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Justin F. Martin
Whitworth University, jmartin@whitworth.edu

Hansika Kapoor
Monk Prayogshala, hk@monkprayogshala.in

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It's Worse If Superman Does It: Perceptions of Moral Transgressions Committed by Superheroes and Supervillains

Cover Page Footnote

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Superhero media has become an increasingly ubiquitous and sophisticated genre (Peaslee, 2007). Social scientists have recently taken notice and have theorized about the popular relevance of superheroes and supervillains. A few examples include communication (Miczo, 2016), education (Letizia, 2020), political science (Smith, 2018), and psychology (Langley, 2019; Rosenberg, 2013). Moreover, recent scholarship centers supervillains in their analyses (Langley, 2019; Peaslee & Weiner, 2015, 2020).

Good (Heroic) or Bad (Villainous)?

For the present study, a superhero is defined as someone with superpowers who is generally selfless and prosocial (Coogan, 2006, 2009) and tends to treat others morally (their actions towards supervillains notwithstanding). Conversely, a supervillain is defined as someone with superpowers whose actions are generally selfish and antisocial (Coogan, 2006) and thus tends to treat others in an immoral or amoral manner. Given the scarcity of psychological investigations of superheroes and supervillains, investigations using related character categories informed the present study. Categories include (1) heroes and villains (e.g., Bonus et al., 2019; Grizzard et al., 2018), (2) heroes, anti-heroes, and villains—with antiheroes being characters who tend to resemble heroes in some ways but not others (for a more detailed discussion, see Eden et al., 2017), (3) altruistic and selfish characters (Krakowiak & Tsay-Vogel, 2013), and (4) good, morally ambiguous, and/or bad characters (Konijn & Hoorn, 2005; Krakowiak & Tsay-Vogel, 2015).

Recent decades have also seen an increase in empirically-driven theoretical formulations and models attempting to explain the processes involved in people's engagement or experience with media content and characters (Sanders & Tsay-Vogel, 2016; Tamborini, 2013; Zillmann, 2002). Despite their differences (e.g., in the relative roles they give reasoning and affect), however, they generally converge on the notion

that people's engagement with fictional characters can be multifaceted. And although differences exist in the role of moral evaluations in these processes, many of the formulations and models identify perceptions of characters' morally relevant acts as playing a role in how a character is construed and experienced (e.g., Konijn & Hoorn, 2005; Sanders & Tsay-Vogel, 2016; Tamborini, 2013).

Affinity

One way to assess character differentiation is through people's perceived affinity. For the present study, affinity pertains to the extent people like, enjoy, appreciate, and relate to different characters. Krakowiak and Tsay-Vogel (2013) found that the extent to which a hypothetical mountain climber was liked was influenced by what they did once their partner became weak and received a transmission from other climbers suggesting dangerous weather was ahead. If they left their partner in order to help the other climbers, then they were liked more than if they left to make it to the summit on their own. Another study (Krakowiak & Tsay-Vogel, 2015) found that morally-ambiguous characters were enjoyed more than bad characters. This distinction held regardless if, prior to their enjoyment ratings, participants were primed so that some of their vices or virtues were made salient. One story used in the study centered around a detective, who, upon interrogating their prime suspect, notices that the suspect falls ill. A bad detective was described as one who, in addition to letting the suspect die, also stole drugs from a crime scene. A morally-ambiguous detective was one that also stole drugs from a crime scene, but who decided to save the suspect's life.

Relatedly, Eden et al. (2017) found that adults (1) enjoyed villains less than they enjoyed either heroes or anti-heroes and (2) appreciated villains less than they appreciated pragmatic anti-heroes. Pragmatic anti-heroes tend to engage in more morally questionable behavior than typical heroes (e.g., such as killing), and thus in

some ways share some features of the kinds of morally-ambiguous characters mentioned above (i.e., Krakowiak & Tsay-Vogel, 2015). That these kind of characters may be more appealing than villainous characters is consistent with the Perceiving and Experiencing Fictional Characters model (FEFiC; Konijn & Hoorn, 2005), which proposes that characters with a mixture of good and bad features may fascinate viewers. Last, in a study that included *Star Wars* characters, researchers found that participants' perceived parasocial relationship with the characters—as measured by Tukachinsky (2010)—was informed by the type of character in question. Specifically, their relationship with each hero (Luke, Leia, and Rey) was significantly stronger than their relationship with each villain (Kylo and Snoke) (Bonus et al., 2019).

Evaluations

Since conceptualizations of superheroes and supervillains focus on morally relevant actions (Coogan, 2006, 2009), how people understand these characters is related to how they evaluate their actions in interpersonal contexts. Along these lines, research related to heroes and villains has indicated that adults consistently distinguish between characters across varying interpersonal contexts. Some of these include responding to acts committed by characters in hypothetical or fictional narratives (Bonus et al., 2019; Sanders & Tsay-Vogel, 2016), perceptions regarding characters' propensity or likelihood to transgress against others (Eden et al., 2017; Eden et al., 2015; Grizzard et al., 2018), and perceptions of characters' general pattern of (im)moral behaviors (Sanders & Tsay-Vogel, 2016). With the exception of Krakowiak and Tsay-Vogel (2013) and Sanders and Tsay-Vogel (2016), the studies discussed in this section assessed characters' moral actions or transgressions using an earlier version of the Moral Foundations Questionnaire (Graham et al., 2011), which assesses acts related to

five domains: care (e.g., suffering), fairness (e.g., individual rights), authority (e.g., respect), loyalty (e.g., betrayal), and purity (e.g., disgust).

