Moral fixations: The role of moral integrity and social anxiety in the selective avoidance of social threat

Lotte F. Van Dillen [a,*], Dorien Enter [a,b,1], Leonie P.M. Peters [a,1], Wilco W. van Dijk [a], Mark Rotteveel [c,d]

[a] Leiden University, The Netherlands
[b] Radboud University Nijmegen, The Netherlands
[c] University of Amsterdam, The Netherlands
[d] Amsterdam Brain Cognition, University of Amsterdam, The Netherlands

ARTICLE INFO

ABSTRACT

People derive their sense of belonging from perceptions of being a moral person. Research moreover suggests that social cues of rejection rapidly influence visual scanning, and result in avoidant gaze behavior, especially in socially anxious individuals. With the current eye-tracking experiment, we therefore examined whether moral integrity threats and affirmations influence selective avoidance of social threat, and how this varies with individual differences in social anxiety. Fifty-nine participants retrieved a memory of a past immoral, moral, or neutral act. Next, participants passively viewed angry, happy, and neutral faces, while we recorded how often they first fixated on the eyes. In addition, we administered the Liebowitz Social Anxiety Scale (1987). Participants first fixated less on angry eyes compared to happy or neutral eyes when their moral integrity was threatened, and this selective avoidance was enhanced with increasing social anxiety. Following a moral affirmation, however, participants no longer selectively avoided the eyes of angry faces, regardless of individual differences in social anxiety. The results thus suggest that both low and high socially anxious people adjust their social gaze behavior in response to threats and affirmations of their moral integrity, pointing to the importance of the social context when considering affective processing biases.

1. Introduction

People value social inclusion because it provides them with a sense of belonging and because it boosts their self-esteem (Knowles and Gardner, 2008; Twenge, Catanese, & Baumeister, 2003). Given the importance of being socially included, monitoring signs of social rejection and adjusting ones behavior accordingly, are therefore crucial strategies for people to safeguard their standing in a group (Gilbert, 2000). However, sometimes people experience moral failures, and these failures can provide the basis for negative responses from others (Brambilla et al., 2011).

Several studies have shown that people value being a moral person (Schwartz and Bardi, 2001), and that they adjust their behavior on the basis of their past (im) moral acts (Jordan, Mullen, & Murningham, 2011). This self-perceived moral standing at any

given point, also called moral integrity, is sometimes described to operate as a 'thermometer' (Jordan and Monin, 2008). The moral emotions that arise from threats to one's moral self-regard regulate people's behavior to safeguard inclusion (Baumeister and Leary, 1995; Pickett, Gardner, & Knowles, 2004). Moral emotions such as guilt and shame in response to a moral integrity threat motivate people to engage in reparatory behavior (Jordan et al., 2011; Gilbert, 2000; Haidt, 2003; Keltner and Harker, 1998), while emotions such as pride and positive feelings about the self in response to a moral affirmation operate as a buffer, and may lead people to behave more self-promoting (Jordan and Monin, 2008; Sachdeva, Iliev & Medin, 2009). People who had just recalled their immoral behavior, for example, reported greater participation in moral activities, reported stronger prosocial intentions, and cheated less than people who recalled their moral behavior (Jordan et al., 2011).

Whereas the link between moral integrity threats and affirmations on the one hand and reparatory versus self-promoting tendencies on the other hand has been demonstrated across several domains and situations (e.g., Hofmann, Wisneski, Brandt & Skitka, 2014), still relatively little is known about the social monitoring process that is thought to occur in response to self-perceptions of

* Corresponding author at: Institute of Psychology, Social and Organizational Psychology Unit/Leiden Institute for Brain and Cognition, Leiden University, P.O. Box 9555, 2300 RB Leiden, The Netherlands. Fax: +31 71 5273619.
E-mail address: dillenlfvan@fsw.leidenuniv.nl (L.F. Van Dillen).
[1] Both authors contributed equally to this work.

moral integrity. In the present experiment we therefore examined whether changes in participants' moral integrity moderate visual attention to social cues of rejection and acceptance as revealed by others.

Social cues provide information about how behavior is perceived (i.e., acceptable or not; Pickett and Gardner, 2005). Angry facial expressions with direct gaze, for example, signal social scrutiny, and possible rejection, whereas happy faces with direct gaze signal acceptance, and possible inclusion (Öhman, 1986; Roelofs et al., 2010). Recent eye-tracking evidence suggests that negative facial expressions of anger and fear are rapidly analyzed and influence visual scanning, but, rather than attracting attention, such faces tend to be actively avoided (Becker and Detweiler-Bedell, 2009; Enter, Terburg, Harrewijn, Spinhoven, & Roelofs, 2016). In one study, for example, people looked away from negative social feedback, as evidenced by fewer, and shorter fixations on the photo of the negative evaluator as compared to their own photo (Vanderhasselt, Remue, Ng, Mueller, & De Raedt, 2015). Relatedly, in another study (Silk et al., 2012), youth who had just been rejected in a chatroom interaction task, looked away from their own crossed out picture more than when they had just been accepted.

