Who can resist a villain? Morality, Machiavellianism, imaginative resistance and liking for dark fictional characters

Jessica E. Black*, Yomna Helmy, Olivia Robson, Jennifer L. Barnes

University of Oklahoma, United States

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ABSTRACT

The purpose of this research was to explore the association between preferences for dark fictional characters, such as villains or morally ambiguous protagonists, and individual differences in related variables, particularly Machiavellianism and imaginative resistance (a reluctance to imaginatively engage with immoral fictions). Past research suggests that liking for morally ambiguous and evil fictional characters is a function of identification and moral disengagement (e.g., Janicke & Raney, 2017; Sanders & Tsay-Vogel, 2016), but does less to address why some people are more likely to successfully morally disengage and identify with such dark characters. Here, in a series of three studies, we found a robust association between liking for dark characters, self-reported imaginative resistance, moral purity concerns, and Machiavellianism. Such results suggest a need to include these constructs in models of fictional engagement.

1. Introduction

Fiction appeals to a deep-seated desire to see righteousness (and the righteous) rewarded and wickedness (and the wicked) punished (Flesch, 2007). In fact, people's belief that the *real* world works this way—the extent to which they believe in a "just world" where people get what they deserve—has been shown to be correlated with the amount of televised fiction they watch (Appel, 2008). Many of the pleasures of fiction seem to be moral pleasures, and some scholars suggest the purpose of fiction is precisely the inculcation of moral sensibility (Gardner, 1977; Nussbaum, 1985). At the same time, much of our enjoyment of fiction depends on our relationship with characters; seeing well-liked characters succeed and disliked characters fail increases enjoyment of fiction (Raney, 2011). Identifying with main characters increases fictional engagement, or cognitive and/or emotional involvement with the text (Cohen, 2001, 2006), even when the character is morally ambiguous or an outright villain (Hall, 2017; Janicke & Raney, 2017). Unsurprisingly, given the degree to which audiences' real-world morality affects enjoyment of fiction (Gendler, 2000; Raney, 2011), the mechanisms behind audience fascination with such dark fictional characters (DFCs) has become a topic of interest for philosophy (e.g., Eaton, 2012) as well as the focus of empirical research (Hoorn & Konijn, 2003; Sanders & Tsay-Vogel, 2016). However, relatively little work has explored the role that individual differences may play in a tendency to like characters who break with moral and social norms. This research addresses this gap by exploring the relationship of liking for DFCs and the perceived inability to engage with morally deviant fictional worlds (imaginative resistance), morality, Machiavellianism, and personality.

In this paper, we begin by summarizing the literature addressing engagement with fiction and fictional characters, drawing on research in the field of communication. Our interest is in audience enjoyment of "dark" fictional characters whose actions violate real world moral norms. These can be morally ambiguous protagonists, who may not always act in accordance with their own and/or the

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audience's moral paradigm; they may also be protagonists who are strictly immoral, though audiences may root for them, and villains, representing the forces of evil in the story. For the current research, we focus on the "dark" aspects of both morally ambiguous or evil protagonists and villains, because all violate real-world moral norms and because relatively few fictional characters, even the "villains," are entirely bad, and the most interesting are often those who are redeemed, such as Anakin Skywalker/Darth Vader.[1] We describe models explaining enjoyment of DFCs in terms of moral disengagement (Raney, 2004, 2011) and identification (Konijn & Hoorn, 2005), and then introduce the concept of imaginative resistance as a potential explanatory factor along with individual differences in morality. Next, we present the exploratory study and two pre-registered follow-ups we carried out to test our predictions. Finally, we discuss our results and their implications for existing models and research in communication.

1.1. Background

Accounts of fictional entertainment—when and why audiences enjoy stories and the characters therein—have been framed in terms of Affective Disposition Theory (ADT), originally proposed by Zillman and Cantor (1976) to explain differences in humorous responding; people's perception of humor depends on their emotional relationship to the disparaging person and the disparaged target. Obviously, people are not going to appreciate a loved one being the object of a joke, but they are ready to laugh when the object is someone they dislike. ADT has since been expanded to address enjoyment of media in general (Raney, 2011, 2017): people engage with fiction via emotions that are primarily moral in nature. Such emotional engagement depends upon affective dispositions towards characters (Raney, 2004); when readers and viewers *like* fictional characters, they care what happens to them. Enjoyment increases when liked characters succeed and when disliked characters fail. Because people take sides according to their view of what is right and wrong, moral consideration is the best predictor of character liking and subsequent enjoyment (Raney, 2011), right up until the point audiences find themselves liking and rooting for morally ambiguous or even evil fictional characters.

Raney (2004, 2011) proposed moral disengagement as a mechanism used by audiences to suspend their usual moral judgment in order to enjoy DFCs. Moral disengagement broadly refers to a process through which individuals can temporarily "turn off" their morality to avoid judging themselves. Bandura (2006) describes moral disengagement as the avoidance of moral agency—the proactive effort to act morally coupled with avoidance of immoral actions—via mechanisms such as selective dehumanization (e.g., of outgroups or enemies), justification or rationalization of immoral behavior, and diffusion or displacement of moral responsibility. In other words, people morally disengage when they ignore their own or societal moral precepts and behave in ways they would normally consider immoral. For example, a student who believes that cheating is wrong might nonetheless cheat and talk themselves into believing that they have done nothing wrong Applied to fiction, moral disengagement allows media consumers to take sides with and like DFCs—characters whose actions they would normally deem morally unacceptable (Raney, 2004, 2011. Such moral disengagement is necessary as it facilitates engaging with the narrative even when the story includes immorality; otherwise we—the fiction consumer—might judge ourselves for liking these characters.

Empirical studies lend credence to moral disengagement as a mechanism of enjoyment of immoral fictional characters (Janicke & Raney, 2017; Krakowiak & Tsay-Vogel, 2013; Sanders & Tsay-Vogel, 2016). For example, Janicke and Raney (2017) used three films that featured antiheroes—main characters that acted immorally to achieve their ends—to test the associations of "situational" moral disengagement (measured with specific reference to the antiheroes and their actions—for example, justifying the violence of the antihero by saying he was just "doing his job"), identification with and liking of the protagonists, and enjoyment of the film. Results revealed a robust relationship between moral disengagement and identifying with the main characters, as well as associations with liking and enjoyment (and various mediation models) that depended on the film viewed.

The importance of identification with characters to engaging with fiction in various forms is supported by theory (Bandura, 2001; Cohen, 2001; Mar & Oatley, 2008) as well as empirical research (de Graaf, Hoeken, Sanders, & Beentjes, 2012; Hall, 2017; Janicke & Raney, 2017; Konijn & Hoorn, 2005; Murrar & Brauer, 2017; Sanders & Tsay-Vogel, 2016). Following Cohen (2001), we define identification with fictional characters as understanding their point of view, empathizing with their plight, and/or finding them similar to the viewer/reader. Cohen (2001) further described identification as an emotional and cognitive process that results in the viewer or reader seeing the fictional world from the character's point of view, thus vicariously experiencing the character's sense of self, motives, social relationships, and feelings. Bandura (2001) outlined the similarity between media figures and real people and how social cognitive theory applies to both: people model their behavior on media figures—even when they are fictional—and learn vicariously from them. Because people are more motivated to model their behavior on others who experience positive outcomes, fictional characters might be especially attractive models, even when their behavior is immoral. Fiction allows viewers to see inside the heads of protagonists in a way that is impossible with real people, and this may encourage the moral disengagement needed to condone or overlook immoral actions. Normally, fiction consumers might be prone to condemn themselves and others for feeling positive emotions toward someone who behaves in horrible ways, but being given intimate access to the minds of fictional characters may make it easier for them to buy into their motivations. For example, in *Breaking Bad*, viewers see Walter White's initial motivation—help his family—as an exonerating factor; their own experiences with the financial difficulties affecting the well-being of family members would make identifying with his predicament that much easier.

