



# Suicidal and violent behavior: The role of anger, emotion dysregulation, and impulsivity



Brooke A. Ammerman<sup>a,\*</sup>, Evan M. Kleiman<sup>b</sup>, Lauren L. Uyeji<sup>a</sup>, Anne C. Knorr<sup>a</sup>, Michael S. McCloskey<sup>a</sup>

<sup>a</sup> Temple University, Philadelphia, PA, United States

<sup>b</sup> Harvard University, Cambridge, MA, United States

## ARTICLE INFO

### Article history:

Received 5 September 2014

Received in revised form 24 January 2015

Accepted 27 January 2015

Available online 14 February 2015

### Keywords:

Suicide

Violence

Anger

Emotion dysregulation

Impulsivity

## ABSTRACT

Suicidality and violence are serious public health problems. A rich literature supports the relationship between suicidality and violence, including common associations with trait anger. However, less is known about how trait anger may facilitate these behaviors. Two potential mechanisms in this relationship are emotion dysregulation and impulsivity, both of which are linked to increased anger, suicidality, and violence. We investigated anger as a common underlying factor for both suicidal and violent behavior, and emotion dysregulation and impulsivity (i.e., negative and positive urgency) as potential mediators in this relationship. Results demonstrate that trait anger was associated with both suicidal and violent behavior. Further, emotion dysregulation mediated the anger and suicidal behavior relationship whereas both negative and positive urgency mediated the anger and violent behavior relationship. Although trait anger may be a common underlying factor for both suicidal and violent behavior, the nature of these relationships seems to vary significantly.

Published by Elsevier Ltd.

## 1. Introduction

Intentional harm towards the self and others is a major public health concern. At the extremes, suicide and homicide are leading causes of mortality, second only to accidental death, among young people (CDC, 2012, 2013). Less severe acts of harm towards self and others are even more ubiquitous. Between 1.9% and 8.7% of individuals attempt suicide in their lifetime (Nock et al., 2008), while 12% of adolescents report physical violence in romantic relationships (Halpern, Oslak, Young, Martin, & Kupper, 2001). These acts of non-fatal harm are of great concern, not only for their direct adverse consequences (Clarke & Whittaker, 1998; Krug, Mercy, Dahlberg, & Zwi, 2002), but also because of the increased likelihood of engaging in other forms of harm. The relationship between suicidal and violent behavior has been long recognized with many psychoanalysts claiming that suicide is aggression turned inward (Plutchik & van Praag, 1986). More recently, empirical evidence has shown that individuals with a history of violence are more likely to engage in self-harm (Greening, Stoppelbein, Luebke, & Fite, 2010; Zhang et al., 2012). Likewise, individuals with past suicide attempts are more likely to have a history of violence (Keil et al., 2006).

One trait that may predispose individuals to suicidal and violent behavior is anger. A rich literature shows a relationship between elevated anger and violence. Anger is the primary motivator for violent behavior and is the most common emotion experienced when engaging in aggression (Averill, 1983). Furthermore, increased anger is repeatedly associated with violence across clinical and non-clinical samples (Deffenbacher, Deffenbacher, Lynch, & Richards, 2003; McCloskey, Berman, Noblett, & Coccaro, 2006; Ramírez & Andreu, 2006). Although less extensively studied, anger is also linked with suicidal behavior in both community and psychiatric populations (Giegling et al., 2009; Horesh et al., 1997; Lehnert, Overholser, & Spirito, 1994).

The mechanism(s) through which anger may facilitate suicidal or violent behavior is less clear. Several intrapersonal variables, most notably emotion dysregulation and impulsivity, have been linked to suicidal and violent behavior, as well as anger (Giegling et al., 2009; Rajappa, Gallagher, & Miranda, 2012; Ramírez & Andreu, 2006). Emotion dysregulation is associated with aggressive responding on laboratory tasks (Cohen, Zeichner, & Seibert, 2008) and discriminates between those who have and have not engaged in intimate partner violence (Gratz & Roemer, 2004). Likewise, emotion dysregulation is predictive of suicidal behavior (Rajappa et al., 2012). Emotion dysregulation is also strongly correlated with heightened trait anger (McCloskey et al., 2009). Although emotion dysregulation has been associated with both suicidal and violent

\* Corresponding author at: Department of Psychology, Temple University, 1701 N 13th Street, Philadelphia, PA 19122, United States.

E-mail address: [brooke.ammerman@temple.edu](mailto:brooke.ammerman@temple.edu) (B.A. Ammerman).

behaviors, a more direct examination of how this trait may influence the pathway from anger to such behaviors is needed.

Although impulsivity was once conceptualized as a facet of emotion dysregulation (Eysenck & Eysenck, 1969) it has since been recognized as an independent construct, where emotion dysregulation is central to coping with emotional experiences (Gratz, 2007) and impulsivity is related to a general propensity to act rashly (Whiteside, Lynam, Miller, & Reynolds, 2005). Both suicidal and violent behavior have been associated with impulsivity (Anestis, Selby, & Joiner, 2007; Mann et al., 2009; Shorey, Brasfield, Febres, & Stuart, 2011); however, specific facets of impulsivity may be more relevant to emotion dysregulation. Negative and positive urgency refer to rash behavior in response to negative and positive emotional experiences, respectively (Cyders et al., 2007; Whiteside & Lynam, 2001), and may facilitate risk behavior in different ways. For example, when experiencing distress one may act rashly to reduce negative affect whereas rash behavior may also be used to enhance an existing positive mood (Cyders & Smith, 2008). Some research has suggested the importance of negative urgency in suicidal (Anestis & Joiner, 2011) and violent (Settles et al., 2012) behavior, but research has been limited. The tendency to act rashly in response to both negative and positive emotions may be an influential factor, but these relationships need to be explored.

