PSYCHOLOGY
RESEARCH
PROGRESS

Juan González-Hernández
Antonio Jesús Muñoz-Villena
EDITORS

Nova Medicine & Health

Looking for a Perfect World

Empirical and Applied Lines

NOVA

Psychology Research Progress

Psychology Research Progress

Influences and Importance of Self-Awareness, Self-Evaluation and Self-Esteem
Heidi R. Thomas (Editor)
2022. ISBN: 978-1-68507-528-6 (Softcover)
2022. ISBN: 978-1-68507-532-3 (eBook)

Psychodrama: Advances in Psychotherapy and Psychoeducational Interventions
Jesús Maya, PhD (Editor)
Jesús Maraver (Editor)
2021. ISBN: 978-1-53619-683-2 (Hardcover)
2021. ISBN: 978-1-53619-775-4 (eBook)

The Power of Peer Providers in Mental Health Services
Patrick W. Corrigan
2021. ISBN: 978-1-53619-597-2 (Hardcover)
2021. ISBN: 978-1-53619-680-1 (eBook)

Understanding Emotional Intelligence
John T. Lanthem (Editor)
2021. ISBN: 978-1-53619-410-4 (Hardcover)
2021. ISBN: 978-1-53619-427-2 (eBook)

Relationships Among the Kessler 10 Psychological Distress Scale, Socio-Demographic Status, Employment-Related Variables, And Internality-Externality In Japanese Employees
Masahito Fushimi (Editor)
2013. ISBN: 978-1-62257-985-3 (Online)

Social Variables Related to the Origin of Hallucinations
Adolfo J. Cangas, Álvaro I. Langer, José M. García-Montes, José A. Carmona and Luz Nieto
2011. ISBN: 978-1-61209-660-5 (Online)

More information about this series can be found at
https://novapublishers.com/product-category/series/psychology-research-progress/

Juan González-Hernández
and Antonio Jesús Muñoz-Villena
Editors

Looking for a Perfect World

Empirical and Applied Lines

DOI: https://doi.org/10.52305/KOYM9040

NOTICE TO THE READER

Library of Congress Cataloging-in-Publication Data

ISBN: 978-1-68507-746-4(eBook)

Published by Nova Science Publishers, Inc. † New York

Contents

Preface

The vision of perfectionism as a multidimensional variable has gained weight in scientific evidence as social functioning sets more rigorous performance standards of an individual or group differentiation in any field (e.g., academic, sports, work, social, religious...). There is a need to establish how we achieve the goals we set ourselves in any field of action, thanks mainly to the creation of valid and reliable instruments to measure it.

In today's societies, there is an increasing emphasis on how to respond to the demands of the environment as quickly as possible, being effective and achieving the best results. The demands of the environment make it possible to stimulate contextually (if they are seen as traits) and to construct perfectionist patterns and attitudes (if they are understood as learned cognitions or behaviors), which are usually associated with agonizing feelings of devaluation, incapacity or psychological vulnerability.

Perfectionists are characterized by setting their goals too high as they are always on a quest to do things perfectly. In cases where they cannot do something perfectly, they do not even try, or they live with significant suffering that floods their lives, causing feelings of dissatisfaction and affecting their self-esteem, mainly because their attention is reduced to focusing only on the end of the tasks they perform, leaving the development of the task in the background.

People who seek to do things perfectly are rigid when it comes to carrying them out, causing difficulty in adapting to changes, and preventing them from enjoying the present moment or taking advantage of their mistakes to improve themselves. In the same way, we can say that they reject reality, or at least they are reluctant to experience it in a way that is very different from the way they shape it. It is impossible to make everything perfect, all people make mistakes, but perfectionists conceive failure as an expression of their maladjustment and for this reason, they generate high levels of anxiety, becoming people who try to control everything around them.

Perfectionist attitudes and patterns are often influenced (shaped) by family environments, where parents put pressure to be successful professionally and academically as if they were the only way to interpret their children's progress; and, by other significant figures in our contexts, focused on instruction-training (e.g., teachers, coaches), management (e.g., job managers) or social connection (e.g., peers, teammates, siblings).

For these and many other reasons offered by the empirical evidence, the main purpose of this publication has been, since it was first conceived, to observe a need to seek an explanation of how perfectionism develops, constructs and influences aspects of our individual conception and behaviors. Another of our initial purposes was to contemplate how it can be mediated to make functional the altered responses it generates (e.g., high levels of stress, intrusive thoughts, fear of failure, obsessions, social isolation, ...), through the maintenance of an active life, high and effective performance, and prosocial behaviors.

Chapter 5

The Price of Perfection: The Link between Perfectionism and Suicidal Behavior

Andres Pemau[1], Patricia Diaz-Carracedo[1,*], Teresa López-Soto[2,3], Veronica Fernandez-Rodrigues[1] and Alejandro de la Torre-Luque[2,4]

[1]Department of Psychology, Complutense University of Madrid, Madrid, Spain
[2]Department of Legal Medicine, Psychiatry and Pathology, Complutense University of Madrid, Spain
[3]Laboratory of Speech Sciences, University of Seville, Seville, Spain
[4]Department of Legal Medicine, Psychiatry and Pathology, Complutense University of Madrid, Center for Biomedical Research in Mental Health (CIBERSAM), Madrid, Spain

Abstract

Suicide is a leading cause of preventable death, injury, and disability worldwide. Suicide behavior may adopt multiple variants, from mild to more severe suicidality expressions: suicidal ideation, suicide plan, suicide attempt, and completed suicide (death by suicide). Major efforts have been made in science and in the clinical practice to develop predictive models that shed a light on why people shift to severe suicidality expressions. Unfortunately, theoretical frameworks on suicide are partial and their contributions to an integrated intervention development remain quite limited. Suicide behavior may be a transdiagnostic symptom present across multiple disorders. Moreover, psychosocial factors that aggravate mental disorders may put individuals at a higher risk of suicidal behavior. In this regard, perfectionism is worth mentioning. Perfectionism constitutes a multidimensional set of thinking and behavioral actions linked to success in real life contexts that drive individuals to struggle to achieve high levels of achievement and 'perfect' performance. However, perfectionism may act as a double-edged sword, as people may feel overwhelmed and unable to meet unrealistic self-oriented standards. Perfectionism has been associated with numerous mental disorders and suicide behavior. Some research is needed in order to determine how suicidal expressions might be induced by a perfectionism influence and other related pathophysiological underpinnings. The aim of this chapter is to present some evidence on the link between suicide and perfectionism, as well as to describe related pathophysiological mechanisms. Perfectionistic thinking may contribute to rigid thinking styles and feelings of inferiority and hopelessness. Poor interpersonal performance may interact with perfectionistic style and hopelessness, leading to suicidal ideation and more severe forms of suicidality. Perfection is an unattainable goal that may put people at a high risk of self-criticism and emotional distress. Furthermore, prevention programs and clinical treatments for suicide behavior should address

* Corresponding Author's Email: patricdc@gmail.com.

In: Looking for a Perfect World: Empirical and Applied Lines
Editors: Juan González-Hernández and Antonio Jesús Muñoz-Villena
ISBN: 978-1-68507-625-2

perfectionism to provide more effective therapeutical options and improve the patient's quality of life.

Keywords: suicide, perfectionism, transdiagnostic symptom, suicidal ideation

Highlights

1. The relationship between perfectionism and suicide has been well-documented.
2. Perfectionism has been directly related with suicidal behavior but also indirectly (through its influence on other suicide-related risk factors).
3. Perfectionistic concerns may contribute to an escalation of suicidal ideation.
4. Maladaptive perfectionism may also facilitate the transition from suicidal ideation to suicide attempt.

Introduction

More than 700,000 people die by suicide every year. Suicide is one of the leading causes of unnatural death worldwide. Still, suicide consequences go far beyond mortality in itself. A completed suicide will also leave a painful scar on family and friends as the reasons for suicide completion may not be well understood. Death by suicide is an avoidable cause of death and, for that reason, society should place suicide prevention as one of its major goals. Society in general and governments in particular should become involved in fighting against this scourge that costs thousands of lives every year.

Suicide is far more than completed suicide (i.e., death by suicide). The spotlight is usually put on the number of casualties as other suicidality forms may pass overlooked as well as their dreadful consequences. To begin with, suicide attempts should account as important, an individual may attempt suicide multiple times before a death by suicide occurs. Also, other forms of suicidality (i.e., ideation or planning) lead to huge levels of mental distress and disability, thus contributing to a general lessening of mental health (World Health Organization, 2014).

Important efforts have been made though, both at the local and global levels, to prevent suicide behavior. However, there are still many questions to be answered that can set into motion the right initiatives that should put a stop to this long-road pandemic. Of particular interest are the efforts made by researchers and professionals in better understanding the mechanisms that underlie the suicide attempt. . Unfortunately, much is yet to be done in order to develop more effective interventions that may prevent both suicide attempt and attempt repetition.

One of these risk factors that has recently caught the attention of researchers is a psychological state highly related with individual self-expectations: perfectionism. Although perfectionism can help ensure that adequate performance levels are being achieved, its role as a risk factor of suicidal behavior is also worth noting.

This chapter aims to provide integrated conclusions from existing literature on the relationship between perfectionism and a dramatic consequence of maladaptive perfectionism (possibly, the fatal price of maladaptive perfectionism): the suicide behavior. Thus, the main existing theories on suicide behavior and risk factors are discussed, intertwining with theories

of perfectionism, to provide further insight into the potential mechanisms by which unmet individual expectations, featured by perfectionistic motives, may influence suicidal behavior. A brief overview of potential therapeutic approaches to perfectionism in the context of suicide is also presented in this chapter.

May the pressure to be perfect have a decisive influence on the genesis of suicidal ideas and behaviors? What is the real price to pay of being driven by unrealistic and perfectionistic goals and expectations?

Suicide

Definition and Prevalence

Suicide may be considered an umbrella term that can be defined from multiple perspectives. Let us start with some definitions of the term that will serve as a starting point of our analysis.

Suicide is defined as the death caused by self-inflicted injuries that were carried out with the intention of killing oneself intentionally. Thus, the suicide attempt involves self-injurious behaviors being undertaken (Center of Disease Control and Prevention [CDC], 2015). The self-injurious acts may not necessarily be fatal, but they would be driven with a lethal intention.

This definition may allow differentiating suicide from other concepts that fall along the continuum of self-injury, such as the non-suicidal self-harm (which does not involve a clear wish of killing oneself). That is a crucial point, as each self-injury form may show their particular risk and maintenance factors and may be controlled by specific pathophysiological cornerstones.

Suicide constitutes a complex phenomenon that may show varying forms. Suicide and suicide attempt may be previously manifested by means of a series of acts that may lead to a lethal outcome. In order words, suicide may be better understood as a continuum. This conceptualization has stemmed from theoretical models, but practical implications can also be directly detected on a clinical basis (Paykel et al., 1974).

Thus, suicidal behavior comprises several forms of suicidality. Each of them may be placed along the continuum according to its severity (lethality) level. From milder to the most severe form: suicidal ideation, suicide plan, suicide attempt and completed suicide. Other forms of suicidality may also be placed along this continuum, such as the passive death wish, which is considered a passive type of suicidal ideation, less serious than the idea of actively killing oneself (Sveticic & De Leo, 2012).

Figure 1 summarizes a probable way an individual may follow along this suicide continuum, manifesting multiple major and intermediate suicidality forms at the same time. Death by suicide (completed suicide) may be then seen as an escalation along the continuum. In other words, an individual who dies by suicide may show suicidality forms that progressively escalate over time. However, this does not mean that the suicide continuum should be read only in a linear way. There may be jumps and setbacks between forms along the continuum. An individual engaging in suicidal thoughts may not necessarily attempt suicide, but suicidal ideations do lead to an increased attempt risk, and even successful completions.

