural factors, such as

education opportunities, recessions, and wars (De Leo, 2002; Pirkis et al., 2016). In recent years, various theories have been operationalized to explain suicidal behaviors from a psychological perspective (O'Connor & Nock, 2014). Given the complexity of suicide, researchers have recognized that it would be difficult for one theory to explain all suicidal incidences, and different theories have emphasized the role of different psychological phenomena (Gunn, 2017; Leenaars, 1996). We summarize some of the major theories and the psychological phenomena they indicate as important to a suicidal crisis in the subsequent sections – see also Figure 1.

Psychological Pain and Suicide

Shneidman (1993; 1998) described suicide as a drive to escape the psychological pain that stems from a diverse range of unmet psychological needs. For Shneidman, suicidal behaviors were activated when psychological pain was experienced as reaching unbearable levels. In this theoretical context, understanding suicidal behaviors is about understanding: 1. An individual's exposure to psychological pain (exposure), 2. Their tools to regulate pain (regulation), and 3. Their threshold for when pain has become intolerable (threshold). Some people may experience high exposure to psychological pain through extremely distressing and traumatic events, yet, if they have tools to regulate their psychological pain in a way that preserves well-being, their pain may remain within a manageable threshold. A person with high psychological pain exposure and poor regulation is at risk of exceeding the threshold of how much pain they can tolerate. Too much unregulated psychological pain was suggested by Shneidman to be "the author of suicide" (1998, p. 2). Suicide prevention is conceptualized as supporting individuals to meet their thwarted psychological needs and regulate their psychological pain. For Shneidman, suicide was not a mental illness but "a phenomenological event" (1993, p. 146). People who died by suicide were psychologically distressed but not necessarily clinically ill.

Psychological Pain, Suicide, and the Self

Baumeister's (1990) 'Escape from Self' theory focused on psychological pain relating to thoughts and feelings towards self. He proposed the following six steps to a suicidal crisis that he conceptualized as driven by aversive self-awareness: 1. A person experiences an awareness that their life conditions are not as expected; 2. Blame for this is attributed to the self, which; 3. generates a negative evaluation of self; and 4. negative feelings towards the self. 5. The person tries to escape awareness of this aversive sense of self through processes of cognitive deconstruction that seek to shut down and limit cognitive awareness by focusing on less meaningful and cohesive forms of thought. To maintain this state, individuals can become passive to long-term goals. In a struggle to avoid meaning, these processes can lead to emotional emptiness and further negative affect. 6. A deconstructed mental state can lower inhibitions and increase the possibility of suicide as long-term consequences of death are not fully comprehended. For Baumeister, recovery was partly about developing new interpretations of life events that allowed for a more compassionate assessment and understanding of the self.

Psychological Pain, Suicide, and Connections with Others

Building upon Shneidman's work, Leenaars (1996) 'Multidimensional Malaise' theory of suicide, posited that suicide results from the psychological pain stemming from both intrapsychic and interpersonal challenges. Humans are social beings, and the propensity to accrue psychological pain is woven into our interpersonal dynamics. As such, Leenaars described suicide as an "intrapsychic drama on an interpersonal stage" (p. 224). Leenaars proposed eight dimensions to suicidal pain, divided into five intrapsychic, and three interpersonal factors. Suicide was viewed as a 'Multidimensional Malaise' that resulted from the accumulation of psychological pain due to the interaction of these factors. Intrapsychic factors include unmanageable psychological pain, cognitive constrictions (e.g., rigidity in thinking), and a weakened ego and sense of self. Interpersonal factors include issues with establishing or managing relationships, relationship losses, abandonments, and rejections. Leenaars proposed that a single event did not cause suicide, but rather the interaction of psychological pain in response to challenges in the intrapsychic and interpersonal domains.

Evolutionary Theories of Suicide

Soper (2018) suggested that given the gravity of suicide, it is important for theories to consider why hypothesized risk phenomena would be so significant that they may bring a person to the point of finding existence too painful to bear. Placing theoretical phenomena in an evolutionary context is potentially helpful in elucidating some of these questions. Evolution does not leave a manual explaining its development, so these theoretical explorations are only speculative. Nonetheless, considering evolutionary pressures for effective regulation in specific domains of human life could help shape hypotheses as to why the dysregulation of certain phenomena could lead to the emergence and enactment of a behavior contrary to the evolutionary drive to live.

Gunn's (2017) 'Social Pain Model' placed the concept of psychological pain and our need for connection in an evolutionary context. Gunn cited the evidence primarily from Eisenberger and Lieberman (2004) that suggested social and physical pain may rely on "similar neural processes" and that as sociality became intrinsic to mammalian survival, "the neural processes related to physical pain were likely co-opted by evolution to cement social bonding and to promote avoidance of social rejection" (Gunn, 2017, p. 284). Gunn's model suggests that the biological pain system—originally designed to respond to physical pain may have come to respond to incidents of psychological pain as well. In a species where social connection became increasingly critical to survival, this co-option may have provided humans with a biological mechanism by which to regulate their behavior in service of maintaining social safety and indicate when they might be in social danger. Pain is an essential survival mechanism shaped by evolution to capture an organism's attention and drive action to mitigate the pain (Finlay & Syal, 2014; Gunn, 2017; Soper, 2018). We are not passive to pain; we try to find solutions to it (Wall, 2002). Suicide may suggest that a person's psychological pain is so intense, and options to alleviate it so exhausted, that suicide may be perceived as the only way to end the pain. As such, Gunn conceived of suicide as an evolutionary by-product of aversive states of social pain stemming from social rejection, exclusion, or isolation. Soper (2018) went further in his 'Pain-and-Brain' theory and claimed suicide was the detrimental by-product of not just the evolution of pain but also the mature human brain that could conceive and enact suicide to escape that pain.

Ideation to Action Models

Joiner's 'Interpersonal Theory of Suicidal Behavior' (2005) was the first of a new generation of suicide models developed to help differentiate between factors related to suicidal ideation from factors that led to the rarer behavior of making an attempt or dying by suicide. Joiner built his theory around three key constructs comprising two dimensions each; 1. 'thwarted belongingness', comprised of loneliness and the absence of mutually caring connections; 2. 'perceived burdensomeness', comprised of the belief that a flawed self is a burden to others and aversive self-hatred; and 3. 'increased capability for suicidal action', constituted by increased tolerance to pain and a diminished fear of death owing to exposure to distressing experiences such as childhood adversity, trauma, and violence. Joiner described the suicide causal pathway as such: thwarted belongingness and perceived burdensomeness are sufficient causes for the emergence of thoughts of suicide; when these states are perceived as unchangeable, hopelessness causes an active suicidal desire; suicide plans and attempts emerge when a person also has acquired capability in terms of fearlessness about death and pain.

More recently, O'Connor proposed the 'Integrated Motivational-Volitional Model' (O'Connor, 2011; O'Connor & Kirtley, 2018), a tripartite model of suicidal behavior. In the 'pre-motivation phase' background factors such as childhood adversity and biological/genetic vulnerabilities increase suicide risk through their impact on the other model parts or phases. The 'motivation phase', describes the psychological processes that lead to suicidal ideation. Here, proximal feelings of defeat and humiliation contribute to a sense of hopelessness, entrapment, and thoughts of suicide. The 'Volitional Phase' describes the factors that lead to suicidal action. Like Joiner's model, these include increased capability, but O'Connor acknowledged other contributors such as past exposure to suicide behaviors (self or others) and impulsivity. Belongingness and burdensomeness are psychologically critical to Joiner's model, for O'Connor feelings of defeat and entrapment are vital (O'Connor & Nock, 2014).

In Klonsky and May's 'Three-step Theory' (2015), the interaction of pain, hopelessness, connections, and capability is suggested to mediate ideation-to-action. They proposed that thoughts of suicide developed due to the interaction of pain (usually psychological) and hopelessness. Unlike Joiner, who conceptualized thwarted belongingness as a critical *risk* component, Klonsky and May stated that suicidal ideation can develop without disrupted connections, and therefore connections should not be operationalized from a risk perspective. Instead, they conceived connections as a *protective* factor in that they could buffer a person from suicidal action. They also broadened connections beyond interpersonal dynamics to include "any sense of perceived purpose or meaning that keeps one invested in living" such as a job or religion (p. 117). Like Joiner, they believed that acquired capabilities guide the transition to suicide attempts.

Fluid Vulnerability

One last significant theoretical contribution has been Rudd's (2006) 'Fluid Vulnerability Model' (FVT), which sought to help clinicians assess imminent suicide risk. The FVT conceived that everyone carries an individual baseline risk for suicide and an individual threshold for when a suicidal mode will be activated. The suicidal mode represents acute risk and imminent danger to life. The suicidal mode has cognitive, affective, physiological, and motivational components and is underpinned by four core beliefs: "unlovability, helplessness, poor distress tolerance, and burdensomeness" (Rudd, 2006, p. 356). Critically the FVT explains that, as the body cannot sustain heightened arousal states, the suicidal mode is necessarily temporal, and suicide risk will naturally ebb and flow. People may experience recurrent suicidal crises, but each one is a discrete, time-limited episode. The FVT can help clinicians differentiate between enduring risk factors that contribute to baseline risk and warning signs indicating that the suicidal mode is active and a threat to life is more imminent.

In summary, psychological domains identified as significant across different suicide theories include psychological pain and tools to regulate it (Gunn, 2017; Klonsky & May, 2015; Leenaars, 1996; Shneidman, 1993; Soper, 2018), perceptions, understandings, and feelings towards self (Baumeister, 1990; Joiner, 2005; Rudd, 2006), interpersonal connections and belongingness (Joiner, 2005; Klonsky & May, 2015; Leenaars, 1996; Rudd, 2006), hopelessness (Joiner, 2005; Klonsky & May, 2015; O'Connor, 2011), and defeat and entrapment (O'Connor, 2011). Additionally, factors that mediate ideation to action (Joiner, 2005; Klonsky & May, 2015; O'Connor, 2011) and factors that contribute to baseline risk versus active suicidal mode have been identified as theoretically significant (Rudd, 2006). Franklin et al. (2017) noted that given the range of psychological factors identified as theoretically important, either some of these theories are fully/partially inaccurate and/or apply to specific populations only, and to progress the field, we must "winnow the accurate theories or accurate theory elements from the less accurate theories" (p. 1). Within these

theoretical frameworks, there is a critical need to understand if and/or how they can help explain the higher prevalence of male suicide.

Empirical Suicide Risk and Recovery Factors

Establishing reliable suicide risk factors is vital for the development of effective theory, clinical assessments, and prevention interventions (Franklin et al., 2017). Non-gender specific risk factors considered to have good empirical support include a connection to suicide either through a past attempt (Barzilay & Apter, 2014; Van Orden et al., 2010) or a family history of suicide (Fazel & Runeson, 2020; O'Connor & Nock, 2014); early life adversity and attachment challenges (Fazel & Runeson, 2020; O'Connor & Nock, 2014; Turecki et al., 2019; Zortea et al., 2019; Zortea et al., 2021); interpersonal stressors, separation and poor-quality relationships (Kazan et al., 2016; O'Connor & Nock, 2014); and psychiatric disorders and drug and alcohol misuse (Borges et al., 2017; Fazel & Runeson, 2020; Klonsky et al., 2016; Turecki et al., 2019). Personality qualities such as anxiety and impulsive-aggressive traits (Turecki et al., 2019) and perfectionism (O'Connor & Nock, 2014), as well as specific emotional states of hopelessness (Beck et al., 1985), and entrapment (O'Connor & Portzky, 2018), have also been linked to suicide. There has been less research into suicide resiliency factors (O'Connor & Nock, 2014). Previous systematic reviews have suggested non-gender specific protective factors include psychological shifts in relation to self, including positive self-regard, self-esteem, and self-regulation (Harris et al., 2020; Johnson et al., 2011; Shahram et al., 2021); and increased social connectedness (Shahram et al., 2021). Psychotherapies such as Cognitive Behavioral Therapy and Dialectical Behavior Therapy (Turecki et al., 2019), some pharmacological treatments, and policy changes such as lethal means restriction have also been shown to be protective (Zalsman et al., 2016).

In terms of understanding male suicide risk specifically, to the authors' knowledge, there has only been one quantitative systematic review of male suicide, which identified 68 different risk factors (Richardson et al., 2021). Risk factors with the most compelling evidence were: 1. substance dependency; 2. relationship status (being unmarried, single, divorced, or widowed); and 3. a diagnosis of depression (Richardson et al., 2021). Other suicide risk factors commonly associated with men include unemployment and low income (Mallon et al., 2019; Qin et al., 2003). Coleman et al. (2020) undertook secondary analysis of a nationally representative study of adolescents to adulthood in the US which showed an association between adherence to masculine norms such as competitiveness, emotional restriction, and aggression with suicide deaths in men. Proximal risk factors linked to male suicide include the use of lethal means (Möller-Leimkühler, 2003; Sher, 2020; Swami et al., 2008). In the United States, nearly 92% of firearm suicides were male (Kaplan et al., 2009). Evidence has also suggested men are more likely to die by suicide on a first attempt, without a mental health diagnosis, and without contact with mental health services (Jordan & McNiel, 2020; Tang et al., 2022). Struszczyk et al. (2019) conducted a scoping review of male suicide prevention and found that multimodal interventions which target change at multiple levels, i.e., psychological support and psychoeducation for men who are suicidal, training for medical professionals and community 'gatekeepers', and broader suicide awareness campaigns, were effective. See Supplementary Material A for key findings from other suicide risk and resilience systematic reviews.

Critical Suicide Knowledge Gaps

Despite the identification of multiple risk and recovery factors, recent reviews have suggested that progress in the field of suicidology has been limited. Franklin et al.'s (2017) meta-analysis of the predictive power of suicide risk factors found that our ability to predict suicide remained only slightly better than chance after over 50 years of research. Similarly, a recent meta-analysis by Fox et al. (2020), on the effectiveness of suicide prevention interventions, has suggested that "across five decades, intervention efficacy has not improved" (p. 1). These are sobering findings. Although lives have undoubtedly been saved and supported by commendable work within suicide research and prevention, there is a substantial dearth in understanding suicide risk and recovery with significant clarity.

The lack of concrete findings in suicidology speaks to the complexity of researching suicide, which is further complicated by the absence of the phenomenon under investigation. People who die by suicide may be psychologically distinct from those who attempt suicide or experience suicidal ideation. A body of research exploring gendered differences in suicide notes has sought to elicit insights from these final communications. Leenaars' (1988) study of predominately US suicide notes, reported no known sex differences. Lester's (2008) study of gender differences in 40 suicide notes from Germany found that men were more concerned with mentioning others than on causation and that men wrote longer notes and used fewer unique words, "fewer insight words (such as think, know consider) (...) fewer tentative words (such as maybe, perhaps) (...) and more words concerned with down (such as down, below, under)" (p. 798). Canetto and Lester's (2002) study of 56 US suicide notes found that in male and female notes, romantic issues were mentioned more frequently than problems related to school or work. Although suicide notes can provide insight into the final moments of a person's unendurable despair, their contents often lack contextualization and can be challenging to interpret (Leenaars, 1988). Suicide notes can vary from one word to multiple pages, and only between 3-42% of people who die by suicide leave a note (Paraschakis et al., 2012). Some researchers caution that conclusions drawn from notes only will contain biases and cannot be generalized to all deaths by suicide (Leenaars, 1998; O'Connor et al., 1999). It is important to note that this applies not only to suicide notes but to all facets of suicide research. In short, while suicide notes can offer useful insights into the final information a

person may want to communicate, their contents must be interpreted with caution and contextualized within a larger understanding of suicide, and they do not tell us too much about male risk specifically.

Understanding who is most at risk of suicide is a major public health concern but developing reliable suicide risk factors is complex (Zortea et al., 2020). Suicide research is constantly evolving, with new findings expanding upon previously established risk factors (Franklin et al., 2017). It is commonly cited that between 90%-95% of people who die by suicide have a mental health diagnosis (Bertolote & Fleischmann, 2002; Cavanagh et al., 2003; Van Orden et al., 2010). Yet, analysis of people who die by suicide using a firearmpredominately men – has suggested that they are less likely to have a long-term mental health diagnosis (Kaplan et al., 2009). Of course, we do not know the reality of these people's mental health. For example, they may never have accessed medical support and may have been living with an undiagnosed condition. The point is that a mental health diagnosis cannot necessarily be relied upon as a robust indicator of suicide risk, indeed, the vast majority of people with a mental health diagnosis will not die by suicide. Impulsivity was once thought to be a reliable risk factor but is no longer considered so (O'Connor & Nock, 2014). Past suicidal behavior is considered an established risk factor, but men are more likely to die on a first attempt (Jordan & McNiel, 2020). These challenges demonstrate the difficulty of establishing generalizability about suicidal behavior. Despite the proliferation of suicide risk factors, we have no reliable predictors of who is most at risk (Danchin et al., 2010; Franklin et al., 2017).

Establishing reliable risk factors is challenging for a multitude of reasons including; 1. suicide is a complex behavior and has genetic, psychological, clinical, environmental, cultural, and evolutionary components (O'Connor & Kirtley, 2018); 2. suicide has a low base rate – although every death is a tragedy, statistically, not that many people die by suicide—

those that do die can't be studied and might be psychologically different from those who attempt and/or have thoughts of suicide (O'Connor & Kirtley, 2018; Zalsman et al., 2016); 3. risk factors such as early-life adversity, or unemployment are relatively common and don't differentiate from people in general, or psychopathology risk factors, and so offer limited utility in identifying who is at proximal suicide risk (Crocker et al., 2006; Franklin et al., 2017); 4. established suicide risk factors may be distal and predict thoughts of suicide which are more common to the population and not suicide attempts which are rarer and potentially psychologically distinct (Glenn et al., 2017); 5. research has often focused on studying single risk factors and we do not have sufficient understanding of risk factors in dynamic interaction and the psychological pathways that lead to suicide (Franklin et al., 2017; Van Orden et al., 2010); 6. suicide states are temporal—ideation and attempts can come on quickly—and we need more real-time data collection to understand how proximal risk evolves (O'Connor & Kirtley, 2018; Rudd, 2006). All these factors and more have impacted our ability to predict suicide and develop effective interventions (Glenn et al., 2017).

Qualitative Research to Help Fill Knowledge Gaps

Researchers have called for a deeper understanding of the psychological pathways that underpin suicide risk, including understanding how risk factors interact (Bryan & Rudd, 2016; Glenn et al., 2017; Klonsky & May, 2015; O'Connor & Nock, 2014). Qualitative work has been identified as a way to contextualize risk factors identified by quantitative research and fill gaps in our collective knowledge (Chandler, 2012; Kryinska, 2014; O'Connor & Kirtley, 2018; Tang et al., 2022; Toomela, 2007). These gaps include the role of gender in suicide (Payne et al., 2008; Scourfield, 2005)—despite the higher rates of male deaths, gender has often been taken as a given and not robustly examined as a potential contributory factor (Lee & Owens, 2002; Swami et al., 2008); the role of male emotional distress (Ridge et al., 2011); and the role of social and cultural contexts (Hjelmeland & Knizek, 2010;

Samaritans, 2012; White, 2015). Culture permeates human behavior, including the meanings and understandings shared by people (Heine, 2007; Laubscher, 2003); for example, what emotions are considered socially acceptable for men? What constitutes a man of social value? Answers to these questions are embedded in cultural norms and meaning systems and potentially play a critical role in contributing to the psychological pain individuals endure depending on whether they meet these standards or not (Colucci, 2013). Understanding how these culturally situated norms and meaning systems are internalized and impact upon the psychology of men who are suicidal is vital (White, 2015). Qualitative work can potentially provide a richer contextualization for how suicidal thoughts, feelings, and behaviors emerge in individual minds and how cultural ideas affect an individual's psychology (Hjelmeland & Knizek, 2010; Lee & Owen, 2002).

The need for qualitative work is not to diminish the valuable contributions quantitative work has yielded (Fitzpatrick, 2011; Kral et al., 2017), nor to eulogize the contributions that qualitative work can make (Bantjes & Swartz, 2017). It is simply to acknowledge that reliance on a single research method can only provide an incomplete view of any behavior, especially one as complicated as suicide, and all scientific methods are required to thoroughly examine its emergence (Canetto & Cleary, 2012; Cleary, 2012; Hjelmeland & Knizek, 2010; Leenaars, 2002, Scourfield, 2005; Shneidman, 1993).

Like other areas of research, psychological suicidology has often been polarized between quantitative and qualitative methods (Goldney, 2002; Leenaars, 2002). Quantitative methods provide validity, reliability, and generalizability in ways that cannot be directly replicated by qualitative work (Noble & Smith, 2015). However, quantitative work has been criticized for producing fragmentary lists of facts that, while valuable, do not always help explain underlying psychological processes (Hjelmeland & Knizek, 2010; Tang et al., 2022; Toomela, 2007). Qualitative work can yield in-depth data about the psychological mechanisms that drive suicidal behaviors, richly informed by the perceptions, experiences, and understandings of those with lived experience, generating theories and hypotheses to be tested by future work across all methodologies (Elliott et al., 1999; Hjelmeland & Knizek, 2010; Lester, 2002; Ojagbemi, 2017). Yet, small sample sizes mean results can be too subjective to offer generalizable conclusions (Fitzpatrick, 2011; Leenaars, 2002). Over the last 20 years, methodological guidelines for qualitative research have been developed to improve credibility and quality by setting standards for various procedures such as transparency of methods and analysis, reflexivity—making clear the role of the researcher and context in influencing data collection and interpretations—as well as evaluating the utility of findings and how much they explain and contribute to knowledge-bases (Grbich et al., 2008; Malterud, 2001; Mays & Pope, 2000; Noble & Smith, 2015; Stenfors et al., 2020). Suicidology requires cross-disciplinary research (O'Connor & Kirtley, 2018; Shneidman, 1993). All methodologies have their strengths and weaknesses, and the lack of concrete progress in suicidology has led to a growing recognition that qualitative and quantitative researchers need to work together to utilize each other's strengths in support of enhancing our understanding of this painful human plight (Goldney, 2002; Greenhalgh et al., 2016; Hjelmeland & Knizek, 2010; Lester 2002; Ojagbemi, 2017).