Empirical research provides evidence of the power of identifying with fictional characters. For example, in an experimental study

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[1] Future research is needed to test the extent to which fiction consumers like completely evil characters who have no redeeming virtues or justifying backstory. Similarly, it may be that genre preferences play a role: literary fiction tends to feature more morally ambiguous characters whereas popular fiction tends to follow tropes with the "bad guys" more clearly delineated.

with fifth grade children, Vezzali, Stathi, Giovannini, Capozza, and Trifiletti, (2014) found that children who identified with Harry Potter had improved attitudes towards immigrants after being read a passage about prejudice whereas children who identified with Voldemort had more negative attitudes towards immigrants afterwards. Vezzali and colleagues used a pre-test/post-test design and manipulated the content of the Harry Potter passage read; whom children identified with depended on the child. How and why people identify with fictional characters is not entirely clear, and different theories have been proposed. The two proposed mechanisms shared by most theories are also intuitive: similarity and liking. Cohen (2001, 2006) distinguishes identification from both liking and similarity, but also states that similarity increases the likelihood of identification, which in turn can increase liking. Interestingly, little has been done to investigate whether individual differences readers and viewers bring to their experience with fiction affects their identification with characters (but see Gerrig, Bagelmann, & Mumper, 2016). Rather, most models emphasize the importance of the immediate mechanism of identification—what readers/viewers do and feel in the moment of fictional engagement and its aftermath.

For example, Hoorn and Konijn (2003) propose the "Perceiving and Experiencing Fictional Characters" theory (see also Konijn & Hoorn, 2005), which describes a mechanism whereby audiences appraise and encode fictional characters in terms of ethics, aesthetics, and realism, compare them to their own situations and selves, and respond by engaging (including identification) more or less, a process that determines appreciation of the fictional experience. Konijn and Hoorn (2005) found empirical support for the theory: perceived similarity with characters increased identification[2], and for *bad* (immoral) characters, identification increased appreciation. In general, negative ethical appraisals of bad characters decreased perceived similarity and identification. However, the model leaves open the question of why some people—though not many—*do* perceive enough similarity between themselves and fictional characters to identify with them. Indeed, the fact that anyone would identify with immoral characters (DFCs) conflicted with intuition and disposition theories (Raney, 2004, 2011), and yet the fact remains that DFCs are often beloved, and audiences *do* identify with DFCs (Hall, 2017). Part of this may be due to narrative exposure (Sanders & Tsay-Vogel, 2016; Shafer & Raney, 2012; see also Dal Cin, Zanna, & Fong, 2004). The more experience people have in a fictional world, the more likely they are to identify with immoral or morally ambiguous characters, and subsequently be less likely to condemn their immoral actions (Sanders & Tsay-Vogel).

Because in the real world, people *choose* the fictions they engage with, any effect of narrative exposure is going to depend on the prior experience, attitudes, and beliefs that influence choice of fictional media. This may be especially true when it comes to fiction that portrays morally deviant worlds and/or characters (Barnes & Black, 2016; Black & Barnes, 2017; Caracciolo, 2013; Gendler, 2000, 2006). Prior research has shown that some individuals are particularly unable or unwilling to buy into fictional worlds in which immoral actions are presented as the right thing to do, a phenomenon known as imaginative resistance that may function as a sort of "morality check" on fiction that prevents people from engaging with stories that require a suspension of their real-world morality (Black & Barnes, 2017; Eaton, 2012; Gendler, 2000, 2006). Self-reported imaginative resistance, operationalized as discomfort with immoral fictions, has been associated with moral purity, disgust sensitivity, moral identity, and empathy (Black & Barnes, 2017).

Given that people generally report being much less able to imagine morally deviant worlds than both fantasy and dystopian worlds (Barnes & Black, 2016), it is surprising that audiences nonetheless enjoy DFCs such as Walter White and Tony Soprano. However, it may be precisely because of the challenge of overcoming imaginative resistance that we do appreciate such "rough heroes" (Eaton, 2012). Conceptualizing imaginative resistance as reluctance (rather than inability) to engage with immoral fictions, Eaton proposes that the attraction of DFCs lies in the aesthetic challenge of overcoming resistance. Audiences feel repulsion and liking at the same time, and relish the ambivalence of their reactions; the conflict with real-world morality makes a story more compelling. Although some people may avoid a book or film that promises to challenge their real world morality, others may find such media especially attractive; indeed, empirical studies provide evidence of individual differences in both self-reported and experienced imaginative resistance (Black & Barnes, 2017; Liao, Strohminger, & Sripada, 2014).

The variability in people's experience of imaginative resistance (Black & Barnes, 2017; Liao et al., 2014), suggests that whereas some may hesitate to engage with fictions—and identify with fictional characters—that offend their real-world morality, others may willingly embrace the same moral deviance, by suspending their real-world morality via moral disengagement (Janicke & Raney, 2017; Sanders & Tsay-Vogel, 2016). Thus, people who experience strong imaginative resistance may be much less likely to practice moral disengagement, either because the two constructs represent general traits that are inversely related, or because, when it comes to fiction, a refusal to go along with immoral stories makes moral disengagement unnecessary.

Current models that address the phenomena of liking for and identification with DFCs (e.g., Gerrig et al., 2016; Konijn & Hoorn, 2005) focus on the immediate mechanisms, such as moral disengagement and identification with characters, without taking into account what audiences bring to the fictional experience. Based on such research, two likely theories emerge: first, that liking for DFCs may be correlated with individual differences in morality—such as the different bases for moral judgment and the degree to which participants are willing to endorse the idea that the end justifies the means in the real world—and second, that liking for DFCs may be associated with a willingness to suspend real-world morality when engaging with fiction. Accordingly, in this research we explored the association of liking for DFCs and individual differences in morality, Machiavellianism, personality, and imaginative resistance. To the extent that trait morality and Machiavellianism—characterized by a cynical view of human nature and a willingness to act immorally and to manipulate others for personal gain (Dahling, Whitaker, & Levy, 2009)—correlated with liking DFCs, the first theory would be supported. To the extent that individual differences in imaginative resistance (reflecting the willingness and/or ability to engage with immoral fictions) related to liking DFCs, the second theory would be supported. Given that the two

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[2] Konijn and Hoorn (2005) use the term engagement rather than identification, and conceptualize engagement to include both involvement and distance from characters. However, the items they used to operationalize involvement reflect identification.

likely theories are not mutually exclusive, it was possible that *both* associations would be found.

2. Study 1

We began with a study designed to explore the association of preference for dark fictional characters with individual differences in imaginative resistance and morality. Affective dispositions towards characters in general depends on individual differences in moral judgment or evaluation (Raney, 2004), which in turn reflects distinct moral concerns (Haidt, 2007) and sense of morality (Black, 2016). Given that imaginative resistance is theorized to arise in response to moral violations performed by fictional characters (Black & Barnes, 2017; Eaton, 2012), we predicted a moderate to strong negative correlation between liking for dark characters and scores on the Imaginative Resistance Scale. This seemed especially likely because six of the thirteen items on the IRS specifically refer to character, protagonist, or hero. Imaginative resistance reflects the morality of the fiction consumer (Black & Barnes, 2017; Gendler, 2000), but it also targets the association between real-world moral beliefs and fiction; as such it should capture the special relationship between dark character liking, morality, and general attitudes towards fictional worlds.

To approach morality more generally, we used the Moral Foundations Questionnaire (MFQ; Graham et al., 2011), which taps moral concerns across the domains of Care, Fairness, Respect for Authority, Loyalty, and Purity (see Haidt, 2007; Haidt & Graham, 2007). These moral domains provide bases for moral judgment that individuals value to different degrees. In general, all people take Care and Fairness into consideration, but the degree to which they worry about the three so-called binding domains of Authority, Loyalty, and Purity tends to vary across the political spectrum, with those who identify as more conservative placing greater emphasis on these three domains. Dark character preference was potentially related to scores on some or all of the MFQ scales, because DFCs violate the precepts of all five domains, harming others, cheating, behaving disloyally, and breaking rules and taboos. If fiction consumers' primary concern was the harm done by morally ambiguous characters to others, or their unjust actions, then the association of liking for DFCs would be have stronger correlations with the individualizing foundations of Care and Fairness would be negatively related to preference for dark characters. If their primary concern was the moral threat to communities, then the correlations would be strongest for the binding foundations would be negatively related to preference for dark characters. We were most interested in the Purity domain, given its association with imaginative resistance: Black and Barnes (2017) reported strong positive correlations between the two constructs across two large samples, and proposed that fiction consumers could potentially worry about "catching" deviant morality from evil characters (Nemeroff & Rozin, 1994). As such, we expected a negative correlation between dark character preference and Purity as well as imaginative resistance.