Suicide constitutes a major public health issue from its earlier (less severe) forms to its most lethal form (completed suicide), gravely affecting millions of people and their families every year. Figures related to mortality by suicide deserve particular attention. The World

Health Organization [WHO], in one of the largest studies on suicidal behavior at a global level, states that there were approximately 804,000 deaths by suicide in 2012 (11.4 suicides per 100,000 inhabitants). Suicide represents 56% of violent deaths worldwide (World Health Organization, 2014).

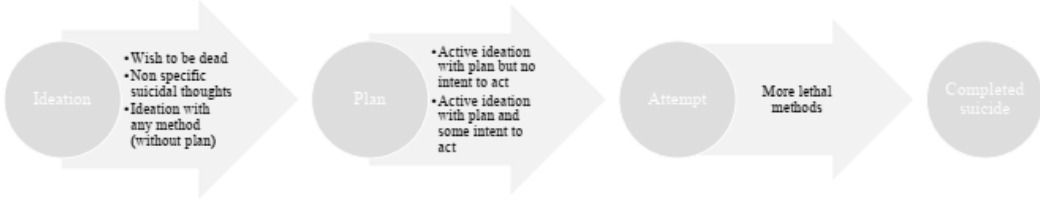


Figure 1. Suicide continuum.

There are significant differences between men and women in terms of suicide casualties, with almost twice the number of men dying by suicide. Of course, economic factors are also relevant, with slightly higher suicide rates in high-income countries in comparison to low and middle-income countries. Age is another relevant factor, with higher suicide rates in people aged 70 and over. However, suicide rates among young people also remain very high, being the second cause of death in young adults between 15 and 29 years old (World Health Organization, 2014).

Although this chapter does not seek to carry out an in-depth analysis of the differences between regions and countries, it should be noted that both the mortality rates and the influence of the sociodemographic factors described so far vary according to the continent, the country and even the region. This makes suicide an incredibly complex phenomenon to study.

Theoretical Approaches

Multiple theoretical frameworks have approached suicide to provide further insight into its clinical manifestations and pathophysiological underpinnings. Some of the most integrative and relevant frameworks will be presented in this chapter. Traditional models on the suicide phenomenon are usually based on a diathesis-stress standpoint, highlighting the distinctive correlation of cognitive and emotional processes on suicide behavior engagement. The more recent developments, however, rely on a more dynamical point of view, the so-called “Ideation to action framework” (Klonsky et al., 2016). Although all theoretical approaches aim to clarify mechanisms of actions, processes, and risk factors for suicide, this framework posits a continuum of suicide that divides ideation from action, from the more introspective to the more inchoative, from the passive to the active. An approach that separates ideation from action allows the study of progression to action (suicide attempt) along the continuum, as well as the deaccelerated escalation that may account for why an individual showing elevated levels of suicidal ideation might never engage in suicidal attempt.

The first model that deserves being mentioned is the Thomas Joiner's Interpersonal Theory of Suicide (Joiner, 2005; Van Orden et al., 2010). Joiner argues that two conditions need to be met for suicidal attempt emergence: first, a death wish and, second, an acquired capability to carry out a related attempt (Joiner, 2005). More specifically, the suicidal desire may be

triggered by the simultaneous action of two psychosocial factors: the thwarted belongingness (derived from unmet needs of belonging and unrealistic thoughts of not being accepted by the others) and perceived burdensomeness (i.e., feelings of being a burden to others). The Interpersonal Theory of Suicide posits that the transition from ideation to action may be triggered by an acquired capability to engage in suicidal attempt, closely associated with the repeated exposure to painful events that may reduce the individual's fear of death and pain sensitivity (i.e., pain and fear normally act as deterrents).

Briefly, the suicidal desire may become intense due to a lack of balance between the interpersonal needs (frequently perceived as unmet) and the real interactions with friends and relatives (sometimes featured by frequent conflict and ambivalent emotions). The repeated exposure to physically painful and/or fear-inducing experiences may lead to the development of physical pain tolerance and reduced fear of death through habituation processes. This may put the individual at an ever increasing risk of engaging in suicidal attempt. Figure 2 illustrates the dynamics of the main concepts from the Interpersonal Theory of Suicide.

Table 1. Classical theories of suicide

Theory and author	Summary
Durkheim's sociological theory (Durkheim, 1897)	Durkheim's classical theory raises two axes that allow suicide to be categorized: social integration and moral regulation. The extremes in these axes allow us to speak of 4 types of suicide: altruistic, egoistic (when we speak of integration) and anomic and fatalistic (attending to moral regulation). One of the most interesting contributions is the idea of social isolation playing a key role in suicide.
Cubic Model of suicide (Shneidman, 1985)	Suicide risk derives from the combination of three factors: stress, perturbation, and psychache. When referring to psychache, we talk about a psychological pain of unbearable intensity, this being the nuclear concept of this theory.
Hopelessness theory (Beck et al., 1985)	Hopelessness is the main driver of suicide, defining hopelessness as a negative and unchanging view of the future.
Diathesis-Stress-Hopelessness (Schotte & Clum, 1987)	This theory proposes that deficits in problem solving, especially interpersonal problem solving, involve a vulnerability that together with stressful life events and hopelessness are associated with suicide.
Escape from self (Baumeister, 1990)	Suicide is conceptualized as a form of escape from negative self-image. Suicide is viewed as an acceptable strategy to tackle self- image.
Emotion dysregulation theory (Linehan, 1993)	Theory developed under evidence from borderline personality disorder. Suicidal behavior occurs when inadequate emotional regulation interacts with emotional invalidation.
Clinical model of suicidal behaviour (Mann et al., 1999)	Pure stress diathesis model. It posits that a stressor (e.g., psychiatric illness) associated with previous vulnerabilities, may lead to greater suicidal ideation and impulsivity. This model differentiates between ideation, planning and suicidal act.
Arrested flight (Williams, 2001)	It poses suicide as a "cry of pain" that arises in response to a situation of defeat in which there is no escape or possible rescue (social support).
Schematic appraisal model (Johnson et al., 2008)	Model highly focused on information processing. It is considered that there is an interaction between information processing systems (biases in memory and attention, for example), self-evaluation, the general evaluation system (in terms of concrete situation, the future and the historical context) and memory schemes and suicide scripts.
Cognitive model (Wenzel & Beck, 2008)	It is another stress diathesis model. In this specific case, special relevance is given to three factors in the development of suicide behavior: vulnerability factors, cognitive processes related to psychiatric disturbances and cognitive processes related to suicide.

Another influential model with a large body of evidence was developed by Prof. O'Connor: the Integrated Motivational-Volitional model (O'Connor, 2011). This model proposes some major components needed for suicidal act engagement. First, some vulnerability factors and their complex interplay may trigger suicidal behavior engagement on its earlier forms: the

intention to die (pre-motivational phase). Second, the motivational phase takes place, in which the intention to die becomes increasingly intense. In this regard, feelings of defeat, humiliation and entrapment (motivational factors already proposed by previous frameworks) derived from negative experience with others may reinforce the intention to die. Suicide begins to be appraised as a valuable solution for problem solving and emotion regulation now (O'Connor, 2011).

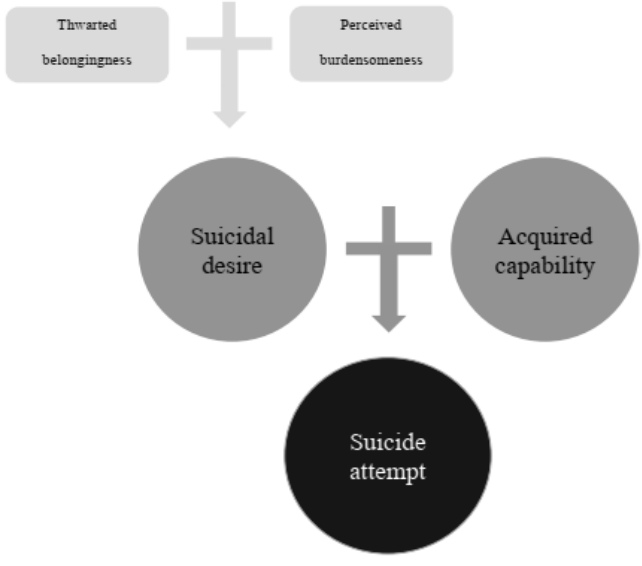


Figure 2. Interpersonal theory of suicide.

The volitional phase involves the transition from ideation to action. In other words, the volitional phase is featured by the initiation of acts that have as their final goal death. The capability to commit suicide is also considered relevant in this model. Other moderating factors of the suicide attempt engagement may be impulsivity traits, access to lethal means, imitation of other beloved ones who engaged in suicide attempt or the development of a suicide plan.

Although some common corollaries have been shared from both the Interpersonal theory of suicide and the Integrated Motivational-Volitional model, the latter provides further clarification on specific moderating factors that may play a relevant role across the model stages. Moreover, this theoretical framework can easily integrate other dispositional factors and cognitive mediators. Accordingly, the perfectionistic traits may be considered a moderating factor that may show up in triggering feelings of defeat over the defeat–entrapment–suicidality pathway. Higher perfectionistic dispositions may be associated with feelings of failure when something does not go as expected. Moreover, the Integrated Motivational-Volitional model provides a framework in which suicidal stages are relatively independent from each other. Therefore, the model can make differential predictions in terms of the varying suicidality forms (i.e., suicidal ideation and attempt).

A recently developed theoretical framework accounting for suicide behavior is the Three-step model of suicide (3ST model), proposed by Klonsky and May (2015). This model is conceptualized under the intention-to-action framework. According to the 3ST model, the progression from intention to death to suicidal attempt engagement goes along three stages (steps).

In Step 1, the suicidal idea becomes evident due to the interacting effect of pain and hopelessness. Pain (understood as psychological and emotional pain) makes life harder and reduces the desire to live. The hope for pain relief may drive people's life in this regard. However, suicidal ideation would emerge when there is no possible escape from pain.

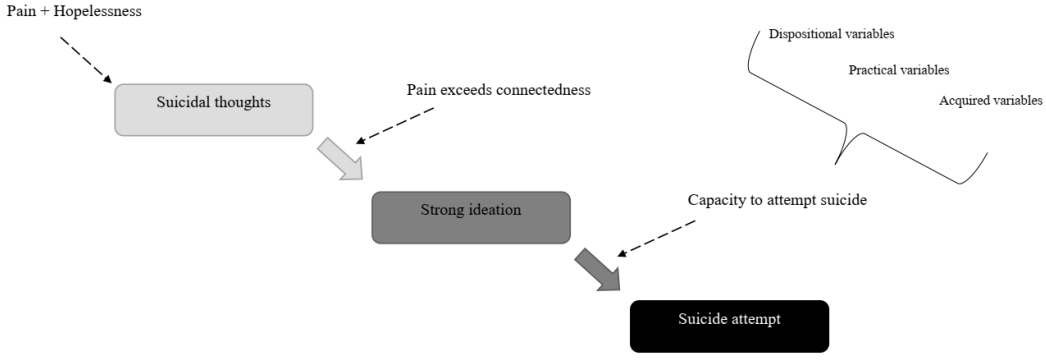


Figure 3. Three step theory.

In Step 2, ideation increases. This may occur when pain exceeds connectedness (understood in a wider way as a means of connection with others and life). In other words, the ideas to killing oneself would become more intense when there is an imbalance between the huge amount of pain felt and the deficient resources used to deal with this pain. In this vein, the higher the intensity of perceived pain, the faster the transition from passive to active suicidal ideation (e.g., making a suicidal plan for killing oneself).

Finally, the transition to a suicidal attempt takes place in Step 3. The capacity for suicide attempt is relevant in this step. In this case, this acquired skill remains in constant interaction with contributing (cognitive) factors operating at Step 2. Three categories of factors may influence the suicidal attempt capacity: dispositional (e.g., low pain sensitivity), acquired (e.g., frequent exposure to painful events) and practical (e.g., access to lethal means, knowledge about suicide).