The aim of the current study was to assess potential pathways leading to suicidal and violent behavior by examining the role of trait anger, in addition to emotion dysregulation and impulsivity. We aimed to first replicate previous findings suggesting that trait anger may be a common underlying factor for both suicidal and violent behavior and then examined emotion dysregulation and impulsivity as mediators in this relationship. Given the support for the relationships between emotion dysregulation and suicidal and violent behavior, and anger, it is expected that emotion dysregulation will mediate the relationship between anger and both suicidal and violent behavior. Similarly, relationships established with negative urgency suggest that it may facilitate the progression from anger to suicidal and violent behavior. The role of positive urgency is less clear. Direct evidence has not examined the relationship between positive urgency and suicidal and violent behaviors, but it has been suggested that anger may serve as a positive, versus negative, emotion (see Litvak, Lerner, Tiedens, & Shonk, 2010 for review). As such, it was also expected that positive urgency would serve as a mediator.

## 2. Method

### 2.1. Participants

Participants were 2,295 undergraduate students from a large urban university. Participants were aged 18–57 ( $M = 20.94$ ,  $SD = 3.42$ ), 61% female, and predominately Caucasian (61%), African American (13%), and Asian American (13%). Participants were classified based on their history of suicide attempts (SA), specifically, as reporting one or more suicide attempts (SA+;  $n = 108$ ) or no attempts (SA–;  $n = 2,177$ ). They were also classified as having a history of violent behavior (VB+ group;  $n = 555$ ) or no history (VB– group;  $n = 907$ ). Because many participants ( $n = 794$ , 34.6%) reported occasional violent behavior (i.e., 1–3 acts), individuals were categorized as having a history of violent behavior if they reported four or more lifetime acts of physical aggression against another person (top quartile of violent behavior).

### 2.2. Materials

#### 2.2.1. Suicidal behavior

The Suicide Behavior Questionnaire-Revised (SBQ-R; Osman et al., 2001), a 4-item questionnaire measuring dimensions of

suicidality, was used to assess the presence of suicide attempts. Only the item regarding lifetime suicide attempts was used in the current study (i.e., “I have attempted to kill myself, and really hoped to die”). The SBQ-R has good psychometric properties (Osman et al., 2001).

#### 2.2.2. Aggressive behavior

The Lifetime History of Aggression (LHA; Coccaro, Berman, & Kavoussi, 1997), an 11-item questionnaire, was used to assess the frequency of violent behavior. Two items specifically addressing violence were used in the current study [i.e., “Get into physical fights with other people,” “Deliberately hit another person in anger (whether during a physical fight or not)"]. The measure's psychometric properties have been previously established (Coccaro et al., 1997).

#### 2.2.3. Anger

The State-Trait Anger Expression Inventory 2 – Trait Anger Subscale (STAXI-T; Spielberger, 1988) is a 10-item self-report measure of trait anger that has strong psychometric support (Spielberger, 1988). In the present study, the STAXI-T had good internal consistency ( $\alpha = .85$ ).

#### 2.2.4. Emotion dysregulation

The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) is a 36-item questionnaire used to assess difficulties in regulating emotions. It assesses six dimensions, in addition to an overall composite score (used in the current study) of emotion regulation. The DERS overall composite has strong psychometric properties (Gratz & Roemer, 2004) and demonstrated excellent internal consistency in our study ( $\alpha = .94$ ).

#### 2.2.5. Impulsivity

The UPPS-P Impulsive Behavior Scale (UPPS-P; Cyders et al., 2007; Whiteside & Lynam, 2001) is a 59-item questionnaire measuring five dimensions of impulsivity, including negative and positive urgency (tendency to engage in impulsive behaviors when experiencing negative and positive affect, respectively). The psychometric properties of the UPPS-P have been supported (Cyders et al., 2007; Whiteside & Lynam, 2001). In our study internal consistency was strong (negative urgency,  $\alpha = .87$ ; positive urgency,  $\alpha = .95$ ).

### 2.3. Procedures

Participants completed a series of self-report measures as part of a larger study examining aggression and self-aggression. All participants provided informed consent and received course credit for their participation.

### 2.4. Analytic strategy

Our analytic approach to test our main model had two steps. The first step involved testing a multiple mediator model in which emotion dysregulation, negative urgency, and positive urgency mediated the relationships between anger and SA and anger and VB. We also tested a version of our full model where the order of predictors were switched such that anger mediated the relationships of emotion dysregulation, negative urgency, and positive urgency with SA and VB, allowing us to test the quality of the direction of the proposed model.

The second step involved separately testing each single mediator and single outcome to examine each relationship in isolation (e.g., emotion dysregulation as a mediator of the relationship between anger and VB). This was accomplished by nesting each smaller model in the multiple mediator model. This approach

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات