Effects of “Meaningful” Entertainment on Altruistic Behavior: Investigating Potential Mediators

Erica Bailey and Bartosz W. Wojdynski

Recent research has shown that exposure to entertainment media depicting moral beauty may not only influence viewers’ affective responses, but also lead to altruistic behavior. Although the process has been tied to a set of feelings commonly referred to as elevation, the mechanisms by which the effects take place have not been examined. This experiment (N = 107) showed that participants who watched a clip portraying moral beauty were more likely to help with an unrelated volunteer task after viewing than those who watched a non-meaningful clip. The effect of the clip was mediated by the degree to which the clip produced mixed affective response in participants. Although the clip portraying moral beauty led to increased empathy with the character and increased feelings of elevation, neither of these predicted helping behavior after controlling for clip content. Helping behavior also increased when the help recipient was less similar to the participants (age, race, and university affiliation).

Entertainment media play a large role in our lives and popular culture. Although the notions of entertainment and happiness have traditionally been heavily intertwined, recent scholarship has examined the popularity of media that do not seem to evoke traditional feelings of happiness (e.g., Oliver & Bartsch, 2010; Oliver, Hartmann, & Woolley, 2012; Oliver & Raney, 2011; Tamborini, Grizzard, Bowman, Reinecke, Lewis, & Eden, 2011). Many sad or dramatic films defy the assumption that media is consumed for pure enjoyment; movies like Hotel Rwanda and Million Dollar Baby are known to elicit more tears than laughter, yet are reviewed favorably by critics and audiences. The continued popularity of media that evoke emotions other than happiness has led researchers to broaden their conceptualization of

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“enjoyment” as it pertains to media, toward one that focuses on enjoyment as the satisfaction of needs (Tamborini, Bowman, Eden, Grizzard, & Organ, 2010).

In addition to examining why and when users may seek out these forms of entertainment (Oliver, 2008; Oliver & Raney, 2011), scholars have also sought to identify the consequences of such viewing. Specifically, viewing entertainment with portrayals of moral beauty has been shown to lead to altruistic intentions, as well as behavior that involves helping others (Oliver et al., 2012; Schnall & Roper, 2012; Schnall, Roper, & Fessler, 2010). Exemplars of moral beauty are thought to include characters behaving with charity, generosity, and sacrifice (Oliver et al., 2012). So, individuals seem to emulate the spirit of the altruistic behavior they just witnessed. One lens through which we can begin to understand why individuals consume and appreciate more serious entertainment is by examining the emotional state of elevation as a potential gratification desired and sought from narratives that are not conventionally happy. Haidt (2000) characterized elevation as “a warm, uplifting feeling that people experience when they see unexpected acts of human goodness, kindness, and compassion” (p. 1). Oliver et al. (2012) defined elevation as “a mixed emotional response to witnessing exemplars of moral beauty” (p. 362). The emotional response of elevation has been shown to lead to pro-social behavior (Algoe & Haidt, 2009; Freeman, Aquino, & McFerran, 2009; Schnall et al., 2010; Schnall & Roper, 2012).

The present study seeks to further expand our understanding of the role that exposure to media containing portrayals of moral beauty, and the affective consequences of this exposure play in influencing altruistic behavior. Specifically, this study examines the role of empathy, elevation, and mixed affect as potential mediators of the effects of exposure to a clip from a television show portraying moral beauty on helping behavior, and whether these effects vary based on whether viewers were asked to help a member of an in-group or an out-group. In the following sections, we address what constitutes media portraying moral beauty by reviewing literature on its characteristics and uses, and affective and behavioral effects, and individual differences related to selection of such media.

**Literature Review**

**Motivations for Consuming Counter-Hedonic Entertainment Media**

Hedonic entertainment, or that which is considered to be more light-hearted in nature, is often sought for pleasure or amusement (Oliver & Raney, 2011). Pleasure and amusement are not the only gratifications viewers look to fulfill, however, and their viewing patterns reflect the specific gratifications they seek (Barton, 2013; Brown, Lauricella, Douai, & Ziadi, 2012; Papacharissi & Mendelsson, 2007; Rubin, 1983). Many of these gratifications are driven by users’ emotional needs (Bartsch,
Media scholars have often examined the fulfillment of these needs through the lens of mood management theory (Zillmann, 2000), which generally predicts selection of media that is likely to maintain one’s positive mood or improve one’s negative mood. However, the popularity of movies and televisions shows in which unfortunate circumstances befall the main characters, from *Old Yeller* to *Game of Thrones*, seems to belie such a simple explanation.

