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What is This?
Tragedy Viewers Count Their Blessings: Feeling Low on Fiction Leads to Feeling High on Life

Silvia Knobloch-Westerwick, Yuan Gong, Holly Hagner, and Laura Kerbeykian

Abstract
Hypotheses were derived from downward comparison and attachment theory to address the tragedy paradox: more sadness produces greater tragedy enjoyment. Participants \((n = 361)\) watched a tragedy and reported affect, enjoyment, life happiness, and spontaneous thoughts (categorized into self- vs. socio-focused). Greater sadness led to greater enjoyment, mediated by life reflection; specifically, both self- and socio-focused thoughts mediated this sadness impact on tragedy enjoyment. Furthermore, more sadness led to greater life happiness increase during exposure, mediated by socio-focused thoughts only. No parallel effects emerged for positive affect. The present findings suggest that tragedy-induced sadness instigates (a) life reflection that increases tragedy enjoyment as well as (b) specifically thoughts about close relationships that, in turn, raise life happiness, which (c) subsequently increases tragedy enjoyment further.

Keywords
affect, attachment theory, happiness, social comparison, tragedy

Tragedy has been a popular entertainment genre since Ancient Greece (Aristotle, 350 B.C.E./1898). In the motion pictures era, several of the most successful movies are tragedies—*Gone With the Wind* (1939), *Doctor Zhivago* (1965), and *Titanic* (1997) are all among the all-time top 10 (in the United States, adjusted for inflation; Box Office Mojo, n.d.). The scarce empirical research that aimed to explain why people enjoy tragedies has consistently yielded that greater sadness from tragedy exposure leads to greater enjoyment.

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Earlier work (Mills, 1993; Oliver, 1993) has drawn on attitudinal explanations for this counterintuitive phenomenon, suggesting that recipients who value sympathy with others’ misery as a positive trait enjoy being sad on others’ behalf because it sheds positive light on them. More recently, Oliver (2008) suggested eudaimonia as the motivation for attending tragedy and defined it as seeking “greater insight, self reflection, or contemplations of poignancy or meaningfulness (e.g., what makes life valuable)” (p. 42). Her related research focused on the blend of emotions said to occur in eudaimonic experiences. The present work aims to specify how sadness from tragedy exposure can lead to enjoyment through evoking reflections upon one’s own life. Moreover, we examined how such reflection affects life happiness.

The Tragedy Paradox

In the limited empirical research at hand, several empirical investigations of tragedy have found that greater sadness and distress during exposure is linked to greater tragedy enjoyment (e.g., de Wied, Zillmann, & Ordman, 1994; Oliver, 1993). These prior findings lead to the first hypothesis, aiming to replicate this pattern.

Hypothesis 1 (H1): The more sadness is induced by tragedy exposure, the greater is the tragedy enjoyment.

Oliver (2008) argued that greater sadness leading to greater enjoyment and preference only seems paradoxical if media users are conceptualized as driven by hedonistic motivations. Broader notions of well-being go back to Aristotle’s idea on eudaimonia: living a “meaningful” life in congruence with personal values, rather than pursuing short-lived pleasure. Drawing on this notion of happiness, portrayals of social virtues such as altruism and social bonding despite most severe agony and suffering, commonly found in tragedy, should be enjoyable for those who value such behavior. Oliver (2008) referred to recent psychological work regarding this distinction between hedonism and eudaimonia by Waterman (1993) and Ryan and Deci (2001). Along these lines, it is to be expected that reflection upon one’s own life mediates the connection between sadness and tragedy enjoyment, leading to the second hypothesis.

Hypothesis 2 (H2): The effect suggested in H1 is mediated by viewers’ reflection on their own lives induced by the tragedy.

As Oliver (2008) called for greater explication of eudaimonic experiences during media use, the present work aims to specify such processes by drawing on the difference between self- and socio-focused responses to fiction (Bosshart & Macconi, 1998; Cupchik, Oatley, & Vorderer, 1998; Vorderer, 2001). For the former, we build on notions suggested by Mares and Cantor (1992), Zillmann (1998), Knobloch, Weisbach, and Zillmann (2004) and Ahn (2009) with regard to downward comparison. Possibly, by comparing one’s own life situation with the deplorable circumstances depicted in media entertainment, self-enhancement along the lines of downward comparison and contrasting (Wills, 1981) sets
in and leads to greater enjoyment. The more negative viewers feel about the deplorable fictitious fates, the better they might feel about how they have been faring themselves—as a result of self-enhancing thoughts on downward comparisons, similar to what psychologists have demonstrated for comparison with real others (Smith, Diener, & Wedell, 1989). Being confronted with fictional others’ unfortunate life courses and early death, as depicted in many tragedies, is thus thought to foster reflections on one’s own life in the sense of eudaimonia, even if the comparison with others’ lives is not explicit.

