


REVIEW ARTICLE

What is the psychological appeal of the serial rapist model? Worldviews predicting endorsement

Ana P. Gantman^{1,2}  and Elizabeth Levy Paluck^{3*} 

¹Department of Psychology, Brooklyn College, Brooklyn, NY, USA, ²Department of Psychology, City University of New York Graduate Center, New York, NY, USA and ³Department of Psychology and School of Public and International Affairs, Princeton University, Princeton, NJ, USA

*Corresponding author: Elizabeth Levy Paluck, email: epaluck@princeton.edu

(Received 1 August 2022; accepted 2 August 2022)

Abstract

The serial rapist model claims that a small number of intentional, repeat offenders are responsible for the majority of sexual assaults on college campuses. The model has formed the dominant argument for some of the most popular forms of campus intervention programs and is cited by high profile advocates and policymakers. Despite enthusiasm for the serial rapist model, it is not empirically well-supported and is contradicted by recent robust data. In this article, we ask: why does the serial rapist model have such broad and enduring appeal? In two US-based samples, one convenience and one representative, we find that people's endorsement of the serial rapist model correlates with worldviews that cohere around ideas of a just and good status quo, and a preference for simple stories. Specifically, we find a positive relationship between endorsement of the serial rapist model and belief in a just world, system justification, social dominance orientation, need for closure and essentialism.

Introduction

The prevalence of sexual assault on college campuses, and its destructive effects on students and the overall college environment, is now recognized by a broad coalition of policymakers, researchers and educators (e.g., Koss *et al.*, 1987; Fisher *et al.*, 2009; Hostler, 2014; White House Council on Women and Girls, 2014; cf. U.S. Department of Education, 2017). Sexual assault threatens the safety, academic success and overall well-being of a substantial proportion of college students. For example, a student who is sexually assaulted is more likely to drop classes, move residences and seek psychological counseling (Krebs *et al.*, 2007; see also Brener *et al.*, 1999; Gidycz *et al.*, 2008; Moylan & Javorka, 2020).

Sexual assault broadly refers to any sexual activity involving a person who does not provide consent or cannot provide consent (due to alcohol, drugs or other causes of incapacitation). By this definition, women between the ages of 18–25 are at the greatest risk for being sexually assaulted (Sinozich & Langton, 2014). Among women

enrolled in an undergraduate college institution, 20–25% are expected to experience sexual assault (Krebs *et al.*, 2016).

Currently, bystander intervention is the primary type of intervention programming used to prevent sexual assault. Sexual assault bystander programs come in different forms, but their common strategy is to educate students about situations in which sexual assault may occur, and to encourage students to intervene in a safe manner when they believe that sexual assault may happen or is happening (e.g., Moynihan & Banyard, 2008; Coker *et al.*, 2011). In a recent review of college sexual assault trainings, 94% contained at least one component of bystander training (34 of 36 programs; listed on cultureofrespect.org). Due to the prevalence of bystander intervention training, it is important to understand the theoretical justification that is most commonly used for this type of intervention.

The current monopoly of bystander trainings on college interventions is likely due to the theoretical perspective advanced by the clinical psychology scholar David Lisak and his colleagues. Although bystander intervention can be justified by other theoretical perspectives (see Banyard *et al.*, 2004), the current predominant justification for it is the serial rapist model (Lisak & Miller, 2002). According to the serial rapist model, a small number of male students, who are fundamentally different from their peers on college campuses, are responsible for the vast majority of campus rapes and other types of sexual assault (e.g., Lisak, 2004, 2011). Lisak and colleagues' claims are based on a cross-sectional self-report survey of males ages 18–71, in which 6.4% of respondents reported acts of attempting or completing sexual intercourse or oral sex without their partner's consent (Lisak & Miller, 2002). A portion of this group (4% of the overall sample) reported multiple acts each; Lisak and Miller estimated that this small group of reporters were responsible for the majority (91%) of all sexual assaults reported in the survey. Lisak labels these repeat offenders "serial rapists" and characterizes them as planning and premeditating their attacks (Lisak, 2011), scoring lower than average on empathy (Lisak & Ivan, 1995),¹ and higher than average on hostility towards women (Lisak & Roth, 1988).

Citing these data, Lisak has been a vocal promoter of bystander interventions as a lecturer and consultant to colleges across the United States. "Rather than focusing prevention efforts on the rapists, it would seem far more effective to focus those efforts on the far more numerous bystanders" (Lisak, 2011: 56). In other words, Lisak believes that because serial rapists are too difficult to reform or even to identify, interventions should instead change the behavior of bystanders.

However, Lisak and Miller's (2002) data purporting that serial rapists are responsible for the majority of sexual assaults on campus have been disputed (Swartout *et al.*, 2015; Utt, 2016). On methodological grounds, researchers have pointed out that the dataset involves community members and not only students (despite explicit extrapolation to a college sample), asks respondents to report assaults committed before as well as during college, and does not establish whether multiple acts constitute multiple incidents or multiple acts within the same incident, or whether repeated

¹Lisak and Ivan (1995) report 185 men took their survey. Fifteen men reported committing acts of sexual violence and were responsible for 27 rapes and attempted rapes among them. Lisak later uses these data when describing the unique characteristics of serial rapists (Lisak, 2011).

acts involve the same person or different people (see also Singal, 2015; Thomson-DeVeaux, 2015). Furthermore, the data were not available upon request (LeFauve, 2015).

By contrast, two recent large-sample longitudinal studies of male-identified college undergraduates do not find evidence that serial rapists account for most assaults on college campuses (Swartout *et al.*, 2015). Importantly, these studies find that approximately twice as many men report rape as the respondents in Lisak and Miller's (2002) study, and do not do so in a consistent fashion compatible with a serial rapist model of sexual assault. While a substantial number of men report more than one rape, their temporal patterns of assault contradict the simplistic idea that they are "serial" perpetrators.