Several rationales have been offered for why consumers might choose to watch something that may bring forth negative emotions. Social comparison is one explanation for the process by which entertainment that evokes sad emotions may nonetheless bring viewers some pleasure. Specifically, viewers may take comfort in seeing characters in less fortunate situations than their own (Mares & Cantor, 1992). Others have pointed out that feelings of sadness themselves may be emotionally rewarding (Oliver, 1993; Zillmann, 1998), and that viewing less-than-pleasurable media can help viewers gain insight into their own problems (Nabi, Finnerty, Domschke, & Hull, 2006; Oliver, 2008).

To help answer the question of why viewers might engage in entertainment media that elicit negative emotions, Oliver and Raney (2011) suggest thinking about audience gratification not only along a “pleasurable” dimension, but also a “meaningful” dimension. They suggest that people often pursue entertainment to fulfill hedonic motivations like enjoyment and amusement, but also at times to fulfill eudaimonic motivations, or desires to “search for and ponder life’s meaning, truths, and purposes” (Oliver & Raney, 2011, p. 985). These motivations may vary situationally, and they also may vary between individuals based on other psychological traits. Studies have shown that individuals with tendencies of reflectiveness, need for cognition, intellectualism, need for affect, and search for meaning in life tend to demonstrate eudaimonic motivations for entertainment consumption more than hedonic motivations (Oliver & Raney, 2011). Oliver and Raney (2011) found that eudaimonic motivations for entertainment consumption were associated with greater inclination to choose entertainment that brings forth both positive and negative emotions. In line with previous research, we predict that trait preferences will align with greater enjoyment of either meaningful or non-meaningful media.

**H1a:** Trait eudaimonic preference will lead to greater enjoyment of a clip depicting moral beauty than of a clip depicting humor.

**H1b:** Trait hedonic preference will lead to greater enjoyment clip depiction humor than of the clip depicting moral beauty.

### Affective and Behavioral Responses to Meaningful Media

Research on consumption of non-hedonic entertainment media has identified a subset of this media often referred to as “meaningful” media. Although the category label mainly refers to the gratifications for meaning sought in and met by this content, several studies have identified specific characteristics of media in
which individuals find such meaning. Some differences exist by genre; Oliver and colleagues (2012) found that individuals asked to name a meaningful film were more likely to name a sad film or drama than those asked to name a pleasurable film. However, not all sad films or dramas may be equal in providing meaning. Entertainment that is found to be more meaningful tends to depict values related to promoting peace, promoting social justice, providing safety for loved ones, self-discipline, and having an impact on others more often than entertainment that is found to be pleasurable (Oliver et al., 2012). These values are similar to what psychologists Algoe and Haidt (2009) define as “moral beauty,” which is seen in characters demonstrating “charity, gratitude, fidelity, [and] generosity” (p. 206).

Affective responses to viewing depictions of moral beauty may help researchers understand why users seek such content, and they may also play a role in shaping the effects of such consumption. One set of feelings that arise from viewing meaningful media is known as elevation, a term has been defined in several ways. Initially, Haidt, Algoe, Meijer, Tam, and Chandler (2000) defined elevation as unambiguously positive, specifically as “a warm, uplifting feeling that people experience when they see unexpected acts of human goodness, kindness, and compassion.” The definition has since evolved to encompass more than just a positively valenced experience. Oliver and colleagues (2012, p. 362) define elevation as “a mixed emotional response to witnessing exemplars of moral beauty,” including feelings of both happiness and sadness. Oliver and colleagues (2012) showed mixed affective response, as well as negative affect and meaningful affect, were significantly higher after viewing a film participants described as “meaningful” than after viewing a “pleasurable” film.

In addition to eliciting feelings of elevation, portrayals of moral beauty within entertainment media have been shown to increase both positive attitudes toward morally virtuous behavior, and engagement in actual altruistic behavior (Algoe & Haidt, 2009; Freeman et al., 2009; Schnall et al., 2010; Schnall & Roper, 2012). Silvers and Haidt (2008) found that when mothers felt elevation after watching a morally elevating video, they were more likely to nurse their children than mothers who watched an equally enjoyable, non-elevating video. The authors acknowledge that the hormone oxytocin, which is associated with signals of trust, only played an indirect mediating role in their findings. However, this supports previous research in that feelings of elevation are associated with both psychological and physical responses.

In Schnall and colleagues’ (2010) study, participants were asked to watch either a clip from the Oprah Winfrey Show showing a musician thanking a mentor who changed his life (see Silvers & Haidt, 2008) or a control clip of a nature documentary. Those in the elevating condition were more likely to engage in pro-social behavior evidenced by the amount of time they spent completing a questionnaire that was not required of them. Freeman and colleagues (2009) found that among White participants who scored high on social dominance orientation, those who experienced feelings of elevation increased charitable donations to the United Negro College Fund (UNCF). These findings show that pro-social behavior as a result of feelings of
elevation extend to a variety of acts and targets, even some unlikely ones. In order to examine the scope of these effects, we wanted to examine whether participants would be more or less likely to engage in helping behavior if the recipient of the aid was more or less similar to them.

H₂: Participants who view a television show segment with depictions of moral beauty will engage in helping behavior more often than participants who view a humorous, non-virtuous segment.

RQ₁: What is the relationship between similarity of the help recipient and participants’ likelihood of engaging in helping behavior?

Mechanisms Behind the Moral Beauty-Altruism Link

Although researchers have established a link between viewing meaningful media and altruistic behavior (Freeman et al., 2009; Schnall et al., 2010), the actual process by which these effects take place is less clear. Although some of the studies have attributed the helping behavior to feelings of elevation that stem from media exposure (e.g., Schnall et al., 2010), the causal pathway has not been established. Algoe and Haidt (2009) found that users who experienced feelings of elevation after watching examples of moral beauty were more motivated to be kind or warm to others. The explanation that users feeling uplifted or optimistic about humanity would be likely to want to prolong or maintain that feeling by helping others is consistent with mood management theory (Zillmann, 1988). Likewise, the effects of altruism on mood in adults has been well-established (e.g., Cialdini, Baumann, & Kendrick, 1981), and they persist whether the altruism is experienced directly or vicariously through media. On this basis, we sought to test the following hypothesis:

H₃a: The main effect of viewing depictions of moral beauty on helping behavior (as predicted in H₂) will be mediated by feelings of elevation.

Responses to viewing depictions of moral beauty have not only been viewed as leading to warm and kindhearted feelings, but also as leading to combinations of counter-valent emotions. While Haidt (2000) described responses to elevation as feelings of “openness, warmth, and inspiration,” other scholars have suggested that the affective experience of witnessing meaningful media results is one characterized by a mixture of positive and negative emotions (Larsen, McGraw, & Cacioppo, 2001; Oliver et al., 2012). Users who prefer eudaimonic entertainment have also been found to prefer entertainment eliciting mixed emotions (Oliver & Raney, 2011). While the relationship between warm, open feelings and mixed positive and negative feelings would benefit from additional research in its own right, Oliver and Raney’s research raises the question of whether some happiness mixed in with sadness in non-hedonic entertainment provides an emotional inspiration to viewers. In light of this research, we predicted that participants who experienced
greater mixed affect in response to the media clip would be more likely to engage in helping behavior.

\[ \text{H}_{3b}: \text{The main effect of viewing depictions of moral beauty on helping behavior (as predicted in } H_2) \text{ will be mediated by mixed affective response.} \]

One additional variable that may play a crucial role in governing individuals’ responses to meaningful and non-meaningful media is empathy. Empathy with characters in entertainment media has been studied in terms of viewers’ dispositional tendencies to cognitively and emotionally engage with fictional characters, as well as in terms of situational empathic response on the part of viewers that differs between characters. Research suggests that those with higher levels of trait empathy experience more emotionally intense responses to media in which characters suffer hardship (Krakowiak & Oliver, 2012). Hoffner (2009) found that the relationship between empathy for characters and enjoyment in frightening films varied based on levels of suffering portrayed, danger excitement, and type of ending, such that empathic concern was associated with less enjoyment when characters were injured or suffering in some way. Gender of the viewer may also influence empathic response for some media; studies have found that women are more likely than men to respond empathically to images of violence (Kobach & Weaver, 2012) and victims of violence in film (Oliver, Sargent, & Weaver, 1998).

Differences in trait empathic tendencies have also been shown to impact media experiences. Although none of the studies focusing on the effects of meaningful media on helping behavior have measured empathy toward the character, we believe that empathy may play a key role in this process. If individuals are drawn to seek exemplars of moral behavior by a desire to feel elevated by watching them, it stands to reason that the greater empathy they feel for a character acting morally, then the greater the level of elevation experienced by the viewer should be.

\[ \text{H}_{3c}: \text{The effect of viewing depictions of moral beauty on helping behavior will be mediated by empathy with the character in the media clip.} \]

One potential confound to measuring affective mediators of effects of viewing meaningful media is the possibility that asking viewers about the extent to which they felt certain emotions may change their affective state (e.g., Tourangeau & Rasin-ski, 1988). These question effects might occur through any number of mechanisms, including priming consideration of moods or thoughts that were not experienced at all during viewing, or by prolonging the effects of moods that were felt. If some variation in helping behavior is influenced by answering the questions, not merely differences in clip content, it would limit the external validity of the findings of the study. In order to examine whether asking participants about their affective states may have influenced participants’ responses, we administered the segment of the questionnaire which included items about positive affect, negative affect, elevation, physical responses to elevation, meaningful affect, and empathy with the character.
to only half the respondents in the sample; the other half of the respondents were asked about the helping measure directly after viewing the clip.

**RQ2:** What is the relationship between answering questions about emotional responses to entertainment media and participants’ helping behavior following exposure?

**Method**

In order to examine the effects that feelings of elevation elicited from television media have on participants, a between-subjects experiment was conducted using 106 student participants who were randomly assigned to either the elevating condition or the control condition. They watched a clip shown to elicit or not elicit the emotion of interest, before filling out a questionnaire and being offered the chance to help another researcher of either an in-group or out-group.

**Participants**

Participants \( (N = 106) \) were recruited for this study in exchange for course credit. Participant ages ranged from 18 to 26, with a mean age of 19.88. Fifty participants \( (46.7\%) \) were female, and three declined to provide a gender. Seventy-seven percent of participants reported being White, while 10% reported being Asian, 5% reported being Hispanic, 3% reported being Black, and 5% reported “other.”

**Stimulus Materials**

Two clips from the television series *Rescue Me* were chosen on the basis of a pre-test involving multiple clips from several television dramas. The same show (*Rescue Me*) was used in both conditions to eliminate confounding variables relating to the show like actor familiarity, content matter, etc.

**Independent Variables**

*Depiction of Moral Beauty.*

In the treatment condition, participants saw a clip in which the main character and New York City firefighter, Tommy, struggles through a divorce and flashbacks of 9/11 where he lost his cousin at the Twin Towers. He is seen reflecting on his own heroic efforts with sadness. In the control condition, participants will watch a more lighthearted clip in which Tommy and the fellow firefighters play pranks on one another. The clips were selected on the basis of a pre-test \( (N = 90) \) in which
the treatment condition clip yielded significantly greater levels of meaningful affect, \( t(85) = -8.627, p < .001 \), and physical responses indicative of elevation, \( t(85) = -5.60, p < .001 \), than the control clip, and they did significantly differ in levels of positive and negative affect.

**Presence of Affective Response Measures.**

The presence or absence of the affective response measures was used as an independent variable to determine the potential effects of it priming participants to reflect on their feelings of elevation. Fifty participants (46.7%) received the series of affective response measures (elevation, positive affect, negative affect, and mixed affect) immediately after viewing the clip, at the beginning of the dependent measures questionnaire.