A schematic version of the model is presented in Figure 3. This theory presents even more steps along the road to suicide. In addition, the model stresses the relevant role of healthy relationships with others as a protective factor.

Although the three theories discussed so far are perhaps the most relevant models and those with stronger supporting evidence, there are other interesting frameworks. For instance, the Rudd's theory of fluid vulnerability mixes a process-like view of suicide with strong cognitive roots (Rudd, 2007).

Very briefly, it is important to point out the relevance the author gives to both stable (time-invariant) risk factors and risk factors that fluctuate over time, both in dynamic interaction. This may provide an interesting, non-linear view of suicidal behavior and allows, in line with other frameworks, for the identification of the potential factors accounting for differences in suicidal behavior trajectories.

To sum up, the existing theories on suicide behavior constitute theoretical approaches in constant change as they are built on mixing theoretical corollaries and data-driven evidence. Moreover, some principles from the theoretical frameworks presented are drawn from the same sources and mutual influence from each other is evident. Even though, each theory focuses on

distinctive key factors and processes. Thus, different pathophysiological underpinnings may be addressed by each theoretical model. The approaches on the ideation-action framework, however, have gained great popularity in the last decades, due to the large amount of supporting evidence provided, emphasizing that the risk factors may not equally affect across the varying forms over the suicide continuum, being necessary to further analyze on how an individual may (or not) transition from ideation to a suicide attempt.

Risk Factors

When we talk about risk factors, we refer to correlates that precede suicidal behavior and increase the chance of engaging in a particular form of suicidality. Given the focus of this chapter, there is no room to provide a highly exhaustive exploration of all possible risk factors, but some of the most studied will be outlined. First, it is worth mentioning that the study of risk factors for suicide behavior, understood as a unitary phenomenon, has been the rule rather than the exception for many decades. In other words, the distinctive nature of each suicidality form has been either partially or fully overlooked across the studies on suicide.

This have undermined the capacity of explanatory models to obtain accurate conclusions from the existing literature leading to poor, simplistic explanations on suicide dynamics. For this reason, theories based on the ideation to action framework have captured much more attention in recent years.

Among the potential classifications and to maintain a simpler structure, three types of risk factors will be outlined: environmental factors, personal factors, and adverse life events. Regarding the environmental factors, references will be made to all those factors related to contextual and interpersonal relationships. Regarding the second type of factors, dispositional traits will be described as well as factors associated with cognitive states and emotional appraisals and psychopathological factors. In the last category (i.e., adverse life events), factors associated with traumatic and highly stressful events and previous suicide attempts will be included; that is, specific moments in life that can increase the probability of suicide. These categories should not be understood as fully independent; the existence of a history of suicide in the family, for example, may be considered as an adverse life event with substantial impact at the intrafamily level.

A slightly different conceptualization of risk factor may come from the concept of warning sign. A warning sign can be understood as an observable sign or verbalization that warn of an imminent risk of a suicide attempt. They are particularly critical in the context of suicide for preventive purposes. Some easy-to-detect warning signs have been presented (Rudd et al., 2006): someone threatening to kill themselves, looking for ways to do it, or writing about it.

Table 2 displays a list of some of the main risk factors studied. It is worth emphasizing that the best predictor of a suicide attempt is the existence of previous ones (Yoshimasu et al., 2008). Further details on relevant risk factors for suicide behavior can be consulted elsewhere (Franklin et al., 2017; Gvion & Levi-Belz, 2018; O'Connor & Nock, 2014; World Health Organization, 2014).

Despite the vast literature on the topic and the wide number of risk factors detected, a change of paradigm is needed. A recent meta-analysis focusing on the last 50 years of the study of suicide risk factors presented very discouraging conclusions, pointing out that most risk factors as very imprecise and with low predictive value. This leads to the need for further

research and especially for new research models, looking for prediction algorithms and not only isolated factors (Franklin et al., 2017).

Table 2. Risk factors

Environmental factors	Society level characteristics	Difficulties in accessing health services Easy access to lethal means Stigma Inadequate media representation of suicide
	Community level characteristics	Discrimination Displacement, migration
	Family history	Parental depression Parental alcoholism Suicide attempts in relatives Presence of severe mental illness
	Personal relationships	Isolation Lack of social support Presence of conflictive relationships
Personal factors	Demographics	Male gender (death by suicide) Female gender (suicide attempt) Old age Low socioeconomic status
	Cognitive factors	Perfectionism Cognitive rigidity Rumination Thought suppression Thwarted belongingness Burdensomeness Impaired problem solving Impulsivity Entrapment Feelings of defeat
	Physical illness	Cancer Migraines Disabilities Chronic pain
	Psychopathology	Mood disorders Borderline personality disorder Emotional dysregulation Substance abuse
	Biology	High pain threshold
Adverse life events	Self-harm and suicide	Previous self-harm Previous suicide attempt Exposure to self-harm Exposure to suicidal thoughts and behaviour
	Traumatic life events	Sexual abuse Physical abuse
	Other adverse life events	Bullying Loss of income Breakups Divorce Death of loved ones

Note. References: Franklin et al., (2017); Gvion and Levi-Belz (2018); O'Connor and Nock (2014); World Health Organization (2014).

Among risk factors, this chapter will concentrate on perfectionism. Contrary to other factors, perfectionism involves a dispositional style usually considered as positive and adaptive, as it helps maintain adequate levels of performance in high-demanding contexts. However, we are facing a double-edged sword, since high self-demand can be accompanied by strong self-criticism, putting the person at risk of disappointment and failure (Smith et al., 2018). So, in its adverse consequences, perfectionism must be analyzed and identified when participating as a predisposing factor in suicidality.

Perfectionism

Definitions and Conceptual Nuances

There is not a universally accepted definition on perfectionism. This section aims at delving into perfectionism definitions, conceptual models, and instruments of measurement.

In the 50s of the past century, the first definitions of this concept were proposed, being Horney (1950) who labelled perfectionism as "the tyranny of duty." Later, Hollender (1965) defined perfectionism as "the practice of demanding from oneself or others, a quality of performance superior to that required by the situation." Burns, in 1980, defined perfectionism as "a network of cognitions" and people with perfectionism as "those whose standards are beyond reach or reason, people who compulsively and tirelessly strive toward impossible goals and who measure their own worth entirely in terms of productivity and achievement. For these people, the drive to excel can only backfire" (Burns, 1980). As can be seen, these definitions pointed out the maladaptive nature of perfectionism.

In later decades of the same century, Frost and colleagues defined perfectionism in terms of "*setting excessively high standards for performance accompanied by overly critical self-evaluation*" (Frost et al., 1990). Subsequent definitions conceptualized perfectionism as a personality trait featured by the struggle for impeccability and the excessively high standards for performance, accompanied by tyrannic criticisms to oneself (Flett & Hewitt, 2002; Frost, Marten, Lahart & Rosenblate, 1990; Hewitt & Flett, 1991).

It is worth mentioning that although multiple approaches stress the maladaptive side of perfectionism, this does not necessarily build on a negative, dysfunctional, or even pathological set of dispositional traits. In fact, Burns (1980) has already stated that when the pursuit of excellence leads to an adaptive and functional outcome, perfectionism may have little clinical relevance.

Hamameck (1978) pioneered on addressing the functionality of perfectionism. In this regard, he distinguished between two forms of perfectionism, a positive form, the so-called "normal perfectionism", and a negative, more maladaptive form, so-called "neurotic perfectionism". This nuance was instrumental in guiding studies towards a multidimensional approach to this attribute. In the early 1990s two research groups independently proposed that perfectionism may be understood as a multidimensional trait in nature and provided two scales to capture the construct in all its complexity (Frost et al., 1990; Hewitt & Flett, 1991). In this vein, Frost et al. (1990) proposed six facets in the experience of perfectionism: personal standards, organization, concern for mistakes, doubts about actions, parental expectations, and parental criticism. This model indicates that perfectionist people may develop high standards

of performance. In addition, they usually show a preference for order and organization, striving for flawless and absence of mistakes. Related dispositional traits may lead them to spend too much time in decision making.

On the other hand, Hewitt and Flett (1991) proposed that three aspects of perfectionism could be distinguished: self-oriented perfectionism, socially prescribed perfectionism, and other-oriented perfectionism. The authors posited that perfectionist people may view their high standards as self-imposed or imposed by others. In addition, perfectionist people may equally have high expectations of others.

Some evidence comes from theoretical models opposing healthy dispositions, emotional appraisals and cognitive states (positive affections, satisfaction with the life, active coping) in contrast to unhealthy ones (anxiety, depression and worry). In this regard, a bipolar conceptualization on perfectionism emerged from these approaches, distinguishing between functional or positive perfectionism vs. dysfunctional (maladaptive) or negative perfectionism (for a review, see Stoeber & Otto, 2006).

Along with the abovementioned approaches, Shafran et al., (2002) stated that perfectionist people who positioned in the negative pole, have a self-evaluation scheme that is dysfunctional in two ways. First, they are overly reliant on achieving self-imposed and highly demanding standards, which means that their self-assessment is extremely vulnerable to failure leading to self-criticism with relative ease. Second, the self-evaluation scheme depends, to a large extent, on the domain in which perfectionism is expressed (i.e., academic performance, physical shape, etc.). This may lead to differential impact of failure according to how valuable the domain is in terms of personal significance.

Research on perfectionism has significantly grown and new theoretical approaches have been developed. The most recent theories have contemplated this perfectionism in a broader way, such as the model developed by Stoeber and Otto (2006). These authors conceptualized perfectionism as a multidimensional personality construct, covering intra- and interpersonal behavioral and cognitive repertoires. From this standpoint, perfectionism may be both adaptive and maladaptive, depending on contextual motives and situations.

Enns and Cox (2002) also used perfectionism from a multidimensional standpoint with multiple facets (both positive and negative), covered by two wider dimensions, perfectionistic strivings and perfectionistic concerns, that again differentiate between healthy and unhealthy (or clinical) perfectionists. The authors came from the influential model developed by Frost et al., (1993).

Theoretical Models

Some theoretical approaches have been developed to disentangle the main perfectionism mechanisms, and main features derived from this multidimensional construct. A selection of some of these models is displayed in Table 3.

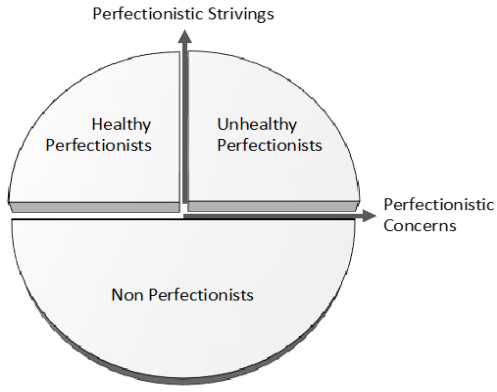
In line with abovementioned definitions, the theoretical models can be distinguished according to the way they conceptualize perfectionism: one-dimensional models and multidimensional models. Thus, the one-dimensional models (e.g., Beck's model or Shafran's model) focus on the self-imposition of excessive levels of demand, which entails adverse consequences when performance standards are not met. Thus, it considers perfectionism as a dysfunctional characteristic due to the negative self-evaluation and self-criticism that the

individual develops on themselves because of failure in achieving the self-imposed level of performance, and due to the inability to make the self-demand criteria more flexible. On the other hand, models based on a multidimensional and dynamic conception (e.g., the Tripartite Perfectionism Model, or the 2x2 Perfectionism Model) come from a more integrative standpoint of perfectionism, defining this as a wider dispositional trait. The Hewitt and Flett's model, as a good example of this type of models, considers the interplay of intra and interpersonal sources to set the criteria for perfect performance. Therefore, three differentiated dimensions may feature perfectionist people (Flett & Hewitt, 2002; Hewitt & Flett, 1991):

- Perfectionism oriented towards oneself.
- Perfectionism oriented towards others.
- Socially prescribed perfectionism (tendency to believe that others expect perfect performance from the subject).

