







## Guided by the rape schema: the influence of event order on how jurors evaluate the victim's testimony in cases of rape

Harrison D. H. Lee , Blake M. McKimmie , Barbara M. Masser  and Jason M. Tangen 

School of Psychology, The University of Queensland, Brisbane, Australia

### ABSTRACT

Jurors are less likely to believe a victim of rape when the events she describes are inconsistent with the rape stereotype and appear more consistent with what occurs in consensual sex. This research investigated whether presenting stereotype-consistent events early in a victim's testimony can lead jurors to evaluate the other events described as depicting rape. In Study 1, a convenience sample recruited at a university ( $N=217$ ) watched a video testimony in which the assault was presented first or last. Participants also evaluated the degree to which the events described depicted rape or consensual sex as they heard them unfold. Results showed that participants who watched the assault-first testimony categorised most of the testimony as depicting rape. However, there were no differences between conditions in participants' rating of guilt. In Study 2, we aimed to replicate the findings of Study 1 using community members ( $N=225$ ) and investigate whether varying the order of events impacted memory of the testimony and organisation of the events into a coherent story. The results of Study 1 replicated and those presented with the assault first remembered fewer details and took longer to create a story. Recommendations for trial interventions are discussed.

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In most Western countries, rape is defined as a crime that occurs when a perpetrator penetrates a victim without his or her consent (Office of Public Affairs, 2012; Sexual Offences Act, 2003). As the majority of rapes involve a female victim and a male perpetrator (Australian Bureau of Statistics, 2019; Office for National Statistics, 2018; Planty & Krebs, 2013), this research focuses on this dynamic. Conviction rates in rape trials are disproportionately low compared to other crimes (Jehle, 2012). One reason for this low conviction rate is the influence of extra-legal factors on decision-making (Anderson & Doherty, 2008). In rape cases, jurors are less likely to believe the victim when her behaviour deviates from stereotypical beliefs, or schemas, about rape and is instead consistent with what is expected to occur in a typical consensual sexual encounter (Masser et al., 2010; McKimmie et al., 2014; Nitschke et al., 2021; Stuart et al., 2019). In the context of a trial, the prosecution is likely to present the victim's testimony in chronological order (Buckles, 2007),

**CONTACT** Harrison D. H. Lee  [harrison.lee1@uq.net.au](mailto:harrison.lee1@uq.net.au)  School of Psychology, The University of Queensland, St Lucia, QLD, 4072, Australia

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which may have the inadvertent effect of initially exposing jurors to events that are more consistent with their schemas about consensual sex (Sampson, 2011). Jurors may evaluate the victim's description of the assault (i.e. what happened during the rape itself) based on these prior events, and so view the assault as more like consensual sex than rape (McKim-mie et al., 2020; N. Pennington & Hastie, 1993). However, if the victim described her assault at the start of her testimony, jurors would initially be exposed to behaviours more consistent with a typical rape (Littleton & Axsom, 2003). The aim of the current research was to investigate whether describing behaviours that are consistent with jurors' schemas about rape early in the testimony will result in jurors being more likely to evaluate the victim's testimony as consistent with rape than if these behaviours are described later in the testimony.

### ***Schemas about rape and consensual sex***

A schema is an assumption about the way the world is organised (Axelrod, 1973). It is a mental structure used to evaluate information quickly and effortlessly (Bartlett, 1932; Rumelhart, 1980). Everyone has a range of schemas (Fiske & Linville, 1980) for particular groups of people (stereotypes), events (scripts), and the roles people play in events (role schemas). Schemas thus play a useful role in encoding and evaluating information (Axelrod, 1973; Carver et al., 1983; Kunda & Thagard, 1996), especially in situations where the information is so complex that it reduces a perceiver's cognitive capacity to carefully think about it (Sherman et al., 2000), such as in a trial setting (Kleider et al., 2012).

During a rape trial, a juror may draw on their stereotypical beliefs about rape to help them evaluate the evidence. One set of beliefs are rape myths, which are false beliefs and attitudes about rape that are widely held and serve to justify male sexual aggression towards women (Burt, 1980; Lonsway & Fitzgerald, 1994). As these beliefs rationalise men's willingness to commit rape by neutralising their prohibitions against sexual assault (Burt, 1980; Malamuth, 1981), men are more likely to endorse rape myths and thus assign more blame to victims than women (see Suarez & Gadalla, 2010 for a meta-analysis). However, as rape myths provide internal attributions for why rape victims are assaulted (i.e. due to their behaviour or appearance; Lonsway & Fitzgerald, 1994), some women may endorse these myths in order to distance themselves from the reality that they are also vulnerable to sexual assault (Gravelin et al., 2019; Sinclair & Bourne, 1998).

Rape myths include beliefs about the victim (e.g. it is not rape if the victim does not fight back or get injured), beliefs that assume rape only occurs between certain types of people (e.g. it is only rape if it occurs between strangers), beliefs that justify the defendant's actions (e.g. men cannot control their sex drive), and beliefs that deny most allegations (e.g. a delay in reporting is likely a false allegation; Bohner et al., 2009; Smith & Skinner, 2017). Research shows that these beliefs can affect juror decision-making, as mock jurors who endorse rape myths are less likely to find the defendant guilty (e.g. Burt & Albin, 1981; Hammond et al., 2011; Süssenbach et al., 2017). Therefore, jurors may rely on rape myths as a general schema about what is expected to occur in a typical or 'real rape' (Bohner et al., 2009; Smith & Skinner, 2017).

In the real rape schema (Krahé et al., 2007; Littleton & Dodd, 2016; Ryan, 1988), a female victim is depicted as being violently attacked by a stranger outside, and despite trying to

physically and verbally resist, she is unable to stop the assault (Littleton et al., 2009). Therefore, the main point of contention in cases that are consistent with this schema is more often whether the defendant has been correctly identified, rather than whether the victim consented to sex (Bryden & Lengnick, 1997). However, the rape schema is not consistent with what occurs in most rapes. In most rape trials, the victim will testify that the rape occurred in a dating or 'hook-up' context (usually occurring inside a home) by an attacker known to her in an assault that she did not physically resist (Edwards et al., 2014; Millsted & McDonald, 2017; Muehlenhard & Linton, 1987). In these types of cases, the point of contention is not around the correct identification of the perpetrator but is instead around consent. Since the main issue is often whether the act claimed as rape was instead consensual, the defendant is likely to claim that the victim consented to sex (Ellison & Munro, 2009a). Therefore, what occurs in most rapes may seem to overlap more with what is expected to occur in consensual sex (Stuart et al., 2019).

Consensual sex scripts (i.e. seduction, date, and hook-up scripts) usually contain stereotypical expectations for both men and women that are based on traditional gender roles (Krahé et al., 2007; Masters et al., 2013). In these scripts, the man is expected to initiate all sexual activity with the woman by pursuing her (Masters et al., 2013). In contrast, the woman is expected to object to the man's advances before eventually consenting to sex. However, this schema conflicts with what occurs in most rape cases, where the victim is likely to have voiced her non-consent at the time of the assault (Cook & Messman-Moore, 2018). Therefore, the events described by the victim in her testimony are usually ambiguous as they are both partially consistent with jurors' rape and consensual sex schemas.

Research shows that the extent to which the evidence presented overlaps with relevant schemas may influence jurors' decisions (McKimmie et al., 2014; Stuart et al., 2019). When evidence is consistent with the real rape script (i.e. the victim is attacked by a stranger outside), jurors are more likely to find the defendant guilty. In contrast, when evidence overlaps with what is expected to occur in both rape and consensual sex (i.e. the assault occurred in a hook-up context), they are more likely to find the defendant not guilty (McKimmie et al., 2014; Stuart et al., 2019). This suggests that jurors' decisions may be partially based on the extent to which they perceive the evidence as more consistent with their schemas about rape or their consensual sex schemas.

### ***The order of presenting evidence***

Jurors' schemas that are relevant to the evidence presented may influence their verdicts. Specifically, the story model suggests that jurors will use their schemas and the evidence to construct a story of what occurred in the alleged crime (N. Pennington & Hastie, 1993). When a juror observes evidence that is consistent with a schema, that schema is likely to be activated by the evidence (Axelrod, 1973; Rumelhart, 1980). They may then interpret subsequent evidence as consistent with the gist of the activated schema (Brewer & Nakamura, 1984; Sherman et al., 2000). A juror will only tend to evaluate subsequent evidence using a different activated schema when they can no longer fit the evidence with the assumptions of the schema that is first activated

(Kunda & Thagard, 1996; Rumelhart, 1980). Regardless of the schema or schemas activated, the juror will use their interpretation of the evidence to construct a story of what occurred in the alleged crime (N. Pennington & Hastie, 1993). They may then match this story to the verdict that fits best and preference it going into deliberation. As such, the order in which evidence is presented is important, as it may determine which schema a juror uses to build their story.