Swartout and colleagues conclude, "[a]lthough the serial rapist assumption is widely taken as fact by politicians and the popular press, it appears to be premised on a single source" (2015: 1149), referring to the Lisak and Miller (2002) paper. They make a different recommendation regarding bystander programming: "Exclusive emphasis on serial predation to guide risk identification, judicial response, and rape-prevention programs is misguided... [we caution] against a uniform approach to high school and college rape response and prevention" (1148, 1153). It is beyond the scope of this paper to adjudicate among different models of sexual assault on campus and the prevention efforts they recommend. Instead, we ask – given the paucity of evidence to support it – why does the serial rapist model persist in the policy marketplace of ideas? In particular, we ask what psychological factors might drive an individual's subscription to the serial rapist model and what types of beliefs or ways of seeing the world are most compatible with this model.

The serial rapist model and the bystander intervention it recommends was received by university administrations and by the public with great interest and enthusiasm, and its appeal has endured. The popularity of the serial rapist model is, from one perspective, quite surprising. The model is endorsed by university administrators and advocates, many of them sophisticated social scientists, despite the fact that the serial rapist model was based on a single disputed paper, and that more recent data presents a different picture of campus sexual assault. The need for bystander trainings are a primary focus in college campus sexual assault prevention programming (e.g., itsonus.org; cultureofrespect.org; DeGue *et al.*, 2014).

From a different perspective, adherence to the serial rapist model among policy makers and members of the public is not particularly surprising. Scholars interested in the policy marketplace of ideas, and specifically in the relationship between policy and evaluation, have long observed that certain narratives about social problems are sticky, and that policy choices are extremely slow to change (e.g., Weiss, 1977). One of the reasons this occurs, according to this scholarship, is that research is often used to legitimate policymakers' and the public's pre-existing ideas, rather than to change them.

Lisak's serial rapist model presents an explanation of sexual assault on college campuses that may satisfy many people's pre-existing worldviews. By worldviews, we mean a person's general ideas about how the world works and how people relate to one another. People may not only believe, but need to believe in these worldviews to make sense of their lives; these worldviews can help to manage uncertainty, reduce

anxiety and promote social ties (Hennes *et al.*, 2012). For example, to varying degrees people espouse a belief in a just world (Lerner & Miller, 1978), a fair political system (Jost & Banaji, 1994), and in valid hierarchies (Pratto *et al.*, 1994), as well as a preference for neat and simple accounts of the world (or “need for closure”; Webster & Kruglanski, 1994), and of other people (via essentialized views of their traits; Bastian & Haslam, 2006).

Why might these worldviews be consistent with an endorsement of the serial rapist model? Consistent with these worldviews, the serial rapist model clearly distinguishes between bad and good people, and implies a simple story of justice by identifying who is a villain, who is a victim and whose behavior we should change. Instead of problematizing human nature, or re-examining ourselves, our social group, and the societal system, the serial rapist model preserves our faith in humanity, ourselves and our social groups, and in our social system and its hierarchies, because sexual assault perpetrators are fundamentally abnormal and different from ourselves.

We hypothesize that the serial rapist model may appeal to people’s pre-existing worldviews that cohere around ideas of a just and good status quo, and a preference for simple stories. While all people endorse these views to a certain extent, important individual differences emerge in the strength of these needs and beliefs. Individuals whose worldviews are stronger will be more likely to adopt accounts that fit with, or further justify, their worldviews (Pratto *et al.*, 1994; Chen & Tyler, 2001; Glick & Fiske, 2001; Quist & Resendez, 2002; Kay & Jost, 2003). As a result, we predict that the serial rapist model may appeal widely, but will resonate more with some people. Specifically, the serial rapist model’s account of rapists as “bad” people distinct from “normal” people would satisfy the individuals’ need for closure (Webster & Kruglanski, 1994), and reinforce the belief that people have a core essence that defines them (Bastian & Haslam, 2006). Also, people with relatively stronger beliefs in a just world (Lerner & Miller, 1978), a fair system (Jost & Banaji, 1994), and a valid hierarchy (Pratto *et al.*, 1994) should also be more attracted to an explanation in which bad people are the ones who do bad things without calling into question the larger system and existing hierarchy of individuals and institutions in that society. Our predictions are anticipated by similar work showing, for example, that people who believe strongly in the social dominance of some groups over others also endorse the protestant work ethic as an explanation for the unequal distribution of wealth in society (Pratto *et al.*, 1994).

In the current set of studies, we ask two linked questions: What is the psychological appeal of the serial rapist model as an explanation for sexual assault perpetration on college campuses? Are there particular worldviews that resonate with justice vs evil, black vs white narrative presented by the serial rapist model? We hypothesize the serial rapist model will be more strongly endorsed by people who also endorse worldviews which cohere around ideas of a just and good status quo, and a preference for simple stories.

We conducted two surveys, one with a convenience and one with a nationally representative U.S. sample, to assess the link between endorsement of the serial rapist model and worldviews like a belief in a just world, social dominance and need for closure. At stake here are questions about what drives our desire to see a policy issue in a particular way, and how to identify its solutions.

Study 1

Study 1 measured whether individuals who are high in need for closure (Webster & Kruglanski, 1994), essentialism (Bastian & Haslam, 2006), belief in a just world (Lerner & Miller, 1978), social dominance orientation (Sidanius & Pratto, 2001) and system justification (Jost *et al.*, 2004) were more likely to support the serial rapist model. To test whether endorsement of the serial rapist model was specific to our hypothesized constructs, we tested for discriminant validity in two ways. First, we measured psychological constructs that we hypothesized would not be related to the serial rapist model as they do not cohere around ideas of a just and good status quo, and a preference for simple stories. These were: belief in free will (Rakos *et al.*, 2008), moral beliefs (Graham *et al.*, 2009) and need to belong (Baumeister & Leary, 1995). Second, we described an alternate, but compatible “rape culture” model of sexual assault to respondents, one that points to many factors that contribute to assault such as demeaning attitudes toward women, power differentials and alcohol. A model of sexual assault framed around a culture of rape is not a logical opposite of, or even incompatible with, a serial rapist model. Thus, we did not predict that endorsement of the rape culture model would negatively correlate with the worldviews predicted to correlate with the serial rapist model. Because the rape culture model is distinct, we hypothesized that the worldviews predicting endorsement of the serial rapist model would not similarly predict endorsement of the rape culture model; we pre-registered no specific predictions about the relationship between the rape culture model and measured worldviews. In the survey, we labeled the serial rapist model as “Bad Apples” and the rape culture model as “Bad Climate,” to avoid any preconceived notions respondents might have about either model.

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. We pre-registered all survey items, item groupings and analyses. All pre-registrations, materials, code and data available at the Open Science Framework (osf.io/guafe).

Methods

Participants and design

In the winter of 2017, we recruited 501 participants on Amazon’s Mechanical Turk, or mTurk (258 males, 240 females, 3 “other gender,” recoded as missing for gender analyses due to small numbers). Participants ranged in age from 19 to 77 ($M = 37.71$, $SD = 12.59$). All participants saw all questions in our correlational design, and all participants’ responses were included for analysis. We included one true or false comprehension question for each descriptive model of sexual assault (i.e., serial rapist and rape culture). Of 501 participants, 37 failed the comprehension question regarding the serial rapist model, and 47 failed the rape culture comprehension question. Only five failed both. All following analyses include all participants; results remain the same when participants who failed comprehension questions are excluded unless otherwise noted. For the full survey, including the full text of comprehension questions see our OSF page.

Materials and procedure

After informed consent, all participants completed scales measuring their individual need for closure (Roets & Van Hiel, 2011), belief in essentialism (Bastian & Haslam, 2006), belief in a just world (Lucas *et al.*, 2011), social dominance orientation (Jost & Thompson, 2000), level of system justification (Kay & Jost, 2003), belief in free will (Rakos *et al.*, 2008), endorsement of the “moral foundations” (Graham *et al.*, 2009) and need to belong (Leary & Baumeister, 1995), as well as three items used to measure political orientation. Where validated scales exceeded 14 questions, we went to the original publication of the scale and chose the highest loading factors to minimize time commitment for participants.² We randomized the ordering of the scales across respondents. After these individual difference measures, participants read about both the “Bad Apples” (i.e., serial rapist) and the “Bad Climate” (i.e., rape culture) explanation for sexual assault (ordered randomly across respondents). After reading about each explanation for campus sexual assault, participants answered a true or false question testing their comprehension of the explanation, and rated how well they thought the model correctly explained sexual assault on college campuses. Finally, participants answered demographic questions about their race, gender, age, income, religion and education, and whether they were currently attending a university.

Worldviews predicted to relate to the serial rapist model

We predicted that need for closure, essentialism, belief in a just world, social dominance orientation and system justification would each relate to endorsement of the serial rapist model. A representative item from the five-item need for closure scale is: “I dislike unpredictable situations” (1 = completely disagree to 5 = completely agree). A representative item from the four-item essentialism scale is “The kind of person someone is, is clearly defined; they either are a certain kind of person or they are not” (1 = strongly disagree to 6 = strongly agree). A representative item from the 4-item belief in a just world scale is “Other people usually receive the outcomes they deserve” (1 = strongly disagree to 7 = strongly agree). A representative item from the four-item social dominance orientation scale is “Sometimes other groups must be kept in their place” (1 = very negative to 7 = very positive). A representative item from the four-item system justification scale is “In general, the American system operates as it should” (1 = strongly disagree to 9 = strongly agree). All scales obtained a Cronbach’s alpha above 0.79.

Worldviews predicted to not relate to the serial rapist model

We predicted that need to belong, moral foundations and belief in free will, would not relate to endorsement of the serial rapist model. A representative item from the four-item need to belong will scale is “I need to feel that there are people I can turn to in times of need” (1 = strongly disagree to 5 = strongly agree). A representative item from the 10-item moral foundations scale, measuring the foundation of harm, is “When you decide whether something is right or wrong, how relevant is whether or not someone cared for someone weak or vulnerable?” (1 = not at all relevant to 9 = extremely

²We also included a scale perceiving minds in humans and dolls (from Hackel *et al.* (2014)) for exploratory purposes. This scale did not relate to any of the other measures.

relevant). These items are measured for each of the five foundations (harm, fairness, authority, loyalty and purity). A representative item from the four-item belief in free will scale is “Human beings actively choose their actions and are responsible for the consequences of their actions” (1 = strongly disagree to 6 = strongly agree). All scales obtained a Cronbach’s alpha above 0.60, except belief in free will ($\alpha = 0.54$).

Political orientation. Three 9-point questions measured political orientation (Cronbach’s ($\alpha = 0.93$)): “Where on the following scale of political orientation would you place yourself (overall, *in general*)?”, “In terms of *social and cultural issues*, how liberal or conservative are you?” and “In terms of *economic issues*, how liberal or conservative are you?” (1 = extremely liberal to 9 = extremely conservative).

Descriptions of serial rapist and rape culture models of sexual assault. Before reading either description participants read:

Now we are going to ask you some questions about a much-discussed social issue: high rates of sexual assault on college campuses in the U.S. You will read two explanations that have been offered to explain the high rates of sexual assault: The “Bad Apples” explanation: a small amount of students are responsible for most of the assault on campus; The “Bad Climate” explanation: many students commit assault on campus. After you read the Bad Apples and Bad Climate explanations, we will ask you your opinions about each one.

When they read about the serial rapist model, they read the following description, under the header “Bad Apples”:

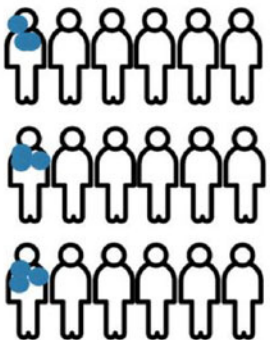
One explanation for the high rates of sexual assault on college campus is that the majority of assaults are perpetrated by a small group of “bad apples” or “predators” – young men who each commit multiple rapes each. These young men use strategies like: intentionally giving women too much to drink, separating women from their friends, identifying women who are too intoxicated to consent, using sufficient force or threats to coerce victims into submission. This small group of serial rapists can be distinguished from the majority of men on campuses, who are not involved in sexual assault.

This was followed by an illustration (see [Figure 1](#)).

When they read about the rape culture model, they read the following description, under the header “Bad Climate”:

One explanation for the high rates of sexual assault on college campus is that many students will perpetuate incidents of sexual assault if the opportunity arises. A number of factors contribute to a climate in which many students, and young men in particular, commit sexual assault. Some situational factors that promote high rates of participation in sexual assault are: young men’s alcohol consumption and fraternity culture, lack of awareness regarding when women are too intoxicated to consent, differences in status and power between men and women, and widespread demeaning attitudes about women. The fact that so

To illustrate the Bad Apples perspective, consider the following pool of potential perpetrators: here, only three students are responsible for the total of nine assaults (three assaults each).



To illustrate the Bad Climate perspective, consider the following pool of potential perpetrators: here, nine students are responsible for the total of nine assaults (one assault each).

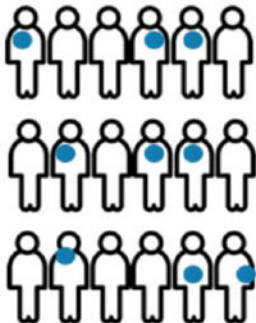


Figure 1. Illustrations for “Bad Apples” and “Bad Climate” descriptions.

many young men are involved in this phenomenon means that women on campus will have a hard time distinguishing who on campus is a potential assailant.

This was followed by an illustration (see [Figure 1](#)).

Endorsement of explanations for sexual assault

After participants read about each model, they were asked three questions (Cronbach's $\alpha = 0.92$ for each model) related to its endorsement: "To what extent you think this probably accounts for the high rates of sexual assault on college campuses?", "To what extent do you think this is the right way of describing the phenomenon of sexual assault on college campuses?", and "To what extent should colleges consider this view when they take action to reduce sexual assault on campus?" (1 = not at all to 9 = completely).³

Results

Overall, support for the serial rapist model ($M = 5.68$, $SD = 1.85$) and the rape culture model ($M = 5.55$, $SD = 1.98$) were negatively correlated $r(499) = -0.23$, $p < 0.001$. Of the 455 participants ($M = 4.47$, $SD = 2.28$) who completed the question, 50 identified as extremely liberal for all three questions, 18 as extremely conservative for all three questions.

Predicting support for "Bad Apples"

We found that some of the predicted worldviews did indeed predict support for the serial rapist model of campus sexual assault. Specifically, we found that those who score higher on need for closure ($B = 0.29$, $SE = 0.11$, $CI = [0.07, 0.51]$, $p = 0.01$), need for justice ($B = 0.17$, $SE = 0.09$, $CI = [0.001, 0.34]$, $p < 0.05$) and in belief in essentialism ($B = 0.30$, $SE = 0.08$, $CI = [0.14, 0.47]$, $p < 0.001$) were all more likely to endorse the serial rapist model. Contrary to our hypotheses, neither system justification motivation ($p = 0.09$) nor social dominance orientation ($p = 0.64$) were significantly associated with endorsement of the serial rapist model. When we exclude participants who failed the true/false comprehension question regarding the Bad Apples explanation, neither need for closure nor belief in a just world significantly predict endorsement of the serial rapist model. We conducted separate regressions because some worldviews were highly correlated, ranging from $r(389) = -0.02$ to $r(385) = 0.75$ (see Supplementary Appendix Table 1 for correlation matrix). In a model simultaneously regressing all measured worldviews, with and without demographic variables, on endorsement of the serial rapist model, only essentialism remains a significant predictor (Supplementary Appendix Tables 2 and 3).

The only demographic variables significantly associated with endorsement of the serial rapist model were income, which negatively predicts support for the serial rapist model, such that moving up one bracket in our four bracket income rating is associated with reduced endorsement of the serial rapist model by approximately 0.23

³A forced choice question was also used, but not further reported on here; no significant relationship to worldviews was obtained.

on the rating scale from 1 to 9, and conservatism, which was positively associated with endorsement. A one-point increase in our nine-point political ideology scale (i.e., self-rating as more conservative by one point) results in an increase of 0.10 in endorsement of the serial rapist model (see Supplementary Appendix Table 3, for the multivariate regression including all worldviews and demographics).

As hypothesized, we did not find a relationship between endorsement of the serial rapist offender model and the individualizing moral foundations (i.e., harm/care, equality; $p > 0.05$), which tend to relate to liberalism (Graham *et al.*, 2009). Also as hypothesized, we did not find a relationship between need to belong and support for the serial rapist model, $p > 0.05$. We were surprised to find that some of the scales we hypothesized would not relate to endorsement of the serial rapist model in fact did correlate significantly. Specifically, we found that increased belief in free will to positively predicted endorsement of the serial rapist model ($B = 0.52$, $SE = 0.11$, $CI = [0.30, 0.74]$, $p < 0.001$), as did belief in the binding moral foundations (i.e., authority, loyalty and purity; $B = 0.47$, $SE = 0.09$, $CI = [0.29, 0.65]$, $p < 0.001$), which tend to relate to conservatism (Graham *et al.*, 2009). (For the model simultaneously regressing all measured individual differences for discriminant validity with and without demographic variables on endorsement of the rape culture model, see Supplementary Appendix Tables 6 and 7.)

Predicting support for “Bad Climate”

As predicted, need for closure, system justification, and need for justice to do not predict support for the rape culture model (all $p > 0.05$). We did find however, that belief in essentialism was significantly associated with endorsement of the “Bad Climate” model ($B = 0.21$, $SE = 0.09$, $CI = [0.03, 0.38]$, $p < 0.05$). We also found that social dominance orientation was negatively associated with endorsement of the “Bad Climate” model ($B = -0.27$, $SE = 0.07$, $CI = [-0.24, -0.09]$, $p < 0.001$) though this relationship does not exist when we exclude those who failed the true/false comprehension question regarding the Bad Climate explanation. For the model simultaneously regressing all measured individual differences with and without demographic variables on endorsement of the Bad Climate model, see Supplementary Appendix Tables 6 and 7.⁴

Discussion

In Study 1, we found some preliminary evidence for our primary hypothesis that endorsement of the serial rapist model of sexual assault perpetration is related to some worldviews and needs regarding a lack of ambiguity, a just and good status quo, and simple stories about people. Need for closure, essentialism and belief in a just world were significantly correlated with endorsement of the serial rapist model. Our tests of the discriminant validity of these individual worldviews suggest that the same worldviews correlated with the serial rapist model endorsement do

⁴An analysis of the order in which participants read about these two accounts suggested that including the bad climate account sometimes weakened the correspondence between some worldviews and endorsement of the serial rapist model.

not generally predict endorsement of an alternative (though not incompatible) model of sexual assault perpetration.

Study 2

To further investigate the preliminary results from Study 1, we replicated our survey with a larger and nationally representative sample in Study 2. For Study 2, we were only interested in replicating our primary hypothesized relationships between endorsement of the serial rapist model⁵ and need for closure, essentialism, belief in a just world, social dominance orientation and system justification. We removed all items from Study 1 regarding discriminant validity, including the description and questions about endorsement of the Bad Climate model, and individual differences that we did not expect to relate to endorsement of the serial rapist model. We added an additional questionnaire regarding gender system justification (Jost & Kay, 2005) which measures how much people think that status quo gender norms are just. Unless otherwise noted, all materials were the same as Study 1. We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. We pre-registered all survey items, item groupings and analyses. All pre-registrations, materials, code and data available at the Open Science Framework (osf.io/guafqe).

Methods

Participants and design

In the summer of 2017, we recruited 735 (368 males, 367 females) participants recruited through Qualtrics, which maintains a panel base proportioned to the general United States population. Participants ranged in age from 18 to 87 ($M = 46.19$, $SD = 15.89$). As part of Qualtrics' quality control, participants were excluded if they did not correctly answer the true or false comprehension question regarding the serial rapist model of sexual assault perpetration.

Procedure

As in Study 1, participants completed the individual worldviews scales in a randomized order, then read the description of the serial rapist model, answered questions about their endorsement of it, and completed demographic questions.

Individual difference measures

We added the system justification-gender scale, of which a representative item reads: "In general, relationships between men and women are fair" (1 = strongly disagree to

⁵In addition to the three measures of endorsement for the serial rapist model from Study 1, we measured three descriptive questions regarding perceptions of sexual assault on college campuses more generally. On a 9-point scale from 1—"Not at all" to 9—"Completely", these questions asked: "To what extent is sexual assault a problem on college campuses?" "How urgent of a problem is sexual assault on college campuses?" and "Has sexual assault on college campuses been increasing in recent years?". We did not pre-register any predictions for these items and do not report further on this here.

9 = strongly agree). All scales obtained a Cronbach's alpha above 0.66, except for system justification of gender ($\alpha = 0.49$) and social dominance orientation ($\alpha = 0.58$).

Results

Worldviews predicting endorsement of the serial rapist model

All of our measured individual differences in worldviews predicted support for the serial rapist model (see Figure 2). Specifically, need for closure ($B = 0.59$, $SE = 0.12$, 95% $CI = [0.37, 0.82]$, $p < 0.001$), essentialism ($B = 0.84$, $SE = 0.06$, 95% $CI = [0.73, 0.95]$, $p < 0.001$), need for justice ($B = 0.58$, $SE = 0.06$, $CI = [0.45, 0.70]$, $p < 0.001$), social dominance orientation ($B = 0.54$, $SE = 0.06$, $CI = [0.43, 0.65]$, $p < 0.001$), system justification motivation ($B = 0.32$, $SE = 0.04$, $CI = [0.25, 0.40]$, $p < 0.001$) and system justification-gender ($B = 0.33$, $SE = 0.07$, $CI = [0.18, 0.47]$, $p < 0.001$), predict endorsement of the serial rapist model. We conducted separate regressions because all worldviews were correlated, ranging from $r(733) = 0.08$ to $r(733) = 0.60$ (see Supplementary Appendix Table 8 for correlation matrix).

In a simultaneous regression including all of these worldviews with demographic, SES, and ideological differences, need for closure and both system justification measures are no longer significant predictors of support, but essentialism, need for justice, and social dominance orientation remain significantly related (see Supplementary Appendix Table 9).