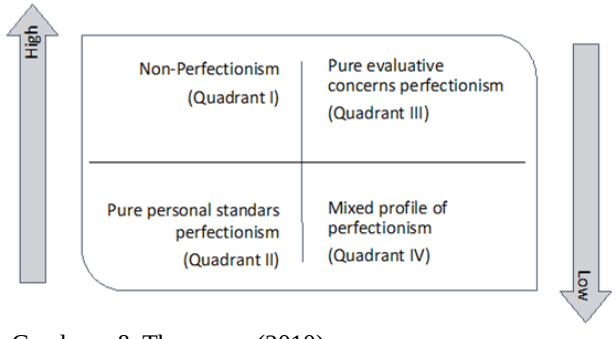
Table 3. Theories of perfectionism

Precursor Models	
Theory and author	Summary
Classical Cognitive Model (Beck, 1983)	Depression is related to alterations in the cognitive domain, particularly in information processing and formation of dysfunctional schemes (such as perfectionism) that constitute the negative view of oneself, the world and the future (cognitive triad).
Self-discrepancy Model (Higgins, 1987)	The construction of the self-concept is not based solely on the present self (what we are now) but on the existence of other "possible selves" (what we can become). These possible selves serve as points of comparison with the current self. These comparisons may result in a discrepancy and negative emotions may emerge.
Models of Perfectionism	
Clinical Perfectionism Model (Shafran et al., 2002)	One-dimension model that focuses on the action of the self-evaluation scheme in the domains most valued by individuals. In this sense, any perceived failure in a specific domain would provoke self-criticism and the maintenance of a negative self-image.
Dual Processing Model (Slade & Owens, 1998)	Distinguishing between functional and dysfunctional perfectionism, this model posits that the type of reinforcement is what determines the type of perfectionist behavior.
Multidimensional and Dynamic Model (Hewitt & Flett, 1991)	It presents both an intra and interpersonal view of perfectionism and states that the different dimensions are associated, in a different way, with the results of perfectionistic cognitions and behaviors, describing perfectionism in terms of its direction (towards oneself or towards others).
Tripartite Perfectionism Model (Stoeber & Otto, 2006)	It differentiates three types of perfectionism: healthy or adaptive perfectionism (people with high personal standards / low perfectionistic concerns), unhealthy or maladaptive perfectionism (high personal standards / high perfectionistic concerns) and non-perfectionism that includes people with low levels of perfectionistic strivings. Key elements of this model are displayed with further detail in Figure 4.
2x2 Perfectionism Model (Graudeau & Thompson, 2010)	The facets of perfectionism are grouped into two broad dimensions based on their origin and cognitive manifestations: evaluative concern perfectionism (ECP), and personal standards perfectionism (PSP). This model postulates that, instead of the dimensions of perfectionism themselves, the interaction between them (PSP and ECP) allows the types of perfectionism to be more clearly differentiated: Non-perfectionism, Pure ECP, Pure PSP, and Mixed profile of Perfectionism. Key elements of this model are displayed with further detail in Figure 5.



Source: Taken from Stoeber and Otto (2006).

Figure 4. Tripartite model.



Source: Adapted from Gaudreau & Thompson (2010).

Figure 5. 2X2 model of perfectionism.

Assessment Instruments

Some of the most relevant scales created for the measurement and study of perfectionism are listed in Table 4. One of the first attempts to measure perfectionism was the Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978), an instrument aimed at measuring one of the central elements of Beck's cognitive theory of emotional disorders: the dysfunctional schemas that may trigger negative thought development. In this sense, the "*Success-perfectionism*" subscale of the DAS included items that cover the relationship between achievement and self-evaluation (for example, "if I fail at my job, then I am a failure as a person").

From the dimensional perspective, two scales have gained great popularity and are widely used in both clinical and community settings: the Hewitt Multidimensional Perfectionism Scale (HMPS; Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991) and the Frost Multidimensional Perfectionism Scale (FMPS; Frost, Marten, Lahart & Rosemblate, 1990). A more detailed description on both scales is provided below.

Table 4. Perfectionism scales

Scale	Items and scale of response	Description
HMPS (Hewitt Multidimensional Perfectionism Scale; Hewitt et al., 1991)	45 items on a 7-point Likert scale	It evaluates three dimensions of perfectionism: - Self-oriented perfectionism (SOP). - Socially prescribed perfectionism (SPP). - Perfectionism oriented towards others (OOP).
FMPS (Frost Multidimensional Perfectionism Scale; Frost et al., 1990)	35 items on a 5-point Likert scale	It assesses six factors: - High personal standards - Concern about mistakes - Doubts about actions - Parental expectations - Parental criticism - Organization It also assesses the origin of perfectionism, parental expectations, and parental criticism.
CAPS (Child and Adolescent Perfectionism Scale; Flett et al., 2000)	22 items on a 5-point Likert scale	It evaluates two dimensions: self-oriented and socially prescribed perfectionism.
AMPS (Adaptive/Maladaptive Perfectionism Scale; Rice & Preusser, 2002)	27 items on a 4-point Likert scale	It evaluates four dimensions: - Sensitivity to errors - Contingent self-esteem - Compulsiveness - Need for admiration
IPI (Child Perfectionism Inventory; Fernandez et al., 2012)	36 items on a 5-point Likert scale	It evaluate three factors that make up childhood perfectionism: - Self-demand - External Pressure - Self-assessment

HMPS

As abovementioned, in the early 1990s, perfectionism began to be approached as a multi-dimensional construct. This change in perspective was due to two reasons. First, it was argued that perfectionist people were overly concerned about making mistakes, questioning their own performance constantly. In addition, the other-oriented involvement in developing performance standards was highlighted due to the considerable value of parents' expectations (Frost et al., 1990). Finally, independent clinical observation pointed to the relevance of the role of perfectionism in the interpersonal context to trigger social adjustment difficulties (Hewitt and Flett, 1991).

In line with the dominant theoretical view, the Hewitt Multidimensional Scale of Perfectionism, a self-report comprising 45 items on a 7-point Likert scale of response, was developed to cover three major dimensions (the dimensions are listed below as well as main descriptors):

- Self-oriented perfectionism (SOP):
  - High personal standards and motivation to achieve perfection for oneself.
  - Strict evaluation of one’s behavior.
  - Irrational importance to being perfect.
  - Unrealistic expectations of oneself and punitive self-assessments.

- Socially prescribed perfectionism (SPP):
  - Perception of unrealistically high standards imposed by others.
  - Perception of the social context as excessively demanding.
  - The individual must show perfection to ensure approval.
- Other-Oriented Perfectionism (OOP):
  - Excessively high standards for others.
  - Individuals impose unrealistic standards to those around them and evaluate others critically.

Self-oriented perfectionism, according to a study by Hill et al., (1997), seemed to have largely adaptive consequences, while socially prescribed perfectionism as well as other-oriented perfectionism may lead to an opposite pattern (i.e., they may trigger the emergence of maladaptive outcomes). Adequate levels of reliability have been derived from delivering the questionnaire in both community and clinical samples (Cronbach's α between .74-.88, across factors) as well as concurrent validity with similar instruments (Hewitt et al., 1991). More recently, Stoeber (2016) demonstrated the adequate psychometric properties of the shorter version of the HMPS. This 15-item version preserved the same psychometric properties of the original scale.

FMPS

The Frost Multidimensional Perfectionism Scale (Frost et al., 1990) is a self-report made up of 35 items on a 5-point Likert scale of response. The scale evaluates six factors corresponding to major dimensions of perfectionism:

- High personal standards
- Concern about mistakes
- Doubts about actions
- Parental expectations
- Parental criticism
- Organization.

It is worth noting that this scale also assesses the origin of perfectionism, parental expectations, and parental criticism. The FMPS total score is calculated on 29 items. The psychometric properties of the original FMPS were satisfactory, observing adequate reliability (Cronbach's α ranging from .77 to .93 across factors) and good levels of convergent validity with other instruments measuring related constructs (i.e., psychopathology and depressive thinking).

As discussed by Frost et al., (1993) this multidimensional scale entails three major improvements on the existing instruments to measure perfectionism. First, they showed that the different facets of perfectionism saturated on two major, higher-order dimensions of perfectionism: concerns and strivings. Second, all context-specific manifestations of perfectionism may build on these main dimensions. Third, perfectionistic concerns usually lead

to negative, maladaptive outcome, while the dimension of perfectionistic strivings is more related to better adjustment to context and positive outcome maximization.

It should be noted that although there are scales that have contributed to innumerable investigations and which have allowed to establish working hypotheses of great value for the study of perfectionism, all of them are retrospective self-report tools. Instruments based on interviews should be developed so that we could obtain hetero-applied data that allow for the testing of the results obtained as well as for convergent results between measurement methods.

Positive and Negative Perfectionism and Correlates

Higher scores of perfectionisms, regardless the measurement instrument, have been associated with psychological distress and maladaptive coping. In this regard, the demands of perfection towards others may yield a clear deterioration of family and couple relationships. In addition, perfectionism has been identified as a major risk factor of psychopathology across a wide variety of mental disorders, such as borderline personality disorder, affective disorders, eating disorders, and anxiety and anger disorders (for a review, see Limburg et al., 2017). Moreover, a clear and strong relationship has been shown between suicide behavior and perfectionism (Muyan and Chang, 2015; Pia et al., 2020; Smith et al., 2018; 2021). Perfectionism may predispose suicidal behavior to be developed. This pervasive effect of perfectionism has been consistently observed regardless the suicidality form (see Limburg et al., 2017).

Even though it is worth noting that clinical or maladaptive perfectionism occurs in contexts in which the pursuit of high standards is often socially valuable, in fact, perfectionist patients often report higher levels of high-standard expectations and criticism and psychological control from parents (Frost, Lahart, & Rosenblate, 1991; Ko et al., 2019; Miller et al., 2017; Segrin et al. 2019; Vieth & Trull, 1999; Walton et al., 2020). Accordingly, mounting evidence reinforces the idea of the importance of family influence, parenting style and bonding, and the education received during childhood on perfectionist expectation formation (Smith et al., 2017). In addition, family cohesion is another important factor that affects the levels of perfectionism (Segrin et al., 2019). Some robust evidence supports the link between specific parenting style practices and perfectionism (Hamachek, 1978; Burns, 1980). Barrow and Moore (1983) highlighted four generalized practices associated with the development of perfectionist thinking:

1. Openly critical and demanding parents.
2. Parental expectations and performance standards are excessively high and criticism is indirect.
3. Parental approval is absent, inconsistent, or conditional.
4. Perfectionist parents who model perfectionist attitudes and behaviours.

In cultural terms, Markus and Kitayama (2010) suggest that the dominant cultural values of society at any given time are reflected by the norms of its civil institutions (family, academic, religious, economic, and political) and individual attitudes, values and beliefs, even dispositions, may be shaped by cultural issues. In the same vein, culture may lead to higher disposition to develop specific personality traits.

On the other hand, a recent meta-analysis suggests self-oriented perfectionism may increase in recent times, which seems to indicate that increasingly demanding expectations on oneself may be more evident with new generations (Curran, 2019). In terms of socially prescribed perfectionism, this study also highlights that younger people perceive their social context as increasingly demanding and therefore, they may increasingly be more inclined to develop perfectionist expectations as a way of ensuring approval from others. These findings are consistent with growing levels of anxiety and the sense of social disconnection observed among young people in current times (Curran, 2019; Sommerfeld and Malek, 2019; Stoeber et al., 2021).

