



Anger and everyday risk-taking decisions in children and adolescents



Elisa Gambetti ^{*}, Fiorella Giusberti

Department of Psychology, University of Bologna, Italy

ARTICLE INFO

Article history:

Received 30 July 2015

Received in revised form 18 November 2015

Accepted 21 November 2015

Available online 28 November 2015

Keywords:

Anger
Hostility
Aggression
Decision-making
Adolescence
Childhood
Risk

ABSTRACT

The current research examined the relationship between cognitive, affective and behavioral components of anger and risk decision-making in childhood and adolescence. 88 children and 101 adolescents completed hypothetical choice scenarios and the Multidimensional School Anger Inventory–Revised. Results showed that: 1) hostility, anger experience and destructive expression of anger were positively related to risky decisions in everyday-life situations; 2) only the behavioral component of anger was predictive of risk-taking; 3) hostility and anger experience indirectly affected, through the destructive expression of anger, risky decisions in childhood; 4) the effect of hostility on risk was both direct and indirect, while the effect of anger experience was only indirect on the adolescence sample. Theoretical and practical implications of these findings were discussed.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

In the developmental literature, risk decision-making is defined as making decisions that is associated with some probability of undesirable results (Boyer, 2006). A number of studies have found that childhood and adolescence are both characterized by experimentations, greater preference for risky over certain decisions and appreciation of risk (e.g., Eftekari, Turner, & Larimer, 2004; Reyna, 1996). In particular, there is evidence that school-age children often make risky decisions, especially when they are playing away from home and not directly supervised by adults (e.g., Petrass, Blitvich, & Finch, 2009; Saluja et al., 2004), and that adolescents frequently engage in several risky behaviors, such as cigarette smoking, having unprotected sex or initiating interpersonal aggression (e.g., Rai et al., 2003). According to most theoretical accounts, all risk decisions involve a trade-off between short-term gains and potential long-term costs (e.g., Baumeister & Scher, 1998). For example, cigarette smoking may appeal to an individual because of its immediate benefit, such as relief from stress or sharing an enjoyable moment with friends, despite long-term health hazards. From this perspective, individual characteristics that influence the weighing of costs and benefits, or bias the ability to accurately evaluate the trade-off, should contribute to an overall disposition toward risk-taking. Several works showed that there are significant individual differences in making risky decisions in young people: risk-taking and related decision-making processes may reflect underlying dispositional qualities that

vary across individuals (e.g. Chassin & DeLucia, 1996; Hoffrage, Weber, Hertwing, & Chase, 2003). For this reason, it is important to identify which individual characteristics make children and adolescents more vulnerable to making risky decisions in several everyday situations. Actually, evidence suggests that mortality and morbidity during childhood and adolescence are highly associated with risky decisions (e.g., Cobb, 1998; Rice & Dolgin, 2008) and that economic and personal costs of risky behaviors are increasing (Savadori & Rumiati, 2005).

1.1. Individual differences in risk-taking

Numerous studies showed that individual differences in cognitive, emotional, psychobiological and social domains could influence and explain several risk-taking behaviors during development (for a review see Boyer, 2006). Regarding the cognitive and emotional aspects, studies analyzed how specific factors, such as cognitive appraisals and personality traits, influence decision-making in potentially risky situations. For example, children who judge their personal vulnerability for injury, the potential severity of injury or danger in a situation as low engages in greater risk-taking (Morrongiello & Matheis, 2004). Moreover, young people who are high in impulsivity and in sensation seeking or low in inhibitory control (i.e., capacity to resist off limits but interesting hazards) engage in more risk behaviors, such as drug abuse or peer aggressions (e.g., Morrongiello, Corbett, McCourt, & Johnston, 2006; Stanford, Greve, Bourdeaux, Mathias, & Brumbelow, 1996). Other works identified depression (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995), low self-regard (Dryfoos, 1990), negative emotionality, avoidant strategies of coping (Cooper, Wood, Orcutt, & Albino, 2003) and extraversion (i.e., high activity level, sociability and dominance)

^{*} Corresponding author at: Department of Psychology, University of Bologna, V.le Bert Pichat, 5, 40127 Bologna, Italy
E-mail address: e.gambetti@unibo.it (E. Gambetti).

(Schwebel & Plumert, 1999) positively associated with youth's risk-taking decisions. On the other hand, agreeableness (i.e., kindness, likeability and trustworthiness) and conscientiousness (i.e., organization and reliability) were found negatively related with youth's deviant and unhealthy behaviors (Markey, Markey, Erickson, & Tinsley, 2003). In summary, the literature showed that cognitive (e.g., self- and other-representations), affective (e.g., negative emotionality) and behavioral (e.g., impulsivity, inhibitory control and sensation seeking) differences seem to predict risk-taking in adolescents, whereas there are few studies that explore this issue during childhood.

1.2. Anger and risk-taking

One of the individual differences that can affect risk-taking during childhood and adolescence is the tendency to feel anger in different circumstances and situations. For a complete definition of anger, the whole range of anger-related events that occur congruently with the individual's subjective label of anger has to be considered (Eckhardt, Norlander, & Deffenbacher, 2004). Current models define anger as a multidimensional construct consisting of affective, cognitive and behavioral variables (e.g., Kassino, Roth, Owens, & Fuller, 2002; Wilkowski & Robinson, 2008). In particular, the *affective* component of anger consists of angry feelings that, according to the dimensional approach of affect (e.g., Posner, Russell, & Peterson, 2005), are characterized by a negative valence and an intensity that could "vary from mild irritation or annoyance to intense fury and rage" (Spielberger, 1996). This component is an internal and stable feeling state, naming trait anger, that is typically associated with an increased motivation to hurt others (Wilkowski & Robinson, 2008).

