# Manner of Death Impacts the Death Effect in Literary Evaluation

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ABSTRACT. The existence of a death effect—that the value of a creative work tends to increase after the creator has died—in literary evaluation was demonstrated. To replicate and extend previous findings, (*N* = 408) university students were asked to imagine being an art collector potentially interested in purchasing a short story. The status of the author varied from still being alive to having died from a car accident, suicide, or heart attack. Consistent with earlier work, students, when informed that the author was dead, offered to pay more money (81% more, on average) to purchase the story relative to students informed that the author died from a car accident. Priming students about death and dying boosted valuations. Unlike earlier work, subjective impressions about the author and the story were not affected by these manipulations. Mortality awareness and the relatability of the manner of death enhanced the desire for a perceived-to-be scarce product, in this case a creative literary work from a dead author.

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# INTRODUCTION

Previous reporting has shown that the value of a creative work tends to increase after the creator has died (Agnello and Pierce 1996; Czujack 1997). Ekelund et al. (2000) demonstrated the existence of this so-called "death effect" by observing a postmortem increase in the value of artwork created by 21 Latin American artists who died between 1977 and 1996. Frick and Knebel (2007) similarly observed an increase in the value of art following the death of the artist. The authors examined auction prices of more than a quarter-million pieces of art from more than 500 artists over a 45-year span. The authors found that the surge in value following death was stronger among more accomplished and popular artists relative to those of less fame, noting that the effect was time limited in that prices tended to return to pre-death levels within about 5 years. Matheson and Baade (2004) reported that the selling price of cards featuring popular baseball players increased in value after the death of the player. Consistent with findings by Frick and Knebel (2007), card price surges were both temporary and most impressive among popular players. Matheson and Baade (2004) proposed a "nostalgia effect" to account for the increased valuation driven by media attention of the players' deaths.

Few may be surprised that the value of art tends to increase following the death of the artist. Still, questions remain about the magnitude and stability of the effect, its longevity, and circumstances when it is most powerful. A better understanding of the factors that motivate purchasing decisions is needed to illuminate how the death of an artist impacts the valuation of art.

## **Availability of Produced Works**

Supply and demand calculations could explain the valuation of works produced by individuals who have died. The value of duplicative art, for example, is tied to the number of pieces produced (Ekelund et al. 2000). Post death, new creations cannot be made, thereby guaranteeing a limited supply of works produced by a given artist. People may intuitively appreciate the effect of an artist's death on limiting future supply, and assume that work by deceased artists will increase in monetary value if there is demand. In other words, the death of an artist may lead to a scarcity bias resulting in increased valuation of the work.

Humans do seem to be attracted to items believed to be scarce, relative to those in greater abundance (Mittone et al. 2005). Possessing scarce resources might promote self-differentiation, enhance



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personal uniqueness, and boost self-esteem (Snyder and Fromkin 1980; Taubman - Ben-Ari and Findler 2003). In a set of experiments, Mittone and Savadori (2009) examined competition for goods after creating perceptions that products were either scarce or in abundance. Subjective evaluations increased when goods were presented as being scarce; however, the perceived monetary worth of objects was not affected by availability. Participants were more attracted to items presented as scarce even though individualized selling prices were similar across the scarce and abundant conditions. The authors suggested that the perceived value and desirability of scarce goods likely stems from competitive pressures leading the consumer to "infer...that the scarce good should possess some inner intangible property" rather than reflecting some form of cold economic calculation about the monetary value of the good (p. 454). Even children show a preference for items perceived to be scarce. Ferera et al. (2020) found that children as young as 5 years old displayed a scarcity bias, long before the ability to comprehend market valuations or understand supply and demand principles. In short, it appears that economic considerations alone do not capture the entirety of the "death effect" associated with the attractiveness and desirability of items created by individuals who have died.

## **Potential Impact of Making Death Salient**

Death anxiety and mortality salience may play a role in product evaluation. Terror management theory (Solomon et al. 1991; Greenberg et al. 1997) asserts that when individuals focus on thoughts of their own death, proximal defenses such as distancing and denial are initially triggered. After a delay or period of distraction, more distal defenses emerge. These include a desire to enhance selfesteem and maintain cultural worldviews. Jessop et al. (2008) (study 1) showed that after reading facts about the dangers of driving, young adults completing word fragments formed more deathrelated words than a control group not exposed to risks associated with car accidents. In addition, increasing mortality salience resulted in greater intentions to drive fast among young males, who equated reckless driving with a boost to self-esteem (Jessop et al. 2008) (study 3).

Making mortality salient can also affect item valuation (Mandel and Heine 1999). Kasser and

Sheldon (2000) instructed students to write an essay focused on death or a neutral topic; the students were then asked to project a future career. Students who wrote about death anticipated earning more money, and being more financially secure in their future relative to those in a neutral (control) condition. Dar-Nimrod (2012) reported that watching televised death scenes increased materialism and enhanced the favorability of commercial products.

# Past Findings and Limitations on the Death Effect in Literary Evaluations

Green and Mohler (2014) assessed the perceived monetary worth of a literary work across students who had been informed that the author was either dead or alive. In both conditions, the volume of works produced by the author was the same, and students assigned to the "author alive" condition were informed that the author did not plan on producing future works. Green and Mohler (2014) found that students assigned greater monetary worth to a literary work when believing that the author of the piece had died. More specifically, when offered the chance to hypothetically purchase the rights to a short story, students informed that the author was dead offered more than 3 times the amount of money to purchase the story than students told that the author had recently moved. Furthermore, the "dead vs. alive" manipulation extended to subjective evaluations of the story and the author. That is, students-when informed that the author had died-reported liking the story and the author more, believed the author to be more famous, and assigned higher quality ratings to the story relative to those informed that the author had moved. Only a few participants polled at the end of the study reported consciously connecting the death of the author to the value placed on the story. Instead, it appeared that the majority of participants were unaware of how the purported death of the author affected estimations of the worth of the literary work. Green and Mohler (2014) suggested that findings might reflect a type of "reverence for the dead" attitude that is observed within many cultures (p. 229).

The manner of death and recency of death may also influence appraisals of worth (Green 2016). Based on evidence that sales increased following the suicide of an artist (Cameron et al. 2005), Lester (2016) investigated whether subjective

ratings varied as a function of how the author died. Lester (2016) presented students with the same short story used by Green and Mohler (2014) ("The Peacelike Mongoose" by James Thurber, 1957) and informed students that the author died from either a heart attack or by suicide. Students' subjective evaluations of the story (e.g., likability of the story and the author) did not differ across these 2 manners of death. Lester did not ask students to ascribe a monetary value to the story. Furthermore, neither of the 2 manners of death investigated by Lester-suicide and heart attack-represented the most likely manner of death among collegeaged students. Motor vehicle crashes are the most prevalent cause of death and injury to adolescents and young adults worldwide (DeJong and Atkin 1995). Within the United States, car accidents are the leading cause of death among 15 to 20-yearolds (Heron 2019). Zhang and Fan (2013) reported that students perceive the risk of death from motor vehicle accidents to be high. Because motor vehicle crashes pose a potent risk of mortality to young adults, college students might provide a higher valuation for a creative work when the author purportedly died from a car accident relative to suicide or heart attack.

# Replicating and Expanding Previous Findings: Relatability of the Death Story

One of the goals of this study was to replicate Green and Mohler's (2014) finding that students' monetary valuation and subjective appraisal of a short story is affected by knowledge that the author is dead. Unique to this study, 3 different descriptions of death were presented to students to determine whether the manner of death affected evaluations. More specifically, some students were informed that the author died from an unintentional car accident, suicide by intentionally crashing his car, or a heart attack. Based on previous work, it was predicted that students informed that the author was dead would offer higher prices, and provide more favorable ratings associated with the story and the author, relative to students informed that the author was alive. In addition, it was anticipated that the manner of death would affect appraisals. Specifically, given that motor vehicle crashes pose a high risk of mortality within college populations (Zhang and Fan 2013), it was predicted that students'

assessments would be strongest when told that the author died from a car accident, relative to dying from suicide or heart attack. Because female college students may have stronger perceptions of mortality risk than male students (Zhang and Fan 2013), gender was included as a separate factor. Across the "author dead" conditions, students were informed that the author died recently (i.e., 2 months ago) or several years ago (i.e., 20 years ago), enabling an exploration of whether recency of death matters. Participants also completed a fear of death scale, an abbreviated scale assessing attitudes about suicide, and questions linking mental illness with creativity. These measures were included to explore whether the death effect might be enhanced by priming students with questions about death and mental illness prior to reading the story. The order of completing these measures and evaluating the story were balanced (i.e., some students completed the scales before, and others after, reading and evaluating the story). Completing these scales before reading the story should enhance mortality salience and intensify the impact of learning that the author of the story is dead on subsequent evaluations.

In sum, the purpose of this study was to examine whether students' purchase price offering would differ across our independent variables of author status (alive; dead by car accident, suicide, or heart attack) and gender. Subjective ratings (e.g., likability of the story) were contrasted across these same variables as well. Separate analyses—conducted among students informed that the author had died-examined whether recency of death, scale completion order, and gender impacted the purchase price offering and subjective ratings. Scale order was included within the analyses of recency of death in order to determine whether priming students about death interacted with knowledge about how long ago the author died. A listing of the independent variables is provided in Table 1.

### **METHODS**

#### Participants

A total of 501 undergraduate students at The Ohio State University at Lima enrolled to participate in this study. Final data analyses were based on N= 408 participants ( $M_{age}$  = 19.17, SD = 2.72) meeting the inclusion criteria. The breakdown of the sample by gender across conditions is listed in Table 2.

#### **Measures and Materials**

Story Prologue. Within an opening paragraph entitled, Information about the author, a short biographical sketch of the author was provided. It started off the same for all students: The author of the story was male. He was born and lived in London. He published two short stories during his life. The remaining biographical information varied across conditions (see below). Students were instructed to carefully read the story ("The Peacelike Mongoose" by James Thurber, 1957) which was presented without its title or name of the author. Including its moral (i.e., Ashes to ashes, and clay to clay, if the enemy doesn't get you your own folks may), the story consisted of 235 words. **Reading Comprehension and Past Knowledge** of the Story. After reading the story, participants answered questions about the author. Students were invited to look back to the narrative if unsure of an answer. The questions were: The author of the story was \_\_\_\_\_ (response options: male or female); The author was born in \_\_\_\_\_ (options: New York, London, or Rome); The author published \_\_\_\_\_ short stories during their life (options: two, ten, fifty); Is the author alive or dead today? (options: alive, dead); Will the author publish more stories in the future? [options: No (he is dead) or No (he has no plans to do so) and Yes (he will or he plans to do so)]. Students informed that the author was dead were also asked: How did the author die? Participants

Table 1Independent variables used to explore the death effect

Author status	Gender	Scales completion order	Manner of death	Recency of death
Alive	M or F	Before or after story	N/A	N/A
Dead by car accident	M or F	Before or after story	Car accident	2 mos. or 20 years ago
Dead by suicide	M or F	Before or after story	Suicide	2 mos. or 20 years ago
Dead by heart attack	M or F	Before or after story	Heart attack	2 mos. or 20 years ago

Status	Manner of death	Recency of death	Female	Male	Total 62	
Alive	N/A	N/A	33	29		
Dead	Car accident	2 months ago	26	25	51	
"	11	20 years ago	33	30	63	
"	"	Total car accident	59	55	114	
Dead	Suicide	2 months ago	27	28	55	
"	"	20 years ago	32	30	62	
"	"	Total suicide	59	58	117	
Dead	Heart attack	2 months ago	35	25	60	
"	"	20 years ago	22	33	55	
"	"	Total heart attack	57	58	115	
		Total of entire sample	208	200	408	

Table 2 Gender breakdown across author status, manner, and recency of death

then selected either the stated reason of the author's death provided in the narrative (i.e., *suicide*, *car accident*, or *heart attack*) or *natural causes*. These participants were also asked: *How long ago did the author die*? Response options varied according to whether participants were informed that the author died recently (options: 2 weeks ago or 2 months ago) or long ago (options: 100 years ago or 20 years ago).

Participants also responded to questions assessing pre-existing knowledge or awareness of the story: *Have you read or heard this story before*? (yes/no); and, *Do you know who wrote the story*? (yes/no; and if "yes," write down the name of the author).

#### **Independent Variables**

Author Status. There were 4 author statuses (alive, dead by car accident, dead by suicide, and dead from heart attack). Students in the "author alive" condition received the following conclusion to the prologue: "The author is alive today but no longer writes and has no plans to publish any more works." Students in the "author dead" conditions received 1 of 3 different death scenarios as described below.

*Manner and Recency of Death*. Some students were informed that the author died in a car accident, from suicide, or from a heart attack. Across these 3 "author dead" conditions, details about how long ago the author purportedly died varied, as illustrated in the following conclusions to the prologue: (a) "*Two months ago* (or, "*Twenty years ago*"), *the author was in a car accident where he lost control of his car, slid off the road, and went over a cliff. The car burst into flames and he burned to death*"; (b) "*Two months ago* (or, "*Twenty years ago*"), *the author committed suicide by intentionally driving his car over a cliff. The car burst into flames and he burned to death*"; and (c) "*Two months ago* (or, "*Twenty years ago*"), *the author died from a heart attack.*"

*Gender*. Participants' gender was included as a separate factor.

#### **Dependent Variables**

**Perceived Quality of the Story.** Participants subjectively evaluated the story and the author by completing 5 Likert-type items: (1) *How much did you like the story*? (0 = not at all, 5 = somewhat, 10 = very much); (2) *Rate the overall quality of this piece of literature* (0 = terrible, 5 = mediocre, 10 = superb); (3) *As best you can, guess the fame of*  *the author* (0 = not at all famous, 5 = somewhat, 10 = very famous); (4) *Based on what you read today, how much do you like the author*? (0 = not at all, 5 = somewhat, 10 = very much); (5) *Knowing what you know about the author (and if he was alive today), would you like to be friends with the author*? (0 = not at all, 5 = somewhat, 10 = very much). The first 4 items were used by Green and Mohler (2014).

**Purchase Price**. After reading the story, participants were asked: Suppose you are an art collector and have \$25,000 to spend. Further suppose that the story you just read was for sale at auction, in its original form. That is, the story is the original version, penned by the author, and signed by the author. The quality of the paper and clarity of the ink is pristine. ...we want to know how much of your \$25,000 would you be willing to spend to buy this story? Consistent with Green and Mohler (2014), participants wrote down a value between \$0 and \$25,000 on the line provided.

# **Death and Mental Health Priming Measures**

The following measures were included to explore whether the death effect might be stronger among students reporting greater fears or concerns about death or suicide. If these measures correlate with purchase price, then it would be instructive to explore whether the hypothesized death effect remains after controlling for pre-existing levels of death anxiety. If the measures do not correlate with purchase price, then individual attitudes or general concerns about death or suicide would not explain the death effect.

Collett-Lester Fear of Death Scale, Revised (FoD-R) (Lester 1994; Lester and Abdel-Khalek 2003). This 28-item scale measures death anxiety and fear of death. Respondents indicate levels of disturbance or anxiety associated with different concerns associated with dying and consequences of death. Participants were instructed to read each item and then answer quickly, relying on initial impressions and feelings at the present moment (response options ranged from 1 = not at all, 3 = somewhat, 5 = very much). For example, one item asks participants to indicate their level of anxiety after thinking about How it will feel to be dead. Another item concerns The disintegration of your body after you die. The scale is divided into four, 7-item subscales focusing on participants' own death, the death of others, participants' own

dying, and the dying of others. Lester and Abdel-Khalek (2003) reported adequate reliability across the dimensions ( $\alpha = 0.88$  to 0.92). In the present study, responses were summed across all items to provide an overall index of death anxiety. Responses to the FoD-R items were highly reliable in this investigation (i.e., Cronbach's alpha was  $\alpha = 0.94$ across all 28 items).

Abbreviated - Suicide Opinion Scale (a-SOQ). The a-SOQ was adapted from the Suicide Opinion Questionnaire (Domino et al. 1982), the latter being a 100-item scale assessing attitudes and viewpoints of suicide across multiple dimensions (see Rogers and DeSchon 1992). Thirteen items from the SOQ were used in this study to briefly assess the acceptability, morality, and normality of suicide. Response options ranged from 1 to 5 with the following anchors: agree strongly, agree, undecided, disagree, and disagree strongly. Sample items include: I would feel ashamed if a member of my family committed suicide, and Suicide goes against the laws of God and/or nature. After collecting the data and reverse scoring some items, responses were summed so that higher scores on the *a*-SOQ reflected (a) a stronger tendency to view suicide from a personal liberty perspective; (b) a greater acceptance of suicide as a personal choice to deal with incurable disease; and (c) a weaker belief that suicide is immoral, against God's will, or necessarily a sign of mental illness. The 13 items used in this study were reliable (i.e., Cronbach's alpha was  $\alpha = 0.79$ ).

**Creativity and Mental Illness (CMI)**. Participants indicated their level of agreement with 2 statements associating creativity with mental illness: *There is a link between mental illness and creativity*, and *Very creative people are at higher risk for depression and suicide*. The response format for both items ranged from 1 to 5 and were anchored with: agree strongly, agree, undecided, disagree, and disagree strongly. Items were reverse scored so that higher scores reflected a greater belief in a link between creativity and mental illness.

#### Procedure

Students were informed that the study consisted of a take-home assignment that involved reading a short story, answering a few questions about the story, and providing impressions of the work. The study also involved completing a couple of short surveys regarding fears and attitudes about death and dying, and attitudes about suicide. It was announced that there were no right or wrong answers, that the study was not a test of reading speed, and that individual responses would not be graded. The amount of time to complete the study was estimated at about 20 to 25 minutes. Students were asked to return completed booklets to an identified drop box on campus within a week's time.

The order of completing the scales (e.g., the FoD-R, a-SOQ, and CMI items) and reading the story was balanced. Multiple versions of booklets were printed and randomly compiled. The versions consisted of the 4 different author statuses (i.e., alive; dead by car accident, suicide, or heart attack); 2 orders (i.e., completing the FoD-R, a-SOQ, and CMI items before or after the story); and, within the "author dead" conditions, 2 different narratives regarding how long ago the author died (i.e., 2 months ago or 20 years ago). Booklets were distributed to interested students within several classes. Instructors awarded a small amount of extra credit to students for their participation. In order to compile a participation roster, students' names were printed on the cover sheet of the booklets. This sheet was removed before data entry so that responses were anonymous. Students that did not wish to participate were invited to complete an alternative assignment to earn extra credit. A university institutional review board approved the study.

## **Inclusion Criteria**

To ensure attention to details, students had to correctly identify biographical information about the author. Students had to correctly report the author's gender, city of origin, number of stories published, status as alive or dead, and intent to publish more stories in the future. In addition, students within each of the 3 "author dead" conditions had to correctly report the manner of death and how long ago the author died. Students that incorrectly responded to any of these questions were excluded. Students that had previously read the story, reported knowledge of the story, or claimed to know the name of the author were also excluded. No participant correctly identified the name of the author, but some reported having heard the story before and were subsequently excluded. Finally, individuals that provided extreme price offerings were excluded as detailed below.