Krakowiak and Tsay-Vogel (2013) found that individuals, when responding to the mountain climber's morally questionable act (e.g., leaving their weak partner), were more likely to view the act as acceptable when done for an altruistic reason (i.e., help the other climbers) compared to a selfish reason (i.e., to reach the summit personally). Therefore, as with the character's likability, results indicated that the nature of one's intentions behind a morally questionable act influenced participants' view of the act. In terms of act evaluations, a similar pattern was observed when the outcome was positive (i.e., the weak partner survived) compared to when outcome was negative (e.g., the partner died).

When people's exposure to characters' actions is presumably more salient—whether through watching a movie (Bonus et al., 2019) or television series (Eden et al., 2014)—findings suggest that act evaluations inform how people engage with characters. For instance, participants who watched an online serialized drama (*Sorority Forever*) for eight weeks rated the series' hero higher on assessments of care- and fairness-related acts compared to the villain (Eden et al., 2014). And although Bonus et al. (2019) found that participants indicated stronger relationships with *Star Wars* heroes than villains, these relationships were subsequently influenced by the characters' actions in *Star Wars VIII: The Last Jedi*. Specifically, their evaluations of characters' transgressions after watching the film subsequently weakened the strength of their perceived relationships to the heroes from Time 1 (prior to watching the film) to Time 2 (after watching the film). The finding that changes to initial character perceptions can occur over time in ways that can alter our orientation towards a character is consistent with suggestions from

other character engagement models—including those that do (Bonus et al., 2019; Tamborini, 2013) and do not (Sanders, 2010) rely on MFT.

As with findings pertaining to affinity, Eden and colleagues (Eden et al., 2017; Eden et al., 2015) found that people’s ability to distinguish between relevant features of characters can extend beyond the typical hero-villain dichotomy. In addition to perceiving heroes as committing less moral violations than villains (Eden et al., 2015), for instance, anti-heroes were generally perceived as committing less moral violations than villains, yet more moral violations than heroes (Eden et al., 2017). Grizzard et al. (2018) found similar discriminatory judgments in response to visual features often associated with heroes and villains. After manipulating these features (e.g., showing participants a character with a friendly or stern face, facial scars or no facial scars, darker versus lighter hair and outfit color, etc.), they found that heroic visual schema (e.g., no scars, lighter colors) elicited higher levels of perceived moral upholding compared to the villainous visual schema. Findings therefore suggest that adults attend to the wide range of interpersonal acts (as assessed by the five MFT domains) committed by characters who can be understood along the hero-villain continuum, and account for their acts (or perceptions of their acts) to evaluate them.

Attributions

In addition to affinity and act evaluations, findings suggest that adults’ general understanding of heroes being more “positive” characters and villains being more “negative” holds when it comes to trait attributions. Heroes tend to be characterized as warmer villains characterized as more duplicitous (Eden et al., 2015; Grizzard et al., 2018). It is worth noting that in Grizzard et al. (2018), the characters were assumed to be more heroic or villainous based on non-behavioral features (e.g., face, hair, and clothing). Further, regardless of whether participants were primed so that some of their

vices or virtues were made salient prior to their trait attribution ratings, participants distinguished between character-types in a similar positive-negative manner (Krakowiak & Tsay-Vogel, 2015). They perceived morally-ambiguous characters as having more positive attributes than bad characters, and good characters as having more positive attributes than morally-ambiguous characters.

Findings also suggest that there may be one trait that adults generally believe is shared amongst heroes and villains. Neither Eden et al. (2015) or Grizzard et al. (2018) identified distinctions based on competence. Collectively, findings suggest that the distinguishing criteria people bring to bear on their evaluations of heroes and villains have more to do with interpersonal considerations (e.g., how they treat others) than intrapersonal ones (e.g., individual ability).

Interrelations Between Affinity, Evaluations, and Traits

One reason that superheroes and supervillains may warrant more psychological study pertains to the myriad ways in which people engage with heroes and villains (or “good” and “bad” characters, respectively), and the extent these engagements may inform or relate to each other. For instance, studies using both general (e.g., said character acted in a manner that was very immoral/moral) and specific (e.g., it is right for the character to fight for other witches and warlocks) assessments of character morality have found a link between the two (Eden et al., 2017; Eden et al., 2011; Sanders & Tsay-Vogel, 2016). Positive correlations were found with regards to perceived character morality and character liking for good and bad characters. Characters perceived as good in terms of moral evaluations were liked more and characters perceived as bad were liked less (Eden et al., 2011). Moreover, narrative exposure was associated with character identification, and identification was found to be associated with moral judgments of their actions (Sanders & Tsay-Vogel, 2016).

Eden et al. (2017) found that participants' evaluations of the characters predicted their enjoyment of the characters, but not appreciation. Similarly, Bonus et al. (2019) found that participants' relationships with a *Star Wars* villain strengthened as a function of the discrepancy between expected (T1) and perceived (T2) character immorality, but only when the discrepancy was in the positive direction. In other words, the villain was perceived as behaving more morally than expected, and this presumably strengthened participants' relationship with him during this time period. Investigating the potential relationship between act evaluations and trait attributions, Eden et al. (2015) found that for heroes, perceived violations in the authority and care domains negatively predicted warmth perceptions and positively predicted duplicity perceptions.

