



Defenseless against art? Impact of reading fiction on emotion in avoidantly attached individuals

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ABSTRACT

An experiment tested the hypothesis that literature can subvert habitual emotional disengagement of avoidantly attached individuals. After completing the Attachment Style Questionnaire and an Emotion Checklist, 166 participants were randomly assigned to either an Art or a Control condition. Those in the Art condition read the short story *The Lady with the Toy Dog* by [Chekhov, A. (1899/1990). *The lady with a toy dog*. In S. Applebaum (Ed.), *Five great short stories*. Dover Thrift Editions: Springer]. Those in the Control condition read a comparison text that was documentary in format, and had the same content, length, reading difficulty, and interest. Following this, all participants completed the Emotion Checklist again. As hypothesized, an interaction between Attachment Style and Condition was found: Individuals who scored above the median on avoidant attachment experienced significantly greater Emotion Change in the Art condition than in the Control condition.

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1. Introduction

Can art pierce or circumvent psychological defenses? Psychological defense is a process that involves avoiding or reducing painful emotions (Paulhus, Fridhandler, & Hayes, 1997). Researchers have shown that avoiding occasions for certain kinds of emotion can begin in infancy (Ainsworth, Blehar, Waters, & Wall, 1978) and persist into adulthood (Hazan & Shaver, 1994). Infants who are not able to elicit responses from, or who are rejected by, their caregivers, tend to avoid attachment and thereby preclude the anxiety and distress associated with seeking comfort from an unresponsive attachment figure (Kobak & Sceery, 1988). This behavior often continues into adulthood, and avoidantly attached individuals are less likely to seek support from their partners in times of distress (Collins & Feeney, 2000; Simpson, Rholes, & Nelligan, 1992), and less likely to provide support to their partners in times of need (Feeney & Collins, 2001).

Despite the possibility that emotional and cognitive detachment exhibited by avoidantly attached people point to both diminished negative emotionality and need for attachment, physiological research has shown the issue to be more complicated. Zilber, Goldstein, and Mikulincer (2007) found that those high in avoidant attachment showed amplified Late Positive Potential to negative emotional pictures, a response similar to that of those who were low in avoidant attachment. Furthermore, the re-

duced subjective or self-reported negative emotionality commonly reported by avoidantly attached individuals (Feeney, 1999; Mikulincer, 1998) was accompanied by an increased sympathetic nervous system reactivity (Diamond, Hicks, & Otter-Henderson, 2006), which is associated with detrimental long-term health outcomes (Repetti, Taylor, & Seeman, 2002; Ryff, Singer, Wing, & Love, 2001). Given that about 25% of adults identify themselves as avoidantly attached (Mickelson, Kessler, & Shaver, 1997), discovering ways to reduce avoidance of emotion is important. One way may be art.

The link between art and emotion is deep and variegated (Cupchik, 2006; Silvia, 2005). Artists betray unconscious preoccupation with emotions when speaking about their work (Djikic, Oatley, & Peterson, 2006). On their side, readers experience emotions in empathy with characters they read about (Oatley, 1999; Oatley, 2006), in the course of simulating the plans and events of a piece of fiction. The emotions prompted by art are not inferior to emotions experienced in other contexts. Although the more intense emotions of human tragedy and joy in real life are not matched by those of reading short stories, and although the emotions people report during reading of fiction are usually of shorter duration, they are not dissimilar in kind or intensity from those people typically record in diary studies of emotions in everyday life (Oatley, 1994).

Given the close links between art and emotion, one may ask: could art penetrate defenses that have been carefully built by avoidantly attached individuals? We propose that although art prompts emotions, it seems to do this in a non-threatening way.

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Firstly, because one can put down a book or walk out of a theater, an engagement with a piece of art does not appear to be of the same kind as a relationship that might threaten, compromise, or disappoint. Secondly, some aspects of art, such as form or structure, cannot be defended against. How does one defend against a structure or a rhythm of a short story? How does one defend against a juxtaposition of images or thoughts? So, while it is conceivable that one can potentially distance oneself from the content of a short story or a novel—by not engaging fully, or by discounting what is going on as merely a story and therefore unimportant—to defend against the form of a piece of art would be difficult, not least because it cannot easily be isolated or located.