**Hypothesis 2a (H2a):** The effect suggested in H1 is mediated by self-focused thoughts about one’s own life situation.

Speaking to socio-focused responses, another possibility is that the drama form of tragedy in particular induces compassionate responses and triggers feelings of relatedness with others (Ryan & Deci, 2001). An overarching importance of attachment to close others is suggested by much psychological research (e.g., Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). Comedy, on the other hand, can be thought as the opposite of the spectrum along these lines, as it discourages compassion and encourages viewers to laugh about mishaps that are often extremely unfortunate if not devastating for the affected characters (Zillmann, 2000). It may well be that through observing characters in greatest misery, the induced sadness allows onlookers to bond with the characters more so than through other genres and remind them of their own attachments with close others. After all, many tragedies celebrate the virtues of close relationships such as everlasting romantic attachment or enduring friendship (Zillmann, 1998). This reasoning leads to a complementary specification of H2 as follows.

**Hypothesis 2b (H2b):** The effect suggested in H1 is mediated by socio-focused thoughts about one’s relationships with others.

**Tragedy and Outlook on Life**

To elaborate on the eudaimonic perspective, however, implications of tragedy exposure for personal outlook on one’s personal life needs to be considered. If Oliver’s (2008) argument regarding eudaimonia holds up, then the sadness from tragedy viewing should not only affect reflection upon one’s own life and subsequently enjoyment, it should also influence evaluation of one’s life. This consideration leads to the third hypothesis. The fourth hypothesis, however, pertains to the concept of eudaimonia more specifically, as sadness is suggested to induce the life happiness increase through reflection upon life.

**Hypothesis 3 (H3):** Exposure to tragedy increases life happiness (short term).

**Hypothesis 4 (H4):** The increase of life happiness suggested in H3 originates in tragedy-induced sadness and is mediated by viewers’ reflection on their own lives.

But how plausible is the idea that one or two hours of exposure to a Hollywood product might alter how individuals assess their own lives? Downward comparison theory (Wills,
suggested that comparing oneself with others in deplorable circumstances has self-enhancing effects. Along these lines, Wheeler and Miyake (1992) found that comparing oneself with others that were worse off increased subjective well-being. Diener, Suh, Lucas, and Smith (1999) concluded it is no longer in question that comparisons with others can affect subjective well-being, at least in the short run. This reasoning leads to the following specification of H4.

Hypothesis 4a (H4a): The increase of life happiness suggested in H3 originates in tragedy-induced sadness and is mediated by self-focused thoughts about one’s own life situation.

At this point, we would like to propose another rationale for a positive tragedy impact on life happiness: tragedy renders important and valued aspects of one’s own life salient. More specifically, the common celebration of lasting close relationships in tragedies (e.g., Zillmann, 1998) may induce thoughts about one’s own close relationships. If this is the case, then a positive impact of sadness from tragedy exposure on life happiness is highly plausible, given that close relationships are at the heart of personal well-being. Plenty psychological research has shown relationships in the domains of family, romance, and friendship to account for much life satisfaction and well-being (Bowling, 1995; Myers, 2000; Myers & Diener, 1995). Merely thinking of those close relationships bolsters stress on a physiological level (Cryanowski, Hofkens, Swartz, & Gianaros, 2011). Hence, the following specification of H4 pertains to an impact of tragedy-induced sadness on life happiness, mediated by thoughts on close relationships.

Hypothesis 4b (H4b): The increase of life happiness suggested in H3 originates in tragedy-induced sadness and is mediated by socio-focused thoughts about one’s relationships with others.

Ultimately, the idea of eudemonia as explanation for tragedy enjoyment implies that the tragedy-induced sadness results in reflection on one’s own life circumstances, in turn causing a change in life happiness, which subsequently impacts the tragedy enjoyment. This multiple-step mediation process is outlined in H5:

Hypothesis 5 (H5): Tragedy-induced sadness instigates (a) self-focused thoughts about one’s own life situation and (b) socio-focused thoughts about one’s relationships with others, which in turn increase life happiness and subsequently tragedy enjoyment.

Method

Overview

An abridged version of the movie Atonement (Bevan, Fellner, Webster, & Wright, 2007) was shown to 361 participants, embedded in a computerized questionnaire. Before and
after exposure, life happiness for different life domains, among other recipient characteristics as well as distracter questions, was ascertained. Right before the movie, participants reported general movie genre preferences. Finally, participants indicated their movie enjoyment and responded to an open-ended question.

**Respondents**

The sample consisted of 361 undergraduate students (211 females, 150 males) who were enrolled in communication classes at a large Midwestern university. They received extra credit for participation. The ethnicity of participants was distributed as follows: 77.6% White, 9.7% African American, 7.6% Asian, 2.5% Hispanic, other 3.3%. The average age was 20.51 (SD = 2.48). Two thirds (65.4%) had not seen the movie before, while 17.2% had seen the whole movie, 6.6% had seen part of the movie, and 10.8% had seen a preview of the movie.

**Stimulus Material**

The stimulus was an abridged version of the movie “Atonement” (2007). The original movie was 130 minutes long; the shortened stimulus lasted approximately 30 minutes. This British movie depicts how a teenaged girl, Briony, accuses her sister’s lover of a rape that he did not commit, which permanently changes the lives of all involved. Briony has a secret crush on the housekeeper’s son, Robbie, but finds out that he is actually in love with her older sister Cecilia. Several scenes depict the developing romance and passion between Robbie and Cecilia. A rape occurs at the family’s estate, and Briony accuses Robbie of the crime. Despite the scant evidence, based on Briony’s testimony, Robbie is found guilty of the crime and sent off to war. Cecelia and Robbie are thus separated for good and both die as casualties of the war. Briony, who becomes a novelist, is haunted by guilt for the rest of her life.1

**Procedure**

Participants were recruited from introductory communication classes to sign up for a study entitled “Movie Enjoyment.” The sessions were conducted in a lab with six computers with headphones and partitions. Upon arrival, participants were greeted by a researcher and assigned to a computer. They were told that the session consisted of two parts. During the first part, a number of measures were presented, including life happiness, genre preferences, and demographics. Then participants wore a headset and watched their version of the movie in a semiprivate cubicle. The movie was introduced as an Oscar Winner and the following introduction was presented:

In England in 1935, 13-year-old Briony Tallis lives on her family’s country estate with her mother and her sister, Cecilia. Cecilia is home for the summer from Cambridge where she had been studying with the housekeeper’s son, Robbie. She and Robbie have an uncertain relationship; neither is willing to act on it but a certain
romantic chemistry exists between them. Briony also has a secret crush on Robbie. The Tallises are being visited by young relatives—the twins Pierrot and Jackson and their 15-year-old sister, Lola, whose parents are in the process of divorcing. Leon Tallis brings his friend Paul for dinner. While he tries to amuse Pierrot and Jackson, Paul and Lola flirt.

With that introduction, participants were able to follow the rest of the storyline from the stimulus. Also, three pauses were embedded into the stimulus movie. At each pause, participants indicated their positive and negative emotional state, which was repeated after the ending. Finally, participants were asked if they had seen the movie before and asked to write about how the movie had led them to reflect on themselves, their goals, their relationships, and life in general.

Measures Based on Ratings

Pre- and postexposure life happiness. Life happiness was measured with the following questions: “How happy are you with how your life is going currently?” “How happy are you with how your life has been going so far?” “How happy are you with your life prospects?” “How happy are you with the amount of control you have over your life?” “How happy are you with your social relationships?” “How happy are you with your romantic relationship status?” All the responses were based on an 11-point scale ranging from 0 (not at all happy) to 10 (extremely happy). After the movie exposure, these questions were asked again as postmeasures. Based on the life happiness questions, average scores were computed to represent preexposure and postexposure life happiness. Descriptive statistics are reported in Table 1.

General affect and sadness. Affect was measured at pre- and posttest and at three pauses built into the stimulus. The affect items were adopted from Oliver (1993). Drawing on the Evaluative Space Model (Cacioppo & Berntson, 1994; discussed for the media context by Bolls, 2010; Lang, Potter, & Bolls, 2009), both positive and negative affect were measured, with the latter being equivalent to our notion of sadness. Positive affect was assessed using three items, happy, upbeat, and cheerful, which were rated on an 11-point scale (0 = not at all, 10 = very much). Likewise, negative affect (sadness) was measured using sad, gloomy, and blue. Only three items were used for each affect dimension to avoid fatigue because participants had to respond to them five times, so that affective changes could be captured.

The items “happy, upbeat, cheerful” on the one hand and “sad, gloomy, blue, tense” on the other hand were condensed into average scores to represent positive and negative affect before and after exposure. Thus only the first and the last affect measurements were used to calculate affect change by computing differences. Descriptive statistics are reported in Table 1.

Enjoyment. After movie exposure, participants completed a 21-item measure concerning their enjoyment of the movie they had watched (see appendix). The items were based on and extended from the tragedy enjoyment measures developed by Mills (1993). The
subjects were asked to assess whether each of the statement applied to the movie stimulus on an 11-point scale ranging from 0 (not at all) to 10 (very much).

At the time this scale (as well as similar others) was developed, eudaimonia aspects were not conceptualized as a specific facet of movie appreciation, which may have contributed to the impression that greater sadness leads to better tragedy “enjoyment,” even though this increase may have resulted from the eudaimonia-related items. To address this concern, we aimed to parse out eudaimopnia-related items in the following preliminary analysis.

The movie enjoyment items were subjected to a factor analysis (principal component, varimax rotation) that yielded three factions, explaining 72% of the variance. The first factor explained 59% and consisted of the eight items “How good of a movie was this?” “The movie was enjoyable”; “The movie was meaningful”; “How likely would you be to recommend the movie to a friend?” “The movie was exciting”; “This movie was entertaining”; “This movie was memorable”; and “This movie was impressive.” (factor loadings ranging between .71 and .85). The second factor accounted for 7% and pertained to the items “This movie made me reflect on my own life and values”; “This movie contributed to my personal growth”; and “This movie made me think about the purpose of my life.” (factor loading .85). Finally, the third factor explained 6% and consisted of the item “The movie was depressing.” The remaining items showed considerable loadings on other factors (> .40) and were not considered subsequently.

| Table 1. Descriptive Statistics. |
| Measure | M  | SD  | Cronbach’s α |
| Preexposure positive affect | 4.72 | 1.25 | .89 |
| Postexposure positive affect | 2.87 | 1.48 | .91 |
| Positive affect change | −1.85 | 1.69 | |
| Preexposure negative affect | 2.26 | 1.29 | .85 |
| Postexposure negative affect | 3.97 | 1.63 | .88 |
| Negative affect change | 1.71 | 1.93 | |
| Preexposure life happiness | 8.05 | 1.48 | .79 |
| Postexposure life happiness | 8.17 | 1.57 | .84 |
| Life happiness change | 0.12 | 0.71 | |
| Tragedy enjoyment | 7.20 | 2.19 | .95 |
| Life reflection | 5.37 | 2.54 | .88 |

| Thought categories coded (dichotomous) | % |
| Downward comparison | 33 |
| Gratitude | 18 |
| Life goals | 64 |
| Real others | 17 |
| Moral of love | 25 |

| Sum indices of Thoughts | Sum | SD |
| Self-focused thoughts | 1.15 | 0.98 |
| Socio-focused thoughts | 0.42 | 0.65 |
Thus a new variable *tragedy enjoyment* was generated based on the mean score of the items loading on the first factor. The items loading on the second factor were condensed as mean scores to generate the variable *life reflection*. Descriptive statistics are reported in Table 1.

**Measures Based on Coding**

An open-ended question prompted participants to write about how the movie had led them to reflect on themselves, their goals, their relationships, and life in general. On average, they typed 216 (SD = 169) characters and 50 (SD = 43) words. Responses were coded by three trained coders. Ten percent of the responses were randomly selected for an intercoder reliability test.

**Downward comparisons.** Whether the participants engaged in any downward comparison process during movie exposure was determined by whether they explicitly compared themselves with the movie characters in their responses. Those who expressed their comparison experience were coded as “1” and the other participants were coded as “0”. Examples for indications of downward comparisons include “compared to the characters, I feel better” or “my life is not as bad as they are in the movie”. Krippendorff’s alpha for this variable was .646. The following quote illustrates this concept: “it is hard to see it from the point-of-view of Briony because I could never see myself doing something so horrible.”

**Gratitude.** Similarly, *gratitude* captured whether or not the participants indicated they learned from the movie that they should appreciate their life in general (Krippendorff’s α = .735). The following four examples are quotes from different participants: “The movie definitely made me appreciate what I have in life”; “It also makes me realize how blessed I am to have a life that is going great”; “The movie will make you appreciate what you have and how quickly it can be taken away”; “It makes me reflect on how to not take life for granted.”

**Life goals.** For this dichotomous variable (Krippendorff’s α = .853), participants who reflected on their own life and situations from the characters’ situations in the movie were coded as “1”. Examples are provided with the following three quotes: “the movie makes me think about what has been going through my mind a lot lately, and that is what the purpose of life is. What I want to accomplish with my time.” “The movie drove me to think about how these characters never gave up hope when they knew they found something great, relating that idea to life makes me think about my goals.” “This film has led me to reflect on the meaning of life and how although we have long term goals in our lives that we may not reach them. The thought of not meeting my goals does not sit well with me however i took in from this film that i have to live with it along with regrets from the past.”

**Real others.** This variable (Krippendorff’s α = 1.00) reflects whether or not participants mentioned any real individuals in their life such as family members, romantic partners, and friends. Those who referred to others, regardless of frequency, were coded as “1,” while those who did not mention any other person were coded “0”. For example, 3 participants mentioned “This movie made me think of my relationship with my boyfriend a lot.” “this makes me think about the people that I love and that I should spend as much time as possible with them.” “I also feel that I am lucky to have such a strong relationship with my family and friends.”
Moral of love. This dichotomous variable, with a Krippendorff’s alpha score of .66, assessed whether participants pointed out that they realized the value of love based on the movie. The four following quotes from different participants illustrate this notion:

The movie made me think about how lucky I will be once I find someone worth that kind of love and commitment. It also made me hope to have a connection like the two main characters did that could overcome distance and any difficulty in a romantic relationship, even war and false accusations.