## RESULTS Preliminary Analyses

Assumptions for Parametric Tests and Detecting Outliers. Box plots, histograms, and tests of normality and equality of variance were conducted to determine (1) whether the primary variable of interest (i.e., purchase price) was normally distributed and (2) to identify potential outliers. Within the 4 author statuses, 13 participants provided extreme price values (i.e., more than 3 times the interquartile range above the 3rd quartile). Consistent with the procedure used by Green and Mohler (2014), cases identified as outliers were removed because of the potential to distort mean values across factors.

Purchase offerings clustered at the low end of the possible range-rendering strong positively skewed, non-normal distributions. Across the 8 cells created by the 4 author statuses and participants' gender, all Kolmogorov-Smirnov tests were significant [K-S statistics ranged from 0.29 to 0.32, all *ps* < 0.001]. In addition, the variance within these cells was not equal [Levene statistic (7, 400) = 9.32, p < 0.001]. In an attempt to possibly remedy these issues, a Log<sub>10</sub> transformation was applied to purchase price values (\$1 was added to prices to eliminate \$0 values). The transformation was not successful as problems with non-normality (Kolmogorov-Smirnov statistics ranged from 0.13 to 0.14 post transformation, all  $ps \le 0.005$ ) and unequal variances (Levene (7, 400) = 2.85, p = 0.006) remained. Fortunately, the F-test is relatively insensitive to heterogeneity of variance and non-normality (Winer 1962; Meyers 1975; Ito 1980; Hair et al. 1987). Subsequent analyses involving purchase price were conducted on nontransformed values.

Age and Gender Distribution. Results from a 4 (author status) × 2 (gender) analysis of variance (ANOVA) showed that the average age of student groups did not differ across the independent variables, Fs < 1.28, ps > 0.27. A Chi-square test revealed that the proportion of females to males was similar across the 4 author status conditions,  $X^2(3; N=408) = 0.26$ , p = 0.97. These results indicate that our procedure for assigning participants to the different author statuses resulted in groups that were similar in age and gender composition.

Potential Covariates of Purchase Price. A 4 (author status)  $\times$  2 (gender) multivariate analysis of variance (MANOVA) on the scale scores on the FoD-R and the *a*-SOQ, and across the 2 CMI items was performed. The multivariate test on the interaction was not significant, F(12, 1197) = 0.80, p = 0.65. As anticipated given that the booklets were randomly distributed to students, the main effect for author status was not significant-meaning that scores across these measures didn't differ as a function of group assignment, F(12, 1197) = 0.61, p = 0.84. The main effect for gender was significant, F(4, 397) = 4.78, p = 0.001. Univariate analyses revealed a significant gender difference on the FoD-R inventory, F(3, 400) = 12.91, p < 0.001. Female students (M=99.57; SD=19.52) scored higher on the FoD-R relative to male students (M=91.45; SD = 7.23) signaling relatively stronger death anxiety and death-related concerns among females.

Pearson product moment correlations between the FoD-R, *a*-SOQ, and the 2 creativity items with purchase price were also performed. Two sets of correlations were calculated: one based on the entire sample (N=408), and another based on only the participants that were told that the author of the story was dead (n=346). None of the correlations with purchase price were significant, all rs <0.08, all ps >0.13. Given the lack of either a linear relationship between these variables and purchase price or any group-based differences involving author status, none of these variables were included as potential covariates in subsequent analyses regarding purchase price.

#### **Primary Analyses**

**Purchase Price**. A 4 (author status) × 2 (gender) analysis of variance (ANOVA) was performed with purchase price as the dependent variable. The interaction was not significant, F(3, 400) = 1.64, p = 0.18. The main effect for gender was not significant, F(1, 400) = 0.01, p = 0.92. The main effect for author status was significant, F(3, 400) = 6.46, p < 0.001, partial  $\eta^2 = 0.05$ . To test a priori predictions, a contrast was performed between the average purchase price from students who were informed that the author was alive against that from students who were informed that the author was dead (collapsing across the different manners of death). This contrast was significant, showing that the average purchase price was higher when students believed the author was dead (M=3082.61; SD=5159.20) versus alive (M=1702.17; SD=2741.01), F(1, 400)=4.60, p=0.03, partial  $\eta^2$ =0.01. Students informed that the author was dead offered to pay 81.10% more, on average, to purchase the story relative to those believing that the author was still alive.

Because homogeneity of variance assumption was violated in the above analysis, a Welch's *oneway* ANOVA, a test that does not assume equal variances, was subsequently performed in order to evaluate the contrast involving author status (i.e., dead vs. alive) on purchase price. Welch's *one-way* ANOVA results were consistent with what was obtained in the previously described 2 × 4 ANOVA regarding author status, adding confidence to the original results.