2.1. Method

2.1.1. Participants and procedure

A Qualtrics survey was made available on social networking sites such as Facebook and Twitter; 189 adults (70.4% women, mean age = 25, *SD* = 11) completed the study. The majority of the sample was politically liberal, with 7.0% declaring themselves conservative or very conservative, 24.1% moderately conservative, 15.0% moderately liberal, and 53.5% liberal or very liberal. No other demographic information was collected.

2.1.2. Instrumentation

2.1.2.1. Dark character preferences.
Liking for dark characters was assessed with the Dark Character Scale (DCS), developed for this research. Items on the scale tap both liking (e.g., "I often find myself drawn to characters who have darkness in them" and "My favorite fictional characters are morally ambiguous and often do horrible things"), as well as features associated with identification, such as understanding the reasons and perspectives of dark characters (e.g., "I can often understand where the bad guys in fiction are coming from" and "I can often understand where the bad guys in fiction are coming from"). Answers are on a 5-point Likert scale. Seven items were tested; after discarding one with a low corrected item-total correlation ($r_{tt} < .40$), internal consistency reliability was good ($r_\alpha = .81$). See supplemental materials.

2.1.2.2. Morality.
The MFQ (Graham et al., 2011) assesses the five moral foundations of Care, Fairness, Loyalty, Respect for Authority, and Purity in two parts. The first part asked participants to judge how relevant a series of statements are when it comes to judging whether something is moral (7-point scale, *not at all relevant* to *extremely relevant*); the second includes a series of statements with which participants indicate their agreement on a 7-point Likert-type scale (*strongly disagree* to *strongly agree*). Each moral domain is represented by six items. In this study, the internal consistency reliabilities of the Care and Fairness subscales were very low ($r_\alpha s < .60$); as such, we combined the two to make an Individualizing scale with low, but improved, reliability ($r_\alpha = .69$). Scores on the Loyalty subscale also had poor reliability ($r_\alpha = .66$), but those on the Authority and Purity subscales were acceptable ($r_\alpha = .76$, .81 respectively).

2.1.2.3. Imaginative resistance.
The 13-item Imaginative Resistance Scale (IRS; Black & Barnes, 2017) was used to measure reluctance to imaginatively engage with morally deviant fiction. Participants are asked to indicate their agreement with items such as "I don't like books where bad things are presented as the right thing to do" on a 5-point Likert scale. Several items directly reference characters, for example, "The hero of a story should be a moral person," "It makes me uncomfortable when my favorite character commits moral violations as if they were no big deal," and "I sometimes cannot go along with a story when the "good" characters do morally reprehensible things." Internal consistency reliability was $r_\alpha = .92$ in the study.

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Table 1

Study 1. Means, standard deviations, and zero-order correlations between scores on the Dark Character Scale, index of preferences for Villains vs. heroes, scores on the Imaginative Resistance Scale and Moral Foundations Questionnaire scales.

	M	SD	2	3	4	5	6	7
1. Dark Character Scale	3.09	0.75	.39***	−.51***	−.09	−.20**	−.17*	−.24**
2. Villains vs. heroes	−8.15	5.68	–	−.22**	−.19*	−.20**	−.26*	−.20**
3. Imaginative resistance	2.65	0.84		–	.21**	.25**	.32***	.42***
4. Care/Fairness	4.56	0.58			–	.06	.08	.19**
5. Loyalty	3.45	0.82				–	.68***	.64***
6. Authority	3.43	0.96					–	.74***
7. Purity	3.20	1.14						–

Note. *p < .05; ** p < .01; *** p < .001. The Dark Character and Imaginative Resistance scales are answered on a 5-point Likert scale; the Moral Foundations Questionnaire responses are on a 6-point scale. The Villains vs. Heroes index contained 26 pairs of names.

2.1.2.4. Villains vs. heroes. As a secondary measure of liking for dark fictional characters, we used a list of 26 paired names of heroes and villains from well-known stories (e.g., Luke Skywalker/Darth Vader; Mufasa/Scar; Katniss Everdeen/President Snow; Harry Potter/ Voldemort; Batman/Joker). Participants were instructed to choose the character(s) whom they liked the most, with whom they most identified, or whom most interested them. They were told to leave any pair they did not recognize blank. One point was assigned for each villain selected; one point was subtracted for each hero selected (total score = villains – heroes). Higher scores meant greater preference for villains.

2.2. Results

2.2.1. Preliminary analyses

All variables were normally distributed. There were no statistically significant gender differences (.077 ≤ ps ≤ .828), although men ($M = 3.24$, $SD = 0.68$) did tend to prefer dark characters more than women ($M = 3.02$, $SD = 0.78$) did, $t(186) = 1.78$, $p = .077$, $d = 0.29$. On the Villains vs. Heroes measure, participants provided answers for a mean of 14.11 of the 26 pairs ($SD = 5.38$, median = 14, range 2–24), and they tended to prefer heroes ($M_{index} = $ -8.15, $SD = 5.68$, range -22 to 6). There was a moderately strong positive correlation between scores on the Villains vs. Heroes Index and the Dark Character Scale, $r(178) = .39$, 95% CI [.27, .50].

2.2.2. Primary analyses

Imaginative resistance was strongly and negatively correlated with liking for dark characters, $r(170) = $ -.51, 95% CI [-.64, -.36]; it was also negatively correlated with the Villains vs. Heroes index, $r(169) = $ -.22, [-.35, -.09]. Scores on the Dark Character Scale were not significantly related to the MFQ Care/Fairness combined scales ($p = .221$), but they were negatively correlated with the Authority, Loyalty, and Purity subscales. See Table 1 for all correlations, means, and standard deviations.

Finally, we used a regression model to predict liking for DFCs from the Villains vs. Heroes index, imaginative resistance, and the MFQ subscales. Together, the six predictors accounted for 32.2% of the variance in liking for DFCs, adjusted $R^2 = .322$, $F(6. 169) = 14.36$, $p < .001$. Preferences for villains over heroes accounted for 8.5% of the variability if liking for DFCs ($β = .310$, $sr^2 = .085$, $p < .001$), but imaginative resistance was the strongest predictor, explaining 16.2% of the variance above and beyond the other predictors ($β = $ -.453, $sr^2 = .162$, $p < .001$). The MFQ subscales were not significant predictors (ps > .100).

2.3. Discussion

Results of this exploratory study supported the hypothesis that there would be a strong negative correlation between imaginative resistance and liking for dark fictional characters. Importantly, the Dark Character Scale was positively associated with the Villains vs. Heroes index, which provided a secondary assessment of participant preferences for "real" fictional characters (protagonists vs. antagonists). Interestingly, considering the propensity of villains and morally ambiguous protagonists to act in ways that harm others, there was no significant relationship between the combined Care/Fairness MFQ scales and preferences for dark characters. However, scores on the Dark Character Scale were negatively associated with scores on all three binding foundations of the MFQ. Given that DFCs are often disloyal and by definition tend to work against legal and moral authority, the association with the Authority and Loyalty domains was unsurprising. In line with our predications and supporting the theory that failure to enjoy dark fictional characters may be related to a fear of "catching" their deviant morality (Black & Barnes, 2017; see also Nemeroff & Rozin, 1994), the correlation between liking for DFCs and scores on the Purity subscale was the strongest of the MFQ scales.