**Help Recipient Similarity.**

After viewing the clip, participants had the option to help an in-group researcher or an out-group researcher. Random assignment determined which researcher they saw. To manipulate out-group status, we varied the age and university affiliation of the fictitious researcher to be dissimilar to the participants’ ages. In addition, because the student body at the university was predominantly (over 70%) White, and only 3.6% African-American, the racial appearance of the researcher was also varied across in-group/out-group conditions. The in-group researcher was a young, White male professor at the university where the research was being conducted. The out-group researcher was an older, Black male professor at rival large in-state university.

**Potential Individual-Difference Moderators**

**Trait Media Preferences.**

Trait media preferences were measured prior to stimulus exposure using scales adapted from Oliver and Raney (2011) measuring the extent to which audiences typically seek out media to meet hedonic or eudaimonic gratifications (e.g., “I like movies that have profound meanings or messages,” “I find that even simple movies can be enjoyable as long as they are fun”). The items from the subscales were combined to form two measures of trait hedonic preference and trait eudaimonic preference (\( \alpha = .89, M = 5.06, SD = 1.08 \)), (\( \alpha = .73, M = 5.06, SD = 1.08 \)).

**Prior Exposure to Series.**

One question asked if participants had seen *Rescue Me* prior to the research study.
Dependent Measures

Enjoyment.

Enjoyment was measured using 16 items adapted from Krcmar and Renfro’s (2005) scale in which affective, cognitive, and behavioral components of enjoyment are accounted for (e.g., “I would hate to be distracted while watching this show”; “I did not enjoy the subject matter of this show”). These items proved to be reliable (Cronbach’s $\alpha = .86$) and were combined to form a single enjoyment scale ($M = 4.82, SD = 0.86$)

Elevation.

Elevation was measured using a 6-item scale developed by Schnall and colleagues (2010), which asked participants the degree of their agreement with statements that watching the clip made them feel “moved,” “uplifted,” “optimistic about humanity,” “a warm feeling in the chest,” or “want to help others,” and “want to be a better person.” The six items proved to be internally consistent ($\alpha = .730$) and were summed to create a single elevation index ($M = 3.59, SD = 1.01$)

Positive Affect.

Positive affect was measured using four items from Oliver and colleagues (2012). Participants rated their agreement on a 7-point scale with statements that watching the television clip made them feel upbeat, cheerful, happy, and joyful. The four items were found to be highly unidimensional ($\alpha = .93$) and were averaged to form a single measure of positive affect ($M = 3.15, SD = 1.69$)

Negative Affect.

Negative affect was measured using four items from Oliver and colleagues (2012). Participants rated their agreement on a 7-point scale with statements that watching the television clip made them feel sad, gloomy, depressed, and melancholy. The four items were found to be highly unidimensional ($\alpha = .90$) and were averaged to form a single measure of negative affect ($M = 3.88, SD = 1.72$)

Mixed Affect.

Participants’ mixed-affective response to media viewing was operationalized using a procedure from Ersner-Hershfield, Mikels, Sullivan, and Carstensen (2008) on the basis of an earlier formula by Kaplan (1972). The formula substitutes the lowest value between a participant’s positive affect and negative affect scores. Thus participants that score more highly on both scales have higher mixed affect, and those that have low scores on at least one scale have a low degree of mixed affect. Participant mixed affect scores ranged from 1 to 4 ($M = 2.06, SD = 0.91$).
Empathy.

Empathy was measured using two, 7-item subscales measuring personal distress and empathetic concern adapted from Davis (1983) (e.g., “I had tender, concerned feelings for the character, as they were less fortunate than me”). After testing for unidimensionality ($\alpha = .85$), the items were combined to form a single empathy scale ($M = 5.05, SD = 0.91$).

Meaningfulness.

Participants were asked to rate the degree to which watching the clip was “meaningful” on a 7-point scale ($M = 4.14, SD = 1.86$).

Engagement in Helping Behavior.

Participants’ willingness to engage in virtuously moral behavior was measured as a dichotomous variable by whether or not they complete the optional survey.

