

Moving Toward an Ideation-to-Action Framework in Suicide Research: A Commentary on May and Klonsky (2016)

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May and Klonsky's (2016) meta-analysis of factors that distinguish between suicidal ideators and suicide attempters did an excellent job of bringing to light a very important gap in the suicide literature. It highlighted that whereas thousands of studies have identified many risk factors for suicidal ideation and behaviors, relatively few studies have focused on distinguishing between ideators and attempters. This research gap in the suicide literature is significant, as considerable evidence suggests that out of the relatively high percentage of individuals who contemplate suicide, only one-third make a suicide attempt, underscoring the severe lack of specificity of these risk factors (May & Klonsky, 2016).

May and Klonsky (2016) identified a mere 36 studies that have compared lifetime ideators without any suicide attempt history to those who have attempted suicide. Of these 36 studies, only 27 met criteria to be included in the meta-analysis. These studies examined a total of 12 variables (gender, marital status, race, education, depression diagnosis, depression severity, any anxiety disorder, posttraumatic stress disorder (PTSD), drug use disorder, alcohol use disorder, sexual abuse, and hopelessness), of which not one exhibited a large effect size in differentiating between ideators and attempters. Whereas the meta-analysis found that the presence of anxiety disorders, PTSD, drug use disor-

ders, and sexual abuse history exhibited moderate effects in distinguishing between ideators and attempters, the remaining variables were found to have negligible to small effects. It is troubling that after decades of suicide research, we have merely identified four factors that may predict suicidal behavior among ideators (with just a moderate effect size). However, it is not surprising that only four variables were identified, given that so few studies have examined this research question. This review substantiates a necessary new direction for suicide research already identified by several researchers in the recent past—a direction based on the conceptualization of suicide within an ideation-to-action framework.

BRIDGING THE GAP BETWEEN IDEATION AND ACTION

May and Klonsky (2016) proposed that given our current inability to predict suicidal actions among ideators, novel variables need to be explored. They outlined three relatively recently proposed theories that fit within the ideation-to-action framework that may be useful in conceptualizing the ideation-to-action transition process and in stimulating such innovative research. The Interpersonal Psychological Theory of Suicide (IPT), the Integrated Motivational-Volitional Model (IMV), and the Three-step Theory (3ST) converge in hypothesizing acquired capability as a potent variable capable of connecting thought to action and of predicting the likelihood of engaging in suicidal behavior among ideators. Recent literature has confirmed that acquired capability does, in fact, distinguish between ideators without any suicide attempt history and those with an attempt history (Klonsky & May, 2015). However, it is important to highlight that this effect was small as measured by both the acquired capability subscale of Klonsky and May's Suicide Capacity Scale (SCS-3) and the Acquired Capability for Suicide Scale based on Joiner's original conception of acquired capability (Klonsky & May, 2015).

Moreover, practical predictors of suicidal action, highlighted as central in both the IMV and the 3ST, also have been examined in this framework (Klonsky & May, 2015). Although differentiating ideators from attempters significantly, the practical factors (measuring "access to and knowledge of suicide methods") had a small effect size. Finally, dispositional factors, as

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described by the 3ST as another active ingredient in transitioning an ideator to an attempter (measuring a “long-standing pattern of low fear of pain or death”), were similarly significant, but also evidenced a small effect size (Klonsky & May, 2015). Although these preliminary results are promising given the significant effects, it is imperative to note that they did not outperform the four variables evidencing moderate effect sizes identified in this meta-analysis.

These results are preliminary, however, and more studies are needed to examine acquired capability, the practical and dispositional factors proposed by the 3ST, and the remaining volitional moderators proposed by the IMV to better understand their capacity in predicting the transition from ideation to action (May & Klonsky, 2016). Perhaps acquired capability may be able to more effectively predict transition from ideation to behavior if measured in a more precise manner. In accordance, future studies may do well to examine these proposed active ingredients (specifically acquired capability) in differentiating between ideators and actors using instruments other than self-report, such as with novel behavioral tasks.

Novel Risk Factors to Study

Given the limited effect sizes exhibited thus far by commonly investigated risk factors for suicidal behavior (e.g., those investigated in this meta-analysis), and by more recently identified risk factors for the transition to action (e.g., acquired capability measured via self-report), it is necessary to explore more novel factors that may contribute to action among ideators. For example, future research may benefit from examining reward networks among those at risk for suicide. A recent study examining depressed adolescents with a lifetime history of only ideation or a history of suicide attempt(s) found that whereas there were no differences between these groups on levels of depressive symptoms, current ideation, or anxiety symptoms, the groups evidenced significantly different patterns of behavior in a reward-cost task (Auerbach, Millner, Stewart, & Esposito, 2015). Specifically, attempters were less likely to pursue hard, high-value tasks in the context of uncertain outcomes and less likely to incorporate reward information from previous tasks when making decisions on later tasks (Auerbach et al., 2015).