The study presented in this paper tested the impact of a literary story on subjective changes among avoidantly attached individuals, as compared with those who were more securely attached. We hypothesized that successful circumvention of defenses in the avoidant might prompt changes in emotion that would be greater than those of less-defensive individuals. Why greater rather than equal? Avoidant individuals avoid negative emotions because of their sensitivity to emotion content, and so it seems likely that if defenses are circumvented, the emotional responses of defensive individuals could be stronger than those of less-defensive individuals.

In this study, we exposed participants either to a short story by Anton Chekhov, the world's most famous writer of short stories (Art condition) or to a documentary text with the same content (Control condition). We measured participants' self-reported emotions before and after reading the text, and considered the changes we measured to be effects of reading. Our hypothesis was that avoidant attachment would interact with condition, so that in the Art condition high avoidant individuals would experience significantly greater changes of emotions than their low avoidant counterparts.

2. Method

2.1. Participants¹

Participants were 166 first-year undergraduates (112 women and 54 men, mean age = 19.5 years) from a large urban university. All were fluent in English. Participants were treated in accordance with the Canadian Psychological Association's (and APA's) ethical standards with regard to treatment of human participants. All were awarded course credit for their participation.

2.2. Procedure

Participants were seated at a computer and told that a computer program would guide them through the entire experiment. They were encouraged to follow the instructions carefully, and left to complete the experiment. First, they answered questions on a series of 12 questionnaires, which included the Attachment Style Questionnaire (Feeny, Noller, & Hanrahan, 1994) and an Emotions Checklist. Following the questionnaires, participants were randomly assigned either to the Art group, who read the short story *The Lady with the Toy Dog* by Chekhov (1899/1990), or to the Control group, who read a comparison text that had the same content as the story, but was documentary in form. After they completed the reading, participants were given a manipulation check, follow-

ing which they completed another questionnaire set including the Emotions Checklist. The computer program randomized the presentation of all administered questionnaires, as well as the order of items within the questionnaires. Following this, participants were fully debriefed.

2.3. Instruments

2.3.1. Texts

(1) *Short story*. The short story used in the experimental condition was Anton Chekhov's *The Lady with the Toy Dog*, originally published in 1899, and translated into English by S. S. Koteliensky and Gilbert Cannan. The story is 6367 words long and has the Flesch–Kincaid grade level score of 6.7. This score is a readability statistic, and it is calculated as $(.39 \times \text{ASL}) + (11.8 \times \text{ASW}) - 15.59$, where ASL is average sentence length (the number of words divided by the number of sentences), and ASW is average number of syllables per word (the number of syllables divided by the number of words). Among Chekhov's stories it is among the five most highly regarded (Llewellyn-Smith, 1973). None of our participants had previously read the story.

(2) *Comparison text*. Given that the purpose of the experiment was to test whether artistic form, rather than content, can penetrate defenses and prompt change in emotion, we constructed a version of the story in which nothing was changed but its formal artistic properties. The content of the short story deals with a love affair between two married people. It has high relevance to attachment. The comparison text consisted of an ostensible court document constructed as a divorce proceeding, in which the main protagonists of the story retell the events of their involvement with each other in court. Thus, all events of the story, and some of the words, were included, but in a manner that differed from the story-form that Chekhov wrote. The comparison text was the same in length (6358 words), readability (Flesch–Kincaid grade level score = 6.7). We also measured in the level of interest that the participants found in it (see results section).

2.3.2. Questionnaire measures

In this section, only the questionnaires used for testing the main hypothesis are described.

(1) *Attachment Style Questionnaire*. (Feeny, Noller, & Hanrahan, 1994). Attachment Style Questionnaire is a 40-item measure used to assess individual attachment style by asking individuals to rate statements concerning their perceptions of themselves and their relationships. Items, such as "It's important to me that others like me." or "My relationships with others are generally superficial", are scored on a six-point scale (1 = "totally disagree" to 6 = "totally agree"). The scale assesses attachment style along five dimensions: "Confidence", "Discomfort with Closeness", "Relationships as Secondary", "Need for Approval", and "Preoccupation with Relationships". The authors reported alpha reliability coefficients to be .80, .84, .79, .76, and .76, respectively, indicating good reliability. Test-retest reliabilities over 10 weeks are .74 (Confidence and Discomfort with Closeness), .78 (Need for Approval), .72 (Preoccupation with Relationships), and .67 (Relationships as Secondary) (Strodl & Noller, 2003).