Qualitative Meta-Synthesis

As the demand for more qualitative work in suicidology increases, there is a need to robustly bring together the existing evidence base. To our knowledge, there has been no published qualitative meta-synthesis of male suicide research. As the quality and production of qualitative research has grown, qualitative meta-synthesis has become an increasingly popular tool for reviewing evidence bases (Lachal et al., 2017; Lewin & Glenton, 2018; Newman et al., 2006; Thomas & Harden, 2008). Qualitative meta-synthesis increases the generalizability, credibility, and validity of qualitative work by providing a triangulation of results across multiple studies (Finfgeld, 2003). By bringing individual studies together to integrate, amalgamate and interpret findings, qualitative meta-synthesis yields richer insights into an issue, enhancing the explanatory powers of individual qualitative studies (Erwin et al., 2011; Finfgeld, 2003; Paterson, 2012; Sandelowski et al., 2007; Siddaway et al., 2019; Xu, 2008; Willig & Wirth, 2018). To advance the male suicide research field, this review aims to synthesize how men who are suicidal, and people bereaved by male suicide understand male suicide risk and recovery factors across 20 years of research, in order to create a framework for what is already known and elucidate directions for future work (Levitt, 2018). Our research question was as follows: What are the potential common themes and psychological phenomena underpinning male suicide risk and recovery as perceived and experienced by men who are suicidal, and people bereaved by male suicide and experienced by men who are suicide risk and recovery as perceived and experienced by men who are suicide risk and recovery as perceived and experienced by men who are suicidal, and people bereaved by male suicide?

Method

Study Design

This review adhered to the PRISMA guidelines (Moher et al., 2009) for reporting systematic reviews of qualitative evidence (Figure 2). Various approaches to a qualitative meta-study have been proposed and there is some conceptual blurring in the procedural literature, with practitioners often modifying processes, and using terms such as "qualitative meta-synthesis" and "qualitative meta-analysis" interchangeably (Levitt, 2018; Paterson, 2012; Timulak, 2009; Willig & Wirth, 2018). Researchers have suggested that given the complexity of undertaking a qualitative meta-study, methodological flexibility is necessary, and tailoring methods to fit the needs of each review appropriate (Levitt, 2018) so long as researchers have ensured their process is clearly and robustly documented (Xu, 2008). To that end, we have attempted to fully account for our processes here and have made available in the supplementary materials all our documentation for future scrutiny and replicability (Xu, 2008).

Reflexivity and Positionality

It is widely accepted that researchers cannot bring pure neutrality to their work therefore it is important for potential biases to be disclosed (Elliott, Fischer, & Rennie, 1999; Malterud, 2001). The lead author of this study has loved ones who experience debilitating mental health conditions, as well as thoughts of suicide that have also led to suicide attempts. Other members of the research team, who were a mixture of mixed-methods clinical and health psychologists, have been personally bereaved by male suicide. The proximity to the research topic carried the risk, therefore, that personal biases influenced the interpretation of the data. In recognition of our own implicit and explicit biases, we employed a rigorous methodological approach-documented here-to ensure the validity and reliability of our findings, triangulated through multiple co-authors, peer reviewers, and the editorial process. Attride-Stirling (2001) noted that qualitative analysis is always a subjective endeavor and different interpretations can arise from the same data. Nonetheless, we believe our interpretation is rigorously supported by the review data, and all coding has been made available in the supplementary materials. This study aimed to produce useful insights to enhance our understanding of male suicide by striving to accurately represent the complex diversity of experiences evident within the studied population.

Search Strategy

The purpose of this review was to capture what is known about male suicide, so we opted for an inclusive search strategy that sought to capture as much available data as possible within certain parameters (Timulak, 2009). Together with an expert librarian, we developed an exhaustive, systematic search strategy. Searches were undertaken on Web of knowledge Core Collection and EBSCO Host on seven key databases: CINAHL, Medline, PsycARTICLES, Psychology and Behavioral Sciences Collection, PsycINFO, SocINDEX with Full Text, Web of Science: Core Collections. Siddaway, Wood, and Hedges (2019)

suggested that search terms and inclusion and exclusion criteria be relevant to the research questions, key variables, participants, and research design, and this guidance informed our search strategy development. Searches of indexed terms, titles, and abstracts were based on derivatives of the key variables' 'men' AND 'suicide' AND 'qualitative OR mixed methods.' Each database had bespoken indexed terms, so we created a targeted search strategy for each database (Lachal et al., 2017). See Supplementary Material B for complete search strategy.

Inclusion and Exclusion Criteria

Studies included in this review were required to meet the following criteria: 1. English language research published in the last 20 years in peer-reviewed journals; 2. Qualitative or mixed-methods research conducted anywhere in the world; 3. Participants aged 18 and over; 4. Participants included men who have experienced suicidal thoughts/feelings/attempts and/or people bereaved by male suicide. Quantitative studies were excluded in addition to research with only female participants who were suicidal or people bereaved by female suicide, as well as dissertations, reviews, and short reports.

Rationale for Exclusions

Around the turn of the century, scholars such as Elliott, Fisher, and Rennie (1999) and Yardley (2000) produced critical reflections and guidelines to improve the credibility and quality of qualitative work, with previous research considered weak in terms of rigor and transparency of process and analysis. We imposed a 20-year cut off on the data to acknowledge the heralding of these methodological improvements and to try to maximize appropriate quality within our sample. A 20-year timeframe also helped us accommodate sensitivity and specificity, i.e., sourcing a robust volume of studies (sensitivity) that could purposefully address our research questions (specificity) (Siddaway et al., 2019; Willig & Wirth, 2018). Whilst we wanted to have good sensitivity of reach, we also wanted to maintain specificity by ensuring findings were as relevant as possible to understanding male risk and recovery factors in contemporary environments—a 20-year framework felt appropriate for this. Like other qualitative meta-synthesis, we only sourced English language studies for practical reasons as this was the only language of the first author (Xu, 2008). Timulak (2009) recommended only published data be used in a qualitative meta-study as a form of quality control. We followed this protocol and excluded dissertations, in keeping with other qualitative meta-synthesis work (de Vos et al., 2017; Lachal et al., 2015). Siddaway et al. (2019) strongly advised against using the NOT search operator "because it can have odd implications for search results" (p. 760). For this reason, we focused on studies that specifically included men rather than a strategy that focused on excluding women. It is possible we missed studies this way. The decisions made are illustrative of potential gaps in all search strategies. Thomas and Harden (2008) noted that it is important to remember that although a quantitative meta-analysis needs to locate all studies to create accurate statistical insights, with a qualitative meta-synthesis, there is not the same urgency to source every potential paper on a topic. A qualitative meta-synthesis is seeking to establish a "conceptual synthesis" (Thomas & Harden, 2008, p. 3). As such, the emphasis is to identify themes across a body of evidence that contribute to a higher interpretive synthesis. If multiple studies present similar themes, their addition does not necessarily change the overall framework of the synthesis, and researchers can develop a comprehensive interpretation without needing to review all available studies. Thomas and Harden (2008) acknowledged that how this principle of conceptual synthesis gets applied is unclear, with a review team having to decide whether they have sourced sufficient studies to form a coherent analysis. We believe the studies sourced for our review have allowed us to achieve this goal.

Screening

A scoping search was conducted on January 14, 2020, and the review was then registered on PROSPERO (CRD42020166686) before the official screening process began.

Databases were searched on February 10, 2020. A total of 23,427 studies were extracted to ENDNOTE; 4,339 duplicates were removed, and the remaining 19,088 studies were screened by the first author (SB) for eligibility by title and abstract, removing 18,730 studies. To ensure rigor and reliability in the selection process, 20% of the abstract and titles were randomly selected, stratified by year of publication, and independently screened by two reviewers (CR & TZ). CR and TZ screened a total of 3,812 references for inclusion in the study (pair one: n = 1,905, pair two: n = 1,907). Cohen's κ was used to measure the interrater reliability of the screening process. The analysis revealed $\kappa = 0.50$ (95% CI [0.34, 0.66], Z = 4.26, p < 0.0001, 98% agreement rate) for pair one and $\kappa = 0.30$ (95% CI [0.11, 0.50], Z = 2.56, p = 0.0051, 97.5% agreement rate) for pair two, both indicating 'moderate agreement' between the two raters of each pair, based on Landis and Koch (1977) classifications. A third referee was consulted to resolve non-agreements between authors. At the full-text screening stage, each pair screened five publications. Full agreement between both pairs of raters was achieved during the latter stage. A full-text review was performed by SB on the remaining 358 studies leaving 67 for the final review. As per other qualitative meta-studies, reference lists within included studies were hand-checked for relevant articles (Timulak, 2009). An additional 10 studies were identified from references. One study identified by the screening review as omitted by SB was included, resulting in a total sample of 78 studies.

Quality Appraisal

We employed the NICE Quality appraisal checklist for qualitative studies to assess each study's quality (NICE, 2012). This tool includes a 14-measure checklist covering theoretical approach, study design, data collection, trustworthiness, analysis, and ethics. The NICE appraisal tool employs a 3-level global scoring system ranging from '0', meaning few checklist criteria are met, and study conclusions are unreliable; to a score of '++' indicating all/most of the checklist criteria are met, and conclusions are reliable. Within the selected publications, 54 studies were rated ++, 24 studies were rated +, and no study scored 0. Of the studies reviewed, 20% were second reviewed by CR to verify this scoring with 100% agreement. Studies generally scored a lower rating because they gave little insight into how the role of the researcher influenced the work or did not adequately describe the context and setting for data collection. These gaps are often because qualitative work is published in journals designed for quantitative work and word counts restrict the amount of methodological information qualitative researchers can share (Lachal et al., 2015; Levitt, 2018). Similar to other meta-synthesis, lower quality studies contributed less to our analysis (Lachal et al., 2015). Of the 1,333 codes generated for this review, 83% came from studies rated ++ and 17% from studies rated +. See Supplementary Material C for 'Quality Appraisal Tool.'

Data Extraction

There are various ways of conducting a qualitative meta-synthesis and our systematic review employed Thomas and Harden's Thematic Synthesis method (2008). Like Levitt (2018), "we wanted the analysis to be anchored in the original data, but use this as a means to establish wider theoretical conceptualizations" (p. 372). We employed an inductive approach to the analysis, which involved interpreting patterns and themes from within the data without being guided by a pre-existing theoretical framework. Instead, we used the contents of the studies as the basis for exploring potential relationships and patterns within the texts (Thomas & Harden, 2008). When conducting a qualitative meta-synthesis, authors must decide what text from primary studies will constitute data for their review (Finfgeld, 2003). To gain as much insight as possible, our data extraction included data from the findings, discussion, and conclusions of each primary study, including both participant quotes and the authors' interpretations (Lachal et al., 2015). Two studies included participants under 18, but only findings attributed to all participants, or quotes attributed to men over 18, were included.

Similarly, in studies where participants' gender was mixed, only findings relating specifically to men, male attributed quotes, or findings relating to all project participants were reviewed. Data for this analysis was reviewed for anything that pertained to a risk or recovery factor as perceived or understood by participants or author/s. Risk factors were experiences identified in primary studies as potentially contributing to suicidal thoughts, feelings, and behaviors. Recovery factors were experiences identified in primary studies as potentially contributing to suicidal thoughts, feelings, and behaviors. Recovery factors were experiences identified in primary studies as potentially contributing to suicidal thoughts, feelings, and behaviors. Recovery factors were experiences identified in primary studies as potentially helping men live with thoughts and feelings of suicide. It is important to flag that the qualitative nature of our data means the risk and recovery factors identified in this review do not imply a causal relationship (Van Orden et al., 2010). We operationalized the terms 'risk factor' and 'recovery factor' to refer to themes that were deemed sufficiently common across studies as to indicate a potential association between that theme and suicide risk/recovery. This was an interpretative perspective and cannot be read as causal.

A qualitative meta-synthesis is iterative and as the coding developed there was enough variety in risk factor descriptions to further categorize them into 'distal' and 'proximal'. Distal factors were those associated with a potential underlying vulnerability to suicidal behaviors, for example: "Men were described as feeling like a failure because of financial burdens" (Hagaman et al., 2018, p. 719). Here the authors described men who experienced economic issues as feeling like a failure. We theoretically coded this as an example of a distal suicide risk factor in relation to potential feelings of failure and negative self-aversion. Proximal factors were those identified by participants and authors as associated with a suicide attempt or death (Turecki et al., 2019). For example: "I tried to set up a business for myself and my family and it didn't work. I lost money and there was no other alternative except killing myself" (Ribeiro et al., 2016, p. 5). Here, the participant appears to have drawn an association between his business failing and his suicide attempt. This association will be mediated by other potential risk factors, i.e., shame, debt, financial burden, and lack of security. We therefore do not claim that these are direct, causal risk factors, only that there was evidence to suggest a perceived association in the understandings of men who were suicidal or bereaved loved ones that these factors were proximal to a suicide attempt or death. We acknowledge the limited and imperfect nature of these categorizations. Nonetheless, in response to calls from suicidologists for research to delineate suicidal ideation from attempts, we wanted to provide colleagues with as much insight as possible from our data (Bloch-Elkouby et al., 2020; Glenn et al., 2017; Klonsky & May, 2015; Nock et al., 2010). Future research using appropriate methodologies can explore the causal relevance of our findings.

As there were remarkable consistencies between the accounts of men who were suicidal and people bereaved by male suicide, we did not separate out their coding. Indeed, combining these two different populations provided a useful source of triangulation with the coding from each population supporting findings in the other. For example, under the theme: "Suicide Associated with Proximal Killing of a Failed Self", a code from a bereaved wife was: "In the four weeks leading up to the suicide he [...] felt like a failure" (Kiamanesh et al., 2015, p. 319). The sentiment expressed here was thematically similar to that described by this example from a man who attempted suicide: "I feel like I failed, that's why I did that [attempted suicide]" (Cleary, 2012, p. 161).

To help us understand how widespread a theme was, we quantified the number of codes and studies that constituted each thematic finding. Doing so helped enhance data transparency and evidence our interpretations (Monrouxe & Rees, 2020). Still, it is important to be cautious in terms of interpreting these numbers. Not all participants were asked the same questions; therefore, these numbers are not a true representation of actual prevalence (Levitt et al., 2016; Malterud, 2001; Monrouxe et al., 2020). It is also essential to consider that other research teams may have privileged other themes and understandings, resulting in

different quantifications (Levitt et al., 2016). A qualitative meta-synthesis does not aim to quantify findings but to interpret them (Monrouxe et al., 2020). Nonetheless, applying a degree of quantification helped anchor our findings in a metric to understand how commonly expressed a theme was across studies and by which demographic groups.

Data Analysis

The data analysis happened in the following steps. First, a data extraction sheet was completed by SB for each study with a line-by-line coding of each primary paper for perceived risk and recovery factors (see Supplementary Material D for 'Data Extraction Tool'). Codes could range from a few words to several lines of text. Codes were then compared and organized into broader categories known as descriptive themes. These themes were descriptive because they reflected the content of the data without too much interpretation or analysis. Descriptive themes were then analyzed to generate analytical themes that offered a deeper understanding of the data. This step is complex to document as it was the most interpretative aspect of the analysis when authors go beyond the verbatim content of primary studies to synthesize new explanatory frameworks (Attride-Stirling, 2001; Erwin et al., 2011, Lachal et al., 2017; Thomas & Harden, 2008; Xu, 2008). For example:

Basic Code: Everything felt like a façade, like, if I was out—having fun, I was putting on a smile for the show of others. (Oliffe et al., 2017, p. 896) *Descriptive Theme:* Performance of Self to Conceal Distress *Analytical Theme:* Failing to Meet Norms of Male Success

Here we took the basic code of a man who concealed his distress from those around him by pretending he was "having fun" and placed it within a descriptive theme of "Performance of Self..." that provided a relative summary of the data. We then took an interpretive, analytical step to place this descriptive theme within a bigger explanatory framework that considered how men in our data felt a pressure to conceal their distress and perform wellness to the world in order to meet masculine norms of male success, and that fear of failing to do so ultimately seemed to drive an element of suicidal despair. Although this last step was interpretative it was also rooted in evidence found in the data. To maintain reliability, regular consensus meetings were held between SB, KR, and ROC to discuss the evolving thematic framework (Lachal et al., 2017). To confirm the logic and validity of the analysis, 20% of studies were randomly selected and reviewed by CR who developed an independent thematic framework. Following a consensus meeting with SB, KR, and ROC, it was considered that the framework developed by CR was representative of the existing one developed by SB, though some wording of course differed. For example, CR suggested a descriptive theme: "Suicide as a release from pain > seeking respite" whereas in our coding this descriptive theme was absorbed within the descriptive theme of "Suicide Associated With Proximal Intolerable Psychological Pain." Consensus was the ethos of this review with authors working to build a shared understanding of thematic interpretations rather than compete (Levitt et al., 2016). Throughout the review, any disagreements or uncertainties about themes were resolved by returning to the primary paper data and re-reading and reflecting on the texts to consider whether the evidence supported assertions.

Dawson (2019) described the data analysis process in a qualitative meta-synthesis as iterative and evolving, involving a constant dialogue between the reviewer's thematic framework and the data of the primary studies. Like other reviews, our thematic framework was continually revised as new data and reflections occurred (Paterson, 2012; Timulak, 2009). Careful and repeated readings of the studies, multiple feedback, including invaluable insights from anonymous peer reviewers and the editor, led to deeper reflections, and the emergence of a more refined framework. Trying to organize psychological phenomena into a neat and orderly thematic framework is challenging. The lack of hard boundaries around psychological phenomena means many thematic constructs were interrelated and interacted (Laubschler, 2003). Thematic framing entails a degree of compromise in trying to separate and conceptualize phenomena to aid colleagues' understandings and emphasize the importance of individual constructs but not diminish the importance of their interaction. We have tried to address this by reviewing psychological phenomena individually in the results but discussing their critical interaction in the discussion.

Once a final thematic framework was arrived upon, a final consensus meeting was held with SB, KR, ROC, and AD to review and confirm the final thematic framing resulting in 1,333 basic codes nested within 24 descriptive themes and four analytical themes, split out into risk and recovery factors. There was full agreement with the final findings and this triangulation of authors and reviewers throughout the analysis gave insights a level of rigor (Lachal et al., 2015). All themes and codes were recorded in a document in Microsoft Excel (see Supplementary Material E for 'Codebook' and Supplementary Material F for 'Thematic Synthesis').

Transparency and Openness

This review followed the transparency and openness guidelines adopted by this journal, including citation standards, pre-registration on PROSPERO (CRD42020166686), and compliance with the PRISMA guidelines (Moher et al., 2009) for reporting systematic reviews of qualitative evidence. We also ensured full transparency in the methods and data underlying our findings. Supplementary materials, including the meta-synthesis codebook data, search strategy, overview of studies and findings, and quality appraisal and data extraction templates are available at http://dx.doi.org/10.5525/gla.researchdata.1441

Results

Characteristics of Studies

Not every paper recorded the number of participants but based on those that did this review covers a sample of at least 1,695 people—902 men who were suicidal and 793 people

bereaved by suicide. Studies were made up of interviews (k = 68), interviews and photo-voice (k = 6), interviews and focus groups (k = 2), mixed-methods (k = 1), and focus groups (k = 1). Study populations varied but were predominately men and women who had attempted suicide (k = 20), men who have attempted suicide (k = 18), people bereaved by male suicide (k = 18), people bereaved by suicide (k = 10) and men who have attempted suicide and/or had suicidal ideation (k = 5). Some studies focused on particular demographics: men under 40 (k = 15), elderly (k = 8), sexual minorities (k = 6), prisoners (k = 4), immigrants (k = 4), rural communities (k = 2), men with substance abuse challenges (k = 2), friends bereaved by male suicide (k = 1), children bereaved by a fathers' suicide (k = 1), young men with psychosis (k = 1). Only 22% of studies provided a breakdown of participants' ethnicity and of these studies approximately 82% of participants were white. A major limitation of the literature is the lack of insight it can provide for the unique challenges and needs men from different racial demographics may have. Publishing dates were between 2000-2010 (k = 17) and between 2011-2020 (k = 61).

Location of studies included: Norway (k = 16), UK (k = 16), Canada (k = 11), Australia (k = 6), Brazil (k = 5), Ghana (k = 4), Ireland (k = 3), Sweden (k = 3), United States (k = 2), Italy (k = 2), South Africa (k = 2), Uganda (k = 2), Belgium (k = 1), Iceland (k = 1), Nepal (k = 1), Poland (k = 1), New Zealand (k = 1) and Taiwan (k = 1). This constituted two studies from lower-income countries (2%), twelve from middle-income (9%), and 64 from upper-income countries (82%). Income classifications were based on World Bank distinctions (World Bank, 2021). The skew towards upper-income contexts is not surprising as 75% of suicide research occurs in the USA, EU, Canada, and Australia (Astraud et al., 2020). Primary studies were originally analyzed using a range of methods, though the most common were Thematic Analysis (k = 25), Interpretative Phenomenological Analysis (k = 17), and Grounded Theory (k = 10). From the total sample, 15 studies were secondary analyses, and based on the rationale of other syntheses, we only included secondary studies when they provided valuable insights not covered in the primary work (Xu, 2008). See Supplementary Material G 'Overview of Studies' for a summary of each paper including aims, sample populations, and key findings pertaining to the research question of this review.

Presentation of Results

Results are split into 1. risk factors; and 2. recovery factors. We have developed two models to represent thematic findings for each of these domains—see Figure 3 for '3 'D' Model of Masculine Norms and Male Suicide Risk' (3 'D' Risk) and Figure 4 for '3'R' Model of Male Suicide Recovery' (3 'R' Recovery). Both models are built on the reciprocal interaction between men's emotions, self-concept, interpersonal connections, and psychological pain. Our 3 'R' Risk model suggests an aspect of men's psychological pain and suicide risk may be underpinned by denial, disconnection, and dysregulation in the domains of emotions, self, and interpersonal connections resulting from how masculine norms may shape some men's relationships with these phenomena. Our 3'D' Recovery model suggests that helping men to recognize, reconnect with, and regulate these phenomena may help reduce their psychological pain and suicide risk. Central to the 3 'D' Risk model is the emergence of unbearable, dysregulated psychological pain, and the potential activation of proximal risk indicators separate to distal factors. We speculate, in keeping with other theories of suicide, that at a certain point a threshold for tolerating psychological pain is breached and bereft of viable solutions to the pain, proximal drivers of suicide, and suicidal behaviors are activated (Rudd, 2006). A potentially illuminating part of our model is the mirroring of risk factors in the distal and proximal domains. In our data, it appeared that proximal risk factors were a heightened manifestation of distal ones. The phenomena in our model are not fixed and stable. Emotions, self-concepts, interpersonal connections, and

psychological pain are constantly in flux. Therefore, our model is temporally dynamic (Bryan & Rudd, 2016; Rudd, 2006). The constant and complex interaction of these factors may move men who are suicidal closer or further away from the proximal threshold of suicidal action.