In a trial, the prosecution or defence will usually aim to present their evidence as clearly as possible to help the jury construct a coherent story, which supports their case (Studebaker, 2017). Research suggests that one way to do this is to present a witness's testimony in chronological order (N. Pennington & Hastie, 1988, 1992). In most rape trials, however, the victim is likely to testify that she was on a date or in a hook-up context with the defendant leading up to the assault (Edwards et al., 2014; Muehlenhard & Linton, 1987). Therefore, if the prosecution presents the victim's testimony in chronological order, jurors will often be exposed to events that are consistent with the consensual sex schema before the events that are more typical of rape (Sampson, 2011). As such, jurors' consensual sex schema may activate first, and so they are likely to interpret the events described in the victim's testimony as consistent with consensual sex (Axelrod, 1973; Littleton et al., 2006). Jurors are likely to use this interpretation to build their story of what occurred in the alleged rape (N. Pennington & Hastie, 1993). Thus, they may perceive that the victim consented to sex with the defendant.

In contrast to this, prosecutors may be more likely to persuade the jury that a rape has occurred by presenting events that are more consistent with the rape schema at the start of the victim's testimony. Supporting this view, D. C. Pennington (1982) found that mock jurors in trials for rape were more persuaded by evidence presented early compared to when the same evidence is presented late (see Stone, 1969 for similar findings in trials for murder). Since behaviours that indicate non-consent are more consistent with the rape than the consensual sex script (Littleton & Axson, 2003), presenting the victim's description of the assault at the start of her testimony may activate jurors' rape schema (Cook & Messman-Moore, 2018; Rumelhart, 1980), leading jurors to be more likely to interpret the subsequent events described in the victim's testimony as consistent with this schema (Kunda & Thagard, 1996). Jurors may, therefore, be more likely to use this interpretation to construct a story where they view the interaction between the victim and the perpetrator as being rape rather than consensual sex (N. Pennington & Hastie, 1993).

In Study 1, we will test whether presenting the rape event first guides participants to view the victim's testimony as more consistent with rape compared to those who watch the same testimony presented in chronological order. To do this, we will use a novel 'real-time' assessment of participants' evaluations. Specifically, past research on juror decision-making assessed judgements at the end of the trial in order to maintain ecological validity. However, such measures may somewhat limit our understanding of how jurors interpret a victim's testimony, as they may not wait until the end of the trial before evaluating the evidence (N. Pennington & Hastie, 1993). Although some studies have repeatedly assessed judgements after each witness testifies (see N. Pennington & Hastie, 1992; Stewart et al., 2000; Stone, 1969), research has yet to examine how mock jurors evaluate testimony as they listen to the events described. As such, to investigate whether varying the order in which the victim's testimony is presented influences how jurors interpret

subsequent events, in Study 1 we assess how participants evaluate this testimony as they watch it.

## Study 1

In Study 1, we aimed to investigate whether the order in which the events are described by the victim in her testimony influences how participants evaluate this testimony in real-time. Participants watched a video in which the victim described the assault (i.e. the rape event) at the start of her testimony followed by the other events in chronological order or all the events were described in chronological order (starting from when she finished work). While watching this video, participants were asked to categorise the extent to which the events described depicted rape or consensual sex. Responses were recorded after every second of the video testimony. Using this design, we investigated how participants evaluated the victim's testimony over the duration of the video. We also investigated how participants evaluated the rape event and the events which occurred before the alleged rape by analysing their responses during focal parts of the video. Finally, we assessed participants' evaluation at the end of the victim's testimony by recording their final indication of whether the events described depicted rape or consensual sex. This study, including the hypotheses, design, exclusion criteria, and analysis plan were preregistered at the Open Science Framework: <https://osf.io/64ng7>.

We expected that presenting events associated with the rape script (i.e. the rape event) first in the victim's testimony would activate participants' rape schema, leading them to categorise the subsequent events described as depicting rape (Axelrod, 1973; Littleton & Axsom, 2003). In contrast, we expected that participants who watched the chronological testimony would be guided by the events presented earlier in the testimony that are more consistent with the consensual sex schema. Using this reasoning, we made the following predictions:

1. There would be a main effect of testimony order on participants' categorisation of the events described. Specifically, over the duration of the video, participants who watched the rape-first testimony would categorise the events described as more typical of rape than those who watched the chronological testimony.
2. There would be a main effect of testimony order on participants' evaluations of each type of event. Specifically, participants who watched the rape-first testimony would evaluate the events that occurred before the alleged rape—and the rape event itself—as more consistent with rape than those who watched the chronological testimony.