Since our interest lay in the behavior of avoidantly attached individuals, we combined "Discomfort with Closeness Scale" and "Relationships as Secondary" scale into a composite measure of avoidant attachment, which we called Avoidance. We formed two groups, High Avoidance and Low Avoidance, by splitting the participants at the median on the Avoidance measure.

(2) *Emotion Checklist*. We constructed an Emotion Checklist to include 10 emotions: sadness, anxiety, happiness, boredom, anger, fearfulness, contentment, excitement, unsettledness, and awe. Participants were asked to indicate, on an 11-point scale (0 = "The

¹ The participants and procedures of data collection in this study were the same as those of a previously reported study "On being moved by art: How reading fiction transforms the self" by Djikic, Oatley, Zoeterman & Peterson, in press in *Creativity Research Journal*. We collected a good deal of data from these participants, for a number of purposes. The data and analyses presented here are separate from those previously reported.

least intensity I've ever experienced", 10 = "The most intensity I've ever experienced"), how much they felt each emotion at that moment. The emotions were selected for their relevance to the story.

(3) *Manipulation check.* Following their reading of the text, we asked our participants to rate (on a Likert scale from 0 = "Not at all" to 5 = "Extremely"), the text they had just read first on how artistic it was, and second on how interesting it was. The question about how artistic the text was checked whether participants found the Art condition more literary than the Control condition, since otherwise we could make no claims with regards to impact of Art versus Control conditions. At the same time, we worked to make both texts equally interesting, otherwise any effect we found might be the result of interest level, rather than of the experimental manipulation.

2.3.3. Dependent measure

The hypothesis was a general one—that exposure to the experimental condition would prompt a significantly greater change in emotions among the more avoidantly attached individuals than among less-avoidant individuals. Although avoidantly attached people tend to avoid negative emotions, particularly sadness, anxiety, and anger (Feeney, 1995), we made no *a priori* assumptions about which emotions would change or in what direction. It is our hypothesis that art, unlike propaganda or some forms of genre entertainment, allows individuals to explore their own emotional landscape, and that it is this very idiosyncratic exploration that enables art to be moving to its readers, viewers, and listeners.

The dependant variable we constructed was a composite index of Emotion Change that included changes in all ten emotions, in any direction. Time 2 emotions were regressed on Time 1 emotions, for each of the ten emotions.² The absolute values of standardized residuals were then summed. The composite index, therefore, represents an Emotion Change measure for each individual. This allowed us to prevent potentially inflating *p*-values to an exaggerated degree due to a large number of emotions. An added benefit was the increased sensitivity of the measure.

It is important to remember that our Emotion Change index captures emotional exploration and change, rather than an intensification of emotion. For example, a story could make a person experience a decrease in happiness, an increase in anxiety, and no change in anger. Our measure would capture both changes, and sum them, rather than pit increases against decreases, and thus obscure change in emotion and take it for noise. The movement and direction of change of individual emotions were examined *post-hoc*, as a part of an exploratory rather than a hypothesis testing analysis.

3. Results

Over all participants, the means and standard deviations of Avoidance and Emotion Change were 3.19 (.66) and .77 (.32), respectively. A *t*-test showed that the experimental manipulation worked: participants found the short story more artistic than the comparison text ($M_{\text{art}} = 2.86$ versus $M_{\text{control}} = 2.15$, $t(164) = -4.29$, $p < .001$); however, there was no significant difference between Chekhov's story and the comparison text in terms of participants' interest in reading them, $t(164) = -.50$, $p = .62$.

The main prediction was that there would be an interaction between Avoidance and Condition. A linear regression analysis on summed absolute residual emotion scores at Time 2 (controlled for these scores at Time 1) showed this interaction to be significant, $F(2,163) = 3.62$, $p < .05$, $R^2 = .043$. The result is presented in Fig. 1.