The lost love is very moving, waiting your whole life for someone you feel was made for you and never having that love fulfilled; makes me wonder if I’m wasting my time on all the wrong guys and if I will ever be ever to truely love someone that deeply that I would wait for them an eternity. I want to live my life to the fullest and this movie has made me think a lot.

“this movie demonstrated that true love does exist and when you find it, it is so powerful that you will go to the ends of the earth to hold onto it.”

“I’m worried I’ll never be able to find true happiness with the person I love.”

Condensing coding-based measures. A factor analysis (principal component, varimax rotation) examined the five coding-based measures that had been extracted from responses to an open-ended question how the movie had led participants to reflect on themselves, their goals, their relationships and life in general. It yielded two factors, the first pertaining to downward comparison (.84), gratitude (.71), and life goals (.61), and the second to real others (.80), and moral of love (.73). Based on these findings, two new variables were generated based on average scores, labeled self-focused thoughts for the items loading on the first factor and socio-focused thoughts for the items loading on the second factor. A relatively low correlation between these two dimensions (r = .24, p < .001) shows that they were distinct from each other. Descriptive statistics are reported in Table 1; Cronbach’s alpha was not computed because included variables were dichotomous. While factor analysis of dichotomous variables can be justified (Kim & Mueller, 1978), we used this approach here for heuristic purposes and examined whether specific original variables were particularly influential for the overall results.

Results

Impact of Sadness Increase on Tragedy Enjoyment

H1 and H2 were tested simultaneously through a mediation analysis with bootstrapping (Preacher & Hayes, 2008) in which the induced sadness as negative affect change (standardized) served as independent variable, life reflection served as mediator, and tragedy enjoyment was the dependent variable (see Figure 1). Greater negative affect change led more life reflection (coefficient = .43, p = .001). This life reflection, in turn, increased
tragedy enjoyment (coefficient = .50, \( p < .001 \)). The total effect of negative affect change on tragedy enjoyment was significant (coefficient = .71, \( p < .001 \), with a significant direct effect (coefficient = .50, \( p < .001 \)). The analysis revealed, with 95% confidence, that the indirect effect of negative affect change on tragedy enjoyment through life reflection was significant, with a point estimate of .211 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .076 to .373. Thus both H1 and H2 were supported.3

To address H2a/b and disentangle further whether particular kinds of reflection were particularly important for tragedy enjoyment, we conducted another mediation analysis. While negative affect change was again the independent variable, instead of life reflection as mediator self-focused thoughts and socio-focused thoughts were used as two mediators (see Figure 1). Greater negative affect change led more self-focused thoughts (coefficient = .21, \( p < .001 \)) and more socio-focused thoughts (coefficient = .09, \( p = .008 \)). Both the self-focused thoughts (coefficient = .24, \( p = .041 \)) and the socio-focused thoughts (coefficient = .39, \( p = .028 \)) increased the tragedy enjoyment. The total effect of negative affect change on tragedy enjoyment was, as reported above, significant (coefficient = .71, \( p < .001 \)), while the direct effect now had a coefficient of .63 (\( p < .001 \)). The analysis revealed, with 95% confidence, that the indirect effects of negative affect change on tragedy enjoyment were significant for both mediators, with a point estimate of .049 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .010 to .113 for self-focused thoughts and a point estimate of .034 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .008 to .079 for socio-focused thoughts. Thus both H2a and H2b were supported.4

Furthermore, to gain more insight into the processes suggested in H2a/b, we explored if any specific thoughts were particularly influential for these indirect impacts of negative affect change on tragedy enjoyment and utilized all five thought categories as mediators. Greater negative affect change made all these thoughts more likely, with coefficients ranging between .04 and .09 (\( p < .05 \)). But only thoughts on life goals (coefficient = .84, \( p < .001 \)) and moral of love (coefficient = .52, \( p = .047 \)) instigated, in turn, greater tragedy enjoyment. The total effect of negative affect change on tragedy enjoyment was, as reported above, significant (coefficient = .71, \( p < .001 \)), while the direct effect now had a coefficient of .63 (\( p < .001 \)). The analysis revealed, with 95% confidence, that the indirect effects of negative affect change on tragedy enjoyment were significant for two types of mediating thoughts, with a point estimate of .073 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .025 to .150 for life goals thoughts and a point estimate of .022 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .003 to .060 for moral of love thoughts.

To ensure that these patterns did not result from general affective engagement in the movie and were specific for negative affect, parallel analyses were run with positive affect change instead of negative affect change. While positive affect change had a direct influence on tragedy enjoyment (coefficient = -.25, \( p = .030 \)), no indirect effects through life reflection, self-focused thoughts or socio-focused thoughts emerged (ns). The change in positive affect also did not induce more self-focused thoughts or socio-focused thoughts or more thoughts of any of the more specific categories.
Figure 1. Impact of tragedy-induced sadness on tragedy enjoyment (H1) and its mediation via life reflection (H4 and H4a/b).

Note. One asterisk indicates $p < .05$, two indicate $p < .01$, three indicate $p < .001$. 

Negative Affect Increase $\rightarrow$ Life Reflection $\rightarrow$ Tragedy Enjoyment
$$.211 (.073), 95\% \text{ CI} [.076, .373]$$

Negative Affect Increase $\rightarrow$ Self-Focused Thoughts $\rightarrow$ Tragedy Enjoyment
$$.049 (.026), 95\% \text{ CI} [.010, .113]$$

Negative Affect Increase $\rightarrow$ Socio-Focused Thoughts $\rightarrow$ Tragedy Enjoyment
$$.034 (.017), 95\% \text{ CI} [.008, .079]$$
Impacts of Tragedy Exposure and Induced Sadness on Life Happiness

A simple paired t test with the pre- and postexposure life happiness showed that the tragedy exposure led to an increase of life happiness, $t(361) = -3.12, p = .002$. This finding supports H3.

H4 was tested through a mediation analysis (Preacher & Hayes, 2008), in which negative affect change (standardized) served as independent variable, life reflection served as mediator, and life happiness change was the dependent variable. Yet no effects on life happiness change emerged as significant in this analysis.

To address H4a/b regarding origins of life happiness change, the above mentioned mediation analysis model was changed to use self-focused thoughts and socio-focused thoughts as two mediators, instead of life reflection as mediator. The results are illustrated in Figure 2. As reported above, greater negative affect change led more self-focused thoughts and more socio-focused thoughts. In turn, socio-focused thoughts (coefficient = .15, $p = .017$) increased the life happiness, but self-focused thoughts did not ($p = .993$). The total effect of negative affect change on life happiness change was not significant ($p = .893$; current methodological work on mediation analysis does not consider a significant effect of the independent variable on the dependent variable a precondition for mediation effects; see Hayes, 2009). The analysis revealed, with 95% confidence, that the indirect effect of negative affect change on life happiness change through socio-focused thoughts was significant with a point estimate of .013 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .002 to .035. No indirect effect of self-focused thoughts emerged ($ns$). Thus H4b was supported while H4a received no support.

Furthermore, we explored if any specific thoughts were particularly influential for these indirect impacts of negative affect change on life happiness change and utilized all five thought categories as mediators. As reported above, greater negative affect change made all these thoughts more likely. But only thoughts on real others yielded a significant impact on life happiness change (coefficient = .295, $p = .006$). Again, neither the total nor the direct effect of negative affect change on life happiness change was significant ($p > .587$). However, an indirect effect of negative affect change on life happiness via thoughts about real others was significant, with 95% confidence, with a point estimate of .013 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .003 to .033. No other indirect effects were significant.

To ensure that these patterns did not result from general affective engagement in the movie and were specific for negative affect, parallel analyses were run with positive affect change instead of negative affect change. However, no significant impacts of positive affect change emerged.

Tragedy-Induced Sadness’ Impact on Tragedy Enjoyment via Life Reflection and Life Happiness

H5 was tested with multiple-step mediation analysis with bootstrapping (Hayes, Preacher, & Myers, 2010). As no indirect effect in line with H4a emerged for self-focused thoughts, only the results regarding H4b for socio-focused thoughts are illustrated in Figure 3.
As noted above, greater negative affect increase led to more self-focused thoughts, but it naturally did not have a direct positive effect on life happiness change. Yet more self-focused thoughts increased life happiness, as reported above. Both more self-focused thoughts and greater life happiness increase resulted in greater tragedy enjoyment. The effect with great relevance for the eudaimonia perspective to the appeal of tragedy was significant, as greater life happiness change produced greater tragedy enjoyment (coefficient = .35, p = .022). Compared to the total effect of negative affect change on tragedy enjoyment (coefficient = .71, p < .001), the direct effect in this model was .68 (p < .001). Indirect effects were significant for the path from negative affect increase to socio-focused thoughts to tragedy enjoyment, with a point estimate of .036 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .007 to .070, and for the path from negative affect increase to socio-focused thoughts to life happiness change to tragedy enjoyment, with a point estimate of .005 and a 95% BCa (bias-corrected and accelerated) bootstrap confidence interval of .003 to .014.

To explore this multiple-step mediation process further, we utilized the specific types of thoughts as first-step mediator; only thoughts on real others yielded a significant indirect effect pattern. Greater negative affect change made thoughts of real others more likely, which in turn increased life happiness more and subsequently fostered tragedy enjoyment. The point estimate for this indirect effect was .005, and the 95% BCa (bias-corrected and accelerated) bootstrap confidence interval ranged from .003 to .015.
Discussion

The tragedy genre has long intrigued philosophers (see reviews by Schmidt, 2001, and Felski, 2008). Recent empirical entertainment research on this genre encountered the so-called tragedy paradox—more sadness resulting from tragedy leads to greater enjoyment. The same pattern emerged in the present study, supporting H1. Furthermore, the present investigation built on Oliver’s (2008) suggestion that viewers may derive gratification from tragedy exposure through reflection upon their life and its meaningfulness. The resulting hypothesis that more sadness leads to greater enjoyment through more life reflection (H2) was supported as well. Drawing on the concepts of downward comparison and close attachments as crucial for psychological functioning, we aimed to detail ways of reflecting upon one’s life utilizing self- versus socio-focused thoughts reported after exposure as more specific mediators through which sadness might induce greater enjoyment. The suggested mediation effects indeed occurred for both types of life reflection, supporting H2a/b.