If presenting the rape event first increases the likelihood that participants will categorise the other events described in the testimony as rape, then this order of events may also influence how they evaluate the overall case (Nitschke et al., 2021). As such, we made the following prediction:

3. Participants who watched the rape-first testimony would categorise the events described at the end of the testimony as more consistent with rape—and be more likely to find the defendant guilty—than those who watched the chronological testimony.

## Method

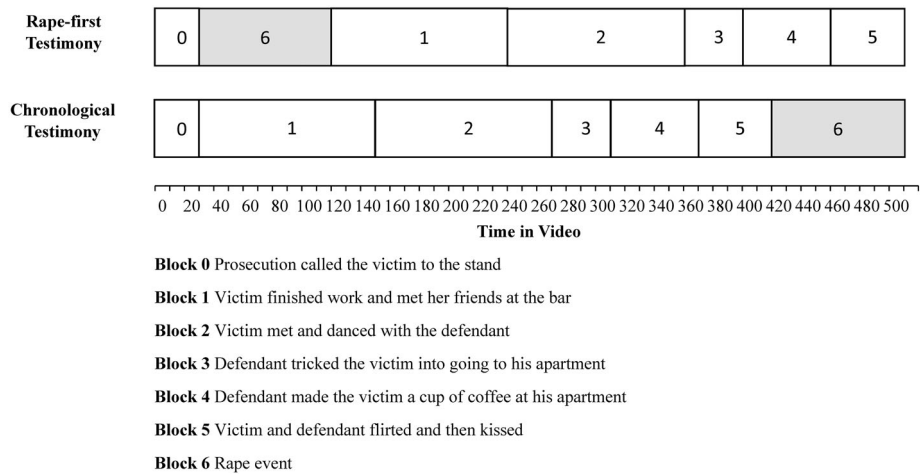
### *Participants and design*

We recruited a convenience sample at a university campus, which comprised both undergraduate students (who participated for course credit;  $N = 231$ ) and members of the university community (who volunteered their time;  $N = 19$ ). A larger number of students were recruited compared to members of the broader university community as the study was more accessible to the student population (the study was advertised through a popular undergraduate course). Unexpectedly, a high number of participants ( $n = 33$ ) did not follow instructions while responding to the event categorisation measure and had to be excluded from analyses. Specifically, they did not respond to this measure while watching the victim's testimony. The final sample comprised 217 participants (1 non-binary, 146 women, 70 men) aged 18–50 years ( $M = 20.72$ ,  $SD = 4.78$ ). An a priori power analysis using G\*Power 3.1 (Faul et al., 2009) suggested that this design was sufficiently powered (a sample size of 140 was required for a power of .80 with a moderate effect size).

Participants took part in the study in a laboratory located at the university and were randomly allocated to one of two conditions formed by the between-subjects manipulation of testimony order (chronological testimony, rape-first testimony). The key dependent variables included participants' categorisation of the events described in the victim's testimony (as consensual sex or rape) and their perception of the defendant's guilt. Participants' responses to the event categorisation measure were used to operationalise two repeated measures variables: time in video—(i.e. participants' responses over the duration of the video)—and event type (i.e. participants' responses during the rape event and the events which occurred before the alleged rape). This measure was also used to assess how participants categorised the events described at the end of the victim's testimony.

### *Materials*

***Video of the victim's testimony.*** Participants watched an 8.5-minute long video of a victim's (Janine) testimony in a rape trial. Testimony order was manipulated by varying the order of the events described by Janine in the video testimony. In this video, the prosecution lawyer called Janine to the stand to testify and asked her about the night of the alleged rape. In the chronological testimony, Janine first described how she finished work and went to a bar to have some drinks with her friends. After Janine talked to her friends for a while at the bar, she then saw the defendant, an old work acquaintance, who later danced with her. They both then agreed to go to a café so they could talk, but the defendant told the taxi driver to drive them to his apartment instead, without Janine's knowledge. At the apartment, both the defendant and Janine talked some more and eventually started kissing. The defendant then forced Janine back onto a sofa, took off her clothes, and raped her. Janine stated that she did not physically resist this assault, but she did tell the defendant that she wanted to go home. In the rape-first version of the testimony, participants first heard Janine testify about the details of the alleged rape. After this event, Janine then described the events from the start of the evening in chronological order. This version of the video ended after Janine described how the defendant kissed her at his apartment (see [Figure 1](#) for a visual of how the order of events changed in each condition). Both videos are available at <https://osf.io/6mwnx/>.