Demographics predicting endorsement of the serial rapist model

For political ideology ($M = 5.19$, $SD = 2.16$ for 1 = extremely liberal to 9 = extremely conservative), we had 32 participants select extremely liberal for all three questions, and 45 select extremely conservative for all three questions (Cronbach's $\alpha = 0.93$). Replicating our previous study's results, a simultaneous regression using all demographic and SES data to predict endorsement of the serial rapist model indicates that higher conservatism predicts endorsement of the serial rapist model, $B = 0.22$, $SE = 0.04$, 95% $CI = [0.14, 0.29]$, $p < 0.001$. We also find that men are more likely than women to endorse the serial rapist model, ($B = 0.32$, $SE = 0.14$, $CI = [0.04, 0.59]$, $p < 0.05$). Controlling for whether participants were enrolled in college at the time, having more education is a significant negative predictor of endorsement of the serial rapist model, ($B = -0.14$, $SE = 0.06$, $CI = [-0.25, -0.03]$, $p < 0.05$). However, being currently enrolled in college positively predicts endorsement of the serial rapist model, ($B = 0.72$, $SE = 0.26$, 95% $CI = [0.21, 1.23]$, $p < 0.01$).

General Discussion

Across two studies, we find support for the idea that the serial rapist model appeals to individuals who hold worldviews endorsing a lack of ambiguity, a just and good status quo and simple stories about people. In both Studies 1 and 2, we find evidence that endorsement of the serial rapist model correlates positively, and in most cases significantly, with higher scores on scales that measure need for closure, essentialism, need

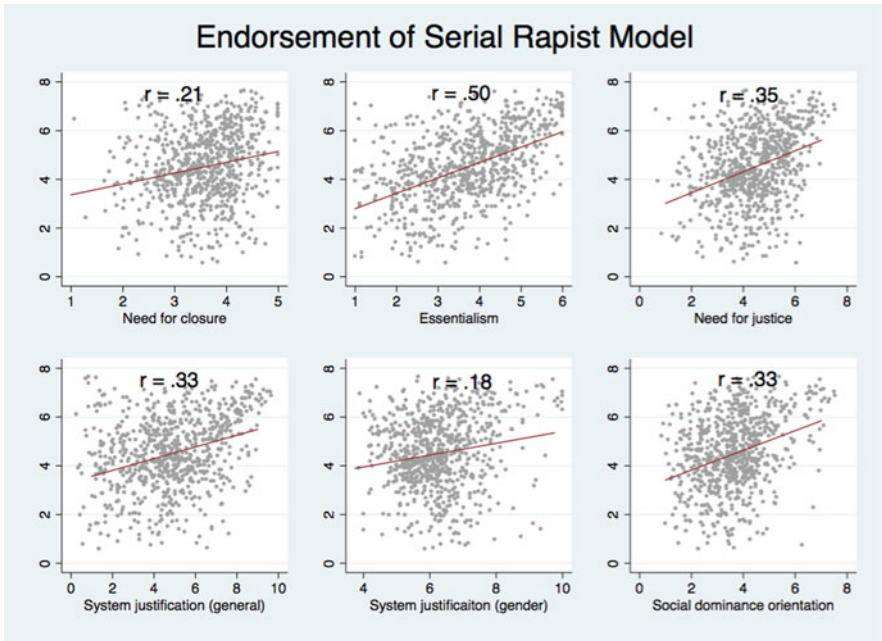


Figure 2. Greater need for closure, essentialism, need for justice, system justification and social dominance orientation all predict support for the serial rapist model.

for justice, system justification (both in general and with respect to gender issues) and social dominance orientation. In both studies, ideological conservatives were more likely to endorse the serial rapist model, but the worldviews that we measured still predicted serial rapist model endorsement significantly, over and above political orientation. While we see mixed results in Study 1, we replicated those findings as well as found evidence for all of our original hypotheses in Study 2 with a larger, representative sample.

The small differences between studies in support for our hypotheses, with Study 1 supporting our hypotheses to a lesser extent, could be due to unobserved differences between the non-representative Study 1 sample and the slightly larger nationally representative Study 2 sample. Differences could also be due to differing survey content: Study 2 did not mention the second account for sexual assault used in Study 1, the culture of rape or bad climate account. Future research could examine the effect of multiple vs singular narratives about the perpetration of sexual assault.

Why are these findings important? Psychological research reveals that if an explanation for the state of the world appeals to our basic need or fundamental worldview, we are more likely to believe in the explanation (Pratto *et al.*, 1994) and to resist contradicting evidence (Kunda, 1990; Ditto *et al.*, 1998; Tetlock, 2002; Taber & Lodge, 2006). Policy preferences based on a broader worldviews and preferences are also less likely to be changed by research evidence in the short run (Weiss, 1977). Endorsement of the serial rapist model may also influence which sexual assaults are more likely to be taken seriously by administrators, the legal system and by bystanders themselves.

Endorsement of the serial rapist model is undoubtedly influenced by more than individual worldviews, political ideology and gender. Situations and timely events should also influence endorsement. For example, news events like the revelation of the criminal behavior of Harvey Weinstein (Kantor & Twohey, 2017), likely increase the accessibility and perceived validity of the serial rapist model (Tversky & Kahneman, 1974). There is no disputing the existence of serial rapists, but as we have reviewed in this paper, more recent and rigorous research (e.g., Swartout *et al.*, 2015) finds that we cannot attribute the majority of sexual assaults on college campuses to serial rapists.

While the present research examines why members of the general population might endorse the serial rapist model, subsequent research can extend these findings to account for why university administrators and policymakers favor bystander interventions, and explicitly or implicitly use the serial rapist model to justify bystander interventions. As classic behavioral research demonstrates, even experts are subject to the same biases and mistaken judgments as laypeople (Tversky & Kahneman, 1974). Future research would also do well to extend our studies to individuals' theories about the causes of workplace harassment and sexual assault more broadly, and to track individuals' schemas regarding sexual assault and its causes over time.