From a wider point of view, perfectionism may become a valuable issue culturally accepted in western cultures, even encouraged, since perfection relates to success and goal achievement across spheres such as sports, business, science, and academics (Walton et al., 2020). In this line, an argument that could help understand the contributions of culture on perfectionism development and maintenance stems from the Dual Processing Model (Slade & Owens, 1998), an actual cornerstone in the study of cultural influences of perfectionism development. This model distinguishes between a normal/adaptive function of perfection and a pathological/maladaptive function. Perfectionism may drive the individual to the achievement of higher standards. This involves the individual being rewarded and becoming socially attractive due to success. In contrast, maladaptive perfectionism is related to self-oriented punishment and self-destructive behavior. Perfectionist expectations may therefore be critical contributors for a healthy pursuit of excellence (Dunkley et al., 2006; Miller et al., 2017; Shafran et al., 2002). On the other hand, perfectionistic strivings themselves may not necessarily lead to adaptive goals but can be positive, when the individual focuses on doing their best instead of worrying about mistakes, enjoying the pursuit of perfection instead of being afraid of not reaching it, and concentrating on what has been achieved rather than pondering the discrepancy between what has been achieved and what could have been achieved.

To sum up, there is substantial agreement on the central aspects that define the perfectionism function: high personal standards and self-oriented perfectionism, in terms of positive perfectionistic strivings. Conversely, the negative (maladaptive) perfectionist expectation may be driven by concerns about one's own mistakes, doubts about performance, socially prescribed perfectionism, and perceived lack of balance between actual achievements and high expectations. Conversely, evidence suggests that perfectionistic strivings may lead to positive (adaptive) outcomes, particularly after removing the residual influence of perfectionistic concerns on strivings or when perfectionistic concerns are at a minimal level (Stoeber and Otto, 2006; Walton et al., 2020). Finally, it is important to mention that positive perfectionistic strivings may also lead to negative outcomes under unfavorable contextual conditions, such as frequent exposure to daily hassles (see Dunkley et al., 2000).

Transdiagnostic Perspective

Researchers and clinicians often complain about the discrepancy between what is presented in manuals and clinical guidelines and reality. In this regard, it is quite difficult to see people with "pure" entities of mental distress in both clinical and community settings. In turn, it is very common to find similar symptom phenotypes across varying disorders. Moreover, it is worth

mentioning the elevated prevalence of co-occurring mental disorders at a given time. In fact, mental disorder comorbidity constitutes the rule rather than the exception among individuals with psychopathology conditions (Merikangas et al., 2010; Plana-Ripoll et al., 2019). Some potential explanations have been posited to explain profiles of co-occurrence between psychiatric disorders as well as same profiles of symptoms across varying disorders. Beside the overlap between definitions of psychiatric disorders (Carragher et al., 2015; Cummings et al., 2014), shared genetic liability and common risk factors may trigger multiple psychiatric conditions or symptom phenotypes being manifested at a given moment (de la Torre-Luque & Essau, 2019; Lahey et al., 2011; Salvatore et al., 2015). Moreover, some physiological systems (e.g., the hypothalamus-pituitary-adrenals axis or some cortical structures, such as prefrontal dorsolateral cortex or amygdala) are involved in common features across psychiatric conditions (Beauchaine & Thayer, 2015; Zahn-Waxler et al., 2008).

A large gap exists in the study of shared pathophysiological mechanisms of psychopathology from the traditional standpoint of diagnostic entities. A multi-level approach more focused on signs, behavioral repertoires and pathological manifestations may therefore constitute a more suitable alternative to dimensionally address shared patterns of development and risk factors across mental disorders. The Research of Domain of Criteria (RDoC) initiative provides an outstanding framework that enables the consideration of distressing conditions along continuums, rejecting a categorical approach to human healthcare and wellbeing (Cuthbert & Insel, 2013; Kozak & Cuthbert, 2016). The RDoC does embrace the potential shared mechanisms that may lead to the development of varying mental disorders at the same time as well as shared complex manifestations.

Perfectionism can be understood as a transdiagnostic risk factor for the development of varying disorders, such as emotional and behavioral pathologies (e.g., anxiety disorders, eating disorders) and personality disorders, as well as suicide behavior (Egan et al., 2011). The study of the key features of perfectionism constitutes a research field of great interest because of its implications for diagnosis, prevention and transdiagnostic treatment (Podina, 2020).

For this reason,, perfectionist dispositions motivate the development of a set of dysfunctional cognitions (high-standard expectations) and behaviors in the search for unrealistic goals, highly related to mental distress and subsequent symptom emergence and aggravation (Harvey et al.,2004; Zeifman et al., 2020). Mental distress may therefore be expressed by means of multiple manifestations, according to genetic liability and contextual influences.

The transdiagnostic nature of perfectionism may be supported by evidence yielding to four main conclusions (see Egan et al., 2011; Limburgh et al., 2017; Podina, 2020; Shahnaz et al., 2018):

1. Perfectionism has been proven to be a significant risk factor for the development of varying psychological disorders.
2. Higher levels of perfectionism may be associated with higher risk of comorbidity between mental disorders.
3. Perfectionism is included as an explanatory mechanism in the maintenance of a variety of psychopathological conditions.
4. The psychological treatment of perfectionism may reduce an important number of symptomatic manifestations from multiple disorders.

Perfectionism is also proven to be a transdiagnostic marker involved in the development of numerous mental disorders. Curran and Hill (2019), in a recent meta-analysis, provided robust evidence supporting a main corollary of classical theoretical models on the link between perfectionism and psychopathology. According to the authors, perfectionism may underlie vulnerability to a variety of disorders, symptoms, and syndromes, basically due to the influence of related cognitive components on behavior and emotion (Flett & Hewitt, 2002). In this regard, perfectionists may have an excessive need for approval from others due to their high standards and dominant external locus of control. Therefore, they tend to feel socially disconnected. This social alienation makes perfectionists susceptible to feel deep confusion and thwarted belongingness (Hewitt et al., 2017).

People with a clinical perfectionist tendency may generate a symptom phenotype and elevated levels of distress that may reach levels of clinical meaningfulness. In this line, some authors support that the presence of perfectionism may become a preexisting disorder more resistant to intervention and treatment, affecting critical processes contributing to disorder remission and recovery, such as therapeutic alliance formation and treatment adherence (Blatt et al., 1998; Zeifman et al., 2020; Zuroff et al., 2000). Shafran et al. (2002) suggest monitoring how perfectionist cognitions and related behavior may evolve over the treatment delivery to detect signals of clinical symptom amelioration towards disorder remission. Similarly, Curran and Hill (2019) discussed on the relevance of socially prescribed perfectionist expectations to explain recent increases in mental health difficulties among young people.

Perfectionism comprises some motivational components (i.e., striving for perfection and avoiding failure) that vigorously drive the individual's behavior towards certain levels of performance in accordance with self-imposed expectations (Hewitt & Flett, 1991). A perceived imbalance between the expected levels of performance and the efforts made to successfully reach the standards may lead to feelings of defeat, affecting self-efficacy and impairing self-esteem.

Classical theorists on the study of suicide proposed that perfectionism may interact with stress and preexisting mental health conditions, leading to suicide behavior engagement (Hewitt & Flett, 1993; Flett, Hewitt, Blankstein & Mosher, 1995). This early approach may constitute a starting point in the study of the transdiagnostic role of perfectionism. Although the authors did not distinguish between suicidality forms as outcomes, the influence of perfectionism on suicidal behavior engagement may be highlighted, regardless the type of preexisting pathology. It is also worth mentioning the moderating role of stress in the relationship between perfectionism and suicide. Stress may alter either the direction or strength of such this relationship. In other words, stress may trigger when the suicide behavior is initiated and what pathway may more directly connect perfectionism with suicide (Baron and Kenny, 1986). Shahnaz et al. (2018) conceptualized perfectionism as a main contributor of suicidal ideation.

Mounting evidence suggests that both self-oriented perfectionism and socially prescribed perfectionism may be associated with an increase in suicidal ideation in both community and psychiatric populations (Robinson et al., 2021; Shafran & Mansell, 2001; Shahnaz et al., 2018; Sommerfeld and Malek, 2019). Hewitt et al., (1994) hypothesized that socially prescribed perfectionism (SPP) is related to suicide because it involves "*a social form of hopelessness in terms of inability to control other people's expectations, as well as a sense of alienation or inability to meet societal expectations*" (p. 455). Smith and colleagues, through two influential meta-analytic studies (Smith et al., 2016, 2018), provided some pieces of evidence in favor of the key role of SPP in suicidal ideation. In this sense, the authors found that socially prescribed

perfectionism consistently predicted increases in depressive symptoms and suicidal ideation over time, considering a wide number of studies from a variety of contexts (i.e., community and clinical samples).

On the other hand, perfectionism may adopt other transdiagnostic roles by triggering the development of suicide mediators. In line with Shaw & Segal (1999), perfectionism may be a strong predictor of several cognitive end-products highly related to suicidal behavior, such as hopelessness and perceived failure and defeat. According to Abramson et al., (2004), hopelessness consists of consolidated expectations about the occurrence of negative events (i.e., negative outcome expectancy) as well as the expectations of no change in the likelihood of their occurrence in the future (i.e., helplessness expectancy). It is worth mentioning that this cognitive end-product is one of the strongest predictors of suicidal ideation, suicidal intention severity and suicide attempt, as discussed elsewhere (Abramson et al., 2004; Blankstein et al., 2007; Castro et al., 2017; Macedo et al., 2017; O'Connor et al., 2010; Ribeiro et al., 2018).

Perfectionist expectations may directly moderate the relationship between hopelessness and suicidal behavior. Perfectionists may be their own worst critics, engaging in endless loops of self-defeating over-striving, by which each new task/situation may constitute another opportunity to confirm the low self-perceived efficacy in achieving the self-imposed standards. This may maintain levels of hopelessness expectations constantly activated. Although this mechanism may be apparently coherent, the empirical evidence yields conflicting results on the relationship between perfectionism and hopelessness: social perfectionism may be associated with psychological distress and hopelessness (Abramson et al., 2004; Hewitt & Flett, 1991; O´Connor & O´Connor, 2003; Robinson et al., 2021; Smith et al., 2021; Sommerfeld & Malek, 2019) but mixed evidence has been provided on the role of self-oriented and other oriented perfectionist expectations in hopelessness expectation development (Hewitt, Flett & Weber, 1994; Hewitt et al., 2014; Smith et al., 2017). In fact, a buffering role of self-oriented perfectionism against hopelessness, under the influence of several intra-individual (e.g., personal goals, grit disposition) and contextual factors (e.g., higher social support) has been suggested elsewhere (Hunter & O´Connor, 2003; Karimi et al., 2014).

On the other hand, socially prescribed perfectionism has been considered a robust correlate of both hopelessness and several forms of suicidality (e.g., suicidal ideation, intention) (Pia et al., 2020). In fact, Boegers, Spirito, and Donaldson (1998) found that adolescents with higher levels of death wish, a passive suicidal ideation, showed higher levels of socially prescribed perfectionism in comparison to those who attempted suicide with lesser motivation. Roxborough et al., (2012) obtained similar results on a sample of child and adolescent psychiatric patients. The authors also found that highly traumatic experiences (e.g., being bullied) may mediate the relationship SPP expectations and suicide behavior engagement (Hewitt et al., 2014; Wetherall et al., 2019).

Some other transdiagnostic factors should be considered regarding the study of the transdiagnostic role of perfectionism and its influence on suicidal behavior engagement. For instance, it is worth noting the influence of ruminative mechanisms by which expectations may be mentally activated along wide periods of time, and other maladaptive coping strategies on the mental domain (Bieling et al., 2004; D'Agata and Holden, 2018; de Jonge-Hessen et al., 2020; Shahnaz et al., 2018). In addition, it is also important to consider the relationships between perfectionism and suicide considering gender-specific processes. To illustrate that, Hewitt et al. (1997) demonstrated that self-oriented perfectionism and socially prescribed perfectionism were correlated with hopelessness in female but not in male participants. In

addition, it is suggested that women may be more prone to develop perfectionist expectations in a wider set of life domains. The relationship between self-oriented perfectionism and neuroticism may be stronger in women in comparison to men (see Smith et al., 2021). However, there is a lack of consensus in the gender-related effect on perfectionism.