In Table 1, 'Thematic Overview and Supporting Evidence,' we have provided a full breakdown of our thematic framework, including the percentage of studies in support of each theme, their World Bank income classification, and NICE quality rating. We have also selfselected the richest quotes from study participants and authors to illustrate the credibility and commonality of our thematic findings, triangulating insight from both sources. A full set of supporting codes for our analysis can be reviewed in Supplementary Material E, 'Codebook.' In the text, we have provided up to three references in support of salient points, but a full list of studies in support of each of these points can be reviewed in Supplementary Material H, 'Supporting Evidence Index.'

Cultural Norms of Masculinity and Male Suicide Risk

An association between certain cultural norms of masculinity and potential male suicide risk factors was the biggest finding of this review, evidenced in 96% of studies and generating 1,070 codes. These findings were categorized into three analytical and 19 descriptive themes (see Table 1 for Thematic Overview). Across different cultural contexts including displaced person camps in Uganda (Kizza et al., 2012), rural farming communities in Australia (Kunde et al., 2018), and urban inner-cities in Brazil (Meneghel et al., 2012), there appeared to be prevailing norms and expectations for male behavior. Reported norms included male strength, self-reliance, stoicism, emotional restrain and suppression; men as providers, protectors, and battlers; men as financially and romantically successful, independent, and virile (Andoh-Arthur et al., 2018; Kunde et al., 2018; Meneghel et al., 2012).

These perceived norms appeared to be modelled culturally as well as environmentally by family, friends, peers, and institutions, and were described as creating certain expectations for male behavior that seemed to limit the scope of male 'being', narrowing possibilities for existence, as exemplified by the following quote from a 23-year old gay man in South Africa who had attempted suicide: "I come from a home where you have your gender roles, men don't cry and my dad didn't show that he is sad, my brothers as well. You can see it in them, so obviously I adopted those ways of doing things" (Meissner & Bantjes, 2017, p. 789).

In this review, specific masculine norms relating to male emotional suppression, failing to meet standards of male success, and the devaluing of men's interpersonal needs appeared to be associated with some men experiencing denial, disconnection, and dysregulation within three core psychological domains: 1. emotions, 2. self, and 3. interpersonal connections. These processes appeared to be associated with 1. increasing men's psychological pain, and 2. diminishing men's ability to regulate that pain, which we have suggested elevates suicide risk. Our findings explore potential suicide risk in the domains of emotions, self, and interpersonal connections individually, to provide the reader with context for specific manifestations of harm. However, in the discussion, and as represented in the 3 'D' Risk model, we speculate that it is the <u>interaction and accumulation</u> of psychological pain across these three domains that may be critical to elevating suicide risk and distinguishing men who are suicidal from other men similarly socialized in masculine norms but not suicidal.

Norms of Male Emotional Suppression

In our review, we found evidence in 92% of studies to suggest norms of male emotional suppression were associated with increased psychological pain and suicide risk in men. This analytical theme comprised the following eight descriptive themes. **Emotional Suppression and Dysregulated Psychological Pain.** Norms around male emotionality—stoicism, suppression, and the need for men to be independent, strong, and cope with problems—were a perceived distal risk factor in 44% of studies. The cultural denial of the fullness of men's emotionality appeared to wreak havoc on men's well-being as depicted in this quote from a 60-year-old gay man in a Canadian study with men who were suicidal: "Conditioning us [men] away from our emotional reality is going to make it harder when your emotional reality is what's ripping you apart" (Oliffe et al., 2017, p. 892).

Norms of male emotional suppression appeared to impact upon some men's *internal* relationship with their emotional experience by seeming to undermine their ability to understand, process, and manage their emotions and psychological distress (Akotia et al., 2019; Cleary, 2005; Kunde et al., 2018). Participants, young and old, described, or were described as, lacking the language and cognitive tools to recognize and regulate their own distress despite mounting psychological pain. A young man from a study in Ireland that interviewed men within 24 hours of a suicide attempt remarked: "I'm miserable and I don't know why. You don't know why you are that way, you don't know what's wrong with you." (Cleary, 2011, p. 501). Men described living in a state of denial (Kiamanesh et al., 2015; River, 2018; Tryggvadottir et al., 2019), or of being aware of their distress but ignoring their feelings because they did not know how to deal with them (Cleary, 2012; Meissner & Bantjes, 2017; Rasmussen et al., 2018).

Norms of male emotional suppression also appeared to impact some men's *external* expression of emotion. Cultural expectations for men to be independent, strong, and cope seemed to affect some men's way of inter-relating as they described concealing their emotional reality from others (Cleary, 2005; Kunde et al., 2018; Oliffe et al., 2018) as illustrated by this quote from a 36-year-old man in Australia who had attempted suicide:

"With my closest friends it was, 'I don't want you to know how I feel'. I'm a dad of three kids and a husband. I've got a good job. I don't want you to know that I'm so sad that I cry at red lights" (Fogarty et al., 2018, p. 264).

Concealing their emotional reality appeared to serve different purposes. Some men described hiding their struggles because they did not want to burden or disappoint loved ones (Biong & Ravndal, 2007; Cleary, 2005; Everall et al., 2006). Some men felt their role as masculine protector meant they should protect significant others from their pain (Oliffe et al., 2017; Oliffe et al., 2018), while others described a lack of trust and psychological safety with which to share vulnerability with others (Cleary, 2005; Meissner & Bantjes, 2017). Other men described learning not to express their emotions for fear of showing weakness (Everall et al., 2006; Jordan et al., 2012; Rasmussen et al., 2018) or because they understood emotional suppression as representing masculine control (Meissner & Bantjes, 2017).

As challenges in life, and unprocessed distress in response to them, accumulated and built up internally, the impact of men's emotional denial and disconnection appeared to lead to a perceived dysregulation of emotions and psychological pain. Men's emotional interiors were described as chaotic, overwhelming, and exhausting to inhabit and within this dysregulated state, thoughts of suicide sometimes emerged (Benson et al., 2016; Cleary, 2012; Salway & Gesink, 2018). A 25-year-old Canadian man described his interior state in response to difficulties expressing emotions as such: "I felt like I was treading in a hurricane, you feel very tired, kind of exhausted and when you get a little break then something comes along and just washes you over and you're choking and drowning again" (Everall et al., 2006, p.381).

Childhood Adversities Affect Emotional Development. In 46% of studies, complex events in childhood and adolescence were associated with impacting upon men's emotional development. The nature of childhood challenges varied with specific references made to

abuse (Biong & Ravndal, 2007; Chung et al., 2015; Tryggvadottir et al., 2019), neglect (Biong & Ravndal, 2007; Elliott-Groves, 2018; Kiamanesh et al., 2015), bereavement (Chung et al., 2015; Fogarty et al., 2018; Tzeng, 2001), abandonment (Biong & Ravndal, 2007), family break-up (Chung et al., 2015; Meissner & Bantjes, 2017; Oliffe et al., 2017), bullying (Cleary, 2005; Ferlatte et al., 2019; Kiamanesh et al., 2015), homophobia (Ferlatte et al., 2019; McAndrew & Warne, 2010; Salway & Gesink, 2018), drug use (Mackenzie et al., 2018; Rasmussen & Dieserud, 2018), violence and conflict (Cavalcante & Minayo, 2015; Elliott-Groves, 2018; Ferlatte et al., 2019), critical and demanding caregiver/s (Biong & Ravndal, 2007; Fogarty et al., 2018; Rasmussen & Dieserud, 2018), addicted caregiver/s (Elliott-Groves, 2018; Kiamanesh et al., 2015, McAndrew & Warne, 2010), and/or distant or absent caregiver/s (Gajwani et al., 2018; McAndrew & Warne, 2010; Meissner & Bantjes, 2017). Many participants described certain experiences in early-life as distressing, of unmet emotional needs (Kiamanesh et al., 2015; McAndrew & Warne, 2010; Rivlin et al., 2013), and of growing up with a sense that "the world is not a safe place" (Oliffe et al., 2019, p. 319). A family member of a young Norwegian man who died by suicide, commented on how childhood challenges with his father had impacted the deceased: "he shut it inside in a way ... he was so angry, but he was unable to just get it out properly" (Rasmussen et al., 2018, p.337). To manage their distress, some participants appeared to adopt different coping strategies, from emotional suppression to self-harm and substance abuse (Biong & Ravndal, 2009; Chung et al., 2015; Everall et al., 2006). For some participants, the intense distress of childhood experiences seemed to lead to an early cognitive association with death as a release from pain (Meissner & Bantjes, 2017; Rivers et al., 2018; Salway & Gesink, 2018). In relation to experiencing abuse as a child, a 71-year-old gay man from Canada remarked: "I would wish very much that I was dead, even at an age when I am not sure a kid understands what death is" (Ferlatte et al., 2019, p. 1533). Men in various studies suggested their suicidal

behaviors might be linked to these challenging childhood experiences (Biong & Ravndal, 2007; Rivlin et al., 2013; Vatne & Naden, 2014).

Help-Seeking Rejected as Weak. In 29% of studies in upper- and middle-income contexts, we found evidence to suggest that cultural expectations for men to be strong and cope meant some participants (young and old) often perceived talking about their problems or seeking professional help as a 'weakness' and a loss of masculine control (Everall et al., 2006; Kiamanesh et al., 2015; Oliffe et al., 2017). A 21-year-old man from South Africa who had attempted suicide remarked: "You don't feel comfortable sharing problems with people, because people might think you are weak or you are less of a man ... Guys don't ask for help and that is the problem" (Meissner & Bantjes, 2017, p. 788). These attitudinal barriers also appeared to limit some significant others' ability to persuade men to access professional help (Creighton et al., 2017; Kiamanesh et al., 2015). This 57-year-old daughter in Australia whose father attempted suicide commented: "I know from my own personal experience with my dad, he won't accept the help really. I could set up a hundred different things, to be honest, but he'll say, no, I don't need it..." (Fogarty et al., 2018, p. 265).

Negative Experiences Accessing Mental Health Care. In 35% of studies from upper-income studies, some men did seek help but described negative encounters with mental health services and professionals. Cultural norms appeared to impact male distress presentations and how these were read by service providers. When men concealed or denied their pain, doctors appeared to take them at face value. If men communicated their despair in matter-of-fact tones, they were perceived as lacking the necessary affect to indicate an imminent crisis (Kunde et al., 2018; Peters et al., 2013; Strike et al., 2006). Mental health systems were characterized by participants as under immense strain, time-poor, and focused on short-term solutions such as medical prescriptions (Peters et al., 2013, Tryggvadottir et al., 2019; Vatne & Naden, 2014). A mental illness framing of suicidal behaviors and a lack of acknowledgment for underlying causes was described as a source of frustration for some men who felt professionals did not fully acknowledge the depths of, or contexts for, their despair (Ferlatte et al., 2019; Vatne & Naden, 2014; Wiklander et al., 2003). This participant from a study with men who were suicidal, and had a clinical diagnosis in Canada, commented: "You cannot have a patient come in your office for 5 minutes and give him a diagnosis or send him on his way with medications. There's more to getting well than medication" (Strike et al., 2006, p. 35).

Some men described an alienating lack of autonomy in treatment plans and of the need to trust health professionals, with dismissive and stigmatizing staff seeming to put some men off from seeking support (Fogarty et al., 2018; River, 2018). Counselling was reported to be too expensive though the preferred intervention for some men (Ferlatte et al., 2019; Oliffe et al., 2019; Strike et al., 2006). Significant others also described challenges navigating mental health systems. A medical focus on emergency response only seemed to leave some families dangerously unsupported (Peters et al., 2013). A woman in Australia whose husband died by suicide commented:

"How can somebody stab themselves one night, need 36 stitches, and say they want to be dead, and the next day they ring up and say, he's fine to go home now? So that—I just couldn't believe it. I stood on the phone, I said, "He's what?" "Oh, yes," he [hospital employee] said, "he's fine now"" (Peters et al., 2013, p. 313).

Ineffective Coping Strategies Exacerbate Pain. In 42% of studies, we found evidence to suggest that the effect of masculine norms such as emotional non-disclosure and coping with problems alone, appeared to lead men to find their own solutions and strategies to manage and regulate their distress. Participants, irrespective of demographics or location, described seeking respite from mounting despair through socially sanctioned 'male' behaviors (Creighton et al., 2017; Oliffe et al., 2019; Ribeiro et al., 2016) such as drinking (Cleary, 2005; Kunde et al., 2018; Meissner & Bantjes, 2017), drugs (Biong & Ravndal, 2007; Gajwani et al., Ribeiro et al., 2016), violence/aggression (Costa & de Souza, 2017; Everall et al., 2006; Meissner & Bantjes, 2017), gambling (Biong et al., 2007; Jordan et al., 2012; Kizza et al., 2012), and/or sex (Strike et al., 2006). References to self-harm cutting more commonly associated with women—were also made (Everall et al., 2006; Meissner & Bantjes, 2017; Rivlin et al., 2013). These behaviors were described as 'pain-relief strategies' that were described as helping men to relax and release tension (Meissner & Bantjes, 2017; Rivlin et al., 2013), to cope and feel in control (Cleary, 2012; Owens et al., 2011; Rivlin et al., 2013), to numb/escape feelings (Biong & Ravndal, 2009; Kizza et al., 2012; Meissner & Bantjes, 2017), turn off thoughts (Biong & Ravndal, 2007; Kizza et al., 2012), self-medicate (Creighton et al., 2017; Mackenzie et al., 2018; Oliffe et al., 2019), and stimulate positive affect (Biong & Ravndal, 2009; Cleary, 2005). A participant from an Irish study with men who had attempted suicide recalled: "Denying, denying meself that, to meself, like I was depressed, you know? And I was using all sorts of drugs to, just kind of, to go out to enjoy meself basically (...)" (Cleary, 2005, p. 163).

Alcohol and drugs were also cited as helping men open up in a way they did not feel able to when sober (Biong & Ravndal, 2009; Cleary, 2005). For men who experienced adversity in childhood these pain-relief strategies could often start early in life (Gajwani et al., 2018; Jordan et al., 2012; McAndrew et al., 2010). While these behaviors appeared to provide short-term relief, they were associated with failing to resolve underlying issues and potentially compounded long-term damage by seeming to increase some participants' shame and self-condemnation (Hagaman et al., 2018; Mackenzie et al., 2018), interpersonal stress and conflict (Knizek & Hjelmeland, 2018; Player et al., 2015; Ribeiro et al., 2016), and isolation (Peters et al., 2013; Oliffe et al., 2019). A 35-year-old, UK man on probation for shoplifting who attempted suicide by cutting, remarked: "Although I'm trying to lift myself with this short term miracle [drinking], long term it was doing me more damage because it was pushing me lower and lower" (Mackenzie et al., 2018, p.149). Many men described becoming trapped in chaotic cycles of seeking relief from their psychological pain via behaviors that seemed to compound their pain and potentially left them increasingly isolated from support and intervention. As their psychological pain intensified some men described escalating their substance use to harder drugs or becoming addicted (Biong & Ravndal, 2007; Cleary, 2012; Creighton et al., 2017).

Suicide Associated with Intolerable Psychological Pain. In this review, the most common proximal description of what drove suicide was as a release from unbearable psychological pain (Andoh-Arthur et al., 2018; Benson et al., 2016; Cavalcante & Minayo, 2015; Kizza et al., 2012). In 56% of studies, across cultural contexts, men, young and old, described being overwhelmed by a generalized and intolerable state of emotional and psychological pain. Lacking tools to regulate this distress, suicide was perceived as the only way to stop the pain (Cleary, 2012; Kiamanesh et al., 2015; Oliffe et al., 2017). An Italian man who had attempted suicide recalled: "Sometimes you try to cut yourself to let this pain out of your body, but you know it won't work . . . the only thing that works is suicide . . ." (Ghio et al., 2011, p. 513). A 60-year-old unemployed gay man from Canada also described his suicide as a pain-ending strategy: "Mostly the experience of that intense despair that I would feel suicidal is interior (...) The worst pain is, you just don't think it will ever stop" (Oliffe et al., 2017, p. 893).

Suicide Associated with Hopelessness, Defeat, and Entrapment. Along with descriptions of a generalized state of psychological pain, in 31% of studies, more specific proximal associations with feelings of hopelessness, defeat, and entrapment as drivers of suicidal action were referenced. Some men described a poverty of internal resources with which to respond to the challenges consuming their lives. A perceived lack of autonomy,

control, and agency to redirect their lives and regulate their distress appeared to create a state of hopelessness, defeat, and entrapment (Everall et al., 2006; Kjlseth et al., 2010; Rasmussen, Dieserud et al., 2014). For some men, life was described as becoming devoid of meaning and purpose, and they described acclimatizing to suicidal thoughts as a way out of a hopeless, defeated, and entrapped situation (Andoh-Arthur et al., 2018; Cleary, 2012; Player et al., 2015). This quote from a 23-year-old Canadian man about his suicide attempt describes his feelings of entrapment: "Everything seemed very dark in a lot of ways. I had the feelings of being trapped, sometimes hopelessness, like I wasn't ever going to get out of it" (Everall et al., 2006, p. 378). A young man who died by suicide in Norway described in his suicide note a sense of hopelessness and defeat: "I am sorry. There is so much I wanted to say, but this is how it is. ... I can't find a path in this life" (Rasmussen et al., 2018, p. 334).

Summary. In 92% of studies, we found evidence for a potential association between norms of male emotional suppression and increased psychological pain and suicide risk. Norms of male emotional suppression and expectations for men to cope, appeared to leave some men struggling to regulate their emotional responses to life's challenges and vulnerable to accruing psychological pain with no meaningful release for that distress. The potential denial, disconnection, and dysregulation of some men's emotions appeared to (a) increase some men's psychological pain and (b) diminish their ability to regulate that pain effectively, potentially elevating suicide risk (see Figure 3). Emotional suppression was associated with denial and disconnection in terms of men's internal relationship with their emotions and ability to recognize their own distress, and/or their external expression of emotions and ability to communicate their distress to others. As challenges in life mounted and accumulated, men's emotional denial and disconnection was associated with a dysregulation of distress. For men who experienced challenges in childhood, this emotional dysregulation may be doubly compounded through the impact of early life exposure to psychological pain, and being socialized in masculine norms to suppress emotions and conceal distress. Norms of male emotionality seemed to impact help-seeking behaviors. Some men appeared to reject help-seeking as a sign of weakness. Other men sought help but described negative encounters where their distress was misread. Many men appeared to regulate their psychological pain through socially sanctioned male behaviors such as drinking that were described as providing short term respite but seemed to compound psychological pain over the long term. In a proximal context, some men appeared to become trapped in dysregulated psychological pain. Unbearable psychological pain and, to a lesser extent, feelings of hopelessness, defeat, and entrapment were associated with potential proximal drivers of suicide.

Failing to Meet Norms of Male Success

In 76% of studies, we found evidence to suggest that failing to meet norms of male success was associated with increased psychological pain and suicide risk. This analytical theme comprised the following five descriptive themes.

Failed Masculine Selves and Aversive Self-Awareness. Across 54% of studies, evidence suggested that norms of male success were internalized and became a standard by which participants appeared to evaluate themselves and their social value. A repeated pattern emerged of some men seeming to harbor a socially "othered" or "failed" element/s of their masculine identity (Akotia et al., 2019; Jordan et al., 2012; Kunde et al., 2018). As this participant, aged between 50 and 59, from a Canadian study with suicidal men remarked:

"Expectations I've had on myself in terms of what I consider to be successes in life a good father, a good husband, a good provider, um, those are probably at the top of the list, and it's my belief I failed at—at all of those three responsibilities" (Oliffe et al., 2019, p. 324).

Perceived masculine failures varied, with specific references made to employment problems or not being able to financially provide (Andoh-Arthur et al., 2018; Chung et al., 2015; Ferlatte et al., 2019), mental health struggles (Creighton et al., 2017; Elliott-Groves, 2018; Strike et al., 2006), relationship problems/breakdowns (Bell et al., 2010; Kiamanesh et al., 2015; Meissner & Bantjes, 2017), sexual problems (Andoh-Arthur et al., 2018, Costa & de Souza, 2017; Kizza et al., 2012), sexuality (Ferlatte et al., 2019; McAndrew & Warne, 2010; Meissner & Bantjes, 2017), sexual abuse (Rivlin et al., 2013; Tryggvadottir et al., 2019), failing at studies (Bell et al., 2010; Stanley et al., 2009), gambling addictions (Jordan et al., 2012), criminal behavior (Owens et al., 2011), and aging (Cavalcante & Minayo, 2015; Costa & de Souza, 2017; Meneghel et al., 2012). Although we cannot draw direct cultural comparisons from our data, expectations for male behavior showed some variety across cultures and demographics. In Ghana, and Uganda, masculine norms were described as centering around financial provision and sexual prowess (Akotia et al., 2019; Kizza et al., 2012; Osafo et al., 2015). Poverty, migration, war, and displacement were perceived as contributing to some men being unable to fulfill these roles. In rural Brazil, honor cultures appeared to dictate that men are the head of the family, and men who were suicidal described being ashamed when they could not work anymore (Meneghel et al., 2012). Similarly, older men in Brazil described being unable to deal with the loss of family authority as they aged and perceived themselves to become "useless" (Costa & de Souza, 2017; Gutierrez et al., 2015; Meneghel et al., 2012). Fear of failure appeared to loom large for young men in upperand middle-income locations, especially in relation to exam pressures, relationship challenges, or a mental health diagnosis (Bell et al., 2010; Cleary, 2005; Jordan et al., 2012). Gay and bisexual men described being impacted by both heterosexist stigma relating to their sexuality and general masculine norms for men to be strong, financially successful, and emotionally restrained (Ferlatte et al., 2019; McAndrew & Warne, 2010, River, 2018).