Next, Bonferroni post-hoc pairwise comparisons were performed to explore potential differences between the 4 author statuses. Students informed that the author died from a car accident offered to pay more money to purchase the story, on average, than if informed that the author was in any other condition. The largest difference was between students believing the author died from a car accident and those told that the author was alive. The average purchase price in the death by car accident condition was 162.70% higher than that in the "author alive" condition. Results of the post-hoc tests are listed in Table 3.

*Recency of Death and Scale Order*. Next, recency of death (i.e., "2 months ago" or "20 years ago") and scale completion order (i.e., completing the FoD-R, *a*-SOQ, and CMI items before or after

Table 3
Pairwise comparison of average purchase
price across the 4 author statuses

•		
Status/manner	Mean price	SD
Alive <sup>a</sup>	1702.17	2741.01
Car accident <sup>a, b, c</sup>	4471.59	6784.59
Suicide <sup>b</sup>	2512.43	4049.11
Heart attack <sup>c</sup>	2285.80	3916.55
Entire sample	2872.84	4892.33

<sup>a, b, c</sup> Note: groups with the same superscript significantly differed, all  $p_s \le 0.01$ .

reading and evaluating the story) were examined. Across students informed that the author was dead, a 2 (recency of death)  $\times$  2 (scale order)  $\times$  2 (gender) ANOVA was performed on purchase price. Tests for interactions were not significant,  $F_{s}(1, 338) < 1.86, p_{s} > 0.17$ . The main effects of recency of death and gender were not significant, Fs(1, 338) < 0.02, ps > 0.89. The main effect of scale order was significant, F(1, 338) = 5.62, p =0.018, partial  $\eta^2$ =0.016. Students completing the scales *before* reading the story (M=3759.69;SD=6025.04) offered more money to purchase the story relative to students completing the scales after reading and evaluating the story (M = 2413.31;SD = 4036.48). Completing the scales before evaluating the story resulted in a 55.79% increase in average purchase price.

As before, a follow up *one-way* ANOVA was performed to evaluate the effect of scale order on purchase price *without assuming equal variances*. Results from Welch's *one-way* ANOVA concerning scale order were consistent with what was found in the original  $2 \times 2 \times 2$  ANOVA.

**Examination of Evaluative Items**. A 4 (author status) × 2 (gender) MANOVA on subjective ratings regarding the likeability of the story and its author, quality of the story, fame of the author, and desire to be friends with the author was performed. The multivariate test on the interaction was significant, F(15, 1194) = 1.90, p = 0.02. The multivariate test on author status was not significant, F(15, 1194) = 1.37, p = 0.15. The multivariate test on gender was significant, F(5, 396) = 4.66, p < 0.001.

Univariate analyses indicated that there was a significant interaction on 2 items, Fs(3, 400) > 2.83, ps < 0.04, partial  $\eta s^2 = 0.02$ . Male students gave higher *likability of the author* ratings and expressed a stronger desire to be *friends with the author*, relative to female students, across the conditions where the author died by car accident, heart attack, or was still alive. The exception to this pattern was that female students provided higher ratings, relative to males, on both of these items when told that the author died by suicide.

Univariate analyses revealed gender differences on 3 items, Fs(1, 400) > 7.22, ps < 0.005, partial  $\eta s^2$  ranged from 0.02 to 0.04. Male students provided higher ratings, relative to female students, regarding the *likeability of the story* (M=5.13; SD=2.21 vs. M=4.29; SD=2.37), the *quality of the*  story (M= 5.44; SD= 2.04 vs. M= 4.54; SD= 2.26), and the *likability of the author* (M= 4.75; SD= 2.12 vs. M= 4.30; SD= 2.29).

In order to test a priori hypotheses, a comparison of subjective ratings was conducted between students informed that the author was alive or dead. None of the 5 individual contrasts were significant, ps > 0.35. Mean ratings across the 5 subjective items are listed in Table 4.

Finally, a 2 (recency of death)  $\times$  2 (scale order)  $\times$  2 (gender) MANOVA was conducted on the evaluative items among only those participants who were informed that the author was dead and who had received the recency of death manipulation. Multivariate tests on possible interactions were not significant,  $F_{s}(5, 334) < 2.02$ , ps > 0.07. The multivariate test for recency of death was not significant, F(5, 334) = 1.04, p=0.39. The multivariate test for scale order was not significant, F(5, 344) = 1.63, p = 0.15. The multivariate test for gender was significant, F(5, 344) = 5.26, p < 0.001. Similar to what was found earlier, univariate results indicated that male students (M= 5.01; SD = 2.26) *liked the story* more than female students (M = 4.33; SD = 2.41), F(1, 338) = 7.73, p = 0.006; and male students (M=5.49; SD=2.07) gave higher quality ratings for the story relative to female students (M = 4.52; SD = 2.36, F(1, 338) = 15.74, p < 0.001.