Supplementary material. To view supplementary material for this article, please visit <https://doi.org/10.1017/bpp.2022.28>.

Acknowledgments. The authors would like to thank Jason Chin for help with data collection and manuscript preparation, and Kyonne Isaac for help with manuscript preparation. AG and ELP participated equally in all aspects. This work has been presented at the Women in Public Policy Seminar series at the Harvard Kennedy School. This research was supported by a grant from the Canadian Institute for Advanced Research (ELP).

References

- Banyard, V. L., E. G. Plante and M. M. Moynihan (2004), 'Bystander education: bringing a broader community perspective to sexual violence prevention', *Journal of Community Psychology*, **32**(1): 61–79.
- Bastian, B. and N. Haslam (2006), 'Psychological essentialism and stereotype endorsement', *Journal of Experimental Social Psychology*, **42**(2): 228–235.
- Baumeister, R. F. and M. R. Leary (1995), 'The need to belong: desire for interpersonal attachments as a fundamental human motivation', *Psychological Bulletin*, **117**(3): 497–592.
- Brener, N. D., P. M. McMahon, C. W. Warren and K. A. Douglas (1999), 'Forced sexual intercourse and associated health-risk behaviors among female college students in the United States', *Journal of Consulting and Clinical Psychology*, **67**(2): 252–259.
- Chen, E. S. and T. R. Tyler (2001), 'Cloaking Power: Legitimizing Myths and the Psychology of the Advantaged', in A. Y. Lee-Chai and J. A. Bargh (eds), *The Use and Abuse of Power: Multiple Perspectives on the Causes of Corruption*, New York, NY: Psychology Press, 241–261.
- Coker, A. L., P. G. Cook-Craig, C. M. Williams, B. S. Fisher, E. R. Clear, L. S. Garcia and L. M. Hegge (2011), 'Evaluation of green dot: an active bystander intervention to reduce sexual violence on college campuses', *Violence Against Women*, **17**(6): 777–796.
- DeGue, S., L. A. Valle, M. K. Holt, G. M. Massetti, J. L. Matjasko and A. T. Tharp (2014), 'A systematic review of primary prevention strategies for sexual violence perpetration', *Aggression and Violent Behavior*, **19**(4): 346–362.
- Ditto, P. H., J. A. Scepansky, G. D. Munro, A. M. Apanovitch and L. K. Lockhart (1998), 'Motivated sensitivity to preference-inconsistent information', *Journal of Personality and Social Psychology*, **75**(1): 53–69.
- Fisher, B. S., L. E. Daigle and F. T. Cullen (2009), *Unsafe in the Ivory Tower: The Sexual Victimization of College Women*. Thousand Oaks, CA: Sage.

- Gidycz, C. A., L. M. Orchowski, C. R. King and C. L. Rich (2008), 'Sexual victimization and health-risk behaviors: a prospective analysis of college women', *Journal of Interpersonal Violence*, **23**(6): 744–763.
- Glick, P. and S. T. Fiske (2001), 'An ambivalent alliance: hostile and benevolent sexism as complementary justifications for gender inequality', *American Psychologist*, **56**(2): 109–118.
- Graham, J., J. Haidt and B. A. Nosek (2009), 'Liberals and conservatives rely on different sets of moral foundations', *Journal of Personality and Social Psychology*, **96**(5): 1029–1046.
- Hackel, L. M., C. E. Looser and J. J. Van Bavel (2014), 'Group membership alters the threshold for mind perception: the role of social identity, collective identification, and intergroup threat', *Journal of Experimental Social Psychology*, **52**(May): 15–23.
- Hennes, E. P., H. H. Nam, C. Stern and J. T. Jost (2012), 'Not all ideologies are created equal: epistemic, existential, and relational needs predict system-justifying attitudes', *Social Cognition*, **30**(6): 669–688.
- Hostler, M. J. (2014), Making campuses safer for women. *The Wall Street Journal*. Retrieved from: <https://www.wsj.com/articles/monika-johnson-hostler-making-campuses-safer-for-women-1393288017>.
- Jost, J. T. and M. R. Banaji (1994), 'The role of stereotyping in system-justification and the production of false consciousness', *British Journal of Social Psychology*, **33**(1): 1–27.
- Jost, J. T. and A. C. Kay (2005), 'Exposure to benevolent sexism and complement gender stereotypes: consequences for specific and diffuse forms of system justification', *Journal of Personality and Social Psychology*, **88**(3): 498–509.
- Jost, J. T. and E. P. Thompson (2000), 'Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans', *Journal of Experimental Social Psychology*, **36**(3): 209–232.
- Jost, J. T., M. R. Banaji and B. A. Nosek (2004), 'A decade of system justification theory: accumulated evidence of conscious and unconscious bolstering of the status quo', *Political Psychology*, **25**(6): 881–919.
- Kantor, J. and M. Twohey (2017), Harvey Weinstein paid off sexual harassment accusers for decades. *New York Times*. Retrieved from: <https://www.nytimes.com/2017/10/05/us/harvey-weinstein-harassment-allegations.html>.
- Kay, A. C. and J. T. Jost (2003), 'Complementary justice: effects of "poor but happy" and "poor but honest" stereotype exemplars on system justification and implicit activation of the justice motive', *Journal of Personality and Social Psychology*, **85**(5): 823–837.
- Koss, M. P., C. A. Gidycz and N. Wisniewski (1987), 'The scope of rape: incidence and prevalence of sexual aggression and victimization in a national sample of higher education students', *Journal of Consulting and Clinical Psychology*, **55**(2): 162–170.
- Krebs, C. P., C. H. Lindquist, T. D. Warner, B. S. Fisher and S. L. Martin (2007), *The Campus Sexual Assault (CSA) Study: Final Report*. Washington, DC: National Institute of Justice, US Department of Justice.
- Krebs, C., C. Lindquist, M. Berzofsky, B. Shook-Sa, K. Peterson, M. Planty and J. Widico Stroop (2016), Campus Climate Survey Validation Study: Final technical report. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from: <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5540>.
- Kunda, Z. (1990), 'The case for motivated reasoning', *Psychological Bulletin*, **108**(3): 480–498.
- Leary, M. R. and R. F. Baumeister (1995), 'The need to belong', *Psychological Bulletin*, **117**(3): 497–529.
- LeFauve, L. M. (2015), Campus rape expert can't answer basic questions about his sources. *Reason Magazine*. Retrieved from: <http://reason.com/archives/2015/07/28/campus-rape-statistics-lisak-problem>.
- Lerner, M. J. and D. T. Miller (1978), 'Just world research and the attribution process: Looking back and ahead', *Psychological Bulletin*, **85**(5): 1030–1051.
- Lisak, D. (2004), 'Predators: uncomfortable truths about campus rapists', *Connection: The Journal of the New England Board of Higher Education*, **19**(1): 19–20.
- Lisak, D. (2011), 'Understanding the predatory nature of sexual violence', *Sexual Assault Report*, **14**(4): 55–57.
- Lisak, D. and C. Ivan (1995), 'Deficits in intimacy and empathy in sexually aggressive men', *Journal of Interpersonal Violence*, **10**(3): 296–308.
- Lisak, D. and P. M. Miller (2002), 'Repeat rape and multiple offending among undetected rapists', *Violence and Victims*, **17**(1): 73–84.
- Lisak, D. and S. Roth (1988), 'Motivational factors in nonincarcerated sexually aggressive men', *Journal of Personality and Social Psychology*, **55**(5): 795–802.
- Lucas, T., L. Zhdanova and S. Alexander (2011), 'Procedural and distributive justice beliefs for self and others', *Journal of Individual Differences*, **32**(1): 14–25.