Across different cultural contexts, and different demographics, a similar psychological pattern appeared to emerge, of men perceiving aspect/s of their selfhood as

transgressing social and cultural expectations for what a successful and socially valuable man should be. The internalized stigma attached to perceived losses of masculine capital, appeared to erode the self-esteem of men who were suicidal and became a source of shame (Andoh-Arthur et al., 2018; Bell et al., 2010; Kiamanesh et al., 2015). Perceiving themselves to be a failure was described as emotionally painful for participants. As well as shame, failure was described as generating feelings of stress (Oliffe et al., 2019; Salway & Gesink, 2018), anger (Rasmussen et al., 2018), inadequacy (Kizza et al., 2012), incompetency (Biong & Ravndal, 2009; Kizza et al., 2012), anxiety (Bell et al., 2010), guilt (Rasmussen et al., 2018), self-loathing (Akotia et al., 2019; Biong & Ravndal, 2009; Chung et al., 2015), self-blame (Oliffe et al., 2019; Rasmussen et al., 2018), and self-condemnation (Kizza et al., 2012; McAndrew & Warne, 2010; Rasmussen et al., 2018). A 21-year-old from South Africa who had attempted suicide commented: "That feeling of a girl leaving you like that. It is a feeling of you don't feel good enough, you don't feel sufficient, or you are not man enough and suddenly once again you feel ashamed of yourself" (Meissner & Bantjes, 2017, p. 788).

Performance of Self to Conceal Distress. In 31% of studies, from upper-income locations, some men who were suicidal described disconnecting from their selfhoods by creating a 'false' self that they presented to the outside world—of someone well, happy, and coping—to conceal their inner distress (Everall et al., 2006; Rasmussen et al., 2018; River, 2018). A UK father whose son died by suicide commented: "He'd present a façade to suggest that things were normal when in fact they weren't" (Owens et al., 2011, p.3). Suppressing their authentic self to perform 'wellness' was described as effortful and appeared to consume some participants' cognitive and emotional resources. This performance of self was described as undermining some men's sense of coherent self-identity, mental wellbeing, and ability to create authentic and meaningful social connections, potentially further undermining self-esteem and amplifying isolation and distress (Cleary, 2005; McAndrew & Warne, 2010;

Rasmussen et al., 2018). A young man from Ireland who had attempted suicide remarked: "I hate myself for trying to be somebody else (...) I got so pissed off putting on a front—always putting a happy face on and always being a laugh, a joke" (Cleary, 2005, p. 163).

Childhood Adversities Affect Self-Esteem. In 15% of studies, challenges in childhood were described as affecting the development of some men's self-esteem and self-worth. Men described feeling worthless, abnormal, inadequate, out of place, or ashamed in their childhoods (Kiamanesh et al., 2014; Meissner & Bantjes, 2017). A gay man in a UK study described how the realization of his sexuality at school impacted his sense of self: "A deep thing of dissatisfaction with myself... dislike of myself" (McAndrew & Warne, 2010, p.96). The legacy of these challenges seemed to impact some men's sense of self in their adult lives, as exemplified by this quote from a participant in a Norwegian study exploring substance abuse and suicide in men: "Since I was quite small I was told (by his father) that 'you won't amount to anything'. Even now, when I encounter new situations, his words come back to me (...)" (Biong & Ravndal, 2007, p. 251).

Suicide Associated with Killing of a Failed Self. In 46% of studies, from lower-, middle- and upper-income settings, a profound sense of personal failure, of not meeting social expectations for men, and experiencing an unbearable loss of status and social value were described as proximal drivers of suicidal behaviors in men (Andoh-Arthur et al., 2018; Oliffe et al., 2017; Rasmussen et al., 2018). Some men appeared to struggle to regulate setbacks in life. Defeats seemed not to be contextualized but interpreted as something damning about them as individual men and to symbolize a total failure of their personhood. For some participants, suicide was reported as the desire to escape a failed, defeated, broken, shamed, and/or hated self who has lost all social status and social value (Everall et al., 2006; Kizza et al., 2012; Rasmussen et al., 2018). A Brazilian man described his suicide attempt as such: "I tried to set up a business for myself and my family and it didn't work. I lost money and there was no other alternative except killing myself" (Ribeiro et al., 2016, p. 5). A UK father, whose young son died by suicide, remarked that in his suicide note, his son spoke of his negative sense of self: "It was very much that, he'd been given everything and he didn't live up to everything, and very, very critical of himself" (Bell et al., 2010, p. 262).

Suicide Associated with Regaining of Control. In 14% of studies, suicide was described as a way to potentially reclaim control over a failed life in freefall, the opportunity to return a defeated self to a place of dignity and to watch over and protect loved ones (Kjolseth et al., 2009; Meneghel et al., 2012; Rasmussen et al., 2018). In a Norwegian study, a young man wrote in his suicide note: "When in heaven, I'll watch over you and look after you. It will be my job" (Rasmussen et al., 2018, p. 338). Similarly, a 38-year-old man from a study in Australia, diagnosed with depression and who had no contact with mental health services prior to his attempt, remarked: "When you are completely disempowered, the only way you can empower yourself is to take your own life" (Fitzpatrick, 2014, p. 153).

Summary. In 76% of studies, failing to meet norms of male success appeared to be associated with increased psychological pain and suicide risk. The perceived pressure to meet norms of male success and to be a man of social value were associated with feelings of failure, and disconnection from self. Denial, disconnection, and dysregulation in the domain of selfhood appeared to 1. increase some men's psychological pain and 2. diminish their ability to regulate that pain effectively, potentially elevating suicide risk (see Figure 3). Many men described aversive self-awareness in relation to a perceived 'othered' or 'failed' aspect/s of their masculine identity. Some men created a performance of self to conceal distress and maintain a masculine front of coping. For men who experienced adversity in childhood, their self-esteem may have been further undermined by early-life challenges. In a proximal context, messages of successful male selves were perceived to be so strong, that lacking them seemed to be understood by some men as a total failure of personhood. Suicide was described

by some men as the drive to kill a failed, broken, defeated, and/or hated self. To a lesser extent, suicide was also associated with the desire to regain control over a life in freefall.

Norms that Suppress Men's Interpersonal Needs

Norms that suppress men's interpersonal needs were associated with increased psychological pain and suicide risk in 82% of studies. This analytical theme is broken down into six descriptive themes.

Interpersonal Disconnection, Isolation, and Loneliness. In 46% of studies, we saw evidence to suggest masculine norms that devalue and suppress meaningful interpersonal connection, were associated with painful feelings of isolation and loneliness. Norms of male independence, self-reliance, and autonomy appeared to keep some men separate from others. Norms of emotional suppression and non-disclosure were described as keeping some men from sharing their intimate struggles with others. As such, men who were suicidal were potentially left disconnected from the renewing properties of interpersonal intimacy. Across cultural contexts, a lack of meaningful social and emotional connection was described as a source of anguish for many men as they found themselves alone with their pain (Biong & Ravndal, 2009; Player et al., 2015). A 27-year-old Canadian man who attempted suicide described his social isolation as such: "(...) I've never felt that hollow inside. I really felt that I was dead and I didn't have anyone to reach out to" (Everall et al., 2006, p. 380).

Isolation and loneliness were referenced in different contexts. Some men described feeling alone with their pain (Cavalcante & Minayo, 2015; Cleary, 2012; Oliffe et al., 2017) or suppressed childhood trauma (Kiamanesh et al., 2014; Oliffe et al., 2019). Other men described feeling rejected/excluded or not belonging (Biong & Ravndal, 2009; Gajwani et al., 2018; Rivers et al., 2018). Other men perceived themselves to be isolated because they were afraid their inadequacies would be exposed if anyone got too close (Meissner & Bantjes, 2017; Oliffe et al., 2017), or they described that they did not know how to repair damaged interpersonal dynamics or build intimacy with others (Gajwani et al., 2018; Rasmussen et al., 2018; Strike et al., 2006). The causes of isolation and loneliness were complex and nuanced, and experienced at both the individual level—such as family estrangement (Biong & Ravndal, 2007; Elliott-Groves, 2018)—as well as the community/cultural level. For some men, isolation seemed to stem from the stigma they felt in relation to their mental health challenges (Oliffe et al., 2017) or sexuality (Ferlatte et al., 2019; McAndrew & Warne, 2010; Rivers et al., 2018). Isolation for sexual minority men could be further compounded if they later experienced rejection from within the LGBTIQ community, for example, older gay men described feeling erased by younger generations (Stanley et al., 2009). For immigrant men, a lack of belonging to both their country of origin and host country was described (Biong & Ravndal, 2009; Ferlatte et al., 2019). For men in the Cowichan community, a rupture with traditional cultural life appeared to leave some men isolated from roots and identity (Elliott-Groves, 2018). Male migrant workers in Nepal, seemed to struggle to reintegrate back into their families after being away for work (Hagaman et al., 2018). For older men, isolation appeared to stem from a loss of purpose, status, and perceived value to others (Cavalcante & Minayo, 2015; Kjolseth et al., 2009; Knizek & Hjelmeland, 2018).

Isolation and loneliness as potential distal suicide risks did not just apply to men visibly excluded. Many men who were suicidal were described as embedded in networks of relationships and were either concealing their emotional reality from the people around them or felt they did not have the tools to articulate their pain, and were thus potentially isolated from aspects of meaningful, intimate connection (Cleary, 2012; Chung et al., 2015; Oliffe et al., 2017). Significant others also suggested that the tendency for some men who were suicidal to not disclose their emotional reality, contributed to perceived emotional distance in their dynamics (Creighton et al., 2017; Kiamanesh et al., 2014; Kjolseth et al., 2009). Men who appeared closed off, independent and private, were described as difficult to approach, or their anger could potentially alienate them from others (Creighton et al., 2017; Kiamanesh et al., 2015). A participant bereaved by an elderly man's suicide in a Norwegian study, commented: "He never opened himself to us, never showed his feelings" (Kjlseth et al., 2009, p. 907).

Interpersonal Challenges and Dysregulation. In 28% of studies, we found evidence to suggest that challenges and conflict in interpersonal relating were associated with interpersonal dysregulation and appeared to amplify emotional isolation, feelings of failure, and psychological pain (Biong & Ravndal., 2007; Rasmussen et al., 2018). Conforming to masculine norms such as emotional suppression and self-reliance, seemed to leave some men ill-equipped to build, sustain, and manage intimate interpersonal relationships (Kiamanesh et al., 2015; Kjolseth et al., 2009; Sweeney et al., 2015). A sibling from a Norwegian study whose brother died by suicide remarked: "he thought it was incredibly difficult with girls. He didn't quite know how to go forward ... how to create a stable relationship" (Rasmussen et al., 2018, p. 226)

Problems in the interpersonal realm were broad and included perceived difficulties for some men in expressing and receiving care (Kjolseth et al., 2009; Kunde et al., 2018; Strike et al., 2006), challenges in dealing with interpersonal stresses and conflict (Chung et al., 2015; Kunde et al., 2018, Stanley et al., 2009), problems navigating intimacy and vulnerability (Rasmussen et al., 2018; Stanley et al., 2009), a dogged and alienating need for control and self-reliance (Kiamanesh et al., 2015; Kjolseth et al., 2009), and/or moody and angry behavior that appeared to alienate others (Costa & de Souza, 2017; Fogarty et al., 2018; Player et al., 2015). A 26-year-old man in Australia who attempted suicide recalled: "I became so moody and unpredictable that nobody wanted to intervene because they didn't know what direction that would send me" (Player et al., 2015, p. 7). In other studies, men with low self-esteem were described as maladaptively dependent on external validation (Kiamanesh et al., 2015; Rasmussen et al., 2018). Painrelief behaviors referenced earlier, such as excessive drinking, could also potentially lead to irresponsible, disordered, and sometimes violent behavior that put interpersonal relationships under strain (Akotia et al., 2019; Fogarty et al., 2018; Ziółkowska & Galasiński, 2017). This man from a Brazilian study looking at alcohol and drug use in men who had attempted suicide described how his addiction impacted his relationships: "I was heart broken, I had a fiancée, and then I had a relationship with a person that didn't work either... alcoholism makes us aggressive, unable to accept things... I'm a lousy loser" (Ribeiro et al., 2016, p.5).

Struggling to Trust. In 14% of studies, men described challenges trusting others as impairing their ability to create meaningful connections, and this mistrust seemed to compound isolation and interpersonal challenges (Chung et al., 2015; Gajwani et al., 2018; Mackenzie et al., 2018). A young Irish man who had attempted suicide remarked: "I didn't trust anybody, I didn't even trust me ma" (Cleary, 2005, p.171). Similarly, a woman bereaved by her boyfriend's suicide in a Norwegian study remarked: "He was afraid to let people get too close to him ...I believe that was a survival mechanism (...) he has had so many tough experiences through his life ... he learned very early to just shut off, sharply (...)" (Kiamanesh et al., 2015, p. 138).

Suicide Associated with Interpersonal Stressors and Losses. In 42% of studies within this review, before a suicidal act, participants described proximal interpersonal stressors or losses. These were primarily relationship problems or breakdowns (Kunde et al., 2018; Peters et al., 2013; Rasmussen et al., 2014; Stanley et al., 2009), though family conflict (Kiamanesh et al., 2015; Meissner & Bantjes, 2017; Salway & Gesink, 2018), and bereavements were also cited (Ghio et al., 2011; Fitzpatrick, 2014; Rivlin et al., 2013). These pre-suicide stressors were not considered significant on their own, so much as representing the last straw in an accumulation of unresolved psychological pain that had become intolerable (Player et al., 2015; Rivlin et al., 2013). A participant bereaved by suicide in a Ghanian study described how his friend who died by suicide was: "(...) always talking about death. He said he would die because the wife had left him" (Andoh-Arthur et al., 2018, p. 661). Similarly, an Australian participant whose son died by suicide commented:

"He had a fight with his girlfriend that morning. ... He was drunk ... her [girlfriend's] mother come out and said is [son] there, because they couldn't get in contact with him. I said no. She said check the garage. So he [husband] checked the garage and that was it" (Peters et al., 2013, p. 313).

Suicide Associated with Unbearable Isolation and Loneliness. In 23% of studies, overwhelming social isolation, loneliness, and a lack of belonging and meaningful connection were associated with proximal drivers of suicidal behaviors (Cavalcante & Minayo, 2015; Oliffe et al., 2017; Rasmussen et al., 2014). A Brazilian man who attempted suicide described: "My family slowly abandoned me, or rather, I abandoned them and ended up alone [...] and I would often get depressed, drink, use drugs and would really feel like ending it, end all the suffering that my life had become" (4, 61). Similarly, a Canadian man remarked: "(...) I'm not adding to anybody else's life. I can go for months and years without talking to family members, so you know, if I'm here or if I'm not here, what difference does it make (...)" (Oliffe et al., 2019, p. 318).

Suicide Associated with Perceived Burdensomeness. In 8% of studies, suicide was associated with a desire to stop being a burden on loved ones. These feelings of burdensomeness appeared to be linked to feelings of shame, feeling useless, self-contempt, and not living up to cultural expectations (Hagaman et al., 2018; Knizek et al., 2018; Ribeiro et al., 2016). This man from a Brazilian study looking at alcohol and drug use in men who attempt suicide described: "I believed I was this useless person to society and a burden on my family. I thought that that would bring them some peace (family), since they thought the problem was all me. So, I thought that I could stop the suffering and stop their suffering as well" (Ribeiro et al., 2016, p.4).

Proximal Indicators of Suicide Risk Challenging to Read. Significant others are often closest to men in the days leading up to an attempted or completed suicide. Indicators of suicide risk appeared to vary, with distress described as visible in some men and not in others (Fogarty et al., 2018; Owen et al., 2012; Sweeney et al., 2015). Where struggles were known, the behavior of men who were suicidal was described as erratic, making it difficult for significant others to interpret signs of acute distress (Kiamanesh et al., 2015; Owen et al., 2012; Sweeney et al., 2015). Men who were suicidal were described as hard to reach (Owens et al., 2011) and could respond aggressively when approached about their state of mind meaning suicidal despair could potentially be misread as anger or men actively resisted professional intervention (Fogarty et al., 2018; Player et al., 2015). Some significant others felt men lacked the emotional communication skills necessary to articulate their pain or it was communicated without the expected emotional valence to indicate profound distress (Owen et al., 2012; Owens et al., 2011). Some men were reported as only disclosing feelings of suicide in jest, or when drunk (Owen et al., 2012). Other friends and family described how some men talked about suicide frequently, and so they acclimatized to their loved one's despair such that extreme behaviors ceased to be disturbing or worrying (Owens et al., 2005). This male participant from a UK study shared how his friend who died by suicide would frame his thoughts of suicide:

"And he'd say it with a smile, or he'd say it just as you'd say hello to someone, or he made a joke of it. [...] It would be no big deal. It's just something that would come

up in conversation . . . There was no real emotion or anything behind it" (Owen et al., 2012, p. 425).

In the absence of behavior that friends and family associated with 'mental illness' they often did not think their loved one was a suicide risk (Owens et al., 2005; Sweeney et al., 2015). Suicide disclosures were sometimes rationalized as a natural response to acute life stressors (Owens et al., 2005), and friends and family may have been reticent to pathologize their loved one's behavior or lacked the confidence and skills to know how to intervene (Owens et al., 2011). Some male friends described their friendships as centered around "light-hearted, fun interaction and banter" (Sweeney et al., 2015, p. 153) and felt they lacked the emotional tools to know how to intervene when they perceived a friend struggling (Cleary, 2005; Owens et al., 2011; Sweeney et al., 2015). In studies where men were not in contact with mental health services, an intense burden of care appeared to rest with significant others. Sometimes loved ones were the only people aware of a man's distress and had to manage the pressure of assessing risk escalation (Owens et al., 2011; Peters et al., 2013). Other families appeared to provide 24/7 care for some men who left hospital after an attempt and described feeling isolated by this "hyper responsibility" which took a toll on their own mental health (Owens et al., 2011; Peters et al., 2013). An Australian man, whose nephew died by suicide, described how his family would be on 'suicide watch' for several months:

"Suicide watch sort of consisted of sitting in front of the telly, which was outside his bedroom, and just pretending to watch telly (...) turning the volume down really low, and just being in tune and in check with the different noises that were happening in his bedroom" (Peters et al., 2013, p. 312).

At the other end of the spectrum, many other men appeared to keep their distress so concealed that significant others described having no prior warning of suicide risk. Bereaved families shared that men showed no external signs of mental distress (Rasmussen et al., 2018; Sweeney et al., 2015) and concealed their despair so effectively that they seemed popular, social, upbeat, and the possibility of their suicide inconceivable (Kiamanesh et al., 2014; Oliffe et al., 2018; Rasmussen et al., 2014). A 26-year-old male participant in Ireland, whose friend died by suicide, described his friend as follows:

"He'd be able to talk to anybody, and if you were in a pub or a club or whatever, he'd go up and talk to anyone ... he definitely would never strike you as someone who would do that [suicide]" (Sweeney et al., 2015, p. 155).

Summary. In 82% of studies, we found evidence to suggest masculine norms that appeared to devalue and suppress men's interpersonal needs were associated with denial, disconnection, and dysregulation in some men's interpersonal dynamics. These processes appeared to 1. increase some men's psychological pain and 2. diminish their ability to regulate that pain effectively, potentially elevating suicide risk (see Figure 3). Masculine norms, such as emotional suppression, and the need for men to be independent and autonomous, appeared to impact some men's relationships leaving some men isolated, and/or struggling to trust others, and/or ill-equipped to regulate interpersonal intimacy and challenges. In a proximal context, the dysregulation of men's interpersonal needs was associated with intolerable isolation and relationship challenges, and to a lesser extent, perceived burdensomeness. Masculine norms were described as making proximal indicators of suicide potentially challenging for significant others to read and respond to, and in some instances, appeared to render indicators of acute suicidality invisible.

Regulating Psychological Pain

Evidence for recovery factors generated 263 codes categorized into one analytical theme and five descriptive themes. Findings appeared to center around men learning to recognize, reconnect with, and regulate their emotions, relationship with self, and

interpersonal connections. These processes appeared to help increase some men's ability to regulate their psychological pain more effectively, which seemed to help reduce suicide risk. We have synthesized these thematic findings in Figure 4, '3 'R' Recovery.'

Emotional Regulation and Control

The immediate aftermath of a suicide attempt was described by participants as an emotionally volatile time (Ghio et al., 2011; Owens et al., 2011; Rivlin et al., 2013). For some men, the most painful and distressing feelings they'd been concealing about themselves-that they were a 'failure', that their existence was unbearable, that they could not cope—were suddenly visible to the world. One participant remarked that after his attempt he felt like he was walking around with all his clothes off (Wiklander et al., 2003). Postattempt, men cited emotions such as anger (Ghio et al., 2011; Rivlin et al., 2013; Vatne & Naden, 2014), disappointment that they were still alive (Ghio et al., 2011; Rivlin et al., 2013), guilt towards significant others (Akotia et al., 2014; Ghio et al., 2011; Vatne & Naden, 2012), frustration (Rivlin et al., 2013), distress (Wiklander et al., 2003), shame, embarrassment and fear (Knizek & Hjelmeland, 2018; Tzeng, 2001; Vatne & Naden, 2016). These feelings seemed to create a seascape of rapidly changing and volatile emotional states. In 47% of studies, men described learning to recognize, reconnect with, and regulate their emotions and psychological pain as potentially important for helping them manage their thoughts of suicide (Biong & Ravndal, 2007; Ferlatte et al., 2019; Mackenzie et al., 2018). Reference was made to talking to a psychiatrist/psychologist/counsellor (Ferlatte et al., 2019; Gajwani et al., 2018; Mackenzie et al., 2018), Cognitive Behavioral Therapy (Jordan et al., 2012), peer support (Ferlatte et al., 2019; Gajwani et al., 2018; Ghio et al., 2011), significant others (Tryggvadottir et al., 2019), or prison staff (Rivlin et al., 2013). A young Australian man who attempted suicide twice, and had a negative experience with one professional who framed his distress as mental illness, eventually found support from a psychologist whose personcentered approach appeared to help him: "I felt better instantly because, for no other reason than, I had someone I could talk to, share feelings" (River, 2018, p. 154).