**Figure 1.** The Order in Which the Events Were Presented in Each Condition of Testimony Order Over the Duration of the Video in Study 1. What Happened in Each Event is Detailed Below the Figure. The Event Which Differs in its Order Between Both Conditions is Highlighted Grey.

**Event categorisation measure.** Before participants watched this video, they were given instructions on how to respond to the event categorisation measure as they watched the victim's testimony. These instructions informed participants that they would be asked to indicate the extent to which they thought the events described depicted rape or consensual sex by moving a slider on a rating scale of 1 (*consensual sex*) to 100 (*rape*). The position of the slider on this scale was recorded for every second of video. Before watching the victim's testimony, participants watched a video of two people talking about a party and practiced using the slider on the scale with different end points to answer a question unrelated to the main study. While participants completed this task, a screen recording showed them the experimenter using the slider to respond to the same practice question. Next, participants were asked to watch the video of Janine's testimony while responding to the event categorisation measure. At the beginning of the video, the position of the slider started at the neutral point of '50' on the rating scale. Participants were asked to move the slider any time information from the video of the victim's testimony led them to update their judgement. No other prompts were given to participants during the video to avoid distracting them. Further, the video did not stop to allow participants to respond to the event categorisation measure. This reduced the demand characteristics to respond to this measure while participants watched the testimony (i.e. if the video were to stop, this may prompt participants to move the slider).

To ease interpretation, participants' responses to the event categorisation measure were grouped into clusters for each 10 s interval of video (i.e. 10 scores for each 10 s interval). The scores in each cluster were then averaged to produce a mean score for each 10 s interval to operationalise the time in video. Event type was operationalised by separating participants' responses into two clusters determined by when each type of event was described in each testimony. For example, in the rape-first condition, participants' responses between 30 and 120 s were separated into the rape event cluster (see Block 6 in Figure 1). In contrast, participants' responses between 120 and 510 s were separated

into the cluster representing the events which occurred before the alleged rape (see Blocks 1–5 in [Figure 1](#)). The scores in each cluster were then averaged to calculate two mean scores representing responses to the rape event and responses to events that occurred before the alleged event. Participants' final response on the event categorisation measure was used to determine how they categorised the events described at the end of the victim's testimony.

***Guilt likelihood and manipulation check measures.*** Participants were asked how likely it was that the defendant committed rape, on a scale of 1 (*not at all*) to 7 (*very likely*) as a measure of guilt likelihood. Finally, participants were asked at what point during the video did Janine describe how the defendant forced her back onto the sofa and penetrated her, on a scale of 1 (*very early in the video*) to 7 (*very late in the video*). While this measure assessed the effectiveness of the manipulation of testimony order, no participants were excluded based on their response.

### ***Procedure***

Participants were told upon their arrival at the laboratory that the study involved making decisions while watching a witness's testimony in an alleged rape case. After providing informed consent, participants were asked to provide their gender and age. Next, participants completed a tutorial, which explained to them how to respond to the event categorisation measure. Participants were then asked to imagine themselves as a juror in a trial where a defendant (Neil) is accused of raping Janine. Next, participants either watched the rape-first version or the chronological version of the victim's testimony and completed the event categorisation measure. After watching this video, participants were given judicial instructions outlining the legal definitions of both rape and consent (see [Sexual Offences Act, 2003](#)). Next, participants completed the guilt likelihood and manipulation check measures. Participants were then debriefed and offered the opportunity to ask questions about the study.

## ***Results***

### ***Overview***

The manipulation check and the main analyses were all pre-registered on the Open Science Framework. Exploratory analyses were conducted to follow up any unexpected results, as described below.

### ***Manipulation check***

Testimony order was successfully manipulated with participants who watched the rape-first version of the testimony reporting that the victim described the assault significantly earlier in the video ( $M = 1.43$ ,  $SD = 0.66$ ) than those who watched the chronological testimony ( $M = 6.60$ ,  $SD = 0.75$ ),  $t(215) = -54.07$ ,  $p < .001$ ,  $d = -7.32$ .

