

## Introduction to the Special Issue: Recent Advances in Suicide Research: Mediators and Moderators of Risk and Resilience

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The impact of suicide is undeniable. In the United States alone, over 40,000 people died by suicide in 2012 (Centers for Disease Control and Prevention [CDC], 2013). Moreover, it is estimated that 10 times as many people make medically serious suicide attempts every year, resulting in a cost to the medical system in excess of \$150 million. A large body of research on suicide risk has been amassed with the implicit goal of reducing suicide's impact. This goal has yet to be achieved. Since 1990, suicide rates have generally stayed the same (Kessler, Berglund, Borges, Nock, & Wang, 2005). The lack of progress in reducing suicide's impact may be a result of limits to what we can learn from the majority of previous research, which has often relied upon bivariate and sometimes atheoretical models. Indeed, there has recently been a push to move beyond main effect models to more complex theoretically informed models of suicide risk that involve mediators and moderators (Glenn & Nock, 2014; O'Connor & Nock, 2014). Main effect models can only identify which factors are associated with suicide risk. Moderation and mediation models, however, help us understand the conditions under which suicide risk is enhanced or diminished as well as the mechanisms of how suicide risk is generated. The articles in this special issue of the *International Journal of Cognitive Therapy* address this need for a movement beyond main effects by answering three overarching questions: (1) What are the moderators that might increase or decrease risk for suicide?, (2) What are the mediators between suicide risk and suicide-related outcomes?, and (3) How can we better integrate theory into our empirical investigations?

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## **WHAT ARE MODERATING FACTORS THAT MIGHT INCREASE OR DECREASE RISK FOR SUICIDE?**

One of the most heavily studied suicide risk factors is hopelessness. A body of research spanning over 40 years has demonstrated direct effects of hopelessness on suicidal ideation (Beck, Steer, Beck, & Newman, 1993), behaviors (Minkoff, Bergman, Beck, & Beck, 1973), and death (Beck, Steer, Kovacs, & Garrison, 1985). There has been little examination, however, of factors that moderate the suicide risk conferred by hopelessness. The studies in this issue found that the association between suicide risk and hopelessness is increased by high levels of psychological pain (Klonsky & May, this issue), perceived burdensomeness, and thwarted belongings (Hagan, Podlogar, Chu, & Joiner, this issue) and is decreased by high levels of grit (Pennings, Law, Green, & Anestis, this issue).

Another set of moderators associated with various aspects of suicide risk is described in the interpersonal theory of suicide (Joiner, 2005; Van Orden et al., 2010), which posits that death by suicide is the result of the joint presence of a desire to die by suicide and the capability to do so. In two samples, Hagan et al. (this issue) examined hopelessness within the context of the interpersonal theory of suicide and found that high levels of perceived burdensomeness, thwarted belongingness, and hopelessness interacted to predict greater levels of suicidal ideation than any of the three factors did alone or in tandem. Further investigating moderators of hopelessness, Klonsky & May (this issue) found that high hopelessness and high psychological pain are most strongly related to suicidal ideation in combination. Indeed, individuals with just high hopelessness or just high psychological pain did not differ in terms of suicidal ideation from those with low hopelessness and low psychological pain. Suicidal ideation was significantly higher only in those with both high hopelessness and high psychological pain.

To fully understand the ways in which suicide risk can be reduced, researchers must also study moderating factors that confer resilience to suicide risk (cf. Glenn & Nock, 2014). Identification of such factors will be key in guiding the development of suicide prevention efforts. Within suicidology, there has been recent interest in the role of grit, the tendency to pursue long-term goals with perseverance and passion, even in the face of setbacks (Duckworth, Peterson, Matthews, & Kelly, 2007). Pennings, Law, Green, and Anestis (this issue) found that, among United States military personnel with high levels of hopelessness, high levels of grit conferred resilience to both suicidal ideation and suicide plans and preparation.

## **WHAT ARE THE MEDIATORS BETWEEN SUICIDE RISK AND SUICIDE-RELATED OUTCOMES?**

Equally important to the study of moderators of suicide risk is the study of mediators. Despite the body of work finding that depression and posttraumatic stress disorder (PTSD) are strong correlates of suicide risk, especially in military per-

sonnel (Nock et al., 2014), there has been little attention paid to the potential mechanisms that mediate this risk. Addressing this need for research, Bryan et al. (this issue) found that in two samples of military servicemembers and veterans, guilt mediates the risk for suicidal ideation associated with both depression and PTSD symptoms.

## **HOW CAN WE BETTER INTEGRATE THEORY INTO OUR EMPIRICAL INVESTIGATIONS?**

The disconnect between theoretical work and empirical investigation is an issue that is frequently present in (but is not unique to) suicide research. While exploratory investigations are not without merit, we have the most to learn when our empirical work is guided by theory. While all of the work in this issue is based on solid theoretical ground, three studies empirically tested recently presented theoretical ideas.

Several research groups have identified the need to examine suicide risk within the “ideation-to-action” framework (Klonsky & May, 2014; O'Connor & Nock, 2014)—that is, what factors separate individuals who have only the desire to die by suicide from those who take actions to act upon that desire? Two studies in this issue address suicide risk from this framework. Klonsky and May (this issue) found that individuals who had previously attempted suicide were distinguished from those who had only considered suicide by several factors related to the capacity for suicide: a dispositional low fear of pain or death, acquired decreases in fear of pain or death, and access to and knowledge of suicide methods. Kirtley, O'Carroll, and O'Connor (this issue) found that individuals who had previously engaged in self-harm (i.e., suicidal and non-suicidal self-injury) were distinguished from those who had only considered self-harm by greater emotional reactivity and emotional pain sensitivity.

The relationship between impulsivity and suicidal behavior has been frequently studied, but recent meta-analytic evidence indicates that this relationship has not been as strong as previously theorized (Anestis, Soberay, Gutierrez, Hernández, & Joiner, 2014). Chalker, Comtois, and Kerbrat's study (this issue) addressed this relationship from the perspective that having multiple definitions and measures of impulsivity contributed to difficulties in the prediction of suicidal behavior. They found that not all measures of impulsivity had the same relationship with suicidal behavior. For example, while greater trait impulsivity predicted increased likelihood of a future suicide attempt, the inability to resist the urge to attempt suicide had no relationship with a future suicide attempt.

The authors of the articles in this special issue have all addressed important questions in suicide research with strong theoretical origins, diverse samples, and stringent methodology. Our hope is that these studies will help fuel a continued effort in the move from main effects to more complex models.

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