Details of the specific mechanisms of these processes were scarce but these interactions were described as helping men learn to understand, communicate, and manage their emotions (Meissner & Bantjes, 2017; Player et al., 2015; River, 2018), accept and manage suicidal behaviors (Ferlatte et al., 2019; Jordan et al., 2012; Meissner & Bantjes, 2017), reconcile with their pasts (Biong & Ravndal, 2007; Jordan et al., 2012; Vatne & Naden, 2014), and develop a new narrative of self and social value (Fogarty et al., 2018; Fitzpatrick, 2014; Rasmussen et al., 2018). Learning to identify and communicate problems and emotions (Byng et al., 2015; Pavulans et al., 2012), and understanding triggers for distress and tools for regulating it appeared to help give some men a degree of agency and control back over their lives (Fogarty et al., 2018; Oliffe et al., 2017; Vatne et al., 2018).

Study authors suggested the need for greater awareness of how masculine norms potentially influence men's emotional and cognitive patterns of behavior and for these schemas to be therapeutically explored (Biong & Ravndal, 2007; Kunde et al., 2018; Tryggvadottir et al., 2019), particularly around men's feelings of failure and shame (Andoh-Arthur et al., 2018), and helping men expand their notions of what constitutes a successful man (Jordan et al., 2012). A 38-year-old Australian man who attempted suicide remarked: "I hope that I can disable this narrative of failure which has become, as my psychologist said yesterday, more or less self–fulfilling." (Fitzpatrick, 2014, p. 154)

Interpersonal Care and Connection

In 32% of studies, participants described recognizing their need for social belonging and reconnecting with significant others as helping to strengthen their desire to live (Jordan et al., 2012; Mackenzie et al., 2018; Player et al., 2015). Feeling that their lives mattered and held meaning for people and becoming aware of their emotional responsibilities to others appeared to help anchor some men back in existence (Biong & Ravndal, 2007; Mackenzie et al., 2018; Vatne & Naden, 2016). This is potentially critical when men were still oscillating between suicidal action (Biong & Ravndal, 2007; Sellin et al., 2017). These bonds were primarily with family (Jordan et al., 2012; Sellin et al., 2017; Tzeng, 2001), as well as friends (Ferlatte et al., 2019; Vatne & Naden, 2016), teachers and peers (Fenaughty & Harré, 2003), and God and religion (Biong & Ravndal, 2007; Osafo et al., 2015). A man from a Swedish study, admitted to a psychiatric unit for his suicide risk, commented: "I have learnt that I have great social needs and that it is easier to handle yourself if you have friends and relatives" (Sellin et al., 2017, p. 204). Similarly, a 23-year-old gay man from South Africa remarked on the impact his suicide attempt had on his family: "I saw how upset it made my whole family (...) Sometimes you find yourself in such a dark space ... you don't see that there is actually people that are loving, that can help you" (Meissner & Bantjes, 2017, p. 791).

Peer Connection and Expanding Masculine Selves

In 24% of studies, men described the importance of sharing their lived experiences with other people who were suicidal through peer support groups (Ferlatte et al., 2019; Gajwani et al., 2018; Ghio et al., 2011). Listening to other men in particular disclose their struggles and share tips on dealing with suicidal behaviors, seemed to help change participants' perceptions of masculinity. These connections appeared to help normalize aspects of men's pain and alleviate some of their shame (Ferlatte et al., 2019; Jordan et al., 2012; Vatne & Naden, 2018). A participant from a Canadian study looking at suicide prevention in gay, bisexual, and two-spirited men, commented how sharing his experiences of suicide with peers had helped him:

"I find one of the most useful things that I've done too, is like, talking with other people who have had similar experiences to me. . . . It just feels like validating hearing somebody else talk about things. You're like, "I get that, too" (Ferlatte et al., 2019, p. 1192).

Peers who were successfully rebuilding their lives were described by some as role models who embodied a hope-filled future (Ferlatte et al., 2019; Jordan et al., 2012; Tryggvadottir et al., 2019). Opportunities to be of service to other men who were suicidal through peer groups and volunteering within the wider community, also seemed to bolster some men's self-worth, and appeared to help provide purpose and meaning (Jordan et al., 2012; Ghio et al., 2011). The importance of expansive representations of masculinity were also described. At the individual level, friends and families cited the importance of normalizing men expressing vulnerability and struggles (Creighton et al., 2017; Oliffe et al., 2018). At the cultural/community level, public framings of masculinity were described as needing to represent broader possibilities and more expansive embodiments of masculine selves (Andoh-Arthur et al., 2018; Creighton et al., 2017). A father in Canada, whose son died by suicide, remarked how he wished he had displayed more of his own vulnerability: "(...) I didn't think about all the stuff that I could have taught him. "What would I handle differently?" It would be about vulnerability for myself" (Oliffe et al., 2018, p. 1387).

Being Respected and Valued by Professionals

In 19% of studies, participants described how the intervention of empathetic, compassionate, and attentive professionals was a valuable protective factor and seemed to help breach some of their isolation (Gajwani et al., 2018; Jordan et al., 2012; Vatne & Naden, 2018). Non-judgemental listening (Biong & Ravndal, 2007; Ferlatte et al., 2019; Jordan et al., 2012), being shown respect (Vatne & Naden, 2016; Wiklander et al., 2003), given time (Kjolseth et al., 2009), seen as valuable and cared about (Vatne & Naden, 2018), and treated as an equal (Jordan et al., 2012; Vatne & Naden, 2014) appeared to increase participants' sense that they were worthy of someone's time and attention. Talking about his doctor, a Norwegian man, aged between 32 and 40, who had been suicidal and suffered substance abuse, said: "He believed in me and listened to me. That meant a lot and was one of the reasons why I managed to go on" (Biong & Ravndal, 2007, p. 253). A young man in an Irish study spoke of the difference a mental health professional made: "Honestly? He listened to me. He heard what I was saying" (Jordan et al., 2012, p. 1211).

Contextualized Suicidal Pain

In 31% of studies, participants and authors discussed the need for suicidal pain to be understood beyond individual psychopathology paradigms (Kunde et al., 2018; Meissner & Bantjes, 2017; River, 2018). Suicidal thoughts and behaviors were described as tied to cultural, political, and social norms and values; structural factors; and lived experiences. These factors were described as also shaping the suicidal mind and may need to be understood and explored in order to resolve aspects of men's suicidal pain (Akotia et al., 2019; Fitzpatrick et al., 2014; Kunde et al., 2018; Laubschler, 2003). An Australian man who perceived his suicide attempt as driven by a lack of secure and fulfilling work, and who was told by a psychologist that he was depressed, spoke of his anger at this response: "that really pisses me off, because there are a lot of people out there really struggling and just being classed as depressive" (River, 2018, p. 154).

Summary. In 78% of studies, we found evidence to suggest that recovery factors related to men recognizing, reconnecting with, and regulating aspects of their emotions, self-hood, and interpersonal connections seemed to help men regulate their psychological pain more effectively, which appeared to help reduce suicide risk (see Figure 4).

Discussion

To our knowledge, this qualitative meta-synthesis is the most in-depth review of qualitative male suicide research yet conducted. It is based on the analysis of 78 peer-reviewed studies that encapsulate insights from over 1,695 people close to the phenomena.

Norms of Masculinity and Male Suicide

In 96% of studies, we identified an association between cultural norms of masculinity and male suicide risk. It is important to emphasize that these findings relate to masculinity as "a social construction distinct from male biological sex" (Levant & Pryor, 2020. p. 15). Our findings do not problematize the male sex but cultural norms that may narrow some men's behavioral repertoires with potentially profoundly detrimental costs to their psychological health (Lee & Owens, 2002). Masculinity is not pathological (Kryinska, 2014; Seidler et al., 2018), and most men are not suicidal. Similarly, many norms traditionally associated with masculinity, such as provision and protection, are admirable qualities that have made a valuable contribution to the human story (Kiselica & Englar-Carlson, 2010). Still, our review suggests certain pressures imbued in expectations of masculinity may increase some men's suicide risk, and understanding this dynamic may be a critical component of male suicide prevention work.

In our review, norms relating to male emotional suppression, failing to meet standards of male success, and the devaluing of men's interpersonal needs were associated with some men experiencing denial, disconnection, and dysregulation within three core psychological domains: 1. emotions (92% of studies), 2. self (76% of studies), and 3. interpersonal connections (82% of studies). These processes appeared to be associated with 1. increasing men's psychological pain, and 2. diminishing men's ability to regulate that pain, which we suggest elevates suicide risk. In our review, recovery was framed as learning to regulate psychological pain through recognizing, reconnecting with, and regulating emotions, thoughts, and feelings towards self, and connections with others. To elucidate these dynamics, we developed two models (3 'D' Risk and 3 'R' Recovery). These models do not seek to diminish the huge complexity of suicide. Like Leenaars (1996), we wish to caution that each man who is suicidal must be understood individually. Failure may be a core

dynamic in male suicide, but the causes of that perceived failure will be unique to the individual. Each suicide is an individual story, with its own context and biography.

Our findings accord with quantitative evidence to suggest the potential importance of psychological pain, emotions, self, connections with others, and masculine norms to suicide. A recent systematic review of mental pain in 42 studies concluded it was a significant predictor of suicide risk (Verrocchio et al., 2016). Recent systematic reviews also indicated that higher levels of emotional intelligence protected against suicide (Domínguez-García & Fernández-Berrocal, 2018), and challenges regulating emotions were associated with suicidal behaviors (Colmenero-Navarrete et al., 2021). A recent mini-review and meta-analysis found an association between alexithymia—a condition by which people struggle or are unable to distinguish/identify emotions—and suicidal risk and ideation (De Berardis et al., 2017; Hemming et al., 2019). Problems sharing feelings have been found to be more predictive of a medically serious suicide attempt than depression or hopelessness (Levi et al., 2008).

Quantitative studies have also explored the link between feelings towards self and suicidal behaviors, with shame and low self-esteem associated with suicide (Bhar et al., 2008; Cameron et al., 2020; Chatard et al., 2009; Soto-Sanz et al., 2019; Thompson, 2010). A systematic review of signs of suicidality in men found worthlessness and helplessness to precede a male suicide death (Hunt et al., 2017). A recent machine learning study found levels of self-esteem to be an important predictor of suicidal thoughts and behaviors (Macalli et al., 2021). A systematic review of youth suicide resiliency found positive self-regard to be a protective factor (Shahram et al., 2021). Additionally, the quantitative evidence for a lack of social bonds as a suicide risk for men is well supported. Relationship breakdowns are frequently cited as a trigger for suicidal behaviors in men (Goodman et al., 2020; Hardy, 2019; Samaritans, 2012; Scourfield & Evans, 2015). A meta-analysis found men who were not married demonstrated a higher likelihood of suicide compared to men who were married

(Kyung-Sook et al., 2018). Conversely, a recent study of Australian men found that interpersonal connections, resilience, and coping behaviors protected against suicidal ideation and planning in men (Seidler et al., 2023). Similarly, a meta-analysis of suicide in physicians found marriage to be a protective factor for men (Duarte et al., 2020). Finally, adherence to traditional masculine values has been found to increase suicide risk in men (Coleman, 2015; Houle, Mishara & Chagnon, 2008). In particular, masculine norms of stoicism (Daruwala et al., 2021) and self-reliance have been associated with suicidal ideation in men (King et al., 2020; Pirkis et al., 2017).

Interacting Harms

Our review has presented evidence to suggest a potential association between masculine norms and increased male suicide risk. Yet, given that most men socialized in these same norms do not engage in suicidal behaviors an urgent key question remains as to why these norms are a potential risk for some men. One possible explanation may be that it is the <u>interaction and accumulation</u> of harms across the domains of emotions, self, and interpersonal connections that raise some men's suicide risk.

In this review, we have conceptually separated these psychological domains to illustrate how masculine norms are potentially associated with harm in each domain. However, these constructs cannot be understood in isolation. They are inextricably linked and reciprocal, i.e., our emotional states, our thoughts and feelings toward self, and our interpersonal connections are informed and affected by each other (Barrett, 2017; Farberow, 2004; Smith & Weihs, 2019). Harm in one domain can aggravate and extend harm in the others (Bryan & Rudd, 2016). Themes relating to denial, disconnection, and dysregulation of emotions AND self AND interpersonal connections featured in 65% of studies. In multiple ways, these domains appeared to interact. Feelings of failure were associated with men socially withdrawing and isolating themselves (Biong & Ravndal, 2009; Tryggvadottir et al., 2019). Feeling like a failure was associated with men intensifying emotional suppression as "the only masculine act available" (Oliffe et al., 2017, p. 893). Emotional suppression was associated with leaving men isolated from themselves and others (Biong & Ravndal, 2007) and coping through alcohol (Cleary, 2012). Alcohol dysregulation was associated with increased tension and isolation in interpersonal relationships and driving suicidal behavior (Knizek & Hjelmeland, 2018). Thinking about suicide was associated with exasperating men's feelings of failure and isolation (Tryggvadottir et al., 2019). See Table 2 for additional quotes from primary studies to illustrate how these harms interacted.

We suggest some men who are suicidal are potentially trapped in these pain loops, with harms in core domains possibly reinforcing each other, and potentially increasing men's psychological pain and diminishing their resources to regulate it effectively. It is therefore important to view the risk factors suggested in this review not as discrete, solitary components but as psychological mechanisms in potential reciprocal, dynamic, and fluctuating interaction. We speculate that this interaction may set the dynamic psychological context for male suicide and potentially provide a more compelling explanation for the role of cultural norms in male suicide risk. We cannot present a linear story for how that interaction evolves, it will be unique to each individual (Rudd, 2000). Still, we believe that exploring the interaction of potential harms within these core domains in an individualized context could help bring personal male suicidal narratives and risk to life. For example, a man who loses his job but has good emotional regulation and interpersonal connections where he is meaningfully known and supported is potentially buffered from suicide risk compared to a man who loses his job, has emotional dysregulation, denies his interpersonal needs, and is emotionally and socially isolated. Losing a job can be a source of psychological pain. In this second scenario, other harms to a man's emotional regulation and interpersonal connections may undermine his ability to effectively regulate this pain. Suicide risk will be

mediated by other factors, such as genetics, personality traits, and hormones. We do not claim that this explanation is exhaustive, only that the interaction of cultural harms may contribute to elevating some men's suicide risk.

Childhood Adversity, Masculine Norms, and Suicide Risk

Childhood adversity was also associated with distal suicide risk in 56% of studies and appeared to impact men's emotional development (Biong & Ravndal, 2009; Chung et al., 2015; Everall et al., 2006) and self-worth (Biong & Ravndal, 2009; Kiamanesh et al., 2014; Salway & Gesink, 2018). Childhood adversity is a well-established distal risk factor (Harris, 2010; Joiner, 2005; O'Connor & Kirtley, 2018; Turecki et al., 2019; Zortea et al., 2019). What is potentially significant from this review is thinking about how childhood adversities may interact with masculine norms to potentially compound men's risk. Men who experience childhood challenges and are socialized to suppress pain, may face a double jeopardy in terms of developing robust emotional regulation. Research has also shown that men who experience child abuse and high masculine norm conformity are at increased odds of a suicide attempt (Easton et al., 2013).

Over 96% of childhood adversity codes came from upper-income contexts. Concrete cultural comparisons cannot be established from this review as different researchers investigated and asked different questions, but the absence of childhood challenges in some locations may potentially reflect different cultural contexts. Poverty and instability are potentially the primary focus of daily concerns and sources of emotional turmoil outside of upper income locations. In westernized contexts, relative material comfort has potentially allowed a cultural re-orientation towards a more nuanced awareness of individual, childhood neglect and adversity (Dowbiggin, 2011). It is also worth noting that given male norms to suppress emotions, the studies reviewed may not provide an accurate insight into the childhood adversity experienced by participants. For example, Gajwani et al. (2018) observed

that participants described largely "happy childhoods" even though narratives also referenced profound adversity that was "experienced as intrusive flashbacks" in adulthood (p. 1122). This potential dissonance may be a product of cultural norms of male stoicism and may distort men's recollection and permissions/safety to articulate the impact of adversity.

Understanding Distal and Proximal Risk

In our findings, proximal risk factors appeared to be an intensification of the denial, disconnection, and dysregulation of emotions, self, and interpersonal connections that were identified as distal risk. Causality cannot be inferred from our data. In particular, our proximal distinctions were crude, and there was not clear information about how proximal they were, i.e., hours, days, or weeks before an attempt/death. Still, it could be that there are core psychological phenomena critical to human well-being that both distal and proximal risk factors progressively undermine. Our data suggest these domains to be emotions, self, and connections with others. Exposure to risk factors that deteriorate functioning in these domains could elevate suicide risk over time and suicide prevention work may need to help men achieve effective regulation in these areas. Similarly, it may be difficult to accurately delineate what constitutes a distal risk factor from a proximal risk factor. A middle-aged man who experienced childhood sexual abuse may lose his job and make a suicide attempt immediately after. His job loss may be the proximal factor that precipitates his attempt, but traumatic thoughts relating to the abuse may be most prevalent in his mind as he attempts.

While some researchers have suggested distinguishing between risk factors for suicidal ideation and suicide attempts (Glenn et al., 2017), other scholars suggest that suicide should not be viewed as a linear process. Instead, suicide attempts may be an amalgamation of long- and short-term risk factors with thoughts of suicide and attempts emerging "at once, or within a short lapse of time" (Bloch-Elkouby et al., 2020, p. 915). Our findings suggest support for both views as the level of planning before an attempt appeared to differ. Some

men referenced planning their suicide for years (Biong & Ravndal, 2009; Rasmussen et al., 2014), others suggested they only thought about it a few minutes before attempting (Rivlin et al., 2013). In our review there did appear to be some behavioral presentations in men experiencing profound dysregulated psychological pain that may indicate their threshold for tolerating pain was at risk of being breached. Men's interiors were described as exhausting to inhabit as they struggled to regulate thoughts and feelings of suicide (Cleary, 2012; Kiamanesh et al., 2015; Oliffe et al., 2018). Men described feelings of panic (Cleary, 2012), dysregulated thoughts and decision-making (Biong & Ravndal, 2007), sleep problems (Benson et al., 2016; Oliffe et al., 2019), insomnia (Bonnewyn et al., 2014), anxiety (Bonnewyn et al., 2014), exhaustion (Biong & Ravndal, 2009; Oliffe et al., 2017), diminished self-regulation, and coping resources (Benson et al., 2016; Rasmussen et al., 2018). Understanding the psychobiology of psychological pain could help elucidate useful distal and proximal distinctions. As Sher (2020) remarked, we won't "reduce suicide in men until we have a good grasp of the psychobiology of suicide in men" (p. 277).

Understanding the Suicide Gender Paradox

What value does our review add to understanding why men are more at risk of dying by suicide than women? From a psychological perspective, our findings suggest that denial, disconnection, and dysregulation of emotions, self, and interpersonal connections are potentially associated with male suicide. Yet, these core dynamics could also be active in female suicide risk. In fact, we found similar themes present in studies with mixed suicidal populations, including emotional dysregulation (Everall et al., 2006; Fitzpatrick, 2014; Pavulans et al., 2012), maladaptive coping strategies (Cavalcante & Minay, 2015; Everall et al., 2006; Ghio et al., 2011; Kizza et al., 2012), a lack of self-worth, self-hatred, and feelings of failure (Benson et al., 2016; Chung et al., 2015; Elliott-Groves, 2018; Everall et al., 2006; Orri et al., 2014; Rivers et al., 2018; Wiklander et al., 2003), a lack of trust in others, loneliness, and interpersonal isolation (Akotia et al., 2019; Benson et al., 2016; Bonnewyn et al., 2014; Chung et al., 2015; Gutierrez et al., 2015; Vatne & Naden, 2012), interpersonal challenges, losses, and conflict (Bonnewyn et al., 2014; Cavalcante & Minayo, 2015; Ghio et al., 2011; Orri et al., 2014), suicidal exhaustion (Benson et al., 2016; Bonnewyn et al., 2014; Pavulans et al., 2012; Vatne & Naden, 2012), suicide as a way to end the pain (Bonnewyn et al., 2014; Everall et al., 2006; Ghio et al., 2011), hopelessness and a loss of control over life (Crocker et al., 2006; Everall et al., 2006; Fitzpatrick, 2014). Neither our review nor these primary studies were comparative gender studies. Nonetheless, we speculate that the underlying psychology of men and women who are suicidal may potentially be similar. Denial, disconnection, and dysregulation of emotions, self, and interpersonal connections could potentially underpin an element of female suicide risk too. Still, we suggest that men in certain cultural locations may potentially be at a higher baseline suicide risk because of masculine norms that may mean more men than women culturally inherit harms in these core domains. For example, scholars have suggested that gender differences in the experience of emotions may be primarily influenced by social norms that prescribe gender-specific emotional behavior (Burn, 1996; Danielsson & Johansson, 2005; Wester et al., 2002). Chaplin and Aldao's (2013) meta-analysis of gender differences in children's emotional expression found no gender differences in infancy, with small but significant distinctions beginning to appear from toddler age onwards. Research has suggested that boys show reduced verbal expression compared to girls by age two, and less facial emotional expression by age six (Levant, 2006). Many men go on to be socialized in norms advocating masculine stoicism and the suppression of emotions and vulnerability (Anderson, 2009; Kingerlee et al., 2014; Levant, 1996). A meta-analysis of empirical gender differences in alexithymia found significant differences in non-clinical populations, with men displaying higher levels of alexithymia than women (Levant et al., 2009). Norms of male emotional suppression may

impact men's interpersonal connections. Karakis and Levant's (2012) study exploring the impact of male normative alexithymia on relationships showed that it correlated negatively with relationship satisfaction, communication quality, and positively with fear of intimacy. Other research has shown a link between alexithymia and interpersonal problems and that some men can struggle to express attachment (Frye-Cox & Hesse, 2013; Levant et al., 2009; Vanheule et al., 2007; Zarei & Besharat, 2010). In certain cultures, new norms are evolving for men to take on more active and nurturing roles within interpersonal dynamics, and some men may perceive themselves as lacking the emotional skills to do so effectively and lacking a psychologically safe space in which to learn them (Levant et al., 2006; Samaritans, 2012). Some men could read relationship challenges and conflict as symbolizing a masculine failure to care, protect, provide, and/or satisfy significant others. Similarly, scholars have hypothesized that men have historically experienced stringent norms regarding male success that could leave men particularly vulnerable to feelings of failure, especially concerning financial and work-related stress (Coleman et al., 2011; Scourfield, 2005; Swami et al., 2008). Norms that encourage men to be absent economic providers and that emphasize male achievement over connectedness, may isolate some men from the protective value of intimate connections (Levant, 1996; Swami et al., 2008).