The above eye-tracking findings suggest that people avoid social evaluative cues following a rejection of the self. In line with this, and based on self-affirmation theory (Steele, 1988) one could expect that when an opportunity is present to affirm self-integrity such defensive reactions will *decrease* to the very same threatening social information. For example, self-affirmation has been found to reduce stress responses in social evaluation tasks, as indicated by lower cortisol responses in affirmed participants compared to participants in a control condition (Creswell et al., 2005). In the above-mentioned studies, moreover, participants displayed less threat-avoidant gaze behavior when they had just been positively evaluated (Vanderhasselt et al., 2015) or had just been accepted by a peer (Silk et al., 2012). It is therefore conceivable that self-perceptions of people's moral standing regulate their gaze behavior toward social cues of rejection or approval in a similar way, with greater avoidance of negative social cues following a moral integrity threat, but reduced avoidance following a moral affirmation.

In addition to our examination of moral integrity threats and affirmations on the avoidance of social cues of rejection and acceptance, in the current study, we also examined the effects of individual differences in social anxiety. Socially anxious individuals are highly concerned with humiliating or embarrassing themselves when under the scrutiny of others (American Psychiatric Association, 2013), and may therefore be especially sensitive to social signs of rejection (Staugaard, 2010). This has for example been illustrated by a large web-based study (Schulze, Lobmaier, Arnold, & Renneberg, 2013), in which participants viewed briefly presented (300 ms) facial expressions with different gaze directions. The greater their self-reported social anxiety, the more likely participants were to indicate that these faces were looking directly at them, especially for negative (angry, fearful) and neutral expressions. Social anxiety is moreover characterized by avoidance of social situations, and has been related specifically to avoidance of eye contact (Horley, Williams, Gonsalvez, & Gordon, 2003). Especially angry facial expressions with direct gaze have been found to elicit increased avoidance tendencies in high socially anxious individuals, as evidenced by fewer fixations on the eye region of angry faces compared to happy or neutral faces (Horley, Williams, Gonsalvez, & Gordon, 2004). Socially anxious individuals thus seem to adjust their gaze strategies as to minimize social information (particularly negative cues), conveyed especially by the eyes (Baron-Cohen, Wheelwright, & Jolliffe, 1997). On the basis of the above findings, we expected that moral integrity threats would exacerbate social anxiety effects on the avoidance of social

evaluative threats, whereas we expected that moral affirmations would reduce them.

To test the effects of moral integrity and social anxiety on the avoidance of social evaluative threats, we measured individual differences in social anxiety, and then manipulated participants' self-perceived moral integrity (threatened, affirmed, or unaffected) via an autobiographical recall task. In an allegedly unrelated task we next presented participants with angry, happy, and neutral faces while their spontaneous gaze behavior (i.e., fixations on the faces' eye regions) was recorded during a passive viewing task.

Our primary focus was on people's first fixations on the eye region. The relative reduction of, especially, first fixations on the eye-region of angry faces has been found to be a reliable index of gaze avoidance (Becker and Detweiler-Bedell, 2009; Gamer and Büchel, 2012; Gamer, Zurowski & Büchel, 2010; Garner, Mogg & Bradley, 2006). A recent study moreover found that the percentage of first fixations to angry eyes is enhanced by the administration of testosterone (Enter et al., 2016), a hormone known to facilitate social dominance (Terburg and Van Honk, 2013). The first fixation to the eye-region, finally, is considered to be an early automatic component of gaze behavior that reflects a critical feature of communication (Bradley, Codispoti, Cuthbert & Lang, 2001; Gamer & Büchel, 2012).

We reasoned that if moral integrity threats heighten participants' sensitivity to social cues of rejection (i.e., eyes of angry faces), this should result in fewer first fixations on the eye region (i.e., greater selective avoidance) of angry faces versus happy or neutral ones, compared to a control condition. If moral affirmations, on the other hand, reduce people's sensitivity to social cues of rejection (Silk et al., 2012; Vanderhasselt et al., 2015), this should reduce differentiation in first fixations to the eyes of angry, happy, or neutral faces (i.e., decrease selective avoidance of the eyes of angry faces over happy or neutral ones), compared to a control condition.

We moreover predicted the effects of our moral integrity manipulation to vary with individual differences in social anxiety. More specifically, we expected that high compared to low socially anxious participants would be even more sensitive to our moral threat manipulation, as expressed by an even smaller percentage of first fixations on angry eyes versus neutral or happy eyes compared to less socially anxious participants. We however predicted that, compared to a control condition, our moral affirmation would reduce the selective avoidance of social threat cues for both high and low socially anxious individuals, such that all participants would first fixate as frequently on angry compared to happy or neutral eyes. We examined participants' first fixations to the eyes of happy faces in addition to their first fixations to both angry and neutral eyes, in order to confirm that any reduction in first fixations to angry faces relative to neutral faces indeed reflected the selective avoidance of negative social cues, and not, of socio-emotional cues more generally.

2. Method

2.1. Participants, design, and procedure

Of the eighty-one participants that took part in our experiment at Leiden University, we were unable to examine the data of twenty-two participants due to extreme loss of tracking integrity which was caused by defects of the infrared light of the eye tracker, leaving a total of fifty-nine volunteers for our analyses (30 females; 29 males; $M_{age} = 21.90$ years, SD = 3.96).

Exclusion criteria for participation were use of medication, color blindness, and currently being treated for a mental disorder. All participants had normal or corrected-to-normal vision, were unaware of the aim of the study, and provided written informed consent.