The *cognitive* component of anger consists of hostile beliefs, such as cynicism and lack of confidence in others. These beliefs produce "attributional biases that make it more likely that the behavior of others will be interpreted as antagonistic or threatening" (Barefoot, 1992). Although it is clear that hostile beliefs are the core cognitive components of anger, there is a long history of debate regarding the question about whether these beliefs are necessary or not for anger elicitation: appraisal and attribution theorists have emphasized hostile interpretations as the main determinant of anger (e.g., Lazarus, 1991; Smith & Kirby, 2004), whereas Cognitive Neo-Associationistic theorists have argued that memory accessibility to hostile thoughts may be sufficient (e.g., Berkowitz & Harmon-Jones, 2004).

Finally, aggression is certainly the principal aspect of the *behavioral* component of anger. Verbal aggression and other forms of antagonistic behavior are frequent phenomena in everyday-life situations. Physical aggression emerges in several forms of anger manifestations, such as breaking objects, slamming doors or hitting someone. These kinds of behaviors are the typical expression of anger that is a characteristic of people who express their anger outwardly (Spielberger, 1996) or in a reactive way (e.g., Blair, 2004). Developmental research showed that the tendency to express angry feelings in a destructive manner is a stable behavioral dimension that emerges early in life (e.g., Putnam & Stifter, 2005). Moreover, research on adults showed that both trait anger and hostile beliefs predict this personality trait (Bettencourt, Talley, Benjamin, & Valentine, 2006).

According to Lerner and Tiedens (2006), anger has an *invasive* influence on decision-making under risk. Research found that angry adults tend to act recklessly (Ahn, 2010) because anger is associated with optimistic beliefs about experiencing future life events and promotes cognitive response decision-making biases that increase the tolerance for risk (e.g., Lerner & Keltner, 2001; Gambetti & Giusberti, 2009). There is also considerable evidence that during adolescence anger increases vulnerability to risky behaviors and predicts numerous risky decisions, such as violence, smoking and substance abuse (e.g., Siqueira, Diab, Bodian, & Rolnitzky, 2000; Vaccaro & Wills, 1998). For these reasons, individual differences in the tendency to feel and express anger may represent very important factors in risk decision-making because they

function as early and chronic schemas for organizing and interpreting events (Gasper & Clore, 1998; Lerner & Keltner, 2000).

1.3. The present study

Given this theoretical framework, anger seems to play an important role in risk-taking during the development, but few studies explored this issue directly. To address this gap, the current study extends prior research investigating the link between anger and risk decision-making by examining relations among specific components of anger and risk-taking decisions. In particular, we hypothesized that habitual anger experience (affective component), hostile beliefs (cognitive component) and easiness to engage in acts of destructive expression of anger (behavioral component) would predict risky behavior in children and adolescents and they could interact with each other in influencing risk-taking. Assessing possible interactions among experience of anger, hostile beliefs and destructive expression of anger in risk decision-making may be a worthy addition to the developmental literature making a bridge between different lines of research: studies on emotions and personality in judgments and decisions (e.g., Cooper et al., 2003) and studies that highlight the importance of cognitive assessments on risk-taking (e.g., Morrongiello & Matheis, 2004).

Furthermore, in contrast to much previous research that considered unintentional injury in children (e.g., Morrongiello, Stewart, Pope, Pogrebtsova, & Boulay, 2015) or deviant and unhealthy behaviors in adolescents (e.g., Markey et al., 2003), this study examined risk decision-making in everyday hypothetical scenarios representative of a wide range of situations frequently faced by young people in their everyday lives.

2. Method

2.1. Samples

Following approval of the research ethics review board and the head-master, permission forms were sent home to parents of school-age children and adolescents to obtain consent for their sons to participate in this study. Participants also provided informed consent at school prior to participation. Participants were recruited from two elementary schools and three classes of middle school. Samples comprised 88 children ($M = 9.47$ years, $SD = 0.61$, range 8–11, 43% males) and 101 adolescents who ranged in ages from 12 to 16 ($M = 13.63$, $SD = 1.56$, 44% males). All participants were fluent in Italian, normally developing (as reported by teachers) and in regular classrooms.

Osborne and Costello (2004) suggested that there is no specific criterion for determining sample size in behavioral studies. They showed that one-sixth of the studies used 2:1 subject-to-item ratio and about 20% studies used less than 5:1 subject-to-item ratio. Sample sizes of 88 and 101 were approximately 2:1 subject-to-item ratio which was considered suitable for conducting analyses.

2.2. Instruments

2.2.1. Multidimensional School Anger Inventory-Revised (MSAI-R; Boman, Curtis, Furlong, & Smith, 2006)

The 36-item MSAI-R was developed to measure the psychological/affective, cognitive, and behavioral components of anger with items specifically referring to the school environment (Boman et al., 2006; Furlong, Smith, & Bates, 2002). This instrument is composed of three scales: Anger Experience (e.g., *You ask to go to the bathroom and the teacher says, "no"*), Hostility (e.g., *Rules at school are stupid*), and Destructive Expression (e.g., *When I'm angry, I'll take it out on whoever is around*). All scales use four response categories (from 1 = never to 4 = always). Reliability with Australian children ranged from 0.79 to 0.66 (Boman et al., 2006). The MSAI-R was presented in Italian; this version was a translation of the original questionnaire, with exactly alike

Download English Version:

<https://daneshyari.com/en/article/889869>

Download Persian Version:

<https://daneshyari.com/article/889869>

[Daneshyari.com](https://daneshyari.com)