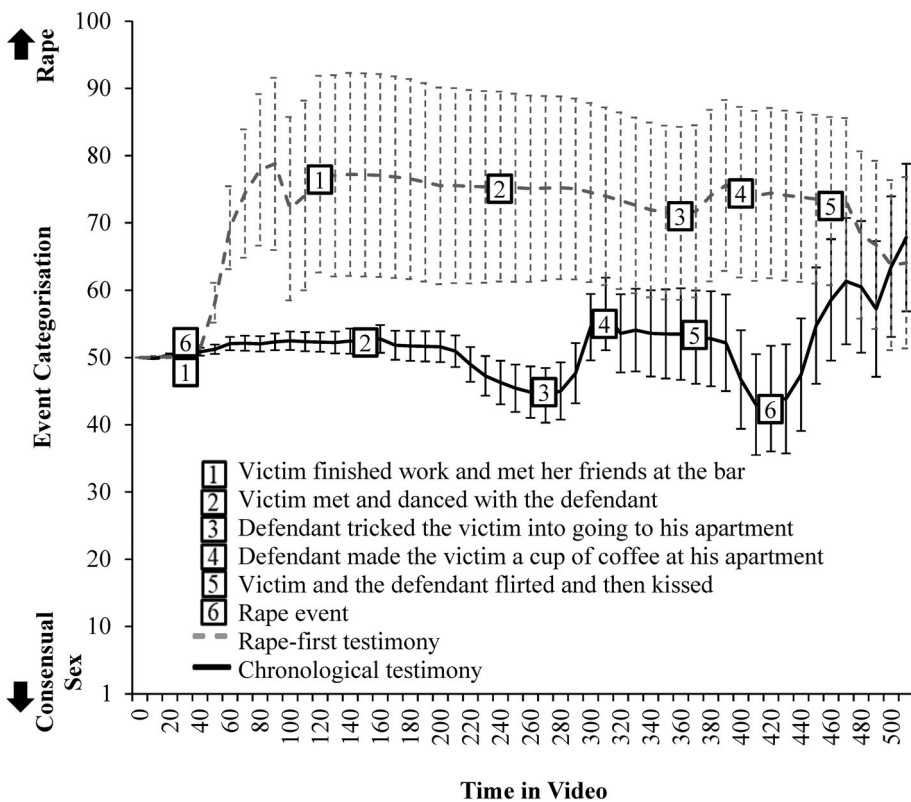
### ***Main analyses***

***Testimony order and time in video.*** To test our first prediction, a 2 (testimony order) by 51 (10 s blocks of time in video) mixed factorial analysis of variance (ANOVA) assessed the effect of testimony order on how participants categorised the events described over the



duration of the video (see Figure 2). There were significant main effects for testimony order,  $F(1, 215) = 83.59, p < .001, \eta_p^2 = .28$ , and time in video,  $F(3.95, 848.71) = 27.79, p < .001, \eta_p^2 = .11$ , on event categorisation.

Both main effects were qualified by a significant two-way interaction between testimony order and time in video,  $F(3.95, 848.71) = 35.97, p < .001, \eta_p^2 = .14$ . To further investigate the relationship between testimony order and time in video, we conducted polynomial contrasts. There was a significant quadratic relationship,  $F(1, 215) = 121.68, p < .001, \eta_p^2 = .36$ , indicating that the effect of testimony order on how participants in the two conditions categorised the events described changed over the duration of the video. Specifically, the data indicated an inverted U-shaped relationship between the rape-first condition and time in video (dashed grey line in Figure 2). Participants in this condition tended to categorise the victim's description of the rape event as more consistent with rape than consensual sex. After the victim described this event, participants' responses remained constant until the victim described how she flirted with and kissed the defendant. On average, participants evaluated this event as more typical of consensual sex.



**Figure 2.** Two-way Interaction Between Testimony Order and Time in Video on Event Categorisation in Study 1. Event Categorisation was Measured on a Sliding Scale of 1 (Consensual Sex) to 100 (Rape). The Numbered Squares on Each Line Represent When Each Event Starts Being Described in Each Testimony. Error Bars Represent the Standard Deviation for Each Participant's Response Over the Duration of the Video.

In contrast, the data indicated both U-shaped and inverted U-shaped trends in the relationship between the chronological condition and time in video (black line in [Figure 2](#)). Participants in this condition did not, on average, evaluate the victim's description of finishing work and meeting her friends as consistent with either rape or consensual sex. When the victim described how she met and danced with the defendant however, participants tended to categorise this event as more typical of consensual sex. On average, participants then evaluated the victim's description of the defendant tricking her to go to his apartment as more consistent with rape. After the victim described this event, participants' responses tended to remain constant until the victim described how she flirted with and kissed the defendant. On average, they categorised this event as more typical of consensual sex. Participants then tended to evaluate the victim's description of the rape event as more consistent with rape. In the last 10 s of the video, participants' categorisation of the events described intersected with those in the rape-first condition. This finding was partially consistent with our first prediction.

