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Life events and suicidal ideation and behavior: A systematic review

Richard T. Liu *, Ivan Miller

Department of Psychiatry and Human Behavior, Alpert Medical School of Brown University, United States

HIGHLIGHTS

- Provides a systematic review of life events and suicidal ideation and behavior
- The relation with stressors was stronger for severe forms of ideation and behavior.
- The relation with positive events was weak for suicidal ideation and behavior.
- Several important methodological limitations characterize much of the literature.

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ABSTRACT

Despite the sustained theoretical and empirical interest over the past 40 years in the association between life events and suicidal ideation and behavior, the literature in this area has yet to be systematically reviewed. The current article provides a comprehensive review of the empirical literature pertaining to life events in relation to at least one aspect of suicidal ideation and behavior (i.e., suicidal ideation, plans, attempts, degree of suicidal intent, medical severity of attempt, repeat versus first lifetime attempt status, and death by suicide). A total of 95 articles meeting inclusion criteria were identified by a literature search using Medline and PsycINFO. Evidence for an association between negative life events and suicidal ideation and behavior was generally consistent, with strongest support found for more severe than with less severe forms of suicidal ideation and behavior. Support for an inverse relation between positive events and suicidal ideation and behavior was generally lacking. Although there is general support for life stressors as a risk factor for suicidal ideation and behavior, interpretation of these findings is constrained by methodological limitations prevalent in much of the literature, particularly in the case of suicidal ideation and suicide plans. Recommendations for future research are provided.

Contents

* Corresponding author at: Department of Psychiatry and Human Behavior, Alpert Medical School of Brown University, Bradley Hospital, 1011 Veterans Memorial Parkway, East Providence, RI 02915, United States.
E-mail address: rtliupsych@gmail.com (R.T. Liu).

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1 . Introduction

Although there has been substantial progress in the development of efficacious treatments for a variety of mental health concerns, such has not been the case for suicidal behavior. Indeed, while intervention efforts for suicidal behavior have increased considerably in recent decades, no corresponding decrease has been observed in the prevalence of these phenomena (Kessler, Berglund, Borges, Nock, & Wang, 2005; Nock et al., 2008). Thus, suicide remains a significant public health concern and a leading cause of death worldwide (Nock et al., 2008).

Arriving at a better understanding of the factors underlying risk for suicidal behavior is crucial to improving risk assessment and intervention strategies for addressing this behavior. Although suicidal behavior is multi-determined, reflecting a convergence of multiple intrapersonal and environmental influences, one risk factor that has received substantial empirical consideration over the past four decades is negative life events. Moreover, life stressors feature prominently in several etiological theories of suicide (e.g., Hawton, Saunders, & O'Connor, 2012; Joiner, 2005; Mann, Waternaux, Haas, & Malone, 1999, Mann et al., 2005; O'Connor, Rasmussen, & Hawton, 2012; Wenzel & Beck, 2008). Despite the considerable theoretical and empirical interest in this area, past reviews of suicide research have generally touched upon negative life events relatively briefly in the course of a more general coverage of the suicide literature (Beautrais, 2000; Brent, 1995; Bridge, Goldstein, & Brent, 2006; Gould, 2003; Spirito & Esposito-Smythers, 2006), or have focused exclusively on particular forms of life stressors (e.g., childhood abuse in Santa Mina & Gallop, 1998; sexual assault in women in Ullman, 2004; and childhood abuse and combat-related trauma in Adams & Lehnert, 1997) or a particular form of suicidal behavior (e.g., death by suicide in psychological autopsy studies in Foster, 2011), or reviewed evidence relating to a specific model of suicide (e.g., cognitive functioning mediating the relation between early life stressors and suicidal behavior in Yang & Clum, 1996). Thus, although these earlier reviews report general support for the etiological relevance of negative life events in suicidal ideation and behavior, there have been no comprehensive and systematic reviews to date on the relation between life stressors and different aspects of suicidal ideation and behavior.