We suggest cultural harms to men's relationships with their emotions, self, and others, coupled with a potential preference in men to use lethal means, like hanging and firearms, could explain some of the gender paradox in suicide. The role of masculine norms may also be relevant to men's higher use of lethal means (Möller-Leimkühler, 2003). Canetto and Sakinofsky (1998) have suggested that hegemonic ideals of masculinity may create a cultural script that reads suicidal behavior as courageous, decisive, and masculine. The use of lethal means may represent men reclaiming masculine control over their distress and ensuring that their suicide attempt results in death, i.e., "success" rather than survival, i.e., "failure", and

potentially having to face the world with their pain and struggles exposed. Swami et al. (2008) have also suggested that gender may inform men and women's familiarity with different suicide methods. For example, men are more likely to own, store, and understand how to operate a firearm (Swami et al., 2008). It is important to note that in our findings, other methods more commonly associated with women, such as cutting and overdoses, were also cited in male deaths and attempts (Byng et al., 2015; Biong et al., 2007; Cleary, 2005). We encourage qualitative researchers, in future studies, to reflect on how the gender paradox may or may not be evident or explained in their data whilst also acknowledging the diverse spectrum of masculine and feminine identities (Scourfield, 2005).

Theoretical Implications

In this section, we review the theoretical implications of our findings and make seven recommendations for future exploration in relation to male suicide, summarized in Table 3.

Theories of Suicide and Psychological Pain

Our data support the theoretical centrality of high exposure and poor regulation of psychological pain to male suicide (Shneidman, 1993; Soper, 2018). It may be theoretically important for future research to explore delineating the impact of psychological pain on suicide risk from physical pain. Ideation-to-action theories of suicide have posited that increased physical pain tolerance may characterize people who attempt suicide (Joiner, 2005; Klonsky & May, 2015; O'Connor, 2001). The assumption is that exposure to events that increase a person's physical pain tolerance may increase their capability to carry out suicidal behaviors. If this is correct, men who attempt suicide should have a higher physical pain tolerance than other men. Our data did not provide insight into physical pain experiences. However, the potential presence of heightened psychological pain was apparent across studies. As such, there may exist a pain paradox whereby men who are suicidal are desensitized to <u>physical</u> pain but potentially more sensitive to <u>psychological</u> pain. Recent

studies with non-suicidal populations suggest a potential positive correlation between physical pain and social pain, with people more sensitive to physical pain more sensitive to social distress (Yao et al., 2020). It is possible men who are suicidal may not follow this pattern.

Theories of Suicide and Cultural Norms

The role of culture is not explicitly addressed in leading suicide theories. Findings from this review suggest its theoretical significance. Cultural norms relating to acceptable and appropriate behavior for men within the domains of emotions, self, and connections with others were potentially important in shaping some men's exposure to and regulation of psychological pain. Integrating an understanding of how cultural norms may impact a man's connection and relationship with psychological phenomena identified as critical to theories of suicide, could help expand our understanding of certain men's risk exposure.

Theories of Suicide and Emotional Regulation

Specific emotional states, such as hopelessness (Klonsky & May, 2015; Joiner, 2005; O'Connor, 2011) and defeat and entrapment (O'Connor, 2011), are integrated within particular theories of suicide. Our findings support the potential theoretical importance of these emotional states. In addition, our data suggest that it may be valuable to integrate emotional regulation as a broader concept into theories of male suicide. Emotional regulation is central to Linehan's (1993) theoretical work developing therapeutic treatments for people with borderline personality disorder, and poor distress tolerance is referenced in Rudd's (2006) Fluid Vulnerability Model. Otherwise, emotional regulation lacks prominence in most theories of suicide. This omission seems incongruous considering the widespread acceptance of psychological pain to understanding suicide. Psychological pain is, in part, emotional pain, and suicide is often driven by emotions that, in the moment of suicidal crisis, feel like they cannot be regulated in a life-orientated way. As such, suicide is often a deeply emotional act. A person's ability to regulate their emotions is intertwined with their ability to manage their psychological pain effectively. Integrating a concept of emotional regulation explicitly into theories of suicide could help inform risk. Any theoretical integration of emotional regulation will also need to consider the relationship between emotions and cultural norms. Understanding norms for male emotionality in a specific location and how men are culturally encouraged to regulate their emotions, cope with psychological pain and seek to relieve it, could help inform aspects of male suicide risk.

Theories of Suicide and Feelings toward Self

Our review suggests that the presence of aversive self-awareness may play a central role in male suicide risk. This finding has strong theoretical accordance with Baumeister's 'Escape from Self' theory, where suicide is conceived as driven by the desire to escape negative self-aversion. Perceived burdensomeness is also a core component of Joiner's 'Interpersonal Theory of Suicide' (2005). This burdensomeness is described as related to 1) a belief that the self is flawed and a burden to others and 2) aversive self-hatred. Our data suggest strong support for potential awareness of a failed/flawed self in the minds of men who were suicidal, but this pain was rarely articulated in relation to being a burden on others though we acknowledge that these constructs are deeply intertwined. Nevertheless, it may be important for professionals and loved ones to be sensitive to male narratives of self that are oriented towards declarations of failure. It is also worth noting that some men described understanding the pain their death would cause loved ones, which suggests they understood themselves to be valuable and meaningful to others - not solely a burden (Pavulans et al., 2012; Vatne & Naden, 2016). Some men who were suicidal seemed conscient of the traumatic need to burden loved ones with the pain of their death because the perceived burden to themselves of enduring their psychological pain was too much to bear.

Similarly, although many men in our data appeared consumed by feelings of failure, we would caution against characterizing these feelings as those solely of self-hatred. Selfhate was referenced in some narratives within our data (Ferlatte et al., 2019; Strike et al., 2006; Tryggvadottir et al., 2019) but the self was also referenced in terms of feelings of sorrow and grief (Akotia et al., 2019; Bell et al., 2010; Oliffe et al., 2019). The language of self-hate has the potential to make the 'self' the enemy in a suicidal crisis rather than, for example, the self being a victim of structural circumstances, oppressive cultural expectations, or other people's abuse. Perceiving yourself to be a failure can provoke many emotions of which hatred may be an aspect. As Shneidman noted, "suicide can be other than homicide; the principle emotional state can be other than rage" (1998, p. 248).

Again, understanding the theoretical relationship between self and suicide will require taking a cultural perspective into account. If we accept that feelings of failure may be theoretically relevant to male suicidal behaviors, we must also explore cultural contexts. Different cultures will have different ideals, expectations, and demands regarding what constitutes a man of social value (Markus & Kitayama, 2010). Understanding male suicide risk may require exploring cultural expectations for male success and failure in specific locations, the resources individual men have to meet these markers, and what sort of subjective wellbeing achieving them yields.

Theories of Suicide and Connections with Others

Our findings support Joiner's theoretical assertation of the centrality of 'thwarted belongingness' to suicidal behaviors. Joiner et al. understood thwarted belongingness to consist of two dimensions "loneliness and the absence of reciprocally caring relationship" (Van Orden et al., 2010, p. 582). In our data, distinctions between these two components were potentially crucial. We found narratives of men who appeared visibly socially isolated (lacked caring relationships), as well as of men who appeared enmeshed in social relations

but who perceived themselves to be unable to be meaningfully known within those dynamics (lonely). The only additional theoretical implication is the integration of a cultural perspective. Understanding the cultural permissions, and constraints, offered to men with regard to the level of connection and intimacy within friendships, family, and romantic dynamics could be important to understanding male suicide risk.

Theories of Suicide and Childhood Adversity

Childhood adversity is referenced in both Joiner's (2005) and O'Connor's (2011) ideation-to-action models of suicide. Our data suggest this may be important as childhood experiences appeared to expose some men who were suicidal to significant psychological pain and potentially contributed to emotional dysregulation and aversive feelings of self.

Theories of Suicide and Evolution

Theoretical explorations of evolutionary pressures for effective regulation in specific domains could help elucidate why the dysregulation of certain phenomena could lead to suicide. This review suggests that dysregulation of emotions, self, and connections with others could elevate men's suicide risk. Future theoretical work to explore evolutionary explanations for the importance of these domains to human well-being may help advance our understanding of why suicide may be activated in response to them being thwarted. For example, emotions are understood to be critical to human life (Adolphs & Anderson, 2018). Emotions help facilitate communication and social bonding, they are "meaning-making tools" that help us understand and explain our experiences and drive our behaviors (Barrett, 2017, p.139). Our "emotional coping strategies have evolved over some six million years of hominid existence" (Langs, 1996, p. 110). The cultural suppression of aspects of men's emotions potentially undermines millions of years of evolution and may deny some men access to fundamental parts of their humanity and a functioning relationship with a core coping/regulatory system. Similarly, a positive self-concept helps imbue our lives with the

agency to drive and direct behavior (Stevens, 1996). Farberow asserts that to function in modern cultures, people need to be able to like or at least tolerate themselves (2004). From an evolutionary perspective, stringent cultural demands around male success may leave some men vulnerable to developing dysregulated feelings of self that may undermine another core aspect of regulation. Lastly, as one of the most social species in existence, successful social bonds and belonging are critical to human survival (Baumeister & Leary, 1995; Eagleman, 2016; Humphrey, 2007; Perry, 2014; Wilson, 2019). Other people help regulate our physiology and positive social bonds provide safety and a feeling of psychological well-being (Barrett, 2017). This evolutionary context may help explain why actual or perceived ruptures in a person's ability to create and/or maintain meaningful connections have been linked with psychological distress and multiple health issues (Smith & Weihs, 2019). Primates raised in social isolation have shown self-harming behaviors such as self-biting (de Catanzao, 1981). Norms that suppress men's interpersonal needs may limit some men's ability to fulfill an evolutionary drive for social connection, belonging, and safety.

In summary, our findings illustrate how multiple theoretical explorations could help us to understand male risk specifically.

Recommendations for Prevention of Male Suicide

Finfgeld (2003) advocated that the ultimate value of qualitative meta-synthesis lies in its utility to "improve clinical practice, research, and health care policies" (p. 903). To that end, we make the following recommendations for male suicide research and interventions based on our findings. This list is by no means exhaustive. Our recommendations are based on qualitative source studies and will not be representative of every man's experience. We do not know how many men in our sample went on to die by suicide irrespective of potential interventions. Recovery work needs to consider cultural contexts with different demographics of men, i.e., rural men, elderly men, sexual minority men, potentially requiring different types of support (Crocker, 2006; Lee & Owens, 2022; Player et al., 2015). Many of these recommendations need to be fully scoped out and evaluated before we can claim that we have established science-based interventions that improve suicide recovery.

Interventions for At-Risk Individuals

Psychological Targets for Interventions. Although the evidence base for effective interventions for suicidal people has grown, it is still not sufficient (Franklin et al., 2017; Krysinska et al., 2017; O'Connor & Nock, 2014) especially with respect of treating or supporting the recovery of men who are suicidal. This dearth was also the case with our data. Of the codes in our review, 77% related to risk factors and only 23% to recovery. Studies rarely revealed the specificity of any interventions, i.e., therapeutic modes, time frames, and length of interventions. Instead, the value of our findings comes from broad insights into the general psychological shifts that participants described as potentially helping aid suicidal relief, which need significant scientific evaluation to determine if they are useful. Our findings support broad hypotheses that interventions which target helping men to 1. regulate their psychological pain, 2. regulate their emotions, 3. revise aversive concepts of self, especially with regards to feelings of masculine failure and shame, and 4. improve interpersonal relating and meaningful connection, could have utility. These domains can be targeted in different ways, i.e., through individual therapy, peer support groups, and at different levels, i.e., clinical, community, policy, and public health campaigns. These claims need to be evidenced and we need to understand how interventions can be best delivered, over what time period, and using what intervention/therapeutic models, potentially in combination.

Post-Attempt. In our data, the immediate aftermath of a suicide attempt was highlighted as a time of high emotional volatility though there was scant evidence for effective interventions. Our data suggest that following an attempt, many men may remain on

the cusp of suicidal action. This may indicate that men's psychological resources are too depleted to cope with intensive therapeutic work during this period. Priority should potentially be given to safety and stability with more intensive therapeutic work to resolve underlying drivers of suicidal behaviors coming later in recovery journeys. A recent metaanalysis (Nuij et al., 2021) and cohort comparison study (Stanley et al., 2018), have shown that safety planning interventions which prioritize coping strategies and social contact post a suicide attempt have utility. Suicide interventions and clinical practitioners should be mindful of the tension imbued in suicide recovery as individuals may oscillate between the suicidal impulse to escape the pain of the present while simultaneously trying to build hope for a better future (Baumeister, 1990; Vatne & Naden 2014).

Therapeutic Support. Our findings suggest that supporting men to regulate their psychological pain is potentially important (Ferlatte et al., 2019; Gajwani et al., 2018; Mackenzie et al., 2018). This work often requires bespoke therapeutic support (Shneidman, 1998). A recent study of intervention preferences for men in outpatient care found that most men wanted long-term, individual psychotherapy (Kealy et al., 2020). The financial cost of private therapy and long waiting lists in public systems, means there may also be utility in exploring self-guided therapeutic tools for men who cannot afford/access therapy. A meta-analysis of digital psychological self-help interventions have shown they have promising value (Torok et al., 2020). It is important to be mindful when assessing the potential utility of therapeutic work that without interventions in other domains—especially those relating to structural pressures—the impact of therapy may be short-lived or limited (Chandler, 2021).

Multi-level Interventions. Recovery may require a network of interventions delivered by different services (Kizza et al., 2012; Pavulans et al., 2012; Ribeiro et al., 2016; Sher, 2020). A gay man in River (2018) described CBT as relatively helpful but it was only when joining a community group for gay men that he perceived peer support enabled him to

address the deep feelings of shame and isolation driving his despair. Some men may need support for their alcohol dependency alongside therapeutic support so that their emotional pain when sober is bearable (Rivlin et al., 2013), other men may need additional vocational training (Ribeiro et al., 2016). Multi-level interventions that tackle psychological and structural issues in conjunction may be a valuable line of research and service development (Struszczyk et al., 2019). A pilot randomized trial of the 'HOPE' service, a brief psychosocial intervention that provides both mental health and financial support to people presenting at hospitals in acute distress, has shown feasibility (Barnes et al., 2018). Similarly, a two-year multi-modal intervention that targeted four different sites, including individuals in distress, their families, primary care staff, and public health campaigns, showed a 24% reduction in suicide deaths/attempts compared to a control region and baseline year (Hegerl et al., 2013).

Clinical Interventions

Assessing Risk. The findings in this review add to existing evidence that assessing suicide risk is highly complex (Carter et al., 2017; Glenn & Nock, 2014; Large & Ryan, 2014; Mackenzie et al., 2018; Pisani et al., 2016; Scourfield et al., 2012). The diverse stories in our data support suggestions that suicide does not appear to follow a linear path which makes identifying and developing reliable risk factors, profiles, and assessments challenging (Zortea et al., 2020). A systematic review and meta-analysis of risk scales found that no scale could predict risk with meaningful accuracy (Carter et al., 2017). Findings from our review show some support for calls to move away from standard risk assessments (Mackenzie et al., 2018; Pisani et al., 2016; Zortea et al., 2020). Scholars have suggested that clinicians instead need to ground their assessments in a better understanding of "the psychosocial factors associated" with suicide risk (Zortea et al., 2020, p. 9). Significantly more resources are potentially required to allow mental health systems the time to hold these deeper assessment conversations and provide clinicians with sufficient training in male psychosocial risk factors

(Carter et al., 2017; Pisani et al., 2016; Seidler et al., 2019). Findings from this review suggest that narratives which indicate signs of denial, disconnection, and dysregulation of emotions, self, and interpersonal connections could potentially indicate elevated suicide risk and also present specific modifiable, psychological targets for tailored interventions. In this way risk assessment moves away from suicide prediction to synthesizing "information that facilitates prevention" (Pisani et al., 2016; p. 625). Much more research is needed to test these assumptions and develop evidence-based tools to guide assessments. We note the emotional burden placed on professionals currently responsible for making suicide risk assessments with tools that are potentially inadequate and that require more research to improve and evidence that they work.

Gender-Sensitive Professionals. Given the association between shame and suicide (Rice et al., 2020), it is potentially important that masculinity is not framed as toxic or pathological by professionals so men who are suicidal do not further internalize negative notions of self (Levant, 1992; Struszczyk et al., 2019). Seagar and Barry (2014) argued that men who are struggling will respond better in environments where "a positive, inclusive, empathic and respectful approach to men and boys is offered" (p.119). Our findings support suggestions by Mahalik et al. (2012) that modules on male socialization be embedded in clinical training programs, for example understanding male distress presentations, and how masculine norms may contribute to men's psychological pain and the behavior of men encountered in services (Lester et al., 2014; Seidler et al., 2019). Norms of emotional suppression—to conceal or downplay struggles—may cause some men to have more difficulties, or initial hesitancy, in describing their interior worlds (Levant et al., 2009; Vanheule et al., 2007). Some men may also present with physical symptoms rather than psychological ones. Suicide can be, in part, the manifestation of a coping crisis (Vatne & Naden, 2014). Given masculine norms around male autonomy, control, and success,

clinicians should potentially be compassionate and alert towards what surviving an attempt, or revealing thoughts of suicide, may mean for some men who may have been conditioned for years to cope by denying their struggles. Some men's sensitivity to autonomy and need to trust and respect practitioners may all impact male distress presentations and responses to clinicians. Seidler et al. (2019) make further important recommendations regarding clinicians' assessing their own gender-based views and potential biases. Services need to become gender-sensitive, though Seidler et al. (2018) warn this does not mean adopting a homogenous approach to male care. Every man who is suicidal has his own history; his own culturally informed schemas of self, emotions, and interpersonal relating; his own learned coping strategies and safety-seeking behaviors; as well as embodying his own intersectionality of identities across multiple dimensions such as race, sexuality, disability, education, socio-economic status, caregiving responsibilities, interpersonal connections, etc., all of which will potentially contribute to the level of psychological pain in his life.

Men's Help-Seeking Attitudes and Experiences. Help-seeking was rejected by some participants as a perceived 'weakness' (Cleary, 2012; Kunde et al., 2018; Player et al., 2015). This is in keeping with theories that suggest by ignoring their wellbeing, some men perform a vision of masculinity that demonstrates strength and independence (Courtenay, 2000). The help-seeking behavior of men is, however, complex and nuanced. Some men reported that their self-esteem was so decimated they did not consider themselves worthy of the attention of service providers (Rasmussen et al., 2014; Strike et al., 2006). The medical model appeared to actively deter some men, and if you don't think the "help" will help, you are not going to necessarily seek it (River, 2018). Some men suggested that they did not understand the utility of talking about problems, potentially reflecting cultural messages they may have received that men do not need to discuss their struggles (Cleary, 2012). It is also important to acknowledge that there are still communities where admitting distress may come

at significant social cost for some men and that simplistic messages that problematize men not talking or seeking help may undermine complex cultural realities (Chandler, 2021). If men receive cultural messages that suggest they need to be strong, independent, and competent then feeling unable to cope independently with distress may add to feelings of failure and shame (Rice et al., 2020). In this light, denying distress may become a logical, if ultimately dangerous, coping strategy within the confines of cultural norms of masculinity. Some men may also be vulnerable to accruing more distress than they can cope with given the potentially limited cultural education societies offer some men in understanding and regulating their emotions.

Alongside continued work to understand men's barriers to accessing support, our data also suggest it is also important to problematize the help available for men. In this review, we found more evidence of men seeking support but describing bad experiences, than of men not seeking help. This review highlights the need previously identified by researchers to examine how health services can better tailor provision to meet men's needs (Seidler et al., 2018; Seidler et al., 2019; Seidler et al., 2020; Tang et al., 2022). It may be important to consider how current professional mental health practices interact and potentially exacerbate sources of psychological pain in men who are suicidal. For men who may be harboring shameful feelings of failure and who have been socialized not to disclose their pain, sitting down in a doctor's chair and speaking their pain aloud to another person, potentially for the first time, could represent a moment of profound vulnerability. In this context, time-pressured and medically focused encounters may be highly alienating. Similarly, men with high levels of hopelessness and/or entrapment, may be deterred by systems with long waiting lists. Seeking help also requires persistence (Ferlatte et al., 2019) and public campaigns may need to consider how to realistically prepare men for help-seeking journeys that may require resilience and seeking support multiple times including navigating potentially negative experiences.

Non-Clinical Interventions

Significant Others. Given the importance of interpersonal connection theoretically to suicide (Joiner, 2005), significant others may be a vital recovery resource for men (Player, 2015; Vatne & Naden, 2016). In our data, affirmations from loved ones and lay-led interventions were described as sometimes more powerful and welcome than medical/counsellor interventions (Ferlatte et al., 2019; Owens et al., 2005; Player et al., 2015). Significant others can be on the frontline of a loved one's suicidal crisis and placed under enormous emotional pressure (Owens et al., 2011; Lascelles, 2021; Peters et al., 2013). Navigating dynamics with significant others post-attempt may be complicated (Jordan et al., 2012; Tzeng, 2001). Suicide attempts may strain relationships, and in some cases, historical tensions may have contributed to a man's suicidal crisis, or a man's dysregulated behavior may have alienated him from others (Fogarty et al., 2018; Vatne et al., 2016). Working with loved ones in a therapeutic context to deal with historical pain could help defuse painful relations so these dynamics can have more abundant protective value (Ghio et al., 2011). RCT's of family interventions with suicidal adolescents have shown good results (Diamond et al., 2010; Pineda & Dadds, 2013). Families and friends are often closest to men in crisis and can potentially identify concerning shifts in behavior (Fogarty et al., 2018). Mental health professionals may need to balance patient confidentiality with taking the concerns of loved ones seriously, especially if a man denies thoughts of suicide (Peters et al., 2013). Significant others could also potentially benefit from more rigorous guidance on the broad and diverse ways male suicide risk can manifest.