**Testimony order and event type.** To test our second prediction, a 2 (testimony order) by 2 (event type) mixed factorial ANOVA assessed how participants categorised the victim's description of the events which occurred before the alleged rape and during the rape event. There was a significant main effect of testimony order,  $F(1, 215) = 70.10, p < .001, \eta_p^2 = .25$ , but no significant main effect of event type,  $F(1, 215) = 0.01, p = .916, \eta_p^2 < .01$ , on event categorisation. The main effect of testimony order was qualified by a significant two-way interaction with event type,  $F(1, 215) = 18.77, p < .001, \eta_p^2 = .08$ . Analyses of simple effects within event type suggested that participants who watched the rape-first version of the testimony categorised the events which occurred before the alleged rape as more consistent with rape ( $M = 73.92, SD = 24.10$ ) than those who watched the chronological testimony ( $M = 50.75, SD = 9.65$ ),  $t(143.90) = 9.35, p < .001, d = 1.26$ . Participants in the rape-first condition also evaluated the rape event as more typical of rape ( $M = 69.09, SD = 13.64$ ) than those in the chronological condition ( $M = 55.82, SD = 21.17$ ),  $t(180.34) = 5.47, p < .001, d = 0.75$ . These findings were consistent with our second prediction.

**Final categorisation and guilt likelihood.** To test our third prediction, we examined the effect of testimony order on how participants categorised the victim's testimony at the end of the video, and on the measure assessing the likelihood that the defendant was guilty, using two two-tailed independent t-tests. Unexpectedly, participants who watched the rape-first testimony thought the defendant was as likely to be guilty ( $M = 4.79, SD = 1.63$ ) as those who watched the chronological testimony ( $M = 4.87, SD = 1.60$ ),  $t(215) = -0.36, p = .722, d = -0.05$ . Further, participants in the rape-first condition categorised the end of the testimony as rape to the same extent ( $M = 64.39, SD = 31.01$ ) as those in the chronological condition ( $M = 69.52, SD = 27.06$ ),  $t(212.52) = -1.30, p = .195, d = -0.18$ . Therefore, there was no support for our third prediction.

### **Exploratory analyses**

**How participants categorised the rape event.** Unexpectedly, the planned analyses suggested that presenting the rape event first did not result in participants categorising the events described at the end of the victim's testimony as more typical of rape. If

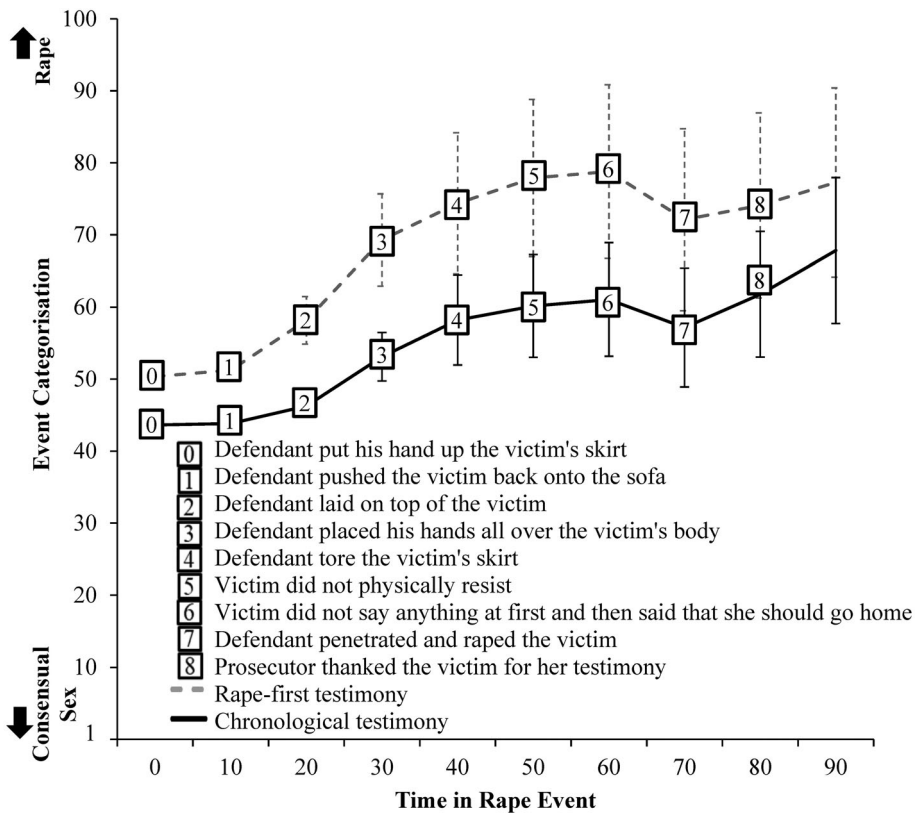
participants, however, did not evaluate this event as more consistent with rape when it was presented first in the testimony, it would explain why they then did not categorise the subsequent events as more typical of rape. Although our second prediction was supported, this result may have been a function of participants in the rape-first condition already scoring higher on the event categorisation measure at the start of the rape event compared to those in the chronological condition (as shown at square 6 for each testimony in Figure 2). As such, we explored whether participants categorised the behaviours described in this event differently when they were presented first compared to last in the testimony. A 2 (testimony order) by 9 (time in rape event) mixed factorial ANOVA assessed the effect of testimony order on participants' responses to the event categorisation measure over the 90 s duration of the rape event. Specifically, participants' responses were only used in this analysis when they occurred during the part of the video where the victim described the rape event (e.g. between approximately 420 and 510 s for the chronological testimony; see Figure 1). These responses were then grouped into clusters for each 10 s interval of video in the rape event (i.e. 10 scores for each 10 s interval). The scores in each cluster were then averaged to produce a mean score for every 10 s of video to operationalise the time in rape event.