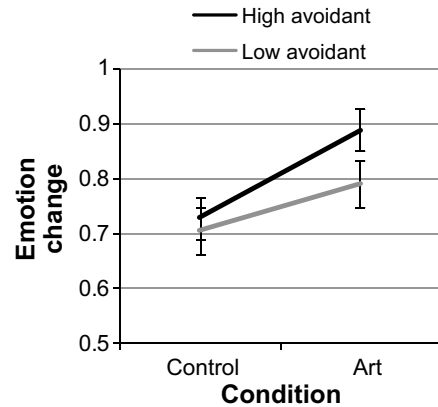


Fig. 1. Mean Emotion Change for High and Low Avoidant individuals across Art and Control conditions.

High Avoidant individuals experienced significantly greater Emotion Change in the Art condition than in the Control condition, $t(79) = -2.14$, $p < .05$, while this was not the case for the Low Avoidant participants $t(83) = -1.29$, $p = .20$.

Exploratory analysis of individual emotions in the two conditions showed that in the Control condition, change in the emotion of happiness was significantly different for High and Low Avoidant individuals, $t(84) = 2.22$, $p < .05$, such that the High Avoidant participants showed an increase in self-reported happiness, while the Low Avoidant individuals showed a decrease. In the Art condition there were no significant differences across emotions between High and Low Avoidance individuals.

4. Discussion

Avoidantly attached people tend to avoid the experience of emotions, especially negative emotions, and this gives rise to what appears to be a paradox—a subjective self-report of reduced emotionality accompanied by physiological measures that imply increased emotionality (Diamond et al., 2006; Zilber et al., 2007). In the present paper, we proposed that art, in this case literature, might circumvent the habitual defenses that result in these effects. The hypothesis that, for High Avoidant participants, exposure to a short story versus a documentary text would yield changes in emotion greater than those observed in Low Avoidance participants was confirmed. The text read by the Control group copied the content and pace of the short story, but it lacked Chekhov's literary genius. The literary qualities of Chekhov's story contributed to greater Emotion Change in the High Avoidance individuals.

Important to our conceptualization of change was the assumption that art does not promote change of emotion in any prescribed direction. This hypothesis derives from the proposal of Collingwood (1938), in which he distinguishes the technical, in which one has a pre-specified end in mind (if one is a furniture maker, for instance a particular kind of chair), from the artistic, which includes expressions of emotions that are not yet fully understood, in languages such as prose, music, painting etc. This hypothesis also distinguishes literary art from documentary and scientific texts in which the intention is to lead a reader towards a particular conclusion, and from advertising and propaganda texts in which the intention is to imbue a particular attitude in the reader. The intention of art is not to convince, to present an argument, or to persuade. What seems essential is exploration of emotional complexity (Djikic et al., 2006). Individuals are more likely respond to art in idiosyncratic and complex ways, than in any particular designed direction.

² Regression residuals were used to prevent regression to the mean that accompanies the use of difference scores.

An interesting result of our exploratory analysis was the significant difference in happiness between High and Low Avoidance participants in the Control condition of reading the documentary text. With this text, self-reported happiness of High Avoidance participants increased while that of Low Avoidance participants decreased. One might make a *post-hoc* hypothesis that painful and complex attachment issues presented in the documentary text functioned as an argument—“close personal relationships are trouble and bad for you”—self-confirming (and thus making happy) the avoidant stance of High Avoidance participants. The same hypothesis would predict that Low Avoidance participants would become somewhat sad at such a conclusion. By contrast with the comparison text, the literary quality of Chekhov’s short story affected participants idiosyncratically, perhaps precisely because it did not function as an argument but as a form of emotional exploration.

The results of this experiment propose more questions than they answer. Do the changes we have observed in a laboratory have more than a temporary effect on habitual avoidance of emotion in avoidantly attached individuals? Would other stories, with less-prominent attachment themes, produce a similar effect? Would a symphony or a sculpture or a dance fare as well as literature in circumventing defenses? While the answers to these questions must await further research, one cannot but be excited by the possibility of finding, in our cultural heritage, the means of reaching out to those who are hard to reach.

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