In general, our hypotheses about the association of reported liking for dark fictional characters, imaginative resistance, and morality were confirmed. The strong negative correlation between imaginative resistance and liking for DFCs made sense: people who are generally unwilling to go along with immorality in fiction are probably not going to enjoy DFCs. However, much of the variance in liking for DFCs remained unexplained. We therefore included a measure of Machiavellianism in our next study, the primary purpose of which was to verify the results of Study 1 in a second, pre-registered study with a distinct sample.

3. Study 2

The purpose of Study 2 was to conduct a pre-registered replication and extension of Study 1 in a sample of college undergraduates (see osf.io/rm x 2 t). In addition to measuring preferences for dark characters, imaginative resistance, and moral purity concerns, we included the Machiavellian Personality Scale (MPS; Dahling et al., 2009). Many dark fictional characters exhibit Machiavellian traits: they knowingly and willfully manipulate others to achieve selfish goals. Given that identification with characters contributes to the enjoyment of fiction and depends to some degree on perceived similarity (e.g., Konijn & Hoorn, 2005), we expected higher scores on the MPS to be positively correlated with liking for dark characters (scores on the DCS). As a separate measure of interest in dark fictional characters, we asked participants whether they had watched five different TV shows that feature protagonists who regularly act immorally; those who were familiar with the shows rated their enjoyment of them. Finally, we asked participants to complete a measure of personality to use as covariate if necessary.

3.1. Pre-registered hypotheses

Based on the results of Study 1, we predicted negative associations between liking for dark fictional characters and both imaginative resistance and moral purity concerns; we also expected a strong positive correlation between imaginative resistance and moral purity. We hypothesized a positive correlation between liking for dark characters and Machiavellianism personality traits; fiction consumers may identify with, and therefore enjoy, characters when they feel they share some of that character's traits and habits (Barnes, 2017; Cohen, 2001). Similarly, we expected a positive correlation between liking for dark characters and enjoyment of TV shows that feature morally ambiguous characters, as well as a negative correlation between imaginative resistance and Machiavellianism. Because our main interest was the MFQ Purity domain, no hypotheses were made regarding the domains of Care, Fairness, Authority, or Loyalty; however correlations were tested on an exploratory basis and results are reported.

3.2. Method

3.2.1. Participants and procedure

As a benchmark for power analyses, we used the correlation between scores on the DCS and MFQ Purity scales ($r = -.24$): $N = 103$ was needed for power of .80. However, given the limitations of the subject pool, we set $N = 100$ cases, or end of semester, as stopping rule. As such, 112 college undergraduates completed the survey before data collection was stopped; of these, five were discarded for completing the survey in less than 5 min and one was discarded for taking more than 24 h to complete survey, leaving 106 cases (56.2% women, 93.3% age 21 and under). The majority of the sample was politically conservative, with 33.3% declaring themselves very conservative or conservative, 37.1% moderately conservative, 13.3% moderately liberal, and only 16.2% liberal or very liberal.

3.2.2. Instrumentation

In addition to the DCS, IRS, and MFQ subscales described in Study 1 (See Table 2 for internal consistency reliabilities), we used the following instruments:

3.2.2.1. Machiavellianism Personality Scale.
Two subscales (amorality and distrust of others) of the Machiavellian Personality Scale (MPS; Dahling et al., 2009) were used as a measure of the self-oriented traits typical of Machiavellian attitudes and behavior, amorality, distrust of others, desire for control, and desire for status. The other two subscales (desire for control and status subscales) are other-oriented and were not used in the present research. The amorality (e.g., "I would cheat if there was a low chance of getting caught") and distrust of others (e.g., "People are only motivated by personal gain") were combined for an overall measure of Machiavellianism. Answers are made on a 5-point Likert scale.

Table 2
Study 2. Cronbach's alpha, means, standard deviations, and zero-order correlations between scores on the Dark Character Scale, the Imaginative Resistance Scale, and the Moral Foundations Questionnaire Purity subscales of Purity, Care and Fairness (combined), Respect for Authority, and Loyalty.

	α	M	SD	2	3	4	5	6	7
1. Dark Character Scale	.80	3.61	0.73	−.28**	.29**	−.36***	< .01	−.33**	−.33**
2. Imaginative resistance	.89	2.43	0.62	–	.11	.48***	.05	.25*	.27**
3. Machiavellianism	.85	2.52	0.67		–	.08	−.16	.01	.09
4. Purity	.75	3.62	0.93			–	.33**	.67***	.62***
5. Care/Fairness	.79	4.31	0.60				–	.22*	.22*
6. Authority	.71	4.00	0.81					–	.75***
7. Loyalty	.73	4.04	0.81						–

Note. *p < .05; ** p < .01; *** p < .001. The Dark Character, Imaginative Resistance, and Machiavellianism scales are answered on a 5-point Likert scale; the MFQ subscales are answered on a 6-point scale.

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Table 3

Study 2. Descriptive statistics for the Big Five Personality factors of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism and their associations with the variables of interest in Study 2.

	α	M	SD	Liking for DFCs	Imaginative Resistance	Purity	Machiavellianism
Openness	.83	3.45	0.59	.12	− .17	− .12	− .05
Conscientiousness	.83	3.52	0.60	− .26**	.08	.04	− .26**
Extraversion	.81	3.31	0.63	.01	− .19	.02	− .02
Agreeableness	.78	3.63	0.51	− .15	− .01	.13	− .55***
Neuroticism	.83	2.94	0.69	.29**	.07	− .03	.07

Note. $*p < .05$; $** p < .01$; $*** p < .001$. The five personality factors were measured on a 5-point scale.

3.2.2.2. Big Five Inventory. (BFI; John et al., 1991, 2008). The BFI assesses personality according to the Big Five model that includes Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The BFI asked participants to consider 44 statements prefaced by "I am someone who…" (e.g., "is talkative"; "gets nervous easily"; "does things efficiently") and answer on a 5-point Likert scale. See Table 3 for scale reliability.

3.2.2.3. TV Enjoyment. In order to measure enjoyment of television featuring protagonists who do highly immoral things, we asked participants whether they had seen five or more episodes of *Scandal, House of Cards, Hannibal, Breaking Bad,* and *The Knick.*[3] Those who answered yes were asked to rate their enjoyment of the show ("How much did you enjoy ___?") from 0 (*not at all*) to 100 (*very much*). Forty-seven (44.8%) people had not watched that many episodes of any of the shows; 36 (34.3%) had watched one; the rest had watched two to four of the shows. For those who had watched more than one show, the mean was used as a measure of enjoyment. See Table 4 for details.

3.2.3. Data analyses

Preliminary analyses tested the relationship of gender and personality with the variables of interest. Gender and personality factors related at $p < .05$ would be included in a regression model to test the hypotheses; if not significantly related, simple Pearson's correlations would be used. Data were visually inspected for bivariate outliers prior to correlational analyses; multivariate outliers were also considered in regression models that tested primary hypotheses; outliers by two or more criteria (Mahalanobis distance, Cook's D, leverage, *df*beta) would be discarded on an analysis-by-analysis basis (none discarded). Any continuous variables not normally distributed would be transformed to meet assumptions of normality. All a priori hypotheses were tested at $p < .05$.

3.3. Results

3.3.1. Preliminary analyses

There were no gender differences on the Dark Character Scale ($p = .756$, $d = 0.06$), TV show enjoyment ($p = .838$, $d = 0.05$), Imaginative Resistance ($p = .928$, $d = 0.02$), Purity ($p = .399$, $d = 0.17$), or Machiavellianism ($p = .073$, $d = 0.36$). Although the personality factors of Openness to experience and Extraversion were not related to any of the variables of interest, Conscientiousness, Agreeableness, and Neuroticism were (see Table 3); as such, each of the hypotheses was tested in a regression model that controlled for the personality factors that were significantly correlated with the variables being tested.

3.3.2. Primary analyses

3.3.2.1. Liking for dark characters. As expected, people who reported liking dark fictional characters had lower imaginative resistance: controlling for conscientiousness and neuroticism, imaginative resistance accounted for 8.1% of the variance in DCS scores, $\beta = −.287$, $p = .002$, $sr^2 = .081$. Similarly, purity accounted for 11.6% of the variability in DCS scores, $\beta = -.341$, $p < .001$, $sr^2 = .116$ (also controlling for conscientiousness and neuroticism). Participants who expressed greater concerns about moral purity were less likely to enjoy dark fictional characters. Also as predicted, participants with greater self-reported Machiavellian personality traits expressed greater liking for dark characters. Controlling for conscientiousness, agreeableness, and neuroticism, Machiavellianism accounted for 5.9% of the variability in DCS scores, $\beta = .292$, $p = .009$, $sr^2 = .059$. Enjoyment of TV shows featuring dark characters also predicted DCS scores, controlling for conscientiousness and neuroticism: $\beta = .271$, $p = .032$, $sr^2 = .073$.

3.3.2.2. Imaginative resistance. In line with past research (Black & Barnes, 2017) and confirming the hypothesis, there was a strong positive correlation between imaginative resistance and moral purity concerns, $r(103) = .48$, 95% CI [.32, .62]. Surprisingly, imaginative resistance was not related to Machiavellianism, $\beta = .108$, $p = .192$, $sr^2 = .012$ (controlling for conscientiousness and agreeableness).

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[3] The protagonists of these shows have committed a large range of moral violations, including adultery, murder, rigging a presidential election, killing a dog, and dealing drugs

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Table 4
Study 2. Participants who had viewed five or more episodes of the TV shows tests, means, standard deviations, minimum, and maximum of enjoyment ratings.

TV show	N	Mean enjoyment	SD	Minimum	Maximum
Breaking Bad	40	79.55	16.28	46	100
Hannibal	7	74.57	27.06	21	100
House of Cards	21	76.19	20.72	37	100
The Knick	2	65.00	19.80	51	79
Scandal	20	86.60	14.08	48	100

Note. Total sample: $N = 105$; of those, only 58 had watched five or more episodes of any of these shows.

3.3.2.3. Exploratory analysis. Correlations for the MFQ subscales of Care and Fairness (combined), Authority, and Loyalty are reported in Table 2. To test the unique contributions of Machiavellianism, imaginative resistance, and moral purity concerns, we entered all three as Block 2 (Block 1 included personality variables) in a multivariate regression analysis. Together, conscientious, agreeableness, neuroticism, Machiavellianism, imaginative resistance, and moral purity concerns accounted for 61.6% of the variance in liking for dark characters, $F(6, 104) = 9.00, p < .001, R^2_{adj.} = .316$; Machiavellianism, imaginative resistance, and moral purity concerns accounted for 23.5% of the variability over and above personality, $F(3, 98) = 11.91, p < .001, R^2_{change} = .235$. Machiavellianism was the strongest predictor, alone explaining 10.2% of the variance in DCS scores, $β = .390, p < .001, sr^2 = .102$. See Table 5 for details.

3.4. Discussion

The purpose of Study 2 was to confirm the results of Study 1 and to extend the investigation to include Machiavellianism. The overall pattern of correlations was consistent with Study 1: DCS scores were negatively correlated with imaginative resistance and moral purity concerns, which were positively correlated. However, the association between DCS and IRS (imaginative resistance) scores was much weaker than in Study 1, although it held even controlling for personality. The weaker correlation could be due to the small sample, or the demographics of the sample (younger, college undergraduates, more politically conservative). Further research would be needed to verify the strength of the relationship. On the other hand, the negative correlation between moral purity concerns and DCS scores was stronger than in Study 1; given the strong association between imaginative resistance and moral purity similar worries about moral contagion might be behind the dislike of dark fictional characters (Black & Barnes, 2017).

An important addition in Study 2 was the association of Machiavellian personality traits and liking for dark fictional characters, a relationship that was even stronger controlling for personality, imaginative resistance, and moral purity concerns. This correlation supports theories that explain identification with fictional characters in terms of perceived similarity between reader/viewer and favorite characters (Konijn & Hoorn, 2005). It could also be that people who like DFCs admire Machiavellian behavior in general, appreciate it in fiction, and are thus ready and willing to ascribe Machiavellian traits to themselves in self-report instruments.

Although the results of Study 2 were largely consistent with Study 1 and our additional hypotheses, the nature of the sample—college students—meant restriction of age range, and consequently a greater likelihood of participants who had consumed a limited amount of fiction. It is also important to note that the sample in Study 1 was much more liberal (68.5% moderately to very liberal) than that in Study 2 (70.5% moderately to very conservative). Conservatism has been associated both with greater moral purity concerns (Graham, Haidt, & Nosek, 2009) and with greater imaginative resistance (Black & Barnes, 2017), which may explain the differences in the results of Studies 1 and 2. Clarification of the slight discrepancy in the relative strength of associations between the first two studies, and the need to confirm the effect of Machiavellianism in a larger sample gave rise to Study 3.

Table 5
Study 2. Exploratory multivariate regression analysis predicting liking for dark fictional characters from Machiavellianism, imaginative resistance, and moral purity, controlling for related personality factors.

	Predictors	b	$β$	sr^2	p	r
Block 1	Conscientiousness	−0.22	−.181	.027	.081	−.262
	Agreeableness	−0.06	−.042	.015	.677	−.153
	Neuroticism	0.24	.228	.047	.023	.291
	$R^2_{CHANGE} = .120$					
Block 2	Conscientiousness	−0.15	−.123	.012	.178	−.262
	Agreeableness	0.28	.202	.025	.054	−.153
	Neuroticism	0.29	.275	.067	.002	.291
	Imaginative Resistance	−0.21	−.180	.024	.059	−.280
	Purity	−0.24	−.314	.072	.001	−.356
	Machiavellianism	0.42	.390	.102	< .001	.287
	$R^2_{CHANGE} = .235$					
	$R^2_{MODEL} = .355$					

Note. $N = $. Adjusted $R^2_{MODEL} = .316$. $b = $ unstandardized slope; $sr^2 = $ semipartial correlation.

4. Study 3

The purpose of Study 3 was to further explore the associations found between liking for dark fictional characters, imaginative resistance, moral purity, and Machiavellianism found in Studies 1 and 2 in a second pre-registered study (osf.io/hyq45). The correlation between imaginative resistance and liking for dark characters was stronger in Study 1 ($r = .51$) than in Study 2 ($r = .28$); a third study could help clarify the strength of the relationship. We also wanted to verify the strong positive correlation between Machiavellianism and liking for dark characters in a larger, adult sample. Finally, we proposed and tested a mediation model whereby moral purity concerns would be associated with liking for dark characters primarily through imaginative resistance. The exploratory regression analysis reported in Study 1, in which the effect of imaginative resistance remained strong and statistically significant while the effect of purity disappeared, suggested that the effect of moral purity on liking for dark characters worked through imaginative resistance (see Baron & Kenny, 1986). On the other hand, the results of Study 2 (where purity was the stronger predictor) suggested that imaginative resistance would act as mediator. In light of theory and the smaller second sample, we predicted the first model, with imaginative resistance as mediator.

4.0. Pre-registered hypotheses

As in Study 2, we hypothesized a negative correlation between liking for dark characters and both imaginative resistance and moral purity. We also expected a negative correlation between imaginative resistance and Machiavellianism. We predicted strong positive correlations between Machiavellianism and DCS scores, and imaginative resistance and moral purity. Additionally, we hypothesized a mediation model whereby imaginative resistance would mediate the association between moral purity concerns and liking for dark fictional characters. People who worry about moral contagion in general would be more likely to fear "catching" immoral behavior from fiction, and therefore be less likely to find dark fictional characters, who commit or condone immoral acts in stories, appealing (Black & Barnes, 2017).

4.1. Method

4.1.1. Participants and procedure

Power analyses based on Study 2 indicated the need for $N = 154$ cases to achieve power of .80 at alpha level of $p < .01$ for correlational analyses, and $N = 121$ for estimated squared semipartial correlations in regression analyses. As such, 159 adults (50.3% female, mean age = 36.84, $SD = 11.32$, range 19–71) were recruited on Amazon.com's Mechanical Turk (MTurk) and paid $0.50 for participating. MTurk provides more diverse and representative samples than those obtained in departmental research pools, and data obtained are no less reliable (see Buhrmester, Kwang, and Gosling, (2011) and Buhrmester, Talaifar, and Gosling, (2018) for evaluation of MTurk samples). MTurk participants were limited to workers who were US citizens with an approval rating greater than 96%; repeat participation was prevented with code and internal survey checks. The sample tended to be liberal, with 15.1% declaring themselves conservative or very conservative, 23.9% moderately conservative, 25.2% moderately liberal, and 35.9% liberal or very liberal.

4.1.2. Instrumentation

Participants completed the Dark Character Scale ($r_\alpha = .88$), the MFQ Purity subscale ($r_\alpha = .88$), the Imaginative Resistance Scale ($r_\alpha = .94$), and the Machiavellian Personality Scale (amorality and distrust of others subscales; $r_\alpha = .91$) in that order. Because including personality in the models in Study 2 had not changed the targeted relationships, we did not include the Big Five Inventory in this study.

4.1.3. Data analyses

Alpha level for bivariate correlational analyses was set at $p < .01$. As such, Pearson's r, with 99% bias corrected and accelerated bootstrapping ($N = 5,000$) for confidence intervals was used. Mediation was tested with the SPSS Macro PROCESS (Darlington & Hayes, 2016), which uses bootstrapping (compensating for potential lack of normally distributed indirect effect) and calculates a variety of effect sizes. The ratio of the indirect effect to the total effect (P_M) is reported as a measure of effect size (Wen & Fan, 2015).

4.2. Results

4.2.1. Preliminary analyses

MPS scores had a slight positive skew that was corrected to normality with a square root transformation. All other variables were normally distributed. Visual inspection (scatterplot) revealed a single outlier for the DCS-MPS relationship that was confirmed in regression analysis (multivariate outlier according to more than two criteria); this case was not included in relevant analyses. Women ($M = 2.82$, $SD = 0.92$) reported greater imaginative resistance than did men ($M = 2.30$, $SD = 0.78$), $t(157) = 3.84$, $p < .001$, $d = 0.61$. Men ($M = 3.47$, $SD = 0.74$) reported greater liking for dark characters than women ($M = 3.12$, $SD = 0.98$), $t(157) = 2.57$, $p = .011$, $d = 0.41$. Men ($M = 2.63$, $SD = 0.87$) also scored higher in Machiavellianism than did women ($M = 2.16$, $SD = 0.77$), $t(157) = 3.55$, $p = .001$, $d = 0.56$. Descriptive statistics reported in Table 6.

Table 6
Descriptive statistics and correlations for variables in Study 3.

	α	M	SD	2	3	4
Dark Character Scale	.88	3.29	0.88	−.52***	−.30***	.50***
Imaginative resistance	.94	2.56	0.89	–	.51***	−.11
Purity	.88	3.16	1.33		–	−.05
Machiavellianism	.91	2.39	0.85			–

Note. *p < .05; ** p < .01; *** p < .001. All scales are answered on a 5-point Likert scale, except the MFQ Purity scale, answered on a 6-point scale.

4.2.2. Primary analyses

As predicted and in line with Study 1, liking for dark characters was strongly and negatively correlated with imaginative resistance, $r(157) = -.52$, 99% CI $[-.68, -.30]$. DCS scores were also negatively correlated with moral purity, $r(157) = -.30$, $[-.47, -.10]$. Imaginative resistance and moral purity were once again strongly and positively correlated, $r(157) = .51$, $[.31, .68]$. As hypothesized and in line with Study 2 results, people who expressed greater liking for dark characters also reported greater Machiavellianism, $r(156) = .50$, $[.34, .63]$. In line with Study 2 and once again failing to confirm the hypothesis, imaginative resistance and Machiavellianism were not significantly correlated, $r(157) = -.11$, $[-.35, .16]$.

A regression analysis predicting DCS scores from imaginative resistance, purity, and Machiavellianism lent further support to the hypotheses. Together, IRS, moral purity, and Machiavellianism accounted for 41% of the variance in liking for dark characters, $F(3, 155) = 37.38$, $p < .001$, $R^2_{adj.} = .409$. Purity was not a significant predictor ($p = .461$); however, both imaginative resistance ($\beta = -.45$, $p < .001$, $sr^2 = .147$) and Machiavellianism ($\beta = .39$, $p < .001$, $sr^2 = .151$) accounted for unique proportions of the variability in DCS scores. Adding gender to the model (Block 1) did not change the associations (sr^2 values were identical).

4.2.2.1. Mediation.

To test for mediation, scores on the IRS and MFQ Purity scales were entered as predictors with scores on the DCS as outcome variable. Together, imaginative resistance and purity accounted for 26.9% of the variability in liking for dark characters, $F(2, 156) = 28.65$, $p < .001$, $R^2 = .269$. As hypothesized, imaginative resistance fully mediated the association between moral purity and liking for dark characters, $ab = -.17$, 95% CI $[-.65, -.35]$, Sobel test $z = -4.72$, $p < .001$, $P_M = 0.84$, $[0.48, 1.48]$. The effect held when Machiavellianism scores and gender were added to the model. See Fig. 1 for details.

4.3. Discussion

Results from Study 3 confirm the negative association between liking for DFCs and imaginative resistance found in Studies 1 and 2, and the positive correlation between liking for DFCs and Machiavellianism found in Study 2. The strength of the relationship between IRS and DCS scores was closer to that of Study 1 rather than Study 2; similarly, the correlation between Machiavellianism and liking for DFCs was much stronger in Study 3 than in Study 2. It is worth reiterating that the participants in Study 2 tended to be more conservative, and therefore potentially more likely to have greater concerns about moral purity (Graham et al., 2009). It was also an undergraduate sample obtained from a departmental research pool (largely first year students); it is possible that age and experience with fiction, both likely to be greater in the other studies, may provide a better estimate of the range of individual differences in adults. Study 3 also tested the hypothesized model whereby IRS scores mediate the association between moral purity concerns and liking for DFCs: results confirmed the proposed model. It should be noted that mediation models depend on the relative strength of the correlations amongst predictor, mediator, and criterion; future research proposing and testing different models is needed. However, moral purity and imaginative resistance are consistently positively correlated, both in the current studies and in prior research (Black & Barnes, 2017), and are both likely to reflect a fear of moral contagion that would discourage people from identifying with and liking DFCs. Individual differences in both, as well as Machiavellianism, are likely to prevent people from
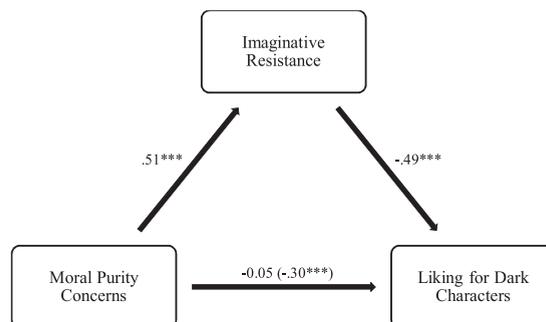

Fig. 1. Mediation model for Study 3. Imaginative resistance fully mediated the association between moral purity and liking for dark characters, ab = −.17, 95% CI [−.65, −.35], p < .001. All statistics are standardized regression coefficients. Number in parentheses is the direct effect of MFQ Purity scores on DCS scores prior to the inclusion of IRS scores in the model. ***p < .001.

reading or watching fiction featuring DFCs, and, for those who do try to engage with immoral fictions, lessen the likelihood of identification with DFCs.

5. General discussion

The purpose of this research was to test the association between liking of DFCs and individual differences in imaginative resistance, morality, Machiavellianism, and personality. Although we found no evidence of an effect of personality, the negative correlation between imaginative resistance and liking of DFCs was supported over three studies, two of them pre-registered. Similarly robust relationships were found with moral purity and Machiavellianism, although moral concerns of care and fairness were not correlated with liking of DFCs. As with imaginative resistance, moral purity was inversely related to liking for DFCs, whereas people who had higher scores on the Machiavellianism scale also reported greater liking of DFCs. Study 2 demonstrated that controlling for personality did not change the associations between liking DFCs and the variables of interest; similarly, adding gender to the models tested in Studies 2 and 3 did not alter the effects.