## DISCUSSION

Results from this study align with Green and Mohler's (2014) finding that students were willing to pay more money to purchase a short story after being informed that the author was dead. Indeed, students informed that the author was dead were willing to pay, on average, 81.10% more compared with students told that the author was still alive. Unique to this investigation, the author's purported manner of death was manipulated. Students informed that the death stemmed from a car accident offered more money, on average, than students told that the author died from suicide or heart attack. The difference in price offerings between the alive versus dead conditions primarily reflected the fact that students in the "author dead by car accident" condition were willing to pay so much. Mean purchase prices were over 162% higher in the car accident versus alive condition. Interestingly, average purchase prices did not statistically differ between groups of students informed that the author (a) died of suicide, (b) died by heart attack, or (c) was still alive.

Death from car accident was particularly impactful on purchase price offerings, perhaps reflecting students' relatively high perception of risk of death stemming from motor vehicle accidents (Zhang and Fan 2013). Indeed, according to the US Department of Health and Human Services, 44.9% of all deaths

Question										
	– Alive		Car accident		Suicide		Heart attack		Entire sample	
	М	(SD)	М	(SD)	М	(SD)	М	(SD)	М	(SD)
1. How m	uch did ye	ou like the .	story?							
	4.90	(2.18)	4.99	(2.21)	4.44	(2.46)	4.57	(2.37)	4.70	(2.33)
2. Rate the	<sup>,</sup> overall q	uality of th	is piece oj	f literature.						
	4.89	(1.79)	5.15	(2.20)	4.81	(2.33)	5.03	(2.28)	4.98	(2.20)
3. As best y	3. As best you can, guess the fame of the author.									
	4.27	(1.99)	4.24	(2.35)	3.81	(2.19)	3.90	(2.31)	4.03	(2.24)
4. Based on what you read today, how much do you like the author?										
	4.76	(2.08)	4.71	(2.15)	4.15	(2.34)	4.58	(2.21)	4.52	(2.22)
5. Knowing what you know about the author (and if he was alive today), would you like to be friends with the author?										
	4.19	(2.47)	4.68	(2.21)	3.96	(2.44)	4.61	(2.32)	4.38	(2.36)

Table 4Subjective ratings of evaluative items across author conditions

Note: none of the post-hoc pairwise comparisons between the different author statuses were statistically significant.

among 20 to 24-year-olds in 2017 stemmed from unintentional injuries involving accidents. Suicide ranked second at 17.8% and heart disease was fifth at 2.9% of deaths (Heron 2019). More specific to this discussion, *death by motor vehicle crashes* was the leading cause of death in 2017 among 15 to 24-yearolds according to a report by the US Department of Transportation (CDC 2019). Findings from this study suggest that the valuation of a literary work depends not only on whether the author is alive or dead but the manner in which the deceased author died. It may be that people add value to products when primed about their own mortality with details about events that pose a particular risk to their existence (Mandel and Heine 1999).

From an economic standpoint, the production of additional works from an artist runs the risk of over supply within the market, potentially depreciating the value of any individual piece of work (Ekelund et al. 2000). Such concerns end, or are at least mitigated, when the artist is dead. In an attempt to keep students' perceptions of future productivity constant, all students within the current study were informed that the author published 2 short stories. Further, in the "author alive" condition, students were informed that the author had no intention of publishing future works. Despite these descriptions of equal productivity, students awarded a higher monetary value to the story when believing that the author was dead. Furthermore, average purchase prices differed within the various "author dead" conditions, suggesting that students' valuations were not solely dependent on productivity concerns. It appears, then, that students relied on factors other than economic principles (such as supply and demand) when evaluating the worth of the story.

Students' valuation of the story was not impacted by information about the recency of death, as similar valuations were generated across descriptions of the author dying 2-months or 20-years ago. Importantly, this study found evidence that priming students about death and dying-related issues enhanced the overall valuation of the story. Among students informed that the author had died, completing scales concerning fear of death, attitudes about suicide, and items linking creativity to mental illness (including suicide) *before* reading the story—as compared to doing so afterwards enhanced the overall "death effect" resulting in stronger valuations. Whereas individual scores across these measures did not correlate with purchase price, the act of completing the scales and related items before reading the story affected students' valuation of the monetary worth of the story. As noted earlier, other work has found that mortality salience can affect product evaluation and influence self-projections of future wealth (Kasser and Sheldon 2000; Dar-Nimrod 2012).