Figure 3. Impact of tragedy-induced sadness on tragedy enjoyment via life reflection and life happiness (H5).
Note. One asterisk indicates \( p < .05 \), two indicate \( p < .01 \), three indicate \( p < .001 \).
To take the eudaimonia perspective to tragedy enjoyment one step further, we examined how life happiness was influenced by tragedy exposure and found that it in fact increased during the viewing period, supporting H3. This increase, however, was not mediated by general life reflection. When examining the two types of life reflection, self- versus socio-focused thoughts, only socio-focused thoughts were found to have a significant mediation effect on life happiness increase (supporting H4b but not H4a). Subsequent analyses suggest that the sadness from observing the dramatic fate of unfulfilled love fosters thoughts about one’s own close relationships that, in turn, raise life happiness. A multiple-step mediation analysis demonstrated that this life happiness increase also fosters tragedy enjoyment—an impact that originates in thoughts about close relationships, triggered by the tragedy-induced sadness (supporting H5).

The present work has several important implications. Individuals may find experiencing sadness from tragedy worthwhile and enjoyable because this affect facilitates reflecting upon one’s own life. Both the plausibly self-enhancing comparisons with the tragedy characters in most deplorable circumstances and being reminded of one’s valued relationships contributes to the enjoyment of tragedy. More interestingly, the sadness derived from viewing tragedy has an uplifting effect on personal life happiness. While this impact may not last long, other seemingly more relevant occurrences, such as a winning the lottery, do not lead to lasting improvements of happiness either (Brickman, Coates, & Janoff-Bulman, 1978). On the other hand, fulfilling personal relationships are known to contribute greatly to steady personal happiness (Myers, 2000). This phenomenon aligns well with the present finding: sadness from a tragedy that celebrates the ideal of one and only love in life, even if this relationship could never flourish and the lovers die young and tragically, induces thoughts about one’s own important relationships and as a result enhances personal life happiness and subsequently tragedy enjoyment. It may well be that this priming of personal relationships not only builds on the crucial importance of attachment but also has positive health implications, as close relationships are known to bolster and improve health (e.g., Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Even simply thinking about close others bolsters physiological stress (Cyranowski et al., 2011), which may be one of the positive implications of tragedy viewing.

It is interesting to note that “self-serving” self-focused thoughts such as downward comparisons did not contribute to the life happiness enhancement (for similar findings, see Ahn, 2009). While exposure to sad content such as a documentary about lonely elderly or sad love songs has been explained with social comparison notions (Mares & Cantor, 1992; Knobloch et al., 2004), maybe the important role of empathetic processes during tragedy exposure (Oliver, 1993) counteracts self-enhancement that is generally thought to result from downward comparisons (Wills, 1981). Indeed, the opposite was suggested for comedy (Zillmann, 2000), in which detachment from characters rather than empathetic engagement is encouraged, leading to experiencing characters’ setbacks as enjoyable, likely due to downward comparison processes.

The present work also has several important limitations. The test of H3 was based on only one stimulus movie. Hence, the present support for the hypothesis that exposure to tragedy increases life happiness must be interpreted with caution. It does not seem very
likely, however, that merely sitting in a research lab for about 45 minutes led to the life happiness increase. The impact could be specific to the particular movie utilized in this study, but this movie is prototypical in that it shares many features with many other prominent examples of the tragedy genre—the premature death of young lovers as a topic has been seen in Shakespeare’s classic “Romeo and Juliet” and lingers on in many modern tragedies. While limitations of the research design imply caution for the present test of H3, the support of subsequent specifications of the origins of the hypothesized increase of life happiness from tragedy exposure in H4 and H4a/b lends much credence to the overall notion that tragedy may make people happy.

The nature of happiness has been a matter of debate since Aristotle and other Ancient Greek philosophers that differentiated between hedonic pleasure and pursuing virtue as sources of well-being. Psychological research suggests that close relationships make people happy and fulfilled. Tragedies appear to be an excellent means to reinforcing prosocial values that make these relationships steady and meaningful, as they celebrate enduring love, friendship, and compassion even in ultimate agony and suffering. Perhaps then much of the emotional response is indeed best described with “appreciation,” even though Oliver and Bartsch (2010) used this term to describe responses to dramatic entertainment. They proposed that moving and thought-provoking experiences lead to appreciation as a type of gratification derived from media entertainment. The current work adds to this view the notion that “counting one’s blessing” and gratitude for relationships specifically allow tragedy viewers to appreciate the sad tragedy experience. As shown in psychological research, feelings of gratitude lead to more generally positive affect as well as positive changes in health behaviors and symptoms (see overview by Wood, Froh, & Geraghty, 2010). Habitual viewers of tragedy may have some intuitive understanding of this beneficial impact of tragedy.