Importantly, we used three separate and distinct samples (adults who participated voluntarily recruited on social media, college undergraduates, and paid MTurk workers) and using three different measures to tap liking for DFCs. Recruiting on social media allowed us to target readers, whereas student and MTurk samples are typically used in psychological research. A further strength is the use of three measures to assess liking: self-reported liking, preferences for villains vs. heroes, and voluntary exposure to and enjoyment of TV shows featuring immoral or morally ambiguous protagonists. The positive correlations between our Liking for DFCs scale and other two measures serve to validate the primary, self-report, instrument; they also suggest various avenues for future research, discussed below. These results, collected from different sources and operationalizing liking for DFCs in three distinct instruments, strongly support the premise that individual differences in morally relevant variables are an important aspect of engagement with fiction.

Explanations of the attraction of DFCs have focused on the immediate mechanisms of fictional engagement, such as identification with characters and moral disengagement. Identification, often used to mean *liking* characters as well as taking their perspective (Cohen, 2001), may depend largely on perceived similarity: audiences tend identify more with characters who are experiencing similar social situations or whom they view as similar (see also Konijn & Hoorn, 2005). Results from Studies 2 and 3 lend credence to the importance of perceived similarity. Participants who expressed greater liking for DFCs also had higher Machiavellian personality traits. Given that DFCs often behave in a Machiavellian manner—in fact, that may be one reason audiences enjoy them (Jonason, Webster, Schmitt, Li, & Crysel, 2012)—readers who self-report greater Machiavellianism may see their own traits, or traits they admire, reflected in the dark heroes they enjoy in fiction.

For others, the immoral behavior of DFCs may be too much to overcome, even when the same characters are sympathetically presented in media. Imaginative resistance, theorized to prevent engagement with immoral fictional worlds (Gendler, 2000, 2006) and characters (Caracciolo, 2013), has been shown to relate to the perceived ability to imagine deviant fictions (Black & Barnes, 2017). Eaton (2012) holds that the entire purpose of works that include DFCs is to overcome imaginative resistance; given evidence of individual differences in resistance (Black & Barnes, 2017; Liao et al., 2014) as well as liking for DFCs, the difficulty of doing so must vary widely. Results from all three studies revealed a robust negative association between liking for DFCs and imaginative resistance, suggesting that whether this is possible will depend on the audience. Negative correlations between liking for dark characters and individual differences in both imaginative resistance and moral purity support the theory that real world morality plays a role in preventing some people from engaging with DFCs. Interestingly and unexpectedly, Machiavellianism was not significantly related to imaginative resistance; this is particularly intriguing given that six of the thirteen items on the Imaginative Resistance Scale directly reference character actions that could be Machiavellian in the right circumstances (e.g., "I would be uncomfortable reading a book in which the protagonist thought it was okay to kill people" where such a protagonist murdered as means to an end). Imaginative resistance and Machiavellianism seem to explain distinct aspects of liking for DFCs. It may be that imaginative resistance reflects fear of moral contagion (Black & Barnes, 2017; Nemeroff & Rozin, 1994). As such both imaginative resistance and moral purity, posited to itself cause resistance in our mediation model (Study 3), may play a protective function by preventing identification with DFCs and subsequent moral disengagement (Sanders & Tsay-Vogel, 2016).

The extent to which real world morality prevents audiences from liking and engaging with DFCs may have real world consequences. People are likely to model their real world behavior on persons they experience through media, whether fictional or real (Bandura, 2001). Identification with characters can increase learning in general, but it can also increase aggression (Cohen, 2001). More generally, liking, as experienced in parasocial relationships (relationships audiences develop with persons they do not know in real life, such as celebrities and fictional characters [Cohen, 2001; Gabriel, Paravati, Green, & Flomsbee, 2018]) has the potential for wide-ranging real-world consequences. This is true even when audiences are not directly modelling their behavior on fictional characters. For example, exposure to Trump media (*The Apprentice* and *Celebrity Apprentice*) increased parasocial bonding with Trump which in turn increased the probability of voting for Trump in 2016 election, especially for those who did not identify with the Republican Party (Gabriel et al., 2018). In light of theories of fictional engagement and supporting research on parasocial relationships and identification (Konijn & Hoorn, 2005; Sanders & Tsay-Vogel, 2016), defining characteristics that may facilitate or prevent liking DFCs, such as Machiavellianism and imaginative resistance, may help to better understand when and for whom fictional engagement could have the potential to negatively affect real world attitudes or behavior.

5.1. Limitations and future directions

This research addresses a gap in the literature; prior research had addressed mechanisms of engagement with DFCs but not individual differences that may predict who is likely engage. These studies strongly suggest that imaginative resistance and Machiavellianism may play distinct roles in liking of DFCs. However, all three studies were correlational and reflect only part of a larger model. Although both imaginative resistance and Machiavellianism were significant predictors in Studies 2 and 3, they explained only 36% and 41% respectively of the variability in liking for DFCs. Identification and moral disengagement will both likely play a prominent role in a more complete model. Past studies have measured both in relation to specific characters (Sanders & Tsay-Vogel, 2016), but there are individual difference in general moral disengagement (Bandura, Barbaranelli, Vittorio Caprara, & Pastorelli, 1996); an important first step would be to test for associations between imaginative resistance, Machiavellianism, and moral disengagement. Further, in order to more fully understand the relationship between immorality in fiction and moral disengagement, it would be interesting to test the degree to which participants' prior experience with different kinds of fiction is related to both moral disengagement and liking for DFCs.

One possible limitation to this study involves the conceptualization of "Dark Fictional Characters" as including both villains (Study 1) and morally questionable (or downright immoral) protagonists (Studies 1, 2, and 3). Thus, one fruitful avenue for future research may be investigating potential differences between different types of DFCs; it is possible that people react differently to outright villains and evil protagonists than they do to morally *ambiguous* protagonists. Further, it remains to be seen if people do like *truly* evil characters (vs. morally ambiguous protagonists or villains that are subsequently redeemed) at all. People who like fictional characters who do bad things for good purposes—encouraging moral disengagement via justification—may differ meaningfully from people who like fictional characters who enjoy doing evil itself, with no mitigating circumstances (Voldemort comes to mind—there are people who identify more with him than with Harry Potter [Vezzali et al., 2014]).

Another interesting direction for future research involves looking at other characteristics of DFCs which may make audiences find them more appealing. For example, does character gender play a role? In this research, we did not delve into specific characteristics of DFCs, although it was telling that men scored higher on the Dark Character Scale than did women; this may reflect the fact that there may be far more *male* DFCs in fiction (both heroes and villains), and people tend to identify more strongly with characters they perceive as similar (Cohen, 2001, 2006).

Another possible limitation involves some of the measures used in this experiment. In Study 1, the Villains vs. Heroes task asked participants to indicate a preference between specific villains and heroes in media properties with which they were familiar; in study 2, participants were asked to indicate whether they had watched and enjoyed five specific shows with DFC protagonists. For the Villains vs. Heroes tasks, participants may have chosen a villain just because they found the corresponding hero dull or uninteresting, or because they were more familiar with an iconic villain than a less-known hero. Similarly, the TV enjoyment task may have tapped enjoyment of the *show* as a whole, rather than the protagonist per se. Notably, however, both measures were related to self-reported liking for DFCs. Nonetheless, future research is needed to refine these variables and include them in a larger model.

Finally, experimental research is necessary to explore the immediate effect of identification with DFCs on different outcome variables (such as attitude change and moral disengagement) while controlling for individual differences in imaginative resistance and Machiavellianism. Manipulating the degree of villainy of a DFC and testing its effect on liking could allow further investigation of the interplay of Machiavellianism, imaginative resistance, and moral disengagement: at what point will people experience resistance and what features of the story can encourage disengagement? Further, future research could also investigate whether these effects are specific to fiction or whether a similar model holds for liking for dark *non*fictional personages, such as historical figures or notorious contemporary celebrities.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.poetic.2018.12.005.