Furthermore, impulsivity, suggested by O'Connor as a potentially important risk factor in transitioning to action and likely considered a dispositional factor by the 3ST, also may distinguish these two groups, and should be examined both with self-report measures and with behavioral tasks.

May and Klonsky (2016) recognize that the factors considered in their meta-analysis were primarily distal risk factors. Proximal factors, those that pose immediate vulnerability for an outcome, have received much less attention in the suicide literature in general, and little to none within the ideation-to-action framework. It is possible that novel proximal risk factors may be particularly important unidentified risk factors for the transition from ideation to action. One example of a proximal risk factor that has yet to be examined in relation to suicidal acts is state hopelessness. In the current meta-analysis, hopelessness exhibited negligible effects in differentiating suicidal ideators and attempters, and the authors remark that this is possibly because the included studies measured current hopelessness and history of ideation/attempts concurrently, therefore conceptualizing hopelessness as a trait-like factor. We agree with May and Klonsky that the negligible effect of hopelessness is likely caused by measurement-related issues and that before drawing any conclusions regarding its predictive capacity, the construct should be examined in the hours and days prior to behavior. Another proximal risk factor is the occurrence of a recent major stressful event, which could propel ideators into action. Although studying proximal risk factors for suicidal behavior has posed a methodological and ethical challenge in the past, recent technological advances have eliminated some of these hurdles. Indeed, computerized Ecological Momentary Assessment (EMA), a reliable data collection method for assessing and recording psychological symptoms and behaviors in real time in one's natural setting, has made the empirical investigation of proximal risk factors for suicide risk a viable endeavor. As May and Klonsky indicated in their review, their findings and conclusions are limited by focusing solely on cross-sectional studies. However, given the dearth of longitudinal evidence, it was the only option at this time. Although cross-sectional research is certainly useful to alert us to potential discriminating factors between these groups of

individuals, longitudinal research examining the transition from ideation to attempts will be most useful in informing ideation-to-action theories. Examining a sample of active suicidal ideators utilizing computerized EMA for an extended period of time would allow for the longitudinal examination of both distal and proximal risk factors for action in keeping with the ideation-to-action framework.

Although nonsuicidal self-injury (NSSI), direct self-injury engaged in without any associated intent to die, may not be considered a *novel* risk factor for suicidal behavior given the substantial body of literature demonstrating it is a strong cross-sectional and prospective predictor of suicidal behavior, to our knowledge, it has yet to be examined within the ideation-to-action framework. Examining the degree to which engagement in NSSI differentiates ideators and attempters will be an important area of future work. Recent literature has begun to identify characteristics of NSSI that may be associated with suicidal behaviors beyond the presence of NSSI itself. This research has found that a greater number of methods of NSSI, a greater frequency of NSSI, and the employment of the NSSI method of cutting, for example, were particularly predictive of suicidal behavior among those with a history of NSSI (Victor & Klonsky, 2014). Researchers have proposed that these characteristics of NSSI may be markedly powerful in eroding one's natural barriers to suicide (e.g., physical sensitivity to pain, fear of pain), thereby allowing individuals to acquire the capability necessary for suicide (Victor & Klonsky, 2014). It may be that measuring acquired capability for suicide indirectly through the assessment of engagement in specific behaviors (such as NSSI) may be more sensitive than measuring acquired capability through self-report instruments in differentiating ideators from actors, and future research should explore this possibility. Studies examining whether NSSI can effectively differentiate between ideators and attempters should not only examine already identified characteristics of the behavior that may enhance prediction of action (Victor & Klonsky, 2014), but also examine novel characteristics of NSSI that have yet to be explored and may contribute to action among ideators (e.g., degree and persistence of urge to engage in NSSI; medical severity of NSSI; presence, severity, and location of physical marks/scars

resulting from NSSI; other- and self-stigma experienced due to NSSI).