These findings are generally consistent with perceiving and experiencing fictional characters (PEFiC) theory (Konjin & Hoorn, 2005). Although a detailed description of the theory's predictions are beyond the scope of the present study, the theory offers a multifaceted view of people's understanding of heroes and villains. Along the moral dimension, for instance, they found that although fictional characters perceived as good elicited more appreciation and involvement than characters perceived as bad, characters perceived as both good and realistic were appreciated more than those considered good and unrealistic. The opposite trend (as far as appreciation) was observed with regards to characters perceived as bad, however, such that bad and unrealistic fictional characters were appreciated more than bad fictional characters who were realistic. Thus, given the nature and frequency of superhero-supervillain interactions and the fact that these interactions are often characterized morally relevant actions, it is possible that people's moral understanding of these characters could relate to multiple considerations, contributing to a dynamic, or multifaceted engagement experience.

The Present Study

As mentioned above, two of the defining features of superheroes are their (1) superpowers and (2) commitment to use those superpowers in the service of others (Coogan, 2006, 2009), whereas supervillains are usually construed as lacking these features in many ways (Coogan, 2006). This commitment to helping others is often reflected in their efforts to prevent harm to others, avenge harm to others, and to hold perpetrators (often villains and supervillains) accountable for their crimes. Thus, harm and justice considerations often frame the parameters by which superheroes interact with supervillains. Although there is disagreement concerning the relative roles intuitions and reasoning play in moral understanding, two perspectives—Social Cognitive Domain Theory (Smetana et al., 2014) and moral foundations theory (Clifford et al., 2015; Graham et al., 2011)—generally agree that harm and justice considerations appear universal. Rottman and Young (2015) suggest that these perspectives can contribute to an understanding of morally relevant phenomena, albeit in different ways. Further, multiple theories related to character engagement contend that moral considerations help inform our view of characters across varying media types or genres (e.g., Konijn & Hoorn, 2005; Sanders & Tsay-Vogel, 2016; Tamborini, 2013).

Moreover, superheroes and the villains they encounter are sometimes used to illustrate core features of a character engagement theory (as the case with Superman in Sanders, 2010 and Tamborini, 2013), identified by participants in studies on heroes and villains, or chosen by researchers as stimuli in said studies. In Eden et al. (2015) for instance, three most frequently chosen heroes were Batman, Superman, and Spiderman. Joker and Lex Luthor, main threats to Batman and Superman, respectively, were the two most frequently chosen villains. In another study (Eden et al., 2017), Superman was the most frequently referenced hero and Joker was the most frequently referenced

villain. Finally, Konjin and Hoorn's (2005) study, which investigated people's evaluations of eight fictional characters across multiple appraisal dimensions (e.g., good vs. bad, beautiful vs. ugly, realistic vs. unrealistic, etc.), used Superman as an exemplar of a good, beautiful, and unrealistic fictional character.

The present study investigated people's understandings of superheroes and supervillains along three broad dimensions: liking, morality, and character traits. Past research indicates that (a) heroes were rated higher on warmth (e.g., tolerant, friendly) than villains (Eden et al., 2015); (b) characters who engaged in morally questionable behavior for altruistic reasons were more liked than those who did so for selfish reasons (Krakowiak & Tsay-Vogel, 2013); and (c) heroes, not villains, elicited stronger parasocial relationships with participants (Bonus et al., 2019). In line with these findings, we hypothesized that superheroes would be liked more than supervillains (H1).

We also expected participants to distinguish characters through moral evaluations. Given that heroes are considered more moral (Eden et al., 2015; Grizzard et al., 2018), we hypothesized that due to the presumed higher expectations for heroes to engage in morally appropriate behavior, participants would view moral violations committed by superheroes as more wrong than those committed by supervillains (H2). Consistent with the finding that characters who engaged in a morally questionable behavior for altruistic reasons were rated higher on positive traits and lower on negative traits compared to characters who do so for selfish reasons (Krakowiak & Tsay-Vogel, 2013), we further expected that superheroes would be rated higher on positive attributes and lower on negative attributes compared to supervillains (H3). No hypotheses were formulated for two of the character trait items the authors considered neutral as opposed to having positive or negative valence.

Exploratory analyses were also performed. One concerned the liking order, and whether *when* participants rated their superheroes and supervillains (before or after they provided moral evaluations) would influence their responses. Another concerned participants' culture (India and US) and whether it may inform moral evaluations and/or trait attributions.

Method

Participants

The overall analyses were based on a total sample of $N = 363$ participants ($M_{\text{age}} = 21.26$ years, $SD = 5.17$, range: 17-61). Data on age were available for 96.69% of the sample; the total sample included 127 men and 231 women, with the remainder identifying as Other. About 41% of the sample identified as White, 40% as Asian, 5% as Hispanic, 1% as African American, and the remainder as multiracial. About 42% identified as Upper Middle Class, 22% as Middle Class, and the remaining in categories ranging from Lower Class to Upper Class.

The analyses by culture were based on a total sample of $N = 331$, consisting of subsamples from India ($n = 145$, 49 men, 93 women, 3 other; $M_{\text{age}} = 23.13$ years, $SD = 6.49$, range: 17-61) and the US ($n = 186$, 67 men, 117 women, 2 other; $M_{\text{age}} = 19.71$ years, $SD = 2.92$, range: 17-47). The total sample satisfied power analysis criteria given $\alpha = .05$ and a large effect size ($\eta^2 = .25$) for a power of .95 ($n = 210$); the American subsample ($n = 186$) satisfied criteria given $\alpha = .05$ and a large effect size ($\eta^2 = .25$) for a power of .85 ($n = 146$), and the Indian ($n = 145$) sample missed satisfying this criteria by only one participant. Ethical approval for the study was obtained from the Institutional Review Boards at Whitworth University (USA) and at Monk Prayogshala in India (#034 - 018).

Measures

English proficiency

Participants responded to two questions (one reading and one writing) about their English proficiency. Responses ranged from 1 = *Not at all Proficient* to 10 = *Very Proficient*. Participants were excluded if they gave a response below 5 on either item, with one exception. Participants who gave a response above 6 for the reading proficiency item and a response below 5 for the writing proficiency were included if their text entries were legible. Participants who did not respond to one or both of the proficiency items were included if their text entries were legible.

Device

Aware of the potential for online surveys to display items differently depending upon the device, participants were asked to indicate which device they were using to complete the questionnaire. The options were computer, tablet, or phone.

Demographic questions

Participants were asked their age, sex/gender, socioeconomic status, ethnicity, country of origin, and country of residence.

Character identification and likeability

Participants were asked to identify someone they considered to be a prototypical example of a superhero or supervillain. With this superhero/supervillain in mind, they were then asked to indicate how much they like this individual, ranging from 1 = *Strongly Dislike* to 7 = *Strongly Like*.

Moral evaluation

Participants responded to 16 moral transgressions with their prototypical character (superhero or supervillain) in mind (see Table 1 for transgressions). Transgressions included physical harm (6 items), psychological harm (4 items), and unfair treatment (6 items), with internal consistencies of $\alpha = .88$, $\alpha = .83$, and $\alpha = .82$, respectively. The

items were variations of MFT items used in previous studies (Clifford et al., 2015; Graham et al., 2011). Evaluations ranged from 0 = *Not at all Wrong* to 4 = *Extremely Wrong*.

Characteristics

Participants were asked to indicate the extent eight characteristics applied to their character. The characteristics were based on previous studies (Allison & Goethals, 2011; Kinsella et al., 2015). Three characteristics are suggested more typical of heroes (strong, inspiring, and selfless), three of villains (greedy, violent, and immoral), and two more or less equally distributed (smart and resilient). Responses ranged from 1 = *Not at all Related* to 8 = *Extremely Related*.

Culture

Participants' culture was determined based on the combined responses to the *Country of Origin* and *Country of Residence* items and only included participants who gave the same answer to both. Those who gave different answers ($n = 32$) were excluded.

Liking Order

Liking order contained two levels that were based on whether participants rated the likability of their character before or after they evaluated the character's moral transgressions and dispositional traits.

Design and Procedure

The present study employed a 2 x 2 between-subjects design with Character Type (Superhero or Supervillain) and Order (Before and After) as between-subjects factors and their evaluations of their character's likeability, moral transgressions, and characteristics as dependent variables. Participants first responded to questions about their proficiency in English and the device they used to complete the survey, followed by demographic questions. They were then asked to mention the name of a prototypical

superhero(ine) or supervillain(ness). Participants then evaluated their chosen character with respect to their likability, moral transgressions, and characteristics. Each of these character-related variables were counterbalanced across groups.

Cleaning

In addition to the above exclusionary criteria, participants were excluded if their identified superhero(ine) or supervillain(ness) was not fictional or was inconsistent with instructions. If more than one character was mentioned, data was only retained for the first character mentioned (if all were fictional); data were excluded if the multiple characters included fictional and non-fictional ones. Due to religious deities' supernatural nature and the fact that many people consider one or more religious deities and characters to be fictional, such responses to the character identification question (e.g., God, Satan) were included in the analyses (see also Sanil, 2017).

Results

Analysis Plan

To test the hypothesis that superheroes would be liked more than supervillains as well explore potential order effects, a two-way ANOVA was performed with Character (Superhero or Supervillain) and Liking Order (Before or After) as between subjects factors and likability as the dependent variable (H1). To investigate the hypothesis that participants would rate moral violations committed by superheroes as more wrong than those committed by supervillains and and explore potential order effects, a two-way MANOVA was performed with Character (Superhero or Supervillain) and Liking Order (Before or After) as between subjects factors and Fairness, Physical Harm, and Psychological Harm as dependent variables (H2). To test the hypothesis that superheroes would be rated higher on positive traits and lower on negative traits compared to supervillains and explore potential order effects, a two-way MANOVA

was performed with Character (Superhero or Supervillain) and Liking Order (Before or After) as between subjects factors with both positive and negative traits serving as dependent variables (H3).

To explore potential cultural differences in participants' moral evaluations of superheroes and supervillains, separate two-way MANOVAs for the India and US samples were performed. Character (Superhero or Supervillain) and Liking Order (Before or After) were between subjects factors and Fairness, Physical Harm, and Psychological Harm were dependent variables. If main effects were found, confirmatory one-way ANOVAs were performed. If a main effect was confirmed, the one-way ANOVA results were reported. For non-significant results, *F*-ratios from the initial two-way analyses were reported since confirmatory one-way analyses were not performed.

Characters

The most frequently reported superhero was Superman (13.5%), followed by Captain America (7.44%), whereas the Joker (16%) and Thanos (10.5%) were the most frequently reported supervillains. Similar patterns were observed in the Indian sample with 11% selecting Superman and about 12% selecting the Joker. Within the US sample, Superman (16%) and Joker (20%) were chosen most often. It is important to mention that certain popular culture-specific examples were also reported across the sub-samples, such as Mogambo in India and Kronos in the US.

Likeability

It was hypothesized that superheroes would be more liked than supervillains. Analyses revealed a main effect of character type on likeability ratings, supporting H1.

Participants liked superheroes more than supervillains, $F(1, 360) = 78.08, p < .001, \eta^2 = .18$. There was also a main effect for order. Both superheroes and supervillains were liked more when the likeability ratings were presented before participants evaluated

their moral transgressions, $F(1, 360) = 12.54, p < .001, \eta^2 = .03$. The interaction between character type and order was not significant, $F(1, 358) = 1.71, p = .19, ns, \eta^2 = .01$.

Evaluations

Participants' moral evaluations for superheroes and supervillains are presented in Table 2. Consistent with the hypothesis that transgressions committed by superheroes would be less morally permissible (H2), analyses revealed main effects for all three categories of moral acts in the hypothesized direction. For committing transgressions involving physical harm, $F(1, 361) = 31.52, p < .001, \eta^2 = .08$, psychological harm, $F(1, 361) = 9.94, p < .01, \eta^2 = .03$, and unfair treatment, $F(1, 361) = 6.72, p < .05, \eta^2 = .02$, superheroes were evaluated more negatively than supervillains. There was also an interaction effect between character type and order for physical harm, $F(1, 359) = 4.63, p < .05, \eta^2 = .01$. Follow-up analyses indicated that for these acts, participants' disapproval of supervillains was higher if they rated their likeability after evaluating their moral transgressions, $F(1, 182) = 4.21, p < .05, \eta^2 = .02$.

Exploratory analyses revealed that the finding that superheroes and supervillains were distinguished across all three categories of moral acts was qualified by participants' culture. Among the Indian participants, all three categories of moral violations were considered more wrong when committed by superheroes (all $ps < .01$ and effect sizes in the small to medium range for confirmatory analyses). Among the American participants, physical harm ($p < .001$, medium effect size) and psychological harm ($p < .05$, small effect size) violations—but not fairness violations—were viewed as more wrong if committed by superheroes. Therefore, H2 was partially supported.

The finding that participants' disapproval of supervillains was higher if they rated their likeability after evaluating their moral transgressions was also qualified by

culture. Indian participants, but not American participants, evaluated the physical harm ($p < .01$, medium effect size) violations of supervillains more negatively when indicating their likeability for supervillains after evaluating their transgressions compared to when they rated their likeability before evaluating their transgressions. Lastly, Indian participants viewed (1) fairness ($p < .05$, medium effect size) violations committed by supervillains and (2) psychological harm violations ($p < .05$, small effect size) committed by both superheroes and supervillains more negatively when indicating their likeability after evaluating their violations compared to indicating their likability before their evaluations.

Attributions

Participants' trait attributions for superheroes and supervillains are presented in Table 3. Consistent with the hypothesis that superheroes would be viewed more positively and supervillains more negatively (H3), analyses revealed main effects of character type for the six valenced traits in the hypothesized directions. Superheroes were considered stronger, $F(1, 361) = 72.85, p < .001, \eta^2 = .17$, more inspiring, $F(1, 361) = 326.71, p < .001, \eta^2 = .48$, and more selfless, $F(1, 361) = 375.78, p < .001, \eta^2 = .51$. Supervillains, conversely, were considered more greedy, $F(1, 361) = 623.42, p < .001, \eta^2 = .63$, violent, $F(1, 361) = 217.77, p < .001, \eta^2 = .38$, and immoral, $F(1, 361) = 722.62, p < .001, \eta^2 = .67$. Exploratory analyses revealed that superheroes were considered more resilient, $F(1, 361) = 66.46, p < .001, \eta^2 = .16$. Superheroes and supervillains did not differ with respect to being smart, $F(1, 359) = 1.51, p = .22, \eta^2 = .004$. The same pattern held across both Indian and US samples. Thus, H3 was supported. There was no main effect for liking order on any of the traits, and there was no interaction effect between character type and liking order on any of the traits.

Discussion

The present study investigated adults' understandings of superheroes and supervillains. Specifically, participants indicated how well-liked these characters were, evaluated their moral transgressions, and made character trait attributions. These assessments were informed by previous studies (Allison & Goethals, 2011; Clifford et al., 2015; Kinsella et al., 2015a; Krakowiak & Tsay-Vogel, 2013), and the categories of moral violations included—harm/welfare and fairness/justice—are considered to be significant sources of moral judgment and action among different theories on moral psychology (Clifford et al., 2015; Smetana et al., 2014). For each assessment, it was hypothesized that superheroes would be rated in a manner consistent with or suggested by prior research on heroes and villains. Specifically, compared to supervillains, superheroes would be liked more (H1), criticized more harshly for moral violations (H2), and rated higher and lower on positive and negative traits, respectively (H3).