The current effort sought to address this gap by systematically reviewing the extant literature relating life events to at least one aspect of suicidal ideation and behavior (i.e., suicidal ideation, plans, attempts, degree of suicidal intent, medical severity of attempt, repeat versus first lifetime attempt status, and death by suicide). Although negative life events were the primary focus of the current review, positive life events were considered in studies that also examined them in relation to some aspect of suicidal ideation and behavior. Additionally, although the associations between suicide and subjective as well as physiological stress are undoubtedly important ones, the current effort focused specifically on the literature examining how objectively occurring life events (i.e., events in the individual's environmental, independent of subjective appraisals; Grant et al., 2003) relate to suicidal ideation and behavior. To provide context for understanding and evaluating the literature on life events in relation to suicidal ideation and behavior, the current review first begins with a brief background on the study and conceptualization of life events.

1.1 . Developments in the conceptualization and measurement of life events

A quite substantial body of research on the potential role of life events in the risk for suicidal ideation and behavior has accumulated since the first publications in this area in the early 1970s. Since that time, there have been several significant developments in how life stressors have been studied and conceptualized. An important early influence in life events research was Holmes and Rahe's (1967) Social Readjustment Rating Scale (SRRS), which defined stressful life events as occurrences most likely to result in readjustment-requiring changes in people's daily activities. Accordingly, Life Change Unit (LCU) weights were assigned to each SRRS item, and a summary of LCUs for endorsed events served as an indicator of overall life stress. Despite its initial popularity, the SRRS fell out of favor among life events researchers with the eventual recognition of several conceptual and methodological issues. In particular, the SRRS (and several subsequently developed life event inventories) included items that were disorders or symptoms of psychopathology. In terms of evaluating life stressors as a risk factor for suicidal ideation and behavior, this issue introduces not inconsiderable difficulties for discerning the unique effect of life stressors independent of psychopathology commonly associated with suicidal ideation and behavior. Additionally, the notion that LCUs underlie the pathogenic effect of life events has now become dated, as LCUs tend to underestimate the relation between life stressors and psychopathology (Goodyer, 1990; Johnson & Roberts, 1995; Kessler, 1997). In its place, other aspects of life events (e.g., unexpectedness) are now viewed as more relevant to mental health outcomes (Hammen, 2005; Kessler, 1997).

Also a noted weakness of life event checklists is their inherent insensitivity to individual circumstances surrounding events which may affect their severity. That is, the same event is accorded equal weight across all individuals, regardless of the context in which it occurs. This is problematic, for example, in the case of a child moving out of the home, which takes on very different meanings if it was to attend college or involved child protective services. One attempt to resolve this issue involved having respondents rate the subjective stressfulness of each endorsed event on a Likert scale. This approach, however, introduces problems of its own. Given that the individual's current affective state (Monroe & Reid, 2008) and diathesis (Dohrenwend, 2006; Espejo et al., 2011) may influence these subjective ratings, their use makes it impossible to determine whether an observed relation with mental health outcomes is due to an environmental stressor or an individual's psychopathology or diathesis. For this reason, life events researchers have cautioned against this approach (Dohrenwend, 2006; Hammen, 2005; Kessler, 1997). The inclusion of subjective stress ratings, however, continues to be fairly common in the literature.

An alternative strategy is the “contextual threat” approach pioneered by Brown and Harris (1978) with their Life Events and Difficulties Schedule. This interview-based approach involves eliciting from the individual a narrative of the context in which each event occurred and its consequences (Brown & Harris, 1978). This approach yields detailed information surrounding each event, allowing for a much more sensitive evaluation of the event's impact on the individual. For example, the death of a child's sole parental caretaker by suicide likely has considerably more impact than the death of an adult's parent to natural causes. This information is then presented to a panel of independent raters blind to the individual's psychopathology, risk factors, and subjective response, and it is tasked with assigning an “objective threat” rating for each event (i.e., the stressful of the event to the average person in identical circumstances). Such information is also important for certain categorizations of events. For instance, determining whether a child changing schools is behavior-dependent (e.g., a result of expulsion from a prior school) or independent (e.g., a result of the child's parents finding a job in a different city) is impossible with checklists, but achievable with contextual threat approaches. For these reasons, the contextual threat approach is now regarded as the gold standard in the field (Dohrenwend, 2006; Hammen, 2005; Monroe, 2008). Nonetheless,