But why do we need to get sad to become grateful? Why does it take watching a tragedy to feel gratitude for the people and relationships that make our lives worthwhile? A very viable interpretation is that the general rule that negative affective states trigger more cognitive elaboration (e.g., Bless, Bohner, Schwarz, & Strack, 1990) applies. Sadness induced by tragedy should then also foster the thoughts necessary for feelings of gratitude. Being in a negative affective state may signal the individual that his or her current situation is problematic and requires detailed attention. It may thus induce more elaborate thoughts, which is generally adequate for handling problematic situations but apparently can also lead to “counting one’s blessings” with regard to close relationships. In contrast, being in a positive affective state may signal to the individual that his or her current situation is nonproblematic and may thus induce reliance on less engaged cognitive processing. More generally speaking, individuals generally respond more strongly to negative affect that signals threat and become habituated to positive affect that signals that no attention to threat is needed (Frijda, 1988). This hedonic asymmetry suggests that the human mind was not made for happiness but for survival. Can a more hopeful perspective be offered in light of this stern mold of the mind? Frijda (1988, p. 354) suggested that
Adaptation to satisfaction can be counteracted by constantly being aware of how fortunate one’s condition is [. . .] through recollection and imagination. Enduring happiness seems possible [. . .] it does not come naturally, by itself. It takes effort.

As it stands, tragedies help us in these efforts of “counting one’s blessings” and achieving enduring happiness through meaningful relationships.

Appendix

Movie Evaluation Items

1. How good of a movie was this?
2. This movie was enjoyable.
3. This movie was inspiring.
4. This movie was meaningful.
5. This movie was moving.
6. This movie was entertaining.
7. This movie was thought provoking.
8. This movie was memorable.
9. This movie was unforgettable.
10. This movie was emotionally satisfying.
11. This movie was impressive.
12. How likely would you be to recommend the movie to a friend?
13. This movie was absorbing.
14. This movie was gripping.
15. This movie was depressing.
16. This movie was exciting.
17. This movie made me reflect on my own life and values.
18. This movie touched a vulnerable spot in my emotions.
19. This movie contributed to my personal growth.
20. This movie was deeply touching.
21. This movie made me think about the purpose of my life.

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Notes
1. It should be noted that movie scenes were manipulated in a $2 \times 2$ design to vary levels of excitation (moderate vs. low), which failed to produce a strong impact, and ending transcendence (nontranscendent: lovers’ untimely deaths vs. transcendent: immortal love) of the tragic ending. The impacts of the transcendence manipulation were reflected in different levels of positive affect change (for nontranscendent: $M = -2.42$, $SD = 1.54$, vs. for transcendent $M = -1.24$, $SD = 1.64$; $t(360) = -7.06$, $p < .001$) and negative affect change (for nontranscendent: $M = 2.22$, $SD = 1.99$, vs. for transcendent $M = 1.16$, $SD = 1.71$; $t(360) = 5.44$, $p < .001$). So, simply speaking, participants saw movie endings that induced different levels of sadness and the subsequent impacts of this sadness on enjoyment and life happiness are the focus of the analyses.

2. An ad hoc scale was used, as a literature review yielded that commonly used related measures do not even involve the word “happy.” For instance, the probably most frequently used related scale is the “Satisfaction with Life Scale” by Diener, Emmons, Larson, and Griffin (1985), which includes the following five items:

1. In most ways my life is close to my ideal; 2. The conditions of my life are excellent; 3. I am satisfied with my life; 4. So far I have gotten the important things I want in life; 5. If I could live my life over, I would change almost nothing (Diener et al., 1985, p. 72).

Except Item 3, all SWLS items tap into life circumstances that may be more or less satisfying, but one could be unhappy despite having the allegedly ideal life conditions and all the “important things.” For further information on life satisfaction scales, see Diener (2000), Diener et al. (2010), Eid and Diener (2004), and Ryff (1989). Hence, we chose to create an ad hoc index with five items, with three items using both “happy” and “life” and two more pertaining to happiness with social and romantic relationships. These items relate to important happiness domains, according to the cited literature, such as autonomy, relationships, and optimism. Per suggestion of a reviewer, we ran our analyses using a “happiness” measure based on just the three items that did not mention relationships—the same findings emerged; if anything, the patterns were stronger than for the broader happiness measure based on all five items.

3. When including experimental variations as control variables, the same reported impacts emerged.
4. When including experimental variations as control variables, the same reported impacts emerged.
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References