Hypotheses were at least partially supported, with results yielding medium to large effect sizes. Order and culture effects were also found, and these results yielded small to medium effect sizes. Order influenced likeability ratings, culture influenced evaluations of moral violations, and both working together influenced moral violations. Implications as they pertain to the understanding of superheroes and supervillains (1) more generally, (2) in the contexts of order and cultural considerations, and (3) as part of a larger research program will be discussed.

Affinity, Evaluations, and Attributions

Not surprisingly, participants liked superheroes more than supervillains. The finding is consistent with studies comparing heroes and villains (Bonus et al., 2019; Eden et al., 2017) but also studies comparing fictional (hypothetical) characters who act in more altruistic or selfish ways (Krakowiak & Tsay-Vogel, 2013, 2015). Collectively, these findings suggest that harm and fairness considerations are brought to bear on adults'

enjoyment of characters who are considered heroic and villainous, either through category (hero or villain) or acts (acting altruistically or selfishly).

Adults in the present study also distinguished between superheroes and supervillains via moral evaluations. For physical harm, psychological harm, and unfair treatment, superheroes were evaluated more negatively when committing moral transgressions than supervillains when committing the same transgressions. However, this finding was qualified when culture was taken into account. Whereas Indian and US adults used physical and psychological violations to distinguish between characters, only Indian adults used fairness violations. The notion that adults generally expect superheroes and supervillains to act in particular ways is supported by previous studies comparing adults' moral evaluations of more good/heroic and bad/villainous characters across harm/care and fairness/justice dimensions (e.g., Bonus et al., 2019; Eden et al., 2015; Grizzard et al., 2018). The present study adds to this growing body of literature by exclusively focusing on superheroes and supervillains.

In line with previous findings (Eden et al., 2015; Grizzard et al., 2018; Krakowiak & Tsay-Vogel, 2015) adults' trait attributions were in the hypothesized direction, with superheroes rated higher on the positive traits lower on the more negative traits. Some traits (e.g., *positive*; selflessness; *negative*; greedy and violent) have a bearing on the moral or immoral treatment of others across harm and justice dimensions, suggesting a relationship between characters engaging in morally relevant acts and being viewed as having dispositions informing those acts. In addition to being sensitive to traits that help adults differentiate between superheroes and supervillains, findings also suggest that there is at least one trait that adults believe is more or less equally shared across superheroes and supervillains. Although the present study used the trait *smart* and other studies (Eden et al., 2015; Grizzard et al., 2018) used

competence, findings suggest that mental ability/acuity is a trait that is believed to be (fairly) equally distributed across heroes and villains. Lastly, exploratory analysis revealed that adults viewed superheroes as being more resilient. The role resiliency may play in people's understanding of superheroes and supervillains, and the extent to which—as suggested by clinicians and behavioral specialists (Fatima et al., 2021; Friedberg & Rozmid, 2022; Radley et al., 2021; Rubin, 2019)—superheroes can be valuable resources in clinical (therapeutic) practice, is a question that warrants further study.

Order and Cultural Considerations

Although superheroes were more liked, three order effects were found, and two applied only to Indian adults. First, both superheroes and supervillains were liked more when the likeability ratings were presented *before* adults evaluated their moral transgressions and traits. Second, Indian adults perceived psychological harm violations as more wrong when indicating their likeability of superheroes and supervillains *after* evaluating their moral violations and traits. Third, Indian adults rated the fairness and physical harm violations of supervillains as more wrong when indicating their likeability for supervillains *after* evaluating their moral violations and traits.

Grizzard et al. (2018) also found order effects when priming participants with hero or villain visual schema, and counterbalancing the order of assessments. The character with the typical hero schema was perceived as more moral when they were presented after the schema priming and evaluations of the villain typical character. Likewise, the villain was perceived as less moral when presented after the schema priming and evaluations of heroes. They also found a similar order effect concerning dispositional traits, where the hero was perceived as possessing more positively valenced traits to a greater degree when presented after the villain.

Taken together, these findings related to order effects have implications for future investigations into adults' psychological understanding of heroes and villains, and the conditions by which certain features relevant to these understandings are viewed as more or less salient in the minds of adults. Grizzard et al. (2018) suggest that in some instances, an "amplification effect" may contribute to US adults' understandings of heroes and villains such that exposure to salient features of one character type may contribute to more distinguishable conceptions of another character type (e.g., viewing heroes as more heroic when immediately assessed after exposure to villains). However, the researchers used a less explicit prompt when assessing perceptions of moral violations (e.g., "The character shown above seems like he would..."). The present study, using a more explicit prompt (i.e., participants were told to assume their character committed each of the moral violations), suggest that in some instances, a "tempering effect" may play a role in Indian adults' understanding of supervillains when it comes to moral violations. For Indian adults, moral violations of supervillains, despite being associated with more negative traits and behaviors (e.g., Eden et al., 2017; Eden et al., 2015; Eden et al., 2014; Sanders & Tsay-Vogel, 2016), may be considered less severe when providing their impressions of supervillains (via likeability ratings) before evaluating these violations.