Procedure

Participants took part in the study in groups of 10 to 16. Each group was randomly assigned to one of the eight conditions. After signing a consent form, participants were briefed on the purpose of the study and told that because this study would not take the entire one-hour time slot, the researcher agreed to include another questionnaire for another researcher with whom she worked. It was stated that the questionnaire was voluntary and that it would be clearly marked as such at the end of the mandatory questionnaire. Participants then watched the Rescue Me clip. Afterwards, they completed the questionnaire on laptops, and were dismissed.

Results

Prior to hypothesis testing, a multivariate analysis was conducted to test if prior exposure to the television series had significantly affected participants’ results on dependent measures. The results showed no significant effect for prior viewing, $F = 1.33, ns$, so all participants were included in further analyses.

To validate selections of two clips that differed in depictions of moral beauty but not overall enjoyment, two analyses were conducted prior to hypothesis testing. An independent-samples t-test showed that participants found the clip in the treatment condition to be more meaningful ($M = 4.83, SD = 0.95$) than in the control condition ($M = 3.11, SD = 1.06$), $t(48) = -6.06, p < .001$ (see Table 1). However, there was no significant difference in the degree to which participants enjoyed the treatment ($M = 4.81, SD = 0.78$) and control ($M = 4.82, SD = 0.91$) clips.
Table 1
Differences in Emotional Responses Between Clips (n = 50)

<table>
<thead>
<tr>
<th>Clip Condition</th>
<th>Meaningful</th>
<th>Non-Meaningful</th>
<th>Univariate F (1, 48)</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affect</td>
<td>1.80</td>
<td>4.49</td>
<td>87.24***</td>
<td>.65</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>5.12</td>
<td>2.63</td>
<td>54.78***</td>
<td>.53</td>
</tr>
<tr>
<td>Mixed Affect</td>
<td>1.80</td>
<td>2.33</td>
<td>4.40*</td>
<td>.08</td>
</tr>
<tr>
<td>Meaningful Affect</td>
<td>4.83</td>
<td>3.11</td>
<td>36.68***</td>
<td>.43</td>
</tr>
<tr>
<td>Empathy</td>
<td>5.32</td>
<td>4.58</td>
<td>11.42**</td>
<td>.19</td>
</tr>
<tr>
<td>Elevation</td>
<td>3.99</td>
<td>3.41</td>
<td>4.61*</td>
<td>.09</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>4.66</td>
<td>4.77</td>
<td>0.22</td>
<td>Ns</td>
</tr>
</tbody>
</table>

Note. The means reported represent the 50 participants that received the battery of emotion response measures. The remaining participants were not given emotional response measures to experimentally control for potential influence of completing these measures on the dependent measure of helping behavior.

H₁a and H₁b predicted that trait hedonic entertainment preference would predict enjoyment of the treatment clip. This was analyzed using separate multiple regression analyses for participants who viewed each clip, with both trait entertainment preference variables as predictors in each analysis. For participants who viewed the control clip (n = 55), trait hedonic preference predicted enjoyment, b = .41, t(53) = 2.80, p < .01, while trait eudaimonic preference was not a significant predictor (b = .03, t(53) = 0.31, ns; model R² = .13). For participants who viewed the treatment clip (n = 49), trait eudaimonic preference predicted enjoyment, b = .36, t(47) = 3.52, p < .01, while trait eudaimonic preference was not a significant predictor (b = -.09, t(47) = −0.89, ns; model R² = .25). Therefore, both H₁a and H₁b were supported.

H₂ predicted that participants who viewed the clip portraying moral beauty would be more likely to help with the additional research survey than participants who viewed the control clip. A chi-square test yielded a significant difference in helping behavior (χ²(1) = 22.04, p < .001) across clip tone conditions, such that 98% of participants (n = 50) in the treatment condition filled out the extra survey for the researcher, while 61% of participants (n = 34) in the control condition filled out the extra survey, thus providing support for H₂.