METHODOLOGICAL CONSIDERATIONS IN EXECUTING IDEATION-TO-ACTION RESEARCH

Measuring Ideation

May and Klonsky (2016) note that it was essential to exclude numerous studies from their meta-analysis because they measured only either current or past-year suicidal ideation. Future studies should be sure to measure the presence of *lifetime* suicidal ideation in order to allow for the parallel measurement of lifetime ideation and attempts. We agree with the authors that it would not be difficult for future research to make minor adjustments to protocols in order to be able to capture lifetime suicidal ideation, as opposed to solely examining current or recent ideation. Moreover, it will be important that these future studies carefully choose suicidal ideation measurement tools, taking into account how different tools define ideation. The studies covered in this meta-analysis assessed lifetime suicidal ideation employing slightly different definitions (e.g., "thoughts of serving as the agent of one's own death," "seriously thinking about committing suicide") measured with various instruments, including structured, semi-structured, and nonstructured clinical interviews; review of medical charts; and self-report questionnaires. Given that this review was written to summarize all relevant data on suicidal ideation as compared to suicide attempts, it made practical sense to incorporate data with divergently measured and defined suicidal ideation. However, employing different definitions of ideation may result in issues in comparing across studies. For example, clinical wisdom, as well as some research in the field, suggests the importance of distinguishing between passive suicidal ideation (e.g., a wish to be dead) and active suicidal ideation (e.g., thoughts about killing oneself), based on the notion that passive ideation is much more common and less serious than active ideation and, thus, may be less related to suicidal behaviors. It is possible that collapsing these two categories of ideators may lead to false-positive identification of variables that distinguish between ideators and attempters, inasmuch as it may be that active ideators are more similar to attempters than are passive ideators. Future research designed to examine suicide risk via

the ideation-to-action framework will need to determine whether there is any clinical utility in distinguishing between these two classes of ideators and employ appropriate ideation measures accordingly.

In the same vein, it may be useful for researchers to become more specific in their comparisons of ideators to attempters by specifying subtypes of ideators further. For example, it may be worthwhile to compare those with suicidal ideation who endorse contemplating what method they would employ or those with suicidal ideation who have developed specific suicide plans (e.g., time, date, method) but have not attempted versus suicide attempters.

Some research indicates the clinical utility of not simply asking about lifetime ideation in general, but rather, inquiring about worst point suicidal ideation (Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999). Worst point suicidal ideation, at its worst point in an individual's life, has been shown to be a more potent predictor of death by suicide than current ideation in a longitudinal study (Beck et al., 1999). It may be that worst point ideation allows clinicians to understand how severe an individual's thoughts of suicide have gotten in the past, which may be a better indicator than current suicidal ideation of how severe these thoughts may become in the future. Furthermore, by asking about the severity of one's worst point, ideation may anchor research participants to a particular time in their life, which may produce more reliable and specific information about lifetime ideation than asking about the presence versus absence or severity of lifetime suicidal ideation. For example, it might be that asking about severity of lifetime suicidal ideation could lead some individuals to average/collapse many different experiences of ideation over their lifetime, which may include fleeting passive suicidal thoughts to persistent and serious suicidal thoughts.

Measuring Action

Researchers also may want to consider the operationalization of "action" in the ideation-to-action framework. May and Klonsky (2016) define "action" as a suicide attempt or death by suicide. Although death by suicide is generally unambiguous, research has suggested there are subtypes of suicide attempts (e.g., interrupted suicide attempts, aborted suicide attempts). An important ques-

tion for researchers to consider when designing a study comparing lifetime ideators to lifetime attempters would be how to classify interrupted and aborted attempters who have not carried out an actual attempt. Should they be excluded or lumped in with ideators or actual suicide attempters? It could be argued that interrupted and aborted attempts must be measured to ensure these individuals are not classified as ideators-only, without making the a priori decision to do so. Alternatively, it might be useful for researchers to classify aborted and interrupted attempters into their own group to examine differences between actual suicide attempters and aborted/interrupted suicide attempters. Doing so may help us to become more specific about the active ingredients that may spur an actual suicide attempt among a sample of only those who have engaged in some form of suicidal action.

CONCLUSION

Given sparse evidence available to identify suicidal ideators at greatest risk for acting on their suicidal thoughts, we agree with May and Klonsky (2016) that it will be imperative for future suicide research to employ an ideation-to-action framework. Extant research has evidenced that both commonly investigated risk factors for suicidal behavior (e.g., psychiatric diagnoses) and even some of the risk factors highlighted in the three ideation-to-action theories (e.g., acquired capability) have only minimal effect sizes in determining group membership. Novel factors urgently need to be identified that can more effectively distinguish between ideators and attempters, and care should be taken in operationalizing and measuring both ideation and action.

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