The extent interrelations between character type, morally relevant acts, culture, and assessment order contribute to adults' conceptions of heroes and villains is unclear. Therefore, future research in this area is needed. Moreover, given that the use or misuse of superpowers can potentially make moral considerations more salient during social interactions (e.g., telling a third party your best friend's secret is not the same thing as having the power to access those secrets by reading their mind), examining how these potential interrelations may inform adults' understanding of superpowered characters.

Future research can also offer insight into how people's moral understanding of superpowered characters may and/or may not align with their moral understanding of non-superpowered fictional characters or fictional characters more generally. Future investigations could provide clarity regarding the conditions by which order-effects contribute to character assessments oriented in different directions, as the case when a hero and a villain are further distinguished from each other (Grizzard et al., 2018). Future investigations can also elucidate conditions that influence character assessments oriented in the same direction, as in the present study. For example, (1) superheroes and supervillains being liked more prior to evaluating their violations and proving trait attributions and (2) Indian adults viewing superheroes' and supervillains' psychological harm violations as more wrong when evaluations and trait attributions preceded likeability ratings. In addition, future research could further clarify the role of trait salience in adults' understanding of heroes and villains, given inconsistencies between previous research (Grizzard, et al. 2018) and the present study regarding whether order can influence trait attributions.

Understanding (Super) Heroes and (Super) Villains

When considered with theoretical models attempting to explain how people experience and understand fictional characters (Konijn & Hoorn, 2005; Sanders, 2010; Tamborini, 2013), present findings have some additional implications for the more specific class of fictional characters that includes (super) heroes, (super) villains, and those in-between. Collectively, the models suggest some general features that are important for engaging with these characters, and that can contribute to a robust line of empirical inquiry into the appeal of these characters across generations and media platforms. These features, in sum, point to dynamic psychological processes that are only partially explained by focusing on a "dichotomies-centric" view.

One feature is that both affective (intuitive) and cognitive (rational) processes (Konijn & Hoorn, 2005; Tamborini, 2013) matter. A second feature is that it is not a given that one's initial impression of a character will remain stable in response to subsequent information perceived relevant to understanding the character. In these cases, initial impressions, based (largely) on conceptual schemas that aid in the categorization of the character (e.g., generally good or bad), can be reevaluated on the basis of new information. People's conceptualization of certain superheroes, it is suggested, can be reconsidered in light of new information pertaining to the character (Sanders, 2010) or a specific conflict between competing values or considerations experienced by the character (Tamborini, 2013).

Third, it is suggested that people's appreciation of heroes and villains can be informed by opposing dispositions. For instance, characters with a mix of good and bad characteristics may be appreciated in ways that include both psychological involvement (i.e., investment in the character) and distance (i.e., avoidance of the character). An example can include a character who commits an immoral act for a sympathetic reason (Konijn & Hoorn, 2005)—a common motive for morally relevant acts committed by (super) heroes and (super) villains.

In addition to the above features suggesting the need for a dynamic approach to people's understanding of (super) heroes and (super) villains, the present study suggests the importance of future studies elucidating the potential role of culturally informed understandings. In the present study, (1) superheroes were liked more, (2) superheroes and supervillains were liked more when impressions (via likeability) were provided prior to moral evaluations, (3) superheroes were evaluated more negatively than supervillains when committing physical harm and psychological harm violations, (4) superheroes were rated higher on positive traits and lower on negative traits compared

to supervillains, and (5) superheroes were rated as more resilient. Indian adults in particular (1) evaluated superheroes more negatively than supervillains when committing fairness violations, (2) considered psychological harm violations as more wrong (for both superheroes and supervillains) when likeability of characters was provided after moral evaluations, and (3) considered physical harm and fairness violations as more wrong for supervillains when likeability of characters was provided after moral evaluations.

Given the dearth of research on superheroes and supervillains, questions concerning the extent and nature of (apparent) normative and contextual features that influence people's understanding of these characters are open ones. Are *evaluations of certain acts* committed by superheroes and supervillains more prone to certain localized cultural norms and understandings than others? What about *attributions of certain traits*? Moreover, in what ways might findings related to normative and contextual influences on people's psychological understanding of superheroes and supervillains be consistent with an SCDT approach to moral understanding (Smetana et al., 2014)? The approach attempts to explain understandings of moral acts largely through appeals to reasoning in both morally prototypical (e.g., where moral concerns are most salient) and morally non-prototypical (e.g., where moral concerns are weighed against non-moral concerns) situations. How do people distinguish between acts committed in prototypical (normative) and non-prototypical (contextual) situations when those acts are committed by superheroes and supervillains? Would it be helpful to apply an MFT approach (Clifford et al., 2015; Graham et al., 2013; Haidt, 2001) that largely appeals to the role of intuitions and the ways these intuitions may or may not be modulated by more localized social, cultural, and/or religious norms and beliefs? Given their frequent morally relevant interactions, multifaceted investigations of how people distinguish

superheroes and supervillains could serve as a fruitful avenue to test Rottman and Young's (2015) suggestion that both approaches have something to contribute to understanding of psychological processes underlying moral appraisals of others' acts.