H₃a predicted that, among the participants asked to rate their affect following the clip (n = 50), the effect of witnessing moral beauty on helping behavior would be mediated by feelings of elevation. Mediation analysis using the Sobel test showed that although viewing the treatment resulted in higher feelings of elevation (M =
4.00, $SD = 0.79$) than did the control clip ($M = 3.17, SD = 1.05$), $t(48) = -3.14$, $p < .001$, elevation did not have a significant effect on helping behavior when controlling for clip condition. Thus, $H_{3a}$ was not supported.

$H_{3b}$ predicted that the main effect of viewing depictions of moral beauty on helping behavior would be mediated by mixed affect. To test this, a series of regression analyses were performed. An analysis testing whether meaningfulness predicted mixed affect showed a significant effect, $b = -0.29, t(48) = -2.10, p < .05$, $R^2 = .08$. A second regression analysis examining the effects of both clip condition and mixed effect on helping behavior found significant effects for clip meaningfulness ($b = 3.00, s.e. = 1.13, p < .01$) and mixed affect ($b = -4.03, s.e. = 1.76, p < .01$) on helping behavior (see Figure 1). The indirect effect of clip meaningfulness on helping behavior through mixed affect was .5185. Both the Sobel test ($z = 2.65, p < .05$) and bootstrapped confidence intervals (Preacher & Hayes, 2008; 95% CI: 0.03 to 2.27) confirmed the significance of the indirect affect. Thus, the mediation effect predicted in $H_{3b}$ was found, although in the opposite direction.

$H_{3c}$ predicted that the effect of the clip portraying moral beauty on helping behavior would be mediated by empathy toward the character. A similar process was conducted as described above for $H_{3a}$ and $H_{3b}$. The results showed that viewing the treatment clip resulted in higher empathy for the character ($M = 5.45, SD = 0.62$) than did the control clip ($M = 4.68, SD = 0.98$), $F = 23.6, p < .001, R^2 = .18$. However, empathy did not have a significant effect on helping behavior when controlling for clip condition. Thus, $H_{3c}$ was not supported.

RQ1 sought to examine whether out-group status of a help target affected the likelihood that participants would engage in helping behavior following exposure to meaningful media. To examine this question, a multiple logistic regression was conducted with helping behavior as the outcome variable and moral beauty portrayal/control clip, researcher out-group status, and the interaction between the two variables as predictors.

**Figure 1**

Effect of Clip Meaningfulness on Helping Behavior Mediated Through Mixed Affect. ($N = 50$)
as predictors. The results showed that both clip tone, $b = 3.59$, $Wald = 10.82$, $p < .01$, and researcher out-group status, $b = 1.56$, $Wald = 8.64$, $p < .01$, were significant predictors of helping behavior. Participants were more likely to help in the treatment condition (log odds = 36.4), and when the research was an out-group member (log odds = 6.4). No significant interaction was found between the two variables. The overall model was significant at the .001 level according to the Model chi-square statistic ($\chi^2 = 36.40$). The model predicted 87 percent of the responses correctly, and the Nagelkerke $R^2$ was .460.

RQ2 sought to examine whether participants who were asked about their feelings following viewing the clips were more likely to participate in helping behavior than participants who were not asked. The results showed no significance difference between the likelihood of helping behavior among participants who were asked about emotional responses (72.5%) of and participants who were not asked (83.9%), $\chi^2 = 2.15$, ns.

**Discussion**

As previous research has established the relationship between portrayals of moral beauty and altruistic behavior, this research attempted to examine the ways in which these portrayals might lead to helping behavior by investigating potential mediators. Further, this study examined the differences in engagement in helping behavior when the target is a member of either an in-group or out-group.

Consistent with Oliver and Raney's (2011) findings, $H_{1a}$ and $H_{1b}$ were supported in that trait eudaimonic preference lead to greater enjoyment of the clip portraying moral beauty, while trait hedonic preference lead to greater enjoyment of the less serious film clip. In light of previous research, $H_2$ predicted that participants who viewed the treatment clip would be more likely to engage in helping behavior by filling out an extra questionnaire than participants who viewed the control clip. The confirmation of this hypothesis both helps solidify the validity of previous research on this topic and shows that the video manipulations in the present study were effective. To get at the processes by which media portraying moral beauty leads to helping behavior, $H_{3a}$ predicted that the effect of this media on helping behavior would be mediated by feelings of elevation. This hypothesis was not supported, which points to a need for deeper understanding of what specific qualities of a media message lead to affective and cognitive responses that in turn predict viewers’ subsequent helping behavior.