Community Interventions. Given some men's preference for support in non-clinical spaces, our review supports suggestions that male suicide prevention should also consider

how to empower interventions led by laypeople and communities who may have more contact and credibility with some men (Hagaman et al., 2018; Rasmussen et al., 2014; Stanley et al., 2009). Peer support has been cited as an important community resource for suicide prevention (Jordan et al., 2012; Mackenzie et al., 2018; Vatne et al., 2018). In our data, talking to other people who were suicidal did not carry the perceived stigma of contacting helplines (Jordan et al., 2012) or hold the power imbalances perceived in therapeutic dynamics (Ferlatte et al., 2019). Men also described finding volunteering healing (Ferlatte et al., 2019; Salway & Gesink, 2018), echoing Baumeister's (1990) assertion that activities which "submerge the self in a broader community may reduce suicidal tendencies" (p. 97). There is a growing movement of community organizations and work schemes to support men's mental health. Preliminary evaluations of 'DUDES Club', a community intervention for Indigenous men in Vancouver, Canada (Gross et al., 2016); a football based mental health support group in Middlesborough, UK (Dixon et al., 2019); the MATES program tackling suicide in the construction industry in Australia (Ross et al., 2019), and James's Place a clinically based community intervention for men who are suicidal in Liverpool, UK (Chopra et al., 2021) all provide potential promising evidence, though have yet to be tested in RCTs.

Universal Interventions. Universal interventions target whole populations rather than individuals most at risk (Turecki et al., 2019) and may be another important element – within a suite of interventions—to reach and support men more broadly.

Suicide Psychoeducation. Our data suggest that programs and campaigns to help lay people better understand masculine norms and male suicide risk, tools to ask about suicide, respond to suicide disclosures, and manage long term suicidal crises may have utility. Psychoeducation programmes that help support people to better regulate emotions, selfhood, interpersonal connections, and psychological pain could also be effective. Suicide prevention

may also need to assume a cultural lens and potentially consider the risk and recovery factors unique to certain communities (Tzeng, 2001). In our data, Han and Oliffe (2015) described the need for bespoke campaigns to target the mental health stigma prevalent in parts of the Korean community living in the United States that may prevent help-seeking. Osafo et al. (2015) identified the need for advocacy campaigns to address community stigma toward suicide survivors in Ghana. Early-life interventions were also cited as potentially important to equip young people with the tools and skills to manage their well-being and stop childhood harm from escalating over the life course (Creighton et al., 2017; Ferlatte et al., 2019). RCT's have shown reduced suicidal behaviors following school interventions (Zalsman et al., 2016).

Representations of Masculinity. Richer representations of masculinity in the public domain could also be beneficial, especially around honoring male emotionality, expansive male selfhoods, male interpersonal needs, normalizing struggles, and highlighting potentially counterproductive coping strategies – such as excessive alcohol. As mentioned previously, we should potentially be mindful of the role of shame in suicide and take caution in how masculinity is portrayed in the public domain. As Levant (1992) noted, this work "must walk a fine line intellectually" by "crediting men for what is valuable about masculinity on one hand, and helping men come to terms with what must be changed on the other" (p. 385). We have all been socialized in norms of masculinity and expectations for male behaviors, and we all potentially have a role to play in educating ourselves about how these internal schemas may be narrowing possibilities for men. While acknowledging the positive aspects of masculinity, and gender norm fluidity, it is also important to recognize how all genders may perpetuate adherence to masculine norms identified as potentially harmful in this review. For example, our data suggest the importance of considering how cultural norms may impact the understandings and behaviors of loved ones, friends, and health professionals in responding to a man in suicidal crisis (Cleary, 2005).

Representations of Suicide. A widely held view in suicidology is that 90% of people who die by suicide have a psychiatric diagnosis (Cavanagh et al., 2003). Yet, in our review, there was nominal reference to the role of mental illness as a suicide risk factor. In multiple studies, the lack of psychopathology was explicitly noted (Kizza et al., 2012; Meissner et al., 2017; Sweeney et al., 2015). Some bereaved participants felt that understanding suicide as related to mental illness was "wrong" and "misleading" (Rasmussen et al., 2018, p. 4). Some men were actively deterred from accessing professional support because of the medicalpsychiatric model (River, 2018). These findings are in contrast with those from the quantitative systematic review of male suicide that found a diagnosis of depression to be a significant risk factor (Richardson et al., 2022). Additionally, a review of suicide in prisoners (Fazel et al., 2008) and a meta-analysis of adolescent suicidal behaviors (Miranda-Mendizabal et al., 2019) have found psychiatric diagnosis to be associated with suicide. Further research is necessary to grasp the intricacies of the relationship between mental health and male suicide. Public health teams, researchers, and clinicians may need to consider how to discuss psychological pain, mental health, and suicide in a manner that is sensitive to men's own understanding of the causes of their distress and can engage rather than alienate men. Our findings do align with recommendations from other research, that men's suicidal pain and potential individual pathology, needs to be understood in the context of the lived experiences, environments, socio-political contexts, and cultures that may allow distress to bloom and grow (Akotia et al., 2019; Button, 2016; Fitzpatrick et al., 2014; Kunde et al., 2018; Laubschler, 2003; Lee & Owens, 2002). While we acknowledge evidence for a shift away from a narrow bio-medical paradigm, further research is required to understand what this would look like in practice and evidence that it does indeed help reduce suicidal behaviors.

Future Research

More research is required to interrogate and validate our findings. We make 22 suggestions for this work in Table 4 alongside the following three key recommendations.

Researching Interactions

Our findings support previous calls for suicide research to focus on risk factor interaction (Franklin et al., 2017; Glenn et al., 2017; Glenn & Nock, 2014; Mackenzie et al., 2018; O'Connor & Nock, 2014; Scourfield et al., 2012). Studying discrete risk factors stripped of context and stripped of their interaction does not tell us much. We believe that the qualitative work in this review provides significant value in terms of generating theories of risk and recovery factor interaction rooted in the lived reality of the phenomena, that can be tested quantitatively, temporally, and in interaction using different methodologies including network analysis models (de Beurs, 2017) and ecological momentary assessment (Sedano-Capdevila et al., 2021). This work needs to be tailored to different demographics, i.e., prisoners, gay men, retired men, First Nations men (Franklin et al., 2017; O'Connor & Nock, 2014). This work could help develop more effective risk assessment tools that identify key risk factors in interaction and bring us closer to understanding potential ideation/attempt profiles better (Albanese et al., 2019; Glenn et al., 2017).

Research Collaborations

Many methodologies and disciplines are critical to illuminating our understanding of suicide (Glenn et al., 2017; Leenaars, 1996; Shneidman, 1993). In our findings, only a psychological lens based on qualitative methods has been applied to the multi-faceted behavior of male suicide. Factors beyond the scope of this review such as neuroendocrinology and immunology will be active in male suicide (Fazel & Runeson, 2020; Sher, 2017). Multi-disciplinary research teams could explore findings proposed here to test their relevancy and implications across different domains pertinent to suicide.

Understanding Contemporary Norms

Gender theorists have proposed that the construction of masculinity is rooted in claiming power over others and avoiding feminine and/or homosexual associations (Anderson, 2009; Connell & Messerschmidt, 2005; Courtenay, 2000; Di Bianca & Mahalik, 2022; Levant, 1992). In our review, homophobia was a potentially violent force in the narratives of queer men (Ferlatte et al., 2019; McAndrew & Warne, 2010), and fear of the feminine was referenced in a few studies (Cleary, 2012; Kizza et al., 2012). Otherwise, our data, which (as far as was documented) was seemingly predominantly drawn from a mainly cis-gendered, heterosexual, white sample, was largely silent on the role of power and feminine/homosexual avoidance. This lack of evidence, compared to other findings, highlights the strong need for future research to investigate the construction of contemporary masculine norms. In certain places, masculinity may not be defined in contrast to femininity or homosexuality, though it's also possible that these ideas are still widespread but have become so deeply internalized that they are not consciously recognized or are considered too taboo to openly discuss. In their review of measurements of masculine ideology, Thompson and Bennett (2015) question the utility of targeting male attitudes towards dominance and femininity-avoidance citing that many participants now disagree with these. They argue that the "masculinities men live by have dramatically changed as both the hegemony of heteronormative social worlds fades and the legitimacy of sexist gender relations is questioned" (p. 10). We recommend more cultural-specific research to interrogate the construction of contemporary masculine norms especially those most related to suicide risk (Wong et al., 2017). For example, findings from a study with students in the United States, have suggested that conformity to self-reliance and emotional control norms were more of a barrier to help-seeking than violence, power over women, and heterosexual self-presentations (McDermott et al., 2018).

Limitations

Method

Like other qualitative meta-synthesis, we acknowledge potential gaps in our method, particularly in relation to our search strategy which, as Levitt et al. (2016) noted in their meta-study, given the broad way in which qualitative studies have been indexed means it would be rare for every relevant study to be sourced. Gaps in our method also include the exclusion of non-English language studies and those published in the grey literature. Their exclusion means our findings and conclusions may be subject to publication bias. As noted by one reviewer, our inclusion of 'men' in the search criteria may have led to the omission of trans studies from our results. As a result, we re-ran our search strategy, exchanging search terms related to 'men' for 'trans' and found three qualitative studies that highlighted issues of thwarted belongingness, suicide as a pain-ending strategy, and the importance of social connections as a protective factor in trans suicide (Bailey et al., 2014; Hunt et al., 2020; Moody et al., 2015).

Study Participants

Our findings are limited by what participants in the data knew about themselves, were prepared to disclose, and/or the accuracy with which events were recalled (Chung et al., 2015). Potential important factors may not have surfaced because participants did not feel safe sharing them or were still in denial about them. This may be particularly true concerning topics with a high social taboo factor, such as sexuality, abuse, violence, trauma, etc., especially if male norms not to disclose vulnerabilities or struggles, are factored in.

Researchers

Both the synthesis provided in this review and the studies analyzed have been filtered through the subjective biases of researchers. As mentioned, the primary author of this paper has a closeness to the material through lived experience which may have shaped their interpretation of data. To mitigate this, we followed a systematic methodology, and our findings have also been triangulated via multiple authors and reviewers. Nevertheless, it is still important for readers to remember our findings represent "one empirically driven interpretation of the data among other possible interpretations that also might have value" (Levitt et al., 2016, p. 822).

Key Demographics Missing

A major limitation of the literature is the lack of insight it can provide for the unique challenges and needs of men from different racial demographics, trans-men, men with disabilities, and men in low- and middle- income contexts.

Lack of Specificity and Utility in Predicting Male Suicide

Our findings are broad and do not necessarily offer insight into how to uniquely predict suicide in men over other psychopathologies. Many of our findings would be risk and recovery factors for other phenomena such as depression or addiction. The lack of specificity and sensitivity in our findings are the same issues encountered in other quantitative reviews of suicide and male suicide (Franklin et al., 2016; Hunt et al., 2017; Richardson et al., 2021). Alongside work focused on identifying unique predictors of suicide, we believe there is utility in taking a holistic view of men's psychological pain, and accepting that this pain can manifest in many ways. Given that over the last 50 years of research our ability to predict suicide remains no better than chance (Franklin et al., 2017), a more concerted effort to situate suicide prevention in a broader context is potentially required. By tackling distal contributors to men's suffering, we can potentially reduce suicide as well as other psychopathologies. Li et al.'s (2011) systematic review comparing interventions to tackle the distal risk factor of socio-economic deprivation against interventions to tackle the proximal risk factor of mental disorders found they had "similar population-level effects" (p. 608)."

Conclusions

Male suicide rates indicate that certain men struggle profoundly to access a life that can be well-lived (Connell & Messerschmidt, 2005). Our findings suggest suicide prevention may need to assume a gender-sensitive lens that exercises compassion towards how masculine norms may impact male psychological pain and how this distress is read and responded to (Seidler et al., 2019). While conversations about male privilege are gaining prominence in the public sphere, it is important to acknowledge how some men's needs are not being met within our gendered worlds (Lee & Owens, 2002; New, 2001). Navigating a space within public discourse for an open and frank conversation about the male experience is critical. It is important to maintain a productive dialogue about the intersectionality of privilege and an understanding that it is not a "zero-sum quantity" (Coston & Kimmel, 2012, p. 98). People can be privileged in one domain and lack privilege in another. Without vilifying or pathologizing masculinity, findings from this review suggest that deepening our understanding of certain masculine norms, and how they may harm some men could be critical to shaping effective male suicide prevention work. The future flourishing of a more gender-equitable world may depend, in part, on us collectively acknowledging and transforming these potential cultural harms.

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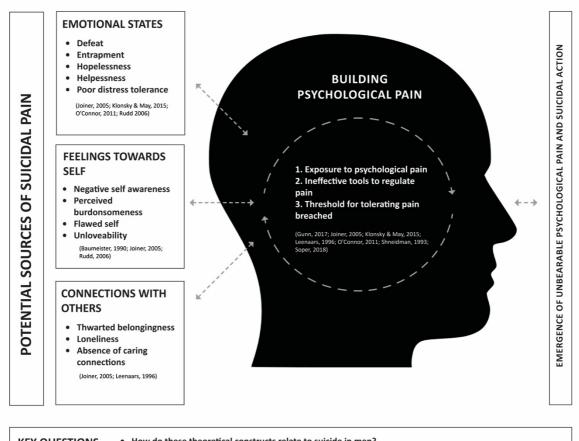
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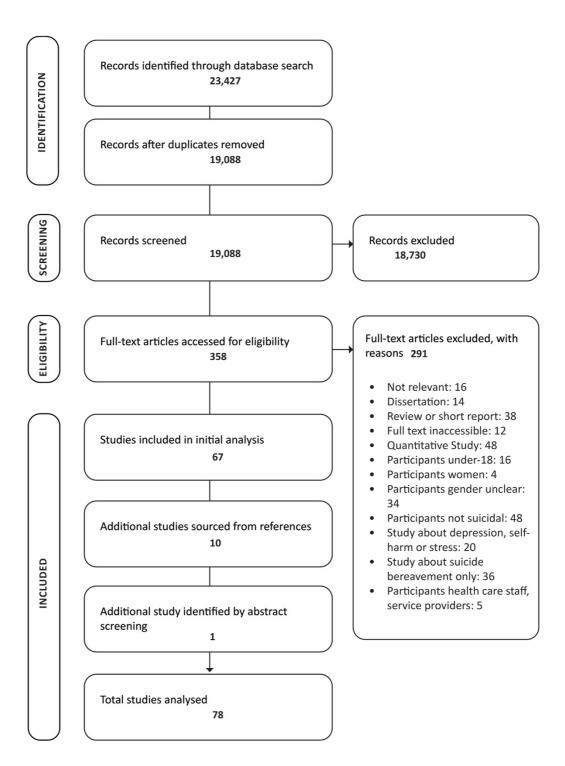
Key Phenomena from Psychological Theories of Suicide

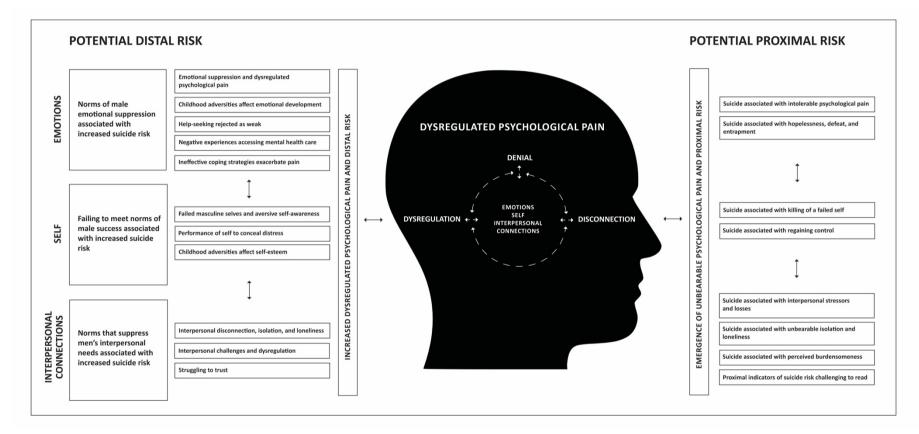


KEY QUESTIONS

How do these theoretical constructs relate to suicide in men?
What mediates a shift from suicidal ideation to action in men?

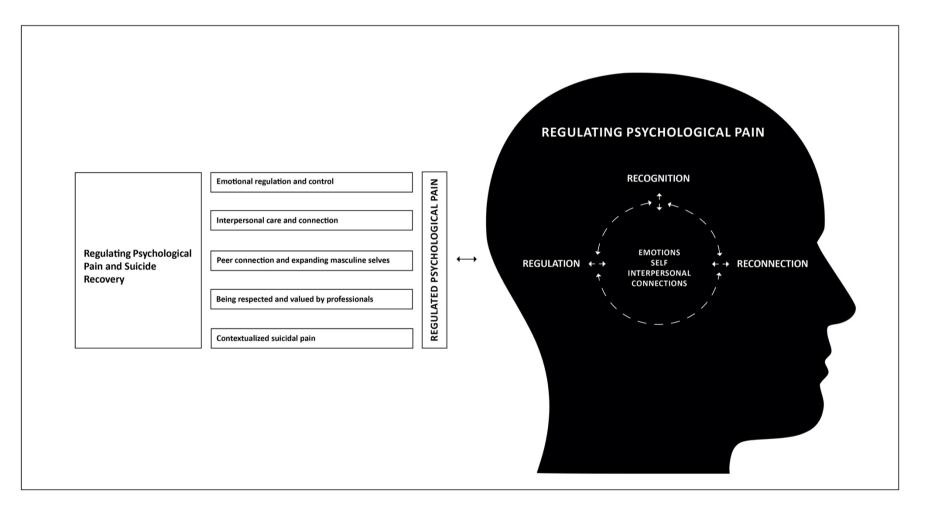
Flow of reports and studies into the meta-synthesis





3 'D' Model of Masculine Norms and Male Suicide Risk

3 'R' Model of Male Suicide Recovery



Thematic Overview and Supporting Evidence

Risk/ Recovery	Analytical Theme	Descriptive Theme	Papers (%)	Income* U/M/L (%)	NICE Rating** ++/+ (%)	Supporting Evidence
Risk	Norms of Emotional Suppression	n/a	92	83/14/3	72/28	 Study Participants: "We are men, we are not supposed to talk about this and we are not allowed to express ourselves about emotions – this is the cost of manhood [] we just block our feelings and then something comes up that pushes these points within us and then we actually have no resources in order to cope with these feelings or even face how we feel." (71, Iceland, Abuse Survivor, p. 1001) Study Authors: "In this study it is possible to see what began as normal, if uncomfortable, emotions being channeled in negative, pathological ways owing to a lack of recognition, disclosure and intervention." (13, Ireland, Young Men, p. 504)
Risk	Norms of Emotional Suppression	Emotional Suppression and Dysregulated Psychological Pain	44	82/18/0	76/24	 Study Participants: "If you keep holding things in [emotions] it's just going to get worse and worse and then it escalates and you want to do something, you just can't handle it anymore." (12, Ireland, Young Men, p. 160). Study Authors: "Thus, common to all the deceased, from whoever's perspective one examines it, was a lack of capacity to handle emotional distress or chaos, and a tendency to act upon oneself." (58, Norway, Young Men, Author, p. 229)
Risk	Norms of Emotional Suppression	Childhood Adversities Affect Emotional Development	46	92/8/0	78/22	 Study Participants: " many bad things happened in his childhood that he has never dealt with and that he has, all the time, pushed it aside and pushed it aside he felt so lonely very lonely with all these bad feelings" (30, Norway, p. 392) Study Authors: "All narratives described serious adverse childhood experiences impacting their mental health, experienced as intrusive flashbacks. There is a sense of a serious negative, global impact on their lives, which led up to the suicide attempts." (24, UK, Clinical/Young Men, p. 1122)
Risk	Norms of Emotional Suppression	Help-seeking Rejected as Weak	29	96/4/0	96/4	Study Participants:"I had this idea that asking for help or telling somebody how you're feeling would be a sign of weakness. I had a real tough image back home. I was a body builder. I was over 200

						 pounds. I never lost a fight. So I couldn't talk to my friends because it was a sign of weakness." (18, Canada, Young Men, p. 380) Study Authors: "Almost all men reported that their masculine beliefs led to them isolating themselves when they were feeling down, for example, to avoid imposing on others. Failure to manage emotions, or live up to expectations of happiness or coping also often led to a sense of lost control or guilt, as well as anxiety about having these perceived weaknesses or failures revealed." (56, Australia, p.5)
Risk	Norms of Emotional Suppression	Negative Experiences Accessing Mental Health Care	35	96/4/0	85/15	 Study Participants: "I don't believe in these, the power of prescription drugs to just heal, you know, mental, psychological trauma." (24, UK, Clinical/Young Men, p. 1125) Study Authors: "Men in this study overwhelmingly rejected services that framed emotional distress and suicidal behavior as mental illness." (62, Australia, p. 153)
Risk	Norms of Emotional Suppression	Ineffective Coping Strategies Exacerbate Pain	42	82/15/3	85/15	 Study Participants: "I was suffering and I started to need alcohol more and more – I was drinking to find a solution but when I drank I would think more about suicide" (25, Italy, p. 513) Study Authors: "Many men stated that their attempts to manage problems to avoid revealing weakness or stigmatising labels, led them to isolate themselves and instead rely on coping strategies that required less immediate effort and provided short-term alleviation of problems, for example, drug or alcohol use, gambling, and working excessively. However, these strategies repeatedly made problems worse in the long term through, for example, debt creation, and emotional reaction and interpersonal conflicts." (56, Australia, p.5)
Risk	Norms of Emotional Suppression	Suicide Associated With Intolerable Psychological Pain	56	84/14/2	77/23	 Study Participants: "I feel great pain and don't think about what I'm doing. I just want to end the pain." (10, Brazil, p. 1661) Study Authors: "In their suicide notes, many of the deceased described their self to be in a place of unbearable pain; they couldn't take it any longer or they couldn't live like this any more." (58, Norway, Young Men, p. 230)
Risk	Norms of Emotional Suppression	Suicide Associated With Hopelessness, Defeat and Entrapment	31	79/17/4	83/17	 Study Participants: "The way I see it is that if you are going to live, you must have something to live for or at least something to look forward to, and that I have never had and will never get. So I see no reason why I should stay here then." (37, Norway, p. 5) Study Author "suicidal behavior can be seen as a reaction or a response to a situation that involves defeat, rejection, or humiliation, in which there is no escape and no possibility of rescue. All of