Limitations and Future Research

It appears the present study was the first to exclusively investigate perceptions of moral transgressions by superheroes and supervillains. However, it was not without limitations. First, participants' own morally relevant beliefs were not assessed. In line with the notion that people can conceptually alter the meaning of a morally relevant event based on their understanding of its features (Turiel et al., 1987; Wainryb & Brehl, 2006), individual variability regarding the meaning of certain acts may have possibly influenced moral evaluations of characters' acts. Second, the present study only assessed people's perceptions of moral violations through likert scale items. Additional information relevant to people's understanding of superheroes and supervillains could be ascertained through the assessment of people's justifications for their evaluations of these characters' actions, particularly when those actions may be presented in potentially morally-complex or morally ambiguous contexts. Such an approach may also contribute to research on people's understanding of fictional characters more broadly.

Krakowiak and Tsay-Vogel (2013, 2015) included stories where various features of the events were manipulated (e.g, motivation, outcome, character-type, etc.). As with the present study, participants' evaluations of the characters and events were assessed, but not their justifications for their evaluations. Assessing justifications could provide insight into the extent actions committed by characters that have moral implications are understood by participants to have been committed in the context of more straightforward or ambiguous situations. Research in SCDT, which relies heavily on

semi-structured participant interviews, indicates that people's evaluations and justifications of morally relevant acts are often related to how complex they construe the situation (Nucci et al., 2017; Turiel & Nucci, 2018; Turiel et al., 1987).

Third, only superheroes and supervillains were investigated which limited the findings' generalizability. Future studies that compare various types of heroes and villains (e.g, superhero heroes/villains, non-super fictional heroes/villains, real-life heroes/villains) can more thoroughly contribute to the growing literature on heroes and villains more broadly. Fourth, given the ubiquity and platform diversity of media involving superheroes and supervillains, the findings' generalizability was also constrained by focusing on adults. A review of research investigating the relationship between morally relevant media (which includes media with superheroes and supervillains) on children and adolescents' morally relevant understanding suggests that engagement with such media can have both positive and negative effects (Krcmar & Cingel, 2020). Lastly, the moral transgressions used in the current investigation pertained to harm and justice concerns. In addition to also finding that adults distinguish heroes and villains using harm and justice considerations, Eden et al. (2015) found that heroes were viewed as more moral despite frequently going against authority. Building on these findings and in line with Krcmar and Cingel (2020), future studies can examine evaluations of other socially and morally relevant acts to extend the current findings.

Conclusion

As a cultural phenomenon, the narratives and morally relevant acts of superheroes and supervillains pervade our media landscape. As the studies reported above, as well as the present study's findings suggest, some criteria for distinguishing between these (and similar) characters may be more straightforward while others more multifaceted.

Considering (1) superheroes can serve as allegories for various aspects of the human

condition (Rosenberg, 2013) and (2) the view that the multifaceted nature of media characters' traits and the narratives may reflect some of the complexity in people's everyday lives (Sanders & Tsay-Vogel, 2016) can also apply to characters with superpowers, future psychological investigations in this area are warranted. The systematic examination of how people attempt to understand superheroes and supervillains may represent an avenue of psychology that, although is relatively unexplored, has the potential to contribute to our understanding of how people view morally relevant acts towards one another.

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Table 1. Moral Transgressions by Category

<i>Physical Harm (6 Items)</i>
Refusing to help a supervillain in pain.
Intentionally harming a supervillain after the supervillain has been defeated.
Physically harming a sidekick for a mistake the sidekick made.
Celebrating after the harm (s)he inflicted on a supervillain leading to the supervillain's death.
Refusing to help a bystander accidentally harmed by a supervillain's actions.

Physically torturing the family of a supervillain to locate him or her.
<i>Psychological Harm (4 Items)</i>
Berating a sidekick for failing to follow instructions.
Harassing a supervillain's family in order to locate him or her.
Mocking a supervillain after the supervillain has been defeated.
Laughing at a supervillain in pain.
<i>Fairness (6 Items)</i>
Bribing a law enforcement official to receive valuable information to further their cause.
Lying in order to receive recognition for something (s)he did not do.
Lying in order to locate a supervillain.
Embezzling the public's money for his or her own benefit.
Supporting a corrupt organization because doing so would allow him or her to stop a supervillain from achieving his or her goal.
Refusing to risk one's life to correct a clear instance of injustice caused by the supervillain.

*Wording pertains to participants in the *superhero* condition. In the supervillain condition, “supervillain” was replaced with “superhero”.

Table 2. Moral Impermissibility by Character

	Superheroes (<i>n</i> = 179)	Supervillains (<i>n</i> = 184)
Category	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Physical Harm	18.58 (4.35)	15.27 (6.63)
Psychological Harm	10.39 (3.60)	9.03 (4.54)
Fairness	15.45 (3.96)	14.01 (6.37)

Table 3. Trait Attributions by Character and Hypothesized Valence

	Superheroes (<i>n</i> = 179)	Supervillains (<i>n</i> = 184)
Trait	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)

Positive

Strong	7.29 (1.11)	5.96 (1.77)
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Selfless	6.85 (1.39)	2.92 (2.34)
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Inspiring	7.20 (1.11)	3.92 (2.16)
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Negative

Greedy	2.13 (1.50)	6.50 (1.82)
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Violent	4.31 (1.98)	6.92 (1.34)
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Immoral	2.23 (1.61)	6.58 (1.47)
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Neutral

Smart	6.84 (1.18)	6.68 (1.32)
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Resilient	7.29 (1.09)	5.97 (1.88)
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