- Moylan, C. A. and M. Javorka (2020), 'Widening the lens: An ecological review of campus sexual assault', *Trauma, Violence, and Abuse*, **21**(1): 179–192.
- Moynihán, M. M. and V. L. Banyard (2008), 'Community responsibility for preventing sexual violence: a pilot study with campus Greeks and intercollegiate athletes', *Journal of Prevention & Intervention in the Community*, **36**(1–2): 23–38.
- Pratto, F., J. Sidanius, L. M. Stallworth and B. F. Malle (1994), 'Social dominance orientation: a personality variable predicting social and political attitudes', *Journal of Personality and Social Psychology*, **67**(4): 741–763.
- Quist, R. M. and M. G. Resendez (2002), 'Social dominance threat: examining social dominance theory's explanation of prejudice as legitimizing myths', *Basic and Applied Social Psychology*, **24**(4): 287–293.
- Rakos, R. F., K. R. Laurene, S. Skala and S. Slane (2008), 'Belief in free will: measurement and conceptualization innovations', *Behavior and Social Issues*, **17**(1): 20–40.
- Roets, A. and A. Van Hiel (2011), 'Allport's prejudiced personality today: need for closure as the motivated cognitive basis of prejudice', *Current Directions in Psychological Science*, **20**(6): 349–354.
- Sidanius, J. and F. Pratto (2001), *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression*. New York, NY: Cambridge University Press.
- Singal, J. (2015), The Hunting Ground uses a striking statistic about campus rape that's almost certainly false. *New York Magazine: The Cut*. Retrieved from: <https://www.thecut.com/2015/11/hunting-grounds-questionable-rape-stat.html>.
- Sinozich, S. and L. Langton (2014), Rape and sexual assault victimization among college-age females, 1995–2013. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from: <https://www.ncjrs.gov/App/AbstractDB/AbstractDBDetails.aspx?id=270574>.
- Swartout, K. M., M. P. Koss, J. W. White, M. P. Thompson, A. Abbey and A. L. Bellis (2015), 'Trajectory analysis of the campus serial rapist assumption', *JAMA Pediatrics*, **169**(12): 1148–1154.
- Taber, C. S. and M. Lodge (2006), 'Motivated skepticism in the evaluation of political beliefs', *American Journal of Political Science*, **50**(3): 755–769.
- Tetlock, P. E. (2002), 'Social functionalist frameworks for judgment and choice: intuitive politicians, theologians, and prosecutors', *Psychological review*, **109**(3): 451–471.
- Thomson-DeVeaux, A. (2015), What if most campus rapes aren't committed by serial rapists? *Five Thirty Eight*. Retrieved from: <https://fivethirtyeight.com/features/what-if-most-campus-rapes-arent-committed-by-serial-rapists/>.
- Tversky, A. and D. Kahneman (1974), 'Judgment under uncertainty: heuristics and biases', *Science*, **185**(4157): 1124–1131.
- United States Department of Education (2017), Department of Education Issues New Interim Guidance on Campus Sexual Misconduct. *Press Release*. Retrieved from: <https://www.ed.gov/news/press-releases/departments-education-issues-new-interim-guidance-campus-sexual-misconduct>.
- Utt, J. (2016), Rethinking Lisak & Miller: Checking the Math. Retrieved from: <https://changefromwithin.org/2013/02/26/rethinking-lisak-miller-checking-the-math/>.
- Webster, D. M. and A. W. Kruglanski (1994), 'Individual differences in need for cognitive closure', *Journal of Personality and Social Psychology*, **67**(6): 1049–1062.
- Weiss, C. H. (1977), *Using Social Research in Public Policy Making*. Lexington, MA: Lexington Books.
- White House Council on Women and Girls (2014), Not Alone: The First Report of the White House Task Force to Protect Students from Sexual Assault. Retrieved from: <https://www.justice.gov/ovw/protecting-students-sexual-assault>.