						these characteristics were found in this study of men's suicide in postconflict Northern Uganda." (34, Uganda, p. 709)
Risk	Failing to Meet Norms of Male Success	n/a	76	81/15/3	75/25	 Study Participants: "If men don't have a way to make it in the world, they don't exist, they're nothing, they don't matter. And so if you don't matter, it doesn't matter whether you're here or not." (45, Canada, p. 893) Study Authors: "Dan's suicide note conveyed a sense of profound personal failure; a feeling that he had let everyone down and a belief that he had failed to meet the expectations of the people who mattered most." (4, UK, Young Men, p. 262)
Risk	Failing to Meet Norms of Male Success	Failed Masculine Selves and Aversive Self- Awareness	54	76/19/5	71/29	 Study Participants: "It just seemed like a lifetime of failure, like no sort of, you know, jumping from job to job I also, ehm, have a son from another relationship that I've never seen as well. It just seems, looking back on my adult life, it just stemmed from like one failure to another." (29, UK, Young Men, p. 1213) Study Authors: "Qualities held up as forms of capital or value for men, and men's lack of resources for securing those markers, served to marginalize and subordinate them within masculine hierarchies." (45, Canada, p. 894)
Risk	Failing to Meet Norms of Male Success	Performance of Self to Conceal Distress	31	100/0/0	88/12	 Study Participants: "Everything felt like a façade, like, if I was out—having fun, I was putting on a smile for the show of others." (45, Canada, Participant, p. 896) Study Authors: "Farmers believed they should be strong in the face of adversity. They "put on a mask," thinking they should be able to deal with or manage the problem, or they avoided and isolated, pretending that everything was all right." (38, Australia, Farmers, p. 259)
Risk	Failing to Meet Norms of Male Success	Childhood Adversities Affect Self- Esteem	15	92/8/0	83/17	 Study Participants: "He was, you know, quite a bright enough lad but he just had real problems with um reading and writing and stuff because of his dyslexia. It was quite severe and he had very low self-confidence, no self-worth, not enough support from the right kind of people." (53, UK, Bereaved, Young Men, p.245) Study Authors: "Central to Malik and Wes, and many other participants, were injuries that had occurred early on but carried significant weight into adulthood, fundamentally shaping their sense of self and self-worth." (45, Canada, p. 892)
Risk	Failing to Meet Norms	Suicide Associated With Killing	46	75/19/6	81/19	Study Participants: "I feel like I failed, that's why I did that [attempted suicide]." (13, Ireland, Young Men, p.501) Study Authors:

	of Male Success	of a Failed Self				"Loss of faith in themselves describes a general feeling of inadequacy or sense of failure in life as a central reason for the suicide attempt." (1, Ghana, p. 240)
Risk	Failing to Meet Norms of Male Success	Suicide Associated With Regaining Control	14	82/18/0	73/27	 Study Participants: "Johan said that he was motivated to attempt suicide to hide his failures and appear in control: 'No one has to know that I actually basically failed this year. No one has to ever find out. You know, it would be my little secret." (43, South Africa, Young Men, p. 790) Study Authors: "Thus, worthless on their own, unable to act differently to regulate emotions and thereby be able to comfort themselves, the suicidal act seems to have been a desperate operation by a failing self to restore itself." (58, Norway, Young Men, p. 231)
Risk	Norms that Suppress Men's Interpersonal Needs	n/a	82	83/16/2	72/28	 Study Participants: "You look at everybody as the enemy before you look at them as a friend." (69, Canada, Clinical, Participant, p. 35) Study Authors: "Participants detailed failed relationships as triggering their suicidality." (45, Canada, p. 896)
Risk	Norms that Suppress Men's Interpersonal Needs	Interpersonal Disconnection , Isolation and Loneliness	46	83/14/3	69/31	 Study Participants: "He was a man that would always keep things to himself I tried to get things out of him but he just couldn't discuss it." (51, UK, p. 506) Study Authors: "Being isolated ultimately heightened participants risk for suicide." (45, Canada, p. 895)
Risk	Norms that Suppress Men's Interpersonal Needs	Interpersonal Challenges and Dysregulation	28	82/18/0	73/27	 Study Participants: "Life with my wife on an everyday basis was hard, I felt I wasn't capable of loving her and it was difficult with the child. I didn't have many positive feelings and I was very passive." (6, Norway, Substance Abuse, Young Men, p. 251) Study Authors: "All participants reported struggling to form and maintain romantic relationships." (43, South Africa, Young Men, p. 788)
Risk	Norms that Suppress Men's Interpersonal Needs	Struggling to Trust	14	100/0/0	73/27	 Study Participants: "I never trust anybody really because I'm not wonderfully able to take the slap in the face. I do be always waiting for the slap in the face - rejection. And that's why I always keep up the barrier so that I'm ready for it. If it comes, I'm ready for it." (12, Ireland, Young Men. p. 172) Study Authors: "Implicit in their remarks was a lack of trust in themselves and others, resulting in difficulties in reaching out for support in times of distress for fear of rejection and criticism." (11, America, Immigrants, p. 359)
Risk	Norms that Suppress	Suicide Associated	42	82/18/0	73/27	Study Participants:

	Men's Interpersonal Needs	With Interpersonal Stressors and Losses				 "He was always talking about death. He said he would die because the wife had left him." (3, Ghana, p. 661) Study Authors: "Three quarters of our participants described relationship problems as the main reason or trigger for their suicidal act." (37, Norway, p. 6)
Risk	Norms that Suppress Men's Interpersonal Needs	Suicide Associated With Unbearable Isolation and Loneliness	23	72/28/0	83/17	 Study Participants: "Umm, because of my feelings of loneliness, I – I felt that life – don't know, life was just very difficult and so I thought of various ways of committing suicide." (24, UK, Clinical/Young Men, Participant, p. 1123) Study Authors: "Social isolation and not belonging were keys to most men's suicidality." (21, Canada, Sexual Minority, p. 1538)
Risk	Norms that Suppress Men's Interpersonal Needs	Suicide Associated With Perceived Burdensomene ss	8	50/50/0	67/33	 Study Participants: "The only thing that spoke against suicide was that I'd hurt my family. The things that spoke for suicide were so many more, for instance then that my family would be better off without me, since my influence on their lives was negative." (54, Sweden, p.5) Study Authors: "many of our findings suggest that male narratives, more often than female, supported the idea that an act of suicide was in some aspect an effort to fulfill obligations or ease burdens on family members." (27, Nepal, p.723)
Risk	Norms that Suppress Men's Interpersonal Needs	Proximal Indicators of Suicide Risk Challenging to Read	19	93/7/0	93/7	 Study Participants: "I know towards the end he was saying I can't remember whether he said it when he was sober or just when he was drunk - that he was going to kill himself () But you know, if I had a fiver for every time I've said it, I'd be a bloody rich man. So I probably didn't take much notice of it." (50, UK, Bereaved, p.425) Study Authors: "The deceased were perceived as very successful by those around them, and thus were interpreted as being protected against suicide." (30, Norway, p. 396)
Recovery	Regulating Psychologic al Pain		78	84/15/2	74/26	 Study Participants: "Once you do get into something like CBT, Buddhism or whatever, finding a way through the talking therapies, through your issues, is remarkably successful. As soon as we abandon our obsession of feeding people with chemicals that's been an appalling waste of time in my life." (41, UK, Probation Clients, p. 150) Study Authors: "Participants said that communicating their emotional distress and seeking help from others were central strategies to protect themselves against becoming suicidal again." (43, South Africa, Young Men, p. 792)

Recovery	Regulating Psychologic al Pain	Emotional Regulation and Control	47	89/8/3	86/14	 Study Participants: "If I talk about it sometimes then it's a bit better instead of bottling it all up." (64, UK, Prison, p. 319) Study Authors: "Disclosure was a huge step for all the participants, whether it was with a partner, friend, expert, counsellor or others. When they finally disclosed what had happened, they experienced great positive energy and a new sense of freedom." (71, Iceland, Abuse Survivors, p. 1001)
Recovery	Regulating Psychologic al Pain	Interpersonal Care and Connection	32	80/16/4	72/28	 1001) Study Participants: "she sees my wrist () she just hugged me, she cried and she cried, and I just balled and balled, and she told me she loved me regardless and she saved my life, knowing that someone loved me regardless." (19, New Zealand, Sexual Minority, Young Men, p.12) Study Authors: "Their suicidal crisis appeared to provide them with an opportunity to reconnect with people close to them and find existential meaning in relationships." (43, South Africa, Young Men, p. 790)
Recovery	Regulating Psychologic al Pain	Peer Connection and Expansive Masculine Selves	24	84/16/0	74/26	 Study Participants: "I was very well received by my male buddies who had been through the same and it was just great to be able to do this [disclosure] at this time because it's a great positive energy that gushes forth following disclosure. Then there was always the hope that I would survive like those who had been through the same and they survived!" (71, Iceland, Abuse Survivors, p. 1001) Study Authors: "Participants stressed the therapeutic value of being able to mix with people who had survived similar circumstances; this helped them to appreciate they were "not the only ones like this." Moreover, they were able to verbalize how they were feeling in a forum in which they were not afraid of being labeled as crazy or weird. Such contact and interaction served to normalize suicide, normalize their difficulties and, ultimately, normalize them as human beings." (29, UK, Young Men, p.1212)
Recovery	Regulating Psychologic al Pain	Being Respected and Valued by Professionals	19	100/0/0	87/13	 Study Participants: "She wasn't yes, 'pitying' again then. We were two people talking together on equal terms, not prisoner and jailer. She was simply so fantastic and it was as if I could talk with her without feeling that, – what shall I say – she would not divert the conversation, no matter what." (74, Norway, p. 170) Study Authors: "On this occasion, he had taken a medication overdose and tried to shoot himself. Lara avoided a mental illness framing of David's difficulties, instead exploring the underlying social and personal issues he raised. David described Lara as "respectful." (62, Australia, p. 155)

Recovery	Regulating	Contextualize	31	71/25/4	79/21	Study Participants:
	Psychologic	d Suicidal				"I had a psychiatrist, kind of like an old man and this guy all he would do was put me on
	al Pain	Pain				medication. He wouldn't help me. He wouldn't talk to me." (69, Canada, Clinical,
						Participant, p. 36)
						Study Authors:
						"Future action plans for the prevention of suicide should include a broader perspective of suicide
						than the illness model." (59, Norway, p. 8)

Notes

* Income U/M/L = Income status according to the World Bank, Upper, Middle of Income. World Bank (2021, July 20.) *The world by income and region*. Retrieved from https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html ** NICE Rating = National Institute for Health and Care Excellence Quality Appraisal Rating. NICE. (2012) *Methods for the development of NICE public health guidance (third edition)* Retrieved from: www.nice.org.uk/process/pmg4/chapter/appendix-h-quality-appraisal-checklist-qualitative-studies. In our review, 69% of papers were rated ++ and 31% +. Of our findings, 83% of evidence came from ++ rated papers and 17% from +. On average, evidence for each descriptive theme was weighted as follows: 78% of codes were from higher-rated papers and 22% from lower-rated papers.

Quotations Illustrating the Interaction of Emotions, Self and Interpersonal Connections

Interaction of:	Supporting Evidence
Emotions and Self	 "A continual negative relationship to the self [self-aversion] seemed to influence both their earlier and current troubles and created emotional problems for the participants in their daily lives [emotional dysregulation]." (Biong & Ravndal, 2007, p. 251) "In the context of this surveillance, continuous self-monitoring of behaviour and emotions was required to project an image of well-being [performance of self/emotional suppression]. This was an additional challenge for the participants in the context of prolonged distress. The main way of dealing with this was to use alcohol and drugs [emotional dysregulation]" (Cleary, 2012, p. 502) "Informants also mentioned the strong social pressures, especially among young men, to hide distress [emotional suppression] and keep up a pretence of coping [performance of self]". (Owens et al., 2011, p.3)
Emotions and Interpersonal Connections	 "There is no one who understands my feelings [interpersonal isolation]. I have hidden my problems from others [emotional suppression]. As a result, I have never asked for help, and I do feel very lonely [interpersonal isolation]." (Chung at al., 2015, p.359) "More so, for some participants aligning to the aforementioned masculine ideals prevented them from seeking help from their social network [emotional suppression] - which in turn resulted in social isolation [interpersonal isolation]." (Ferlatte et al., 2019, p. 1538) "Many men stated that their attempts to manage problems to avoid revealing weakness [emotional suppression], or stigmatising labels led them to isolate themselves [interpersonal isolation] and instead rely on coping strategies that required less immediate effort and provided short-term alleviation of problems, for example, drug or alcohol use, gambling, and working excessively. However, these strategies repeatedly made problems worse in the long term through, for example, debt creation, and emotional reaction and interpersonal conflicts [emotional/interpersonal dysregulation]." (Player et al., 2015, p.5)
Self and Interpersonal Connections	"For men, economic difficulties mean loss of self-worth [self-aversion], lack of recognition and respect from society, equally becoming outcasts [interpersonal isolation]" (Akotia et al., 2019, p. 243)

	 "Our findings suggest that relationship breakdown [interpersonal challenges] is associated with feelings of failure and shame [self-aversion] with lack of trusted supports [interpersonal isolation]." (Kunde et al., 2018, p. 259) "I always used to stay in bed and say I hate myself [self-aversion]. I wouldn't take a bath for days I wouldn't go out. I wouldn't even socialize with people [interpersonal isolation]." (Strike et al., 2006, p. 33)
Emotions, Self and Interpersonal Connections	 "The participants believed that disconnecting from others and the self [isolation from self and others] was a viable technique for managing painful emotions and thoughts [norms of male emotional regulation]. However, in hindsight, participants recognised that disconnecting from others and themselves intensified the emotions that they sought to control and thus it became a trigger for suicidal behaviour [emotional dysregulation]." (Meissner & Bantjes, 2017, p. 792) "Our informants suggested that these six men became suicidal when suddenly faced with unexpected events within significant areas of life, namely work and intimate relationships [interpersonal challenges], which in turn led to a crack in their façade [performance of self undermined]. Thus, they seemed to have experienced themselves as totally defeated [self as defeated], and they showed highly reduced emotional and cognitive capacity toward the end of their lives [emotional dysregulation]" (Kiamanesh et al., 2015, p. 321) "Thus, common to all the deceased, from whoever's perspective one examines it, was a lack of capacity to handle emotional distress or chaos [emotional dysregulation], and a tendency to act upon oneself. Described by many of their parents as "private" young men, several siblings said "we never had deep conversations." [interpersonal isolation] Their friends described them as someone who "did not show emotions," "kept difficulties inside," [emotional suppression] or "not the one we discussed emotional difficulties with." [interpersonal distance] According to their ex-girlfriends, although some were described as "very emotional" young men, when things were difficult "they withdrew," or were "emotionally elusive." [emotional suppression] Thus, common in all informants' understanding was a lack of self-regulation [dysregulation of self]." (Rasmussen et al., 2018, p. 229)

Recommendations for Male Suicide Theoretical Exploration

Psychological Phenomenon	Recommendations
Pain	1. Explore theoretically delineating psychological pain from physical pain to understand their specific relationship in men who are suicidal.
Culture	2. Explore integrating culture into theories of suicide and the impact of cultural norms on men's relationship with psychological phenomena identified as critical to suicide risk.
Emotions	3. Explore integrating emotional regulation into theories of suicide and how cultural norms impact how men learn to connect with and regulate their emotions and psychological pain.
Self	4. Explore the integration of feelings of failure in theories of suicide and how cultural norms of male success and social value impact men's relationship with self.
Connections with Others	5. Explore how cultural norms impact on men's interpersonal needs, male loneliness and isolation, and how men build intimacy and meaningful connection.
Childhood Challenges	6. Explore theoretically integrating childhood challenges into theories of suicide and how they may impact men's exposure to, and tools to regulate, psychological pain, and how these processes may interact with cultural norms.
Evolution	7. Explore from an evolutionary perspective the importance of psychological phenomena identified as potentially critical to male suicide.

Recommendations for Male Suicide Research, Prevention, and Intervention

Target	Area	Recommendations
At-Risk Men	Gender Paradox	1. Investigate the gender paradox in suicidal behaviors considering potential biological, psychological, and sociocultural factors that may differentiate male suicide behaviour from female.
At-Risk Men	Relationship with Emotions	2. Investigate the relationship between men's emotions and suicide risk, including: 1. how men who are suicidal understand, regulate, and express their emotions, and psychological pain; 2. what dimensions of male emotional regulation, and male alexithymia may be relevant to suicidal behaviors; and 3. the relationship between substance use, alexithymia, and suicide risk.
At-Risk Men	Relationship with Self	3. Investigate the relationship between masculine norms, feelings of failure. and male suicide including: 1. what do men who are suicidal invest their self-esteem in and measure their selfhood against; 2. how do men who are suicidal regulate perceived failures; 3. what is the role of self-esteem, control, agency, and purpose in male suicide risk and recovery; and 4. how to effectively support men who are suicidal to repair aversive self-concepts.
At-Risk Men	Relationships with Others	4. Investigate how men's needs for connection and belonging are being met, or not, in contemporary societies, including: 1. male loneliness; 2.what meaningful connection means for men who are suicidal and the challenges they face in creating this; and 3. interventions to potentially support men who are suicidal to build skills for interpersonal relating - potential targets could include help to manage interpersonal stressors and skills for building intimacy.
At-Risk Men	Understanding the Psychobiology of Psychological Pain	5. Understand the psychobiology of psychological pain, including: 1. the relationship between psychological pain and other biological mechanisms such as neural and neuroendocrine activity, immune factors, and nervous system regulation; 2. potential biomarkers that could indicate heightened psychological distress that could be assessed clinically; 3. the relationship between psychological pain and factors such as diet, inflammation, brain-gut axis, sleep patterns, stress regulation, memory, and cognition patterns; and 4. psychobiological interventions that could help men regulate psychological pain.
At-Risk Men	Help-Seeking	6. Explore the key barriers for different demographics of men to seeking help and effective messages and interventions to counter these.
At-Risk Men	Ideation vs Attempt	7. Investigate: 1. the contents, triggers, and temporal dynamic of men's suicidal ideation; and 2. what potentially triggers a shift from thinking about suicide, to planning a suicide, and making an attempt.
At-Risk Men	Recovery	8. Explore what 'recovery' means for men who are suicidal and how men who are suicidal establish purpose and a connection to life.

		9. Understand what areas of life men who are suicidal want help with and the skills they want to build.
At-Risk Men	Post-Attempt	10. Investigate: 1. how men cope in the immediate aftermath of a suicide attempt; 2. men's emergency admission and discharge experiences; and 3. evidence what immediate interventions are most effective for men and how these could be integrated with longer-term support.
Services	Therapy	 11. Identify the most effective psychological targets for male-focused therapeutic interventions, including exploring psychological interventions which target helping men to: 1. regulate psychological pain; 2. regulate emotions; 3. revise aversive concepts of self, especially with regards to feelings of masculine failure, and shame; and 4. improve interpersonal relating and meaningful connection. 12. Explore effective interventions for men who cannot afford/access therapy.
Services	Service Design	 13. Explore the barriers men experience in accessing effective support and how interventions can be more effectively tailored to meet the needs of different demographics of men. 14. Explore how different services can work together better (i.e., how can the criminal justice system work with mental health care?) and multi-agency interventions i.e., structural support as well as psychological.
Services	Health Professionals	 15. Explore training for professionals in cultural norms of masculinity and male suicide risk and recovery factors. 16. Explore tools to help professionals address their own gender bias and increase positive understandings of masculinity.
Services	Clinical Assessment	17. Explore moving away from risk assessment and towards developing potential risk profiles built on potential risk markers relating to denial, disconnection, and dysregulation in self, emotions, interpersonal connections, and psychological pain.
Significant Others	Significant Others	18. Explore the role of significant others in supporting men in suicidal crisis, including: 1. how suicide disclosures are communicated, received, and responded to by significant others; 2. mental health challenges for carers of men who are suicidal: 3. potential support to help significant others cope with, and support, a loved one in suicidal crises; 4. psychoeducation for significant others on male suicide risk and recovery factors; 5. working therapeutically with families' post-attempt; and 6. how the 'insider' knowledge that significant others can provide on a man's state of mind may be utilized by mental health professionals to keep men safe whilst respecting a man's dignity and autonomy.
Community	Community Support	19. Explore community interventions, including: 1. understand and evidence effective interventions; 2. identify effective community gatekeepers to support men at risk; and 3. explore volunteering opportunities for men who are suicidal.
Population	Representations of Masculinity	20. Explore norms of masculinity, including: 1. contemporary construction of masculine norms in different cultural settings 2. how men who are suicidal develop and form their ideas of masculinity, particularly those relating to understandings of emotions, self, interpersonal connections, and psychological pain; 3. how norms are challenged

		and/or reinforced by significant others, communities, and institutions; 4. how masculine norms can be operationalized to help protect men from suicide; and 5. richer and more inclusive representations of masculinity in the public domain particularly around men's emotions and interpersonal needs, expansive male selfhoods, and destigmatising struggles.
Population	Representations of Suicide	21. Understand social representations of the biomedical model, mental illness, and suicide, including: 1. how men understand the causes of their suicidal pain and behavior; 2. how to effectively communicate about suicidal pain in a way that elicits support-seeking rather than shutting it down; and 3. transfer findings into tangible changes to be tested in public health campaigns, clinical services, risk assessments, and interventions.
Population	Psychoeducation	22. Explore psychoeducation programmes that can help support people to 1. better regulate emotions, selfhood, interpersonal connections, and psychological pain; 2. better understand cultural norms of masculinity and male suicide risk and recovery factors; and 3. have tools to ask about suicide and respond to suicide disclosures.