On the other hand, a spotlight should be put on the transdiagnostic management of perfectionism. In this regard, perfectionism intervention usually involves deactivating expectations related to unrealistic standards of performance and self-criticism (De Rosa et al., 2012). The results of interventions on perfectionism are promising even in terms of symptom amelioration of a preexisting disorder. In this regard, Steele, and Wade (2008) showed that the delivery of a specific intervention to reduce perfectionism yielded symptomatic reductions among patients with bulimia nervosa. Similar results have been observed in the prevention of self-injury engagement (International Society for the Study of Self-Injury, 2015).

Perfectionism has been traditionally addressed from the cognitive behavioral therapy (CBT) perspective. CBT has been proven to be effective in decreasing levels of perfectionism (Lloyd et al., 2015). In turn, techniques such as cognitive restructuring are used to change dysfunctional beliefs due to high standards set (Ong et al., 2019). De Rosa et al., (2012) proposed a guided protocol to address perfectionism under the cognitive restructuring framework: 1) identify perfectionism-related end-products (i.e., thoughts and expectations); 2) make a list of potential alternative thoughts; 3) examine both the advantages and disadvantages of these perfectionist thoughts and alternative thoughts; and 4) choose a more objective (adaptive) way to evaluate the performance and standard achievement. More recently, Shafran et al., (2018) produced a step-by-step guide to perform cognitive restructuring techniques, based on increasing motivation for change and gaining control and self-efficacy.

From the third-generation therapy perspective, the acceptance and commitment therapy (ACT) model has also developed some therapeutic tools to address perfectionist expectations. Note that ACT is not focused on symptom reduction and risk factor tackling. ACT aims at aiding value clarification and action taking promotion towards value-based goals (Hayes et al., 2011). Therefore, this therapy is based on modifying the effect of perfectionist thinking on behavior without altering the thought content. Ong et al., (2019) showed an evident deactivation of perfectionist-related functions through ACT-based interventions among individuals with clinical perfectionism. Maybe a key process in tackling perfectionist-related standards is to provide greater cognitive flexibility in terms of performance level (Ong et al., 2019).

Conclusion: Integrating Perfectionism into Suicide Models

A large body of evidence and related theoretical models on perfectionism and suicide has been presented in this chapter. At this point, we would like to return to our starting question: May the pressure to be perfect have a decisive influence on the genesis of suicidal ideas and behaviors? The existing literature leaves no doubt on this respect. Perfectionism does play a critical role in the development, maintenance of suicide behavior, as well as escalation between suicidality forms. However, and due to the varying ways of conceptualizing perfectionism, a derived question arises: Which perfectionism features may be related to suicide and its manifestations? The answer here is not as emphatic as before and it may depend on the theoretical model of reference.

When perfectionism is approached from a hierarchical standpoint and two higher order components are considered (i.e., strivings and concerns; Stoeber and Otto, 2006), a more fine-grained analysis should be done. In this regard, perfectionistic strivings have been historically associated with psychopathology and suicidal ideation at a lesser extent. Conversely, perfectionistic concerns have been strongly linked with both ideation and suicide attempt. This suggests that perfectionistic concerns may activate wider (and more pervasive) mechanisms associated with cognitive mediators of psychopathological distress and suicide. However, one of the most recent meta-analyses found that both perfectionism dimensions are positively associated with suicide risk (Smith et al., 2018). We speculate on the role of perfectionistic strivings in initiating cascades of cognitive appraisals (e.g., lack of personal resources to achieve standards) indirectly involved in suicide risk pathways through other mediators (e.g., feelings of defeat).

Evidence coming from the Hewitt's model (Hewitt et al., 1991) points that socially prescribed perfectionism is related to suicidal ideation. Specifically, it may predict longitudinal increases in ideation (Smith et al., 2018). The fear of constantly failing to live up to expectations may increasingly affect perfectionist people, leading to escalation towards more severe forms of suicidality. Evidence on the link between self-oriented perfectionism and suicide are far less clear. Others-oriented perfectionism, on the other hand, has increasingly raised attention in research.

Contributions from the Frost's model (Frost et al., 1990) point out the role of family and attachment figures in childhood and adolescence. In this regard, parental criticism and expectations towards sons may contribute to create the relationship between perfectionism and suicide behavior. These early influences may work on a more way than socially prescribed perfectionism (Muyang & Chang, 2015; Smith et al., 2018). Other perfectionist forms of expectations have also been classically associated with suicidal tendencies, such as the concerns about mistakes and doubts about performance (see O'Connor, 2007).

The varying evidence collected from the existing theoretical models may account for how complex perfectionism is. For that reason, a twofold mechanism may connect perfectionism and suicide: a direct one (i.e., perfectionist people may be at a higher risk of suicide behavior engagement) but also an indirect mechanism. Both mechanisms may not be opposite and interact with each other. In this respect, the "Escape from self" approach to suicide stresses the central role of escaping from negative self-image. It is, perhaps, the framework that most directly relates suicide and perfectionism (Baumeister, 1990). When a person imposes completely inordinate levels of performance, it is easy self-image to be deteriorated. Therefore, the urgency for escaping would emerge.

Perfectionism may act indirectly on suicide, affecting key mediators. To give a few examples, suicide is associated with specific parenting styles that could bring about greater vulnerability to suicide (Hamachek, 1978; Burns, 1980). Moreover, mental disorder comorbidity may play a relevant role in suicide behavior engagement. Perfectionism may be involved in comorbidity development, considering its transdiagnostic nature as a risk factor of multiple conditions (Egan et al., 2011). Finally, the relationships between perfectionism and cognitive biases and maladaptive cognitive coping cannot be ignored (de Jonge-Hessen et al., 2020; Flett et al., 2014).

Going back to perfectionistic strivings and concerns, Zeifman, Antony and Kuo (2020) found that those end-products were related to suicidal ideation only when emotional dysregulation were involved as a moderator. More concretely, they argued that perfectionists

may have difficulties in finding adaptive regulation strategies, using harmful alternatives instead.

Regarding the Hewitt's socially prescribed perfectionism, some mediational pathways deserve being mentioned. Socially prescribed perfectionism may be related to social hopelessness and a strong pessimism about future relationships. On the other hand, another potential mechanism by which socially prescribed perfectionism may indirectly lead to suicide is by its interaction with anhedonia states and procrastination. Socially prescribed perfectionism may also be related to a difficulty in meeting the central need of belongingness (Smith et al., 2021). Moreover, Pia et al., (2020) suggested that, although socially prescribed perfectionism and self-oriented perfectionism are related to suicidal behavior, they only do so in the context of fear of humiliation. On the other side, we should not ignore that perfectionist people can tend to have more conflictive relationships, which would directly affect one of the protecting factors against suicide, the individual's social network (Hewitt et al., 2017). Finally, it is important not to forget that essential aspects of perfectionism, such as socially prescribed perfectionism or parental criticism, vary significantly between cultures (Muyan y Chang, 2015).

Regarding potential mediators, some authors discuss that perfectionist people tend to show higher levels of psychache (i.e., unbearable psychological pain) (Flamenbaum and Holden, 2007; Shneidman, 1985). Hewitt et al., (1994) suggest that socially prescribed perfectionism can be understood as a form of hopelessness, bringing us closer to Beck's model (Beck et al., 1985). Under the ideation to action framework, recent evidence suggests that the concept of burdensomeness remains nuclear as a mediator between perfectionism and suicidal ideation (Rogers & Joiner, 2019).

Some comments should be given on the suicide behavior conceptualization. First, we would like to stress its dimensional nature. In other words, suicide is better understood as a continuum, with multiple forms placing across. This conceptualization allows addressing the dynamical patterns of suicide and distinctive characteristics. Unfortunately, further research should be done to disentangle specific paths of influence between the perfectionism features and the concrete suicidality forms. Very few studies separate the effects on action and ideation, but this is the exception rather than the norm.

Regarding the theoretical models on suicide unfolded in this chapter, we think that all of them represent good ways to address the relationship between perfectionism and suicide. However, the Motivational-volitional model (O'Connor, 2011) constitutes an integrative approach accounting for the two key features of our constructs in analysis: the multidimensional nature of perfectionism and the complex (multi-form) nature of suicide behavior. The model may help understand the form-specific influence of perfectionism as a risk factor for suicide. In figure 6 a modified version of the original model is presented, to include the potential role of perfectionism in suicide based on previous theories and recent data.

As inferred from the figure, perfectionism could act at many different points across the continuum. In the pre-motivational phase, perfectionism may act as a vulnerability factor, putting the person at higher risk of triggering key mediators (e.g., feelings of defeat and failure). Later, failure, perceived as such by the existence of information processing biases, may lead to feelings of entrapment. Along with the potential deterioration in social relationships, the person could begin to develop suicidal ideation with increasing intensity. Finally, the influence of perfectionism with suicide attempt engagement is somewhat less clear. It speculates, though, that perfectionistic concerns (being one of the aspects most related to attempting) may lead to

increasing severity levels in terms of suicidal ideation. Consequently a plan for suicide is more likely to be established.

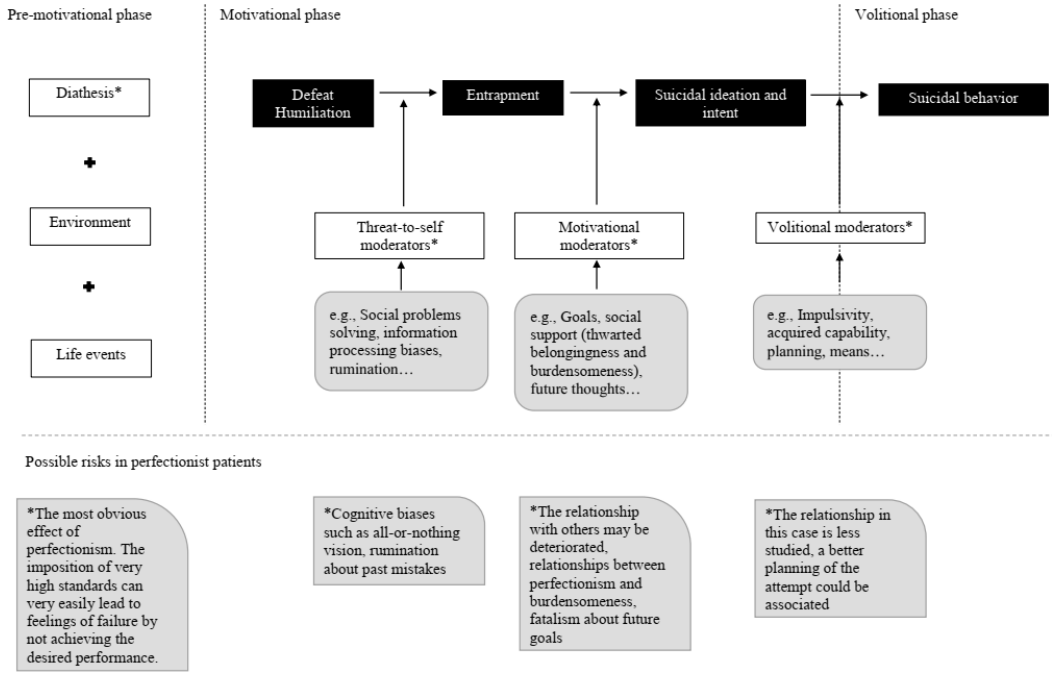


Figure 6. Motivational-volitional model integrated with perfectionism.

To sum up, perfectionism and suicide are highly connected but some gaps in research should be filled. It is necessary to further analyze the potential mechanisms that lead to suicidality considering that both constructs are multifaceted and complex and may evolve in a non-linear manner over time. For that reason, a call for longitudinal research is done. Moreover, the lack of concordance between measurement instruments, protocols and the definitions between studies have hindered the advance of science in relationship with perfectionism and suicide. Franklin et al. (2017) argued that the suicide risk factors studied so far are not very specific and they have low effect sizes. Therefore, an acceptable point has not yet been reached in the knowledge of the reasons that lead to suicide.