Still, mortality salience and knowledge that the author was dead may have triggered a type of scarcity bias: prompting students to believe that the story might be more valuable given that no more works could be produced by the (now dead) author, relative to being told that a stillalive author *didn't plan on* creating more works. Whereas an alive author's intention not to publish more works could change sometime in the future, the finality of death ensures that no new future works are produced. As discussed above, however, findings from this study are not accounted for by productivity concerns. Instead, results are consistent with the claim that owning a relatively rare object or work of art may boost self-esteem and inflate one's sense of personal uniqueness, which in turn may enhance the perception of value (Snyder and Fromkin 1980; Taubman - Ben-Ari and Findler 2003). Consistent with this interpretation, Ferera et al. (2020) concluded that scarcity bias "challenges strictly 'economic' accounts, supports a need for uniqueness account, and raises specific and novel questions as to the evolutionary basis of the bias" (p. 1706). It is important to point out that many of these speculations-concerning the role of scarcity and related links to self-esteem or personal uniqueness-were not directly tested in the present study. It would be instructive for future researchers to assess connections between the desire to possess objects from deceased artists and self-differentiation goals or self-esteem motivations.

Death of the author did not affect *subjective* evaluations in the manner anticipated. Based on previous findings, it was hypothesized that students who were informed that the author was dead would generate more favorable ratings about the likeability of the author, the story itself, the fame of the author, the quality of the story, and the desire to be friends with the author. Unlike Green and Mohler's (2014) finding where the "death effect" impacted both monetary valuations and subjective impressions, manipulating information about whether the author was dead or alive did not meaningfully affect subjective ratings in the current investigation.

Further, the manner of death as an independent factor did not affect subjective evaluations in this study. Comparing 2 of the 3 manners of death that were used in the current investigation, Lester (2016) also reported no differences in the subjective appraisal of the story, or its author, among students informed that the author either died from a heart attack or by suicide. Inconsistent with the current findings and those by Lester, Mittone and Savadori (2009) found that subjective evaluations increased, while monetary valuations remained constant, across scarce and abundant conditions involving common goods. More work is clearly needed to flesh out how subjective evaluations and perceptions of worth are affected by variables such as whether the creator of the work is believed to be alive or dead, how scarce the product is perceived to be, and individual concerns about mortality.

Results also showed that male students, by and large, formed more favorable ratings about the story and its author relative to female students-save for the death by suicide condition. And, among only those students informed that the author had died, male students reported liking the story more, and rated the quality of the story more favorably, than female students. Because the gender of the author was not manipulated in this study, interpretation of these gender-related findings is not straightforward. Because all participants were informed that the author was male, higher ratings from male students might reflect a gender *matching* preference between the reader and the author rather than a bias toward male authors (Swim et al. 1989). Indeed, when Green and Mohler (2014) altered the gender of the author, valuations were higher from *both* male and female students when the author's gender matched that of the participant; this perhaps reflects a type of implicit egoism (Jones et al. 2004).

There are a number of limitations to the current study. Perhaps most notably, the distribution of purchase price was not normal, and the assumption of homoscedasticity was violated across analyses examining how much money students were willing to pay for the story. Accordingly, caution should be exercised when interpreting these results. Additional work on this topic to replicate and expand the current findings would be illuminative. Another limitation was that the descriptions of death were not parallel across the 3 "author dead" conditions. For example, the descriptions of death by car accident and death by suicide were quite similar in terms of length, imagery, and graphic details. In each of these descriptions, students learned that the author's car went "over a cliff," "burst into flames," and the author "burned to death." In contrast, the description of the other manner of death was quite succinct, blandly stating that the author died "from a heart attack." Should future work be done in this area, it is recommended that various descriptions of death be similarly graphic, vivid, and detailed in order to better isolate the manner of death itself. Future studies should directly assess students' selfesteem or personal motivation to buy a work of art from a deceased author. Such a study could be used to determine the importance of ego enhancement associated with owning a perceived-to-be-scarce work of art. Researchers might also include an "author alive and still publishing" condition to explore how the possibility of publishing future works might affect valuations of the story.

## Conclusions

Both the current study and that by Green and Mohler (2014) found that students provided higher valuations of a literary work when believing that the author was dead versus alive. Green and Mohler (2014) proposed that a "reverence for the dead" type of attitude may have driven estimated values of the literary work. In the present investigation, a more nuanced picture of the so-called "death effect" emerged-with the manner of death being an important consideration in how the value of a creative work is affected by the death of an artist. Yet, inconsistencies across studies remain. Unlike Green and Mohler (2014), the present study did not find that subjective ratings were impacted by knowledge of the death of the author. The current study partially replicated and expanded previous findings in important ways: First, higher valuations of a literary work appear to depend on the manner and relatability of the description of death. Second, intensifying mortality salience by priming participants' awareness of death and dying resulted in higher purchase offerings. Finally, supply and demand or economic calculations alone failed to account for these findings. Instead, owning a perceived-to-be-scarce work of art may promote self-differentiation and enhance self-esteem, leading to higher overall valuations of a work by a deceased artist. Hopefully, other researchers will be inspired by these findings and delve further into this fascinating topic.

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