References

Appel, M. (2008). Fictional narratives cultivate just world beliefs. *Communication, 58*, 62–83.

Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology, 3*, 265–299.

Bandura, A. (2006). Towards a psychology of human agency. *Perspectives on Psychological Science, 1*, 164–180.

Bandura, A., Barbaranelli, C., Vittorio Caprara, G., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology, 71*, 364–374.

Barnes, J. L. (2018). Imaginary engagement, real-world effects: Fiction, emotion, and social cognition. *Review of General Psychology,* 125–134.

Barnes, J. L., & Black, J. E. (2016). Impossible or improbable: The difficulty of imagining morally deviant worlds. *Imagination Cognition and Personality, 36*, 27–40.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.

Black, J. E. (2016). An introduction to the moral agency scale. *Social Psychology, 47*, 295–310.

Black, J. E., & Barnes, J. L. (2017). Measuring the unimaginable: Imaginative resistance to fiction and related constructs. *Personality and Individual Differences, 111*, 71–79.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*, 3–5.

Buhrmester, M., Talaifar, S., & Gosling, S. D. (2018). An evaluation of Amazon's Mechanical Turk, its rapid rise, and its effective use. *Perspectives on Psychological Science, 13*, 149–154.

Caracciolo, M. (2013). Patterns of cognitive dissonance in readers' engagement with characters. *Enthymema, 8*, 21–37.

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society, 4*, 245–264.

Cohen, J. (2006). Audience identification with media characters. In J. Bryant, & P. Vorderer (Eds.). *Psychology of entertainment* (pp. 183–198). Mahwah, NJ: Erlbaum.

Dahling, J. J., Whitaker, B. G., & Levy, P. E. (2009). The development and validation of a new Machiavellianism Scale. *Journal of Management, 35*, 219–257.

Dal Cin, S., Zanna, M. P., & Fong, G. T. (2004). Narrative persuasion and overcoming resistance. In E. S. Knowles, & J. A. Linn (Eds.). *Resistance and persuasion* (pp. 175–191). Mahwah, NJ: Lawrence Erlbaum.

Darlington, R. B., & Hayes, A. F. (2016). *Regression analysis and linear models: Concepts, applications, and implementation.* Guilford.

de Graaf, A., Hoeken, H., Sanders, J., & Beentjes, J. W. (2012). Identification as a mechanism of narrative persuasion. *Communication Research, 39*, 802–823.

Eaton, A. W. (2012). Robust immoralism. *Aesthetics and Art Criticism, 70*, 281–292.

Flesch, W. (2007). *Comeuppance: Costly signaling, altruistic punishment, and other biological components of fiction.* Cambridge, MA: Harvard University Press.

Gabriel, S., Paravati, E., Green, M. C., & Flomsbee, J. (2018). From Apprentice to President: The role of parasocial connection in the election of Donald Trump. *Social Psychological and Personality Science*.

Gardner, J. (1977). *On moral fiction.* New York: Basic Books, Inc.

Gendler, T. S. (2000). The puzzle of imaginative resistance. *Philosophy, 97*, 55–81.

Gendler, T. S. (2006). Imaginative resistance revisited. In S. Nichols (Ed.). *The architecture of the imagination*. City: Oxford University Press.

Gerrig, R. J., Bagelmann, K. A., & Mumper, M. L. (2016). On the origins of readers' outcome preferences. *Discourse Processes, 53*(8), 603–631.

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of Moral Foundations. *Personality and Social Psychology, 96*, 1029–1046.

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Personality and Social Psychology, 101*, 366–385.

Haidt, J. (2007). The new synthesis in moral psychology. *Science, 316*, 998–1002.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*.

Hall, A. E. (2017). Identification and parasocial relationships with characters from star wars: The force awakens. *Psychology of Popular Media Culture* No pagination specified.

Hoorn, J. F., & Konijn, E. A. (2003). Perceiving and experiencing fictional characters: An integrative account. *The Japanese Psychological Research, 45*, 250–268.

Janicke, S. H., & Raney, A. A. (2018). Modeling the antihero narrative enjoyment process. *Psychology of Popular Media Culture,* 533–546.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory–Versions 4a and 54.* Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.). *Handbook of personality: Theory and research* (pp. 114–158). New York, NY: Guilford Press.

Jonason, P. K., Webster, G. D., Schmitt, D. P., Li, N. P., & Crysel, L. (2012). The antihero in popular culture: Life history theory and the dark triad personality traits. *Review of General Psychology, 16*, 192–199.

Konijn, E. A., & Hoorn, J. F. (2005). Some like it bad: Testing a model for perceiving and experiencing fictional characters. *Media Psychology, 7*, 107–144.

Krakowiak, K. M., & Tsay-Vogel, M. (2013). What makes characters' bad behaviors acceptable? The effects of character motivation and outcome on perceptions, character liking, and moral disengagement. *Mass Communication & Society, 16*, 179–199.

Liao, S., Strohminger, N., & Sripada, C. S. (2014). Empirically investigating imaginative resistance. *The British Journal of Aesthetics, 54*, 339–355.

Mar, R. A., & Oatley, K. (2008). The function of fiction is the abstraction and simulation of social experience. *Perspectives on Psychological Science, 3*, 173–192.

Murrar, S., & Brauer, M. (2017). Entertainment-education effectively reduces prejudice. *Group Processes & Intergroup Relations* Online first publication.

Nemeroff, C., & Rozin, P. (1994). The contagion concept in adult thinking in the United States: Transmission of germs and of interpersonal influence. *Ethos, 22*, 158–186.

Nussbaum, M. C. (1985). "Finely Aware and Richly Responsible": Literature and the Moral Imagination. *The Journal of Philosophy, 82*, 516–529.

Raney, A. A. (2004). Expanding disposition theory: Reconsidering character liking, moral evaluations, and enjoyment. *Communication Theory, 14*, 348–369.

Raney, A. A. (2011). The role of morality in emotional reactions to and enjoyment of media entertainment. *Journal of Media Psychology: Theories Methods and Applications, 23*, 18–23.

Raney, A. A. (2017). *Affective disposition theory. In The International Encyclopedia of Media Effects*. American Cancer Society.1–11. https://doi.org/10.1002/9781118783764.wbieme0081.

Sanders, M. S., & Tsay-Vogel, M. (2016). Beyond heroes and villains: Examining explanatory mechanisms underlying moral disengagement. *Mass Communication & Society, 19*(3), 230–252.

Shafer, D. M., & Raney, A. A. (2012). Exploring how we enjoy antihero narratives. *The Journal of Communication, 62*, 1028–1046.

Vezzali, L., Stathi, S., Giovannini, D., Capozza, D., & Trifiletti, E. (2014). The greatest magic of Harry Potter: Reducing prejudice. *Journal of Applied Social Psychology, 45*, 105–121.

Wen, Z., & Fan, X. (2015). Monotonicity of effect sizes: Questioning kappa-squared as mediation effect size measure. *Psychological Methods, 20*, 193–203.

Jessica Black recently received her PhD in Social/Developmental psychology at the University of Oklahoma. She is now a postdoctoral fellow in the Imagination and Development lab at University of Oklahoma, studying issues at the intersection of morality, imagination, and narrative, under Dr. Jennifer Barnes. Her interests include moral psychology, philosophy, and quantitative psychology.

Yomna Helmy is a psychology major in her third year at the University of Oklahoma.

Olivia Robson is a third year philosophy major at the University of Oklahoma, although currently she is studying abroad.

Jennifer Barnes is an Associate Professor of psychology at the University of Oklahoma. In addition to researching the psychology of fiction and the imagination, she is also a professional novelist and television writer. She received her Ph.D. from Yale University in 2012. She is a member of the Writers Guild of America and a Fulbright Scholar.