Suicide is an extremely complex behavior. The identification of risk factors becomes crucial to develop preventive intervention. Perfectionism does play a relevant role in the development of suicide behavior and it may therefore be relevant to include perfectionism in the clinical assessment protocols of mental health as a rutinary dimension to be explored. The pursuit of perfection constitutes a double-edged sword, particularly when it sets the person up for failure and procrastination.

Closing

1. Perfectionism may play a key role in the development and maintenance of suicide behavior.

2. Perfectionistic concerns and socially prescribed perfectionism may specifically put people at higher risk of suicide behavior development.
3. Perfectionism and suicide may be connected directly (i.e., perfectionist people may show an increased risk of suicide behavior development) but also by an indirect mechanism, through key mediators and comorbidity.
4. Perfectionism may independently boost the varying forms across the suicidality continuum.
5. Longitudinal study research are needed to better understand the potential mechanisms linking these multifaceted constructs.

References

Abramson, L. Y., Alloy, L. B., Hogan, M. E., Whitehouse, W. G., Gibb, B. E., Hankin, B. L., & Cornette, M. M. (2002). *The hopelessness theory of suicidality*. New York, USA: Springer.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173-1182.

Barrow, J. C., & Moore, C. A. (1983). Group interventions with perfectionistic thinking. *Personnel & Guidance Journal*, *61*(10), 612-615.

Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, *97*(1), 90-113.

Beauchaine, T. P., & Thayer, J. F. (2015). Heart rate variability as a transdiagnostic biomarker of psychopathology. *International Journal of Psychophysiology*, *98*(2), 338-350.

Beck, A. T., Steer, R. A, Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: a 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry*, *1*(42), 559-563.

Bieling, P. J., Israeli, A. L., & Antony, M. M. (2004). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences*, *36*(6), 1373-1385.

Blankstein, K. R., Lumley, C. H., & Crawford, A. (2007). Perfectionism, hopelessness, and suicide ideation: Revisions to diathesis-stress and specific vulnerability models. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *25*(4), 279-319.

Blatt, S. J., Zuroff, D. C., Bondi, C. M., Sanislow III, C. A., & Pilkonis, P. A. (1998). When and how perfectionism impedes the brief treatment of depression: further analyses of the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology*, *66*(2), 423-428.

Burns, D. D. (1980). The perfectionist's script for self-defeat. *Psychology Today*, *14*(6), 34-52.

Carragher, N., Krueger, R. F., Eaton, N. R., & Slade, T. (2015). Disorders without borders: current and future directions in the meta-structure of mental disorders. *Social Psychiatry and Psychiatric Epidemiology*, *50*(3), 339-350.

Castro, J., Soares, M. J., Pereira, A. T., & Macedo, A. (2017). Perfectionism and negative/positive affect associations: The role of cognitive emotion regulation and perceived distress/coping. *Trends in Psychiatry and Psychotherapy*, *39*(2), 77-87.

Centers for Disease Control and Prevention. (CDC) (2015). Definitions: Self-directed violence. *Injury prevention and control: Division of violence*. Retrieved on 25 May 2021 from http://www.cdc.gov/violenceprevention/suicide/definitions.html.

Cummings, C. M., Caporino, N. E., & Kendall, P. C. (2014). Comorbidity of anxiety and depression in children and adolescents: 20 years after. *Psychological Bulletin*, *140*(3), 816-845.

Curran, T., & Hill, A. P. (2019). Perfectionism is increasing over time: A meta-analysis of birth cohort differences from 1989 to 2016. *Psychological Bulletin*, *145*(4), 410-429.

Cuthbert, B. N., & Insel, T. R. (2013). Toward the future of psychiatric diagnosis: the seven pillars of RDoC. *BMC Medicine*, *11*(1), 1-8.

D'Agata, M. T., & Holden, R. R. (2018). Self-concealment and perfectionistic self-presentation in concealment of psychache and suicide ideation. *Personality and Individual Differences, 125*, 56-61.

De Jonge-Heesen, K. W., Rasing, S. P., Vermulst, A. A., Engels, R. C., & Creemers, D. H. (2020). How to Cope with Perfectionism? Perfectionism as a Risk Factor for Suicidality and the Role of Cognitive Coping in Adolescents. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 39*(2), 201-216.

De la Torre-Luque, A., & Essau, C. A. (2019). Symptom network connectivity in adolescents with comorbid major depressive disorder and social phobia. *Journal of Affective Disorders, 255*, 60-68.

De Rosa, L., Dalla Valle, A., Rutsztein, G., & Keegan, E. (2012). Perfectionism and self-criticism: Clinical considerations. *Revista Argentina de Clinica Psicologica, 21*(3), 209-215.

Dunkley, D. M., & Blankstein, K. R. (2000). Self-critical perfectionism, coping, hassles, and current distress: A structural equation modeling approach. *Cognitive Therapy and Research, 24*(6), 713-730.

Durkheim, E. (1897). *Suicide: A study in Sociology*. London, UK: Routledge.

Egan, S. J., Wade, T. D., & Shafran, R. (2011). Perfectionism as a transdiagnostic process: A clinical review. *Clinical Psychology Review, 31*(2), 203-212.

Enns, M. W., & Cox, B. J. (2002). The nature and assessment of perfectionism: A critical analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 33–62). Washington, DC: American Psychological Association.

Fernandez, L. M. L., Cueto, E. G., Vazquez, M. M., & Gonzalez, L. L. (2012). Development and validation of the Childhood Perfectionism Inventory (I.P.I.). *Psicothema, 24*(1), 149-155.

Flamenbaum, R., & Holden, R. R. (2007). Psychache as a mediator in the relationship between perfectionism and suicidality. *Journal of Counseling Psychology, 54*(1), 51-61.

Flett, G. L., & Hewitt, P. L. (2002). *Perfectionism: Theory, research, and treatment*. Washington, DC: American Psychological Association.

Flett, G., Hewitt, P. L., Boucher, D. J., Davidson, L. A., & Munro, Y. (2000). *The Child-Adolescent Perfectionism Scale: Development, Validation, and Association with Adjustment.* Unpublished manuscript.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Mosher, S. W. (1995). Perfectionism, life events, and depressive symptoms: A test of a diathesis-stress model. *Current Psychology, 14*(2), 112-137.

Flett, G. L., Hewitt, P. L., & Heisel, M. J. (2014). The destructiveness of perfectionism revisited: Implications for the assessment of suicide risk and the prevention of suicide. *Review of General Psychology, 18*(3), 156-172.

Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., Huang, X., Musacchio, K. M., Jaroszewski, A. C., Chang, B. P., & Nock, M. K. (2017). Risk factors for suicidal thoughts and behaviors: a meta-analysis of 50 years of research. *Psychological Bulletin, 143*(2), 187-232.

Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences, 14*(1), 119-126.

Frost, R. O., Lahart, C. M., & Rosenblate, R. (1991). The development of perfectionism: A study of daughters and their parents. *Cognitive Therapy and Research, 15*(6), 469-489.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*(5), 449-468.

Gaudreau, P., & Thompson, A. (2010). Testing a 2 × 2 model of dispositional perfectionism. *Personality and Individual Differences, 48*(5), 532-537.

Gvion, Y., & Levi-Belz, Y. (2018). Serious suicide attempts: Systematic review of psychological risk factors. *Frontiers in Psychiatry, 9*(56), 1-17.

Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior, 15*(1), 27-33.

Harvey, A. G., Watkins, E., & Mansell, W. (2004). *Cognitive behavioural processes across psychological disorders: A transdiagnostic approach to research and treatment*. Oxford, UK: Oxford University Press.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. New York, NY: Guilford Press.

Hewitt, P. L., Caelian, C. F., Chen, C., & Flett, G. L. (2014). Perfectionism, stress, daily hassles, hopelessness, and suicide potential in depressed psychiatric adolescents. *Journal of Psychopathology and Behavioral Assessment, 36*(4), 663-674.

Hewitt, P. L., & Flett, G. L. (1991). Dimensions of perfectionism, daily stress, and depression: a test of the specific vulnerability hypothesis. *Journal of Abnormal Psychology*, *102*(1), 58-65.

Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment*. New York, NY: Guilford Publications.

Hewitt, P. L., Flett, G. L., Turnbull-Donovan, W., & Mikail, S. F. (1991). The Multidimensional Perfectionism Scale: Reliability, validity, and psychometric properties in psychiatric samples. *Psychological Assessment*, *3*(3), 464-468.

Hewitt, P. L., Flett, G. L., & Weber, C. (1994). Dimensions of perfectionism and suicide ideation. *Cognitive Therapy and Research*, *18*(5), 439-460.

Hill, R. W., Zrull, M. C., & Turlington, S. (1997). Perfectionism and interpersonal problems. *Journal of Personality Assessment*, *69*(1), 81-103.

Hunter, E. C., & O'Connor, R. C. (2003). Hopelessness and future thinking in parasuicide: The role of perfectionism. *British Journal of Clinical Psychology*, *42*(4), 355-365.

International Society for the Study of Self-Injury (2015). *What is self-injury?* Retrieved on 25 May 2021 from https://itriples.org/category/about-self-injury/.

Johnson, J., Gooding, P., & Tarrier, N. (2008). Suicide risk in schizophrenia: explanatory models and clinical implications: The Schematic Appraisal Model of Suicide (SAMS). *Psychology and Psychotherapy: Theory, Research and Practice*, *81*(1), 55-77.

Joiner, T. (2005). *Why people die by suicide*. Cambridge, UK: Harvard University Press.

Karimi, Y., Bashirpur, M., Khabbaz, M., & Hedayati, A. A. (2014). Comparison between perfectionism and social support dimensions and academic burnout in students. *Procedia-Social and Behavioral Sciences*, *159*, 57-63.

Klonsky, E. D., & May, A. M. (2015). The three-step theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. *International Journal of Cognitive Therapy*, *8*(2), 114-129.

Klonsky, E. D., May, A. M., & Saffer, B. Y. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual Review of Clinical Psychology*, *12*, 307-330.

Ko, A., Hewitt, P. L., Cox, D., Flett, G. L., & Chen, C. (2019). Adverse parenting and perfectionism: A test of the mediating effects of attachment anxiety, attachment avoidance, and perceived defectiveness. *Personality and Individual Differences*, *150*, 109474.

Kozak, M. J., & Cuthbert, B. N. (2016). The NIMH research domain criteria initiative: background, issues, and pragmatics. *Psychophysiology*, *53*(3), 286-297.

Lahey, B. B., Van Hulle, C. A., Singh, A. L., Waldman, I. D., & Rathouz, P. J. (2011). Higher-order genetic and environmental structure of prevalent forms of child and adolescent psychopathology. *Archives of General Psychiatry*, *68*(2), 181-189.

Limburg, K., Watson, H. J., Hagger, M. S., & Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology*, *73*(10), 1301-1326.

Linehan, M. M. (1993). *Skills training manual for treating borderline personality disorder: Diagnosis and treatment of mental disorders*. New York, NY: Guilford press.

Lloyd, S., Schmidt, U., Khondoker, M., & Tchanturia, K. (2015). Can psychological interventions reduce perfectionism? A systematic review and meta-analysis. *Behavioural and Cognitive Psychotherapy*, *43*(6), 705-731.

Macedo, A., Marques, C., Quaresma, V., Soares, M. J., Amaral, A. P., Araujo, A. I., & Pereira, A. T. (2017). Are perfectionism cognitions and cognitive emotion regulation strategies mediators between perfectionism and psychological distress? *Personality and Individual Differences*, *119*, 46-51.

Mann, J. J., Waternaux, C., Haas, G. L., & Malone, K. M. (1999). Toward a clinical model of suicidal behavior in psychiatric patients. *American Journal of Psychiatry*, *156*(2), 181-189.