Although traditional “warm” feelings of elevation did not mediate the effect of clip tone on helping behavior, a mixed affective response did. However, in contrast to the findings of Oliver and colleagues (2012), viewers’ affective response to the media clip was less mixed in the treatment condition. As shown in the mean differences by group in Table 1, viewers in the treatment condition had identical mixed affect scores and positive affect scores, meaning that every viewer in the treatment condition registered a greater negative affective response than positive
response. This more clearly negative affective response led viewers to be more likely to help the fictional second researcher—perhaps as a means of improving their negative mood. These findings also suggest that it may be imprudent to define meaningful media in terms of a singular affective response; participants can find a clip meaningful which makes them sad, or one that gives them a combination of sad and happy feelings.

RQ₁ sought to examine whether out-group status of a help target affected the likelihood that participants would engage in helping behavior following exposure to media depicting moral beauty. That participants were more likely to help the out-group researcher regardless of clip tone condition lends itself to future inquiries into the effects that meaningful entertainment viewing have on willingness to help specific people. Given the academic setting, it may have been the case that participants found the out-group researcher to be a more credible researcher given his older age. Or, students may have been more willing to help a researcher outside of their own university since they were already participating in a study for a researcher of their own institution.

RQ₂ sought to examine whether participants who were asked about their feelings following viewing the clips were more likely to participate in helping behavior than participants who were not asked. Given that being asked about elevation did not impact helping behavior, future researchers can be confident that asking participants questions related should not impact the relationship between stimulus materials and helping behavior.

Limitations and Future Research

While these findings offer a humble contribution to the research area, they should be considered in light of the limitations. The design of the experiment was such that participants took part in the study in groups of 10–15. It is possible that participants made their own decision about whether to fill out the extra survey based on what others in the room were doing. Though they could not see each other’s computers, one could see how a participant might not want to be the first to exit the room, thereby signaling they did not fill out the extra survey.

Future research would benefit from replicating this study with narrower qualities of out-groups and in-groups to identify which specific characteristics about the out-group researcher made participants more likely to help him. Further, examining individual differences as potential predictors of the type of researcher participants are willing to help would be a worthwhile line of inquiry. It may also be useful to inform participants of the purpose of a similar study, and ask them about their decision to help the researcher in order to get at any differences in reasons for helping an in-group versus an out-group member. The present study offered participants a chance to engage in helping behavior immediately following exposure to the stimulus. Research should examine how long the effects of viewing media portraying moral beauty on pro-social behavior last after exposure. Being able to
identify how quickly this added instinct to help dissipates after viewing would be useful for understanding real-world consequences of viewing such media, and might allow charitable organizations (or other advertisers) to capitalize on airings of shows and films that might be more likely to inspire viewers to act or donate.

As previously noted, further investigation of the underlying processes by which media deemed morally beautiful leads to altruistic behavior is a fruitful line of research. Perhaps some of the personality traits that predict enjoyment of more meaningful media (e.g. need for affect, intellectualism) play a role in predicting altruistic behavior. It is also plausible that experiences with the media like identification or transportation play a role in subsequent behavior as well, though it is likely it is a combination of both individual trait differences and temporary affective states.

**Conclusion**

The findings of this study both help to confirm the results of previous studies in that media portraying moral beauty predicts altruistic behavior (e.g., Freeman et al., 2009; Schnall et al., 2010) and opens the door for more probing questions about the relationship between the two. Specifically, it seems though while elevation leads to helping behavior, there are additional emotions and cognitions at play when viewers act altruistically after viewing such media. That viewers tended to help the out-group member more so than the in-group member further emphasizes the need for further investigation into those other possible emotions and cognitions. Overall, the present study offers a better understanding of the relationship between portrayals of moral beauty, empathy, elevation, and altruistic behavior. That altruistic behavior can be encouraged by media depicting moral beauty in which empathy and elevation are attained is a step in the direction of understanding how we can use media for positive purposes.

**References**


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