Markus, H. R., & Kitayama, S. (2010). Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science*, *5*(4), 420-430.

Merikangas, K. R., He, J. P., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., Georgiades, K., Heaton, L., Swanson, S., & Olfson, M. (2010). Service utilization for lifetime mental disorders in US adolescents: results of the National Comorbidity Survey–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, *50*(1), 32-45.

Miller, A. L., & Speirs Neumeister, K. L. (2017). The influence of personality, parenting styles, and perfectionism on performance goal orientation in high ability students. *Journal of Advanced Academics*, *28*(4), 313-344.

Muyan, M., & Chang, E. C. (2015). Perfectionism as a predictor of suicidal risk in Turkish college students: Does loneliness contribute to further risk? *Cognitive Therapy and Research*, *39*(6), 776-784.

O'Connor, R. C. (2007). The relations between perfectionism and suicidality: A systematic review. *Suicide and Life-Threatening Behavior*, *37*(6), 698-714.

O'Connor, R. C. (2011). Towards an integrated motivational–volitional model of suicidal behaviour. *International handbook of suicide prevention: Research, Policy and Practice*, *1*, 181-98.

O'Connor, R. C., Connery, H., & Cheyne, W. M. (2010). Hopelessness: The role of depression, future directed thinking and cognitive vulnerability. *Psychology, Health & Medicine*, *5*(2), 155-161.

O'Connor, R. C., & Nock, M. K. (2014). The psychology of suicidal behaviour. *The Lancet Psychiatry*, *1*(1), 73-85.

O'Connor, R. C., & O'Connor, D. B. (2003). Predicting hopelessness and psychological distress: The role of perfectionism and coping. *Journal of Counseling Psychology*, *50*(3), 362-372.

Ong, C. W., Lee, E., Krafft, J., Terry, C., Barrett, T. S. Levin, M. E., Twohig, M. P. (2019). A randomized controlled trial of acceptance and commitment therapy for clinical perfectionism. *Journal of Obsessive-Compulsive and Related Disorders*, *22*(1), 100444.

Paykel, E. S., Myers, J. K., Lindenthal, J. J., & Tanner, J. (1974). Suicidal feelings in the general population: a prevalence study. *British Journal of Psychiatry*, *124*(0), 460-469.

Pia, T., Galynker, I., Schuck, A., Sinclair, C., Ying, G., & Calati, R. (2020). Perfectionism and prospective near-term suicidal thoughts and behaviors: The mediation of fear of humiliation and suicide crisis syndrome. *International Journal of Environmental Research and Public Health*, *17*(4), 1424-1438.

Plana-Ripoll, O., Pedersen, C. B., Holtz, Y., Benros, M. E., Dalsgaard, S., De Jonge, P., Fan, C. C., Degenhardt, L., Ganna, A., Greve, A. N., Gunn, J., Iburg, K. M., Kessing, L. V., Lee, B. K., Lim, C. C. W., Mors, O., Nordentoft, M., Prior, A., Roest, A. M., & McGrath, J. J. (2019). Exploring Comorbidity Within Mental Disorders among a Danish National Population. *JAMA Psychiatry*, *76*(3), 259–270.

Podina, I. R. (2020). Concluding commentary: Treating perfectionism transdiagnostically with an eye on the future. *Journal of Clinical Psychology*, *76*(11), 2109-2115.

Ribeiro, J. D., Huang, X., Fox, K. R., & Franklin, J. C. (2018). Depression and hopelessness as risk factors for suicide ideation, attempts and death: meta-analysis of longitudinal studies. *British Journal of Psychiatry*, *212*(5), 279-286.

Rice, K. G., & Preusser, K. J. (2002). Adaptive/Maladaptive Perfectionism Scale. *Measurement and Evaluation in Counseling and Development*, *34*(4), 210-222.

Robinson, A., Moscardini, E., Tucker, R., & Calamia, M. (2021). Perfectionistic Self-Presentation, Socially Prescribed Perfectionism, Self-Oriented Perfectionism, Interpersonal Hopelessness, and Suicidal Ideation in US Adults: Reexamining the Social Disconnection Model. *Archives of Suicide Research*, 1-15.

Rogers, M. L., & Joiner, T. E. (2019). Exploring the temporal dynamics of the interpersonal theory of suicide constructs: A dynamic systems modeling approach. *Journal of Consulting and Clinical Psychology*, *87*(1), 56.

Roxborough, H. M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C. M., Sherry, S., & Sherry, D. L. (2012). Perfectionistic self-presentation, socially prescribed perfectionism, and suicide in youth: A test of the perfectionism social disconnection model. *Suicide and Life-Threatening Behavior*, *42*(2), 217-233.

Rudd, M. D. (2007). *Fluid vulnerability theory: A cognitive approach to understanding the process of acute and chronic suicide risk.* Washington, DC: American Psychological Association.

Rudd, M. D., Berman, A. L., Joiner Jr, T. E., Nock, M. K., Silverman, M. M., Mandrusiak, M., Van Orden, K., & Witte, T. (2006). Warning signs for suicide: Theory, research, and clinical applications. *Suicide and Life-Threatening Behavior*, *36*(3), 255-262.

Salvatore, J. E., Aliev, F., Bucholz, K., Agrawal, A., Hesselbrock, V., Hesselbrock, M., Bauer, L., Kuperman, S., Schuckit, M. A., Kramer, J. R., Edenberg, H. J., Foroud, T. M., & Dick, D. M. (2015). Polygenic risk for externalizing disorders: Gene-by-development and gene-by-environment effects in adolescents and young adults. *Clinical Psychological Science*, *3*(2), 189-201.

Schotte, D. E., & Clum, G. A. (1987). Problem-solving skills in suicidal psychiatric patients. *Journal of Consulting and Clinical Psychology*, *55*(1), 49-54.

Segrin, C., Kauer, T. B., & Burke, T. J. (2019). Indirect effects of family cohesion on emerging adult perfectionism through anxious rearing and social expectations. *Journal of Child and Family Studies*, *28*(8), 2280-2285.

Shafran, R., Cooper, Z., & Fairburn, C. G. (2002). Clinical perfectionism: A cognitive–behavioural analysis. *Behaviour Research and Therapy*, *40*(7), 773-791.

Shafran, R., Egan, S., & Wade, T. (2018). *Overcoming Perfectionism 2nd Edition: A self-help guide using scientifically supported cognitive behavioural techniques*. London, UK: Robinson.

Shafran, R., & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review*, *21*(6), 879-906.

Shahnaz, A., Saffer, B. Y., & Klonsky, E. D. (2018). The relationship of perfectionism to suicide ideation and attempts in a large online sample. *Personality and Individual Differences*, *130*, 117-121.

Shaw, B. F., & Segal, Z. V. (1999). *Efficacy, indications, and mechanisms of action of cognitive therapy of depression*. Washington, DC: American Psychological Association.

Shneidman, E. (1985) *Definition of suicide*. New York, NY: John Wiley.

Slade, P. D., & Owens, R. G. (1998). A dual process model of perfectionism based on reinforcement theory. *Behavioral Modification*, *22*(3), 372–390.

Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Flett, G. L., & Hewitt, P. L. (2016). Perfectionism and narcissism: A meta-analytic review. *Journal of Research in Personality*, *64*, 90-101.

Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Mushquash, C., Flett, G. L., & Hewitt, P. L. (2018). The perniciousness of perfectionism: A meta-analytic review of the perfectionism–suicide relationship. *Journal of Personality*, *86*(3), 522-542.

Smith, M. M., Sherry, S. B., Ge, S. Y., Hewitt, P. L., Flett, G. L., & Baggley, D. L. (2021). Multidimensional perfectionism turns 30: A review of known knowns and known unknowns. *Canadian Psychology*.

Smith, M. M., Speth, T. A., Sherry, S. B., Saklofske, D. H., Stewart, S. H., & Glowacka, M. (2017). Is socially prescribed perfectionism veridical? A new take on the stressfulness of perfectionism. *Personality and Individual Differences*, *110*, 115-118.

Smith, M. M., Vidovic, V., Sherry, S. B., & Saklofske, D. H. (2017). Self-oriented perfectionism and socially prescribed perfectionism add incrementally to the prediction of suicide ideation beyond hopelessness: A meta-analysis of 15 studies. In U. Kumar (Ed.), *Handbook of suicidal behaviour* (pp. 349-367). New York, USA: Springer.

Sommerfeld, E., & Malek, S. (2019). Perfectionism moderates the relationship between thwarted belongingness and perceived burdensomeness and suicide ideation in adolescents. *Psychiatric Quarterly*, *90*(4), 671-681.

Steele, A. L., & Wade, T. D. (2008). A randomised trial investigating guided self-help to reduce perfectionism and its impact on bulimia nervosa: A pilot study. *Behaviour Research and Therapy*, *46*(12), 1316-1323.

Stoeber, J. (2016). Comparing two short forms of the Hewitt–Flett multidimensional perfectionism scale. *Assessment*, *25*(5), 578-588.

Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, *10*(4), 295-319.

Stoeber, J., Smith, M. M., Saklofske, D. H., & Sherry, S. B. (2021). Perfectionism and interpersonal problems revisited. *Personality and Individual Differences*, *169*, 110106.

Sveticic, J., & De Leo, D. (2012). The hypothesis of a continuum in suicidality: a discussion on its validity and practical implications. *Mental Illness*, *4*(2), 73-78.

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner Jr, T. E. (2010). The interpersonal theory of suicide. *Psychological Review*, *117*(2), 575-600.

Vieth, A. Z., & Trull, T. J. (1999). Family patterns of perfectionism: An examination of college students and their parents. *Journal of Personality Assessment*, *72*(1), 49-67.

Walton, G. E., Hibbard, D. R., Coughlin, C., & Coyl-Shepherd, D. D. (2020). Parenting, personality, and culture as predictors of perfectionism. *Current Psychology*, *39*(2), 681-693.

Weissman, A. N., & Beck, A. T. (1978). Development and validation of the Dysfunctional Attitude Scale: A preliminary investigation. *Paper presented at the meeting of the American Educational Research Association*. Toronto.

Wenzel, A., & Beck, A. T. (2008). A cognitive model of suicidal behavior: Theory and treatment. *Applied and Preventive Psychology, 12*(4), 189-201.

Wetherall, K., Robb, K. A., & O'Connor, R. C. (2019). An examination of social comparison and suicide ideation through the lens of the integrated motivational–volitional model of suicidal behavior. *Suicide and Life-Threatening Behavior*, *49*(1), 167-182.

Williams, J. M. G. (2001). *Suicide and Attempted Suicide: Understanding the Cry of Pain*. London, UK: Penguin.

World Health Organization. (2014). *Preventing suicide: a global imperative*. Retrieved on 25 May 2021 from https://www.paho.org/en/documents/preventing-suicide-global-imperative.

Yoshimasu, K., Kiyohara, C., Miyashita, K., & Stress Research Group of the Japanese Society for Hygiene. (2008). Suicidal risk factors and completed suicide: meta-analyses based on psychological autopsy studies. *Environmental Health and Preventive Medicine*, *13*(5), 243-256.

Zahn-Waxler, C., Shirtcliff, E. A., & Marceau, K. (2008). Disorders of childhood and adolescence: Gender and psychopathology. *Annual Review of Clinical Psychology*, *4*, 275-303.

Zeifman, R. J., Antony, M. M., & Kuo, J. R. (2020). When being imperfect just won't do: Exploring the relationship between perfectionism, emotion dysregulation, and suicidal ideation. *Personality and Individual Differences*, *152*, 109612.

Zuroff, D. C., Blatt, S. J., Sotsky, S. M., Krupnick, J. L., Martin, D. J., Sanislow III, C. A., & Simmens, S. (2000). Relation of therapeutic alliance and perfectionism to outcome in brief outpatient treatment of depression. *Journal of Consulting and Clinical Psychology*, *68*(1), 114-124.