We found significant main effects of testimony order,  $F(1, 215) = 30.57, p < .001, \eta_p^2 = .12$ , and time in rape event,  $F(2.33, 500.46) = 153.66, p < .001, \eta_p^2 = .42$ , on event categorisation (see Figure 3). The effects of testimony order and time in rape event were qualified by a significant two-way interaction,  $F(2.33, 500.46) = 5.97, p = .002, \eta_p^2 = .03$ . To further explore how the effect of testimony order changed over the duration of the rape event, we conducted follow-up polynomial contrasts. There was a significant quadratic relationship,  $F(1, 215) = 25.83, p < .001, \eta_p^2 = .11$ , indicating inverted U-shaped relationships between both conditions and time in video. Notably, participants who watched the rape-first version of the testimony categorised the actions described over the duration of this event as more consistent with rape than when they watched the chronological testimony.

**Variability in participants' responses.** The error bars for each condition indicated a greater variability in participants' responses across the duration of the video when they watched the rape-first version of the testimony compared to the chronological testimony (see Figure 2). To further explore why there was no difference in how participants evaluated the events described by the end of the testimony, we assessed whether the variability in responses differed significantly by testimony order. A Welch two-tailed independent t-test showed that participants in the rape-first condition had larger standard deviations in their responses to the event categorisation measure at the end of the video ( $M = 12.70, SD = 4.35$ ; where the mean refers to the mean of participants' standard deviations) than those in the chronological condition ( $M = 10.93, SD = 6.44$ ),  $t(185.60) = 2.37, p = .019, d = 0.32$ . Therefore, participants who watched the rape-first version of the testimony varied to a greater extent in their responses to whether the events described depicted consensual sex or rape than those who watched the chronological testimony.

## Discussion

We predicted that presenting the events that are more consistent with the rape schema at the start of the victim's testimony would guide participants to evaluate the subsequent



**Figure 3.** Two-way Interaction Between Testimony Order and Time in Rape Event on Event Categorisation in Study 1. Event Categorisation was Measured on a Sliding Scale of 1 (Consensual Sex) to 100 (Rape). The Numbered Squares Represent When Each Behaviour Starts Being Described in the Rape Event. Error Bars Represent the Standard Deviation for Each Participant's Response Over the Duration of the Rape Event.

events as depicting rape. However, and unexpectedly, although presenting the rape event first caused participants to categorise the majority of the testimony as more consistent with rape (supporting our first two predictions), they did not evaluate the described events any differently to those who watched the chronological testimony by the end of the video.

In contrast with this result, participants who watched the testimony in which the rape event was presented first categorised this event as more consistent with rape than those who watched the chronological testimony. In the rape-first version of the testimony, the victim first described events consistent with the rape schema before she described events associated with the consensual sex scripts (Littleton & Axsom, 2003). Therefore, presenting the rape event first may have activated participants' rape schema, and so they categorised this event as consistent with this schema (Axelrod, 1973). Participants in this condition continued to categorise the events described as typical of what occurs in rape until the victim described behaviours strongly associated with the consensual sex scripts (i.e. consensual kissing; Littleton et al., 2006). As such, participants who watched the rape-first version of the testimony may have also had their consensual sex schema

activated as the presented behaviours (i.e. consensual kissing) may not have fitted the assumptions of the rape script (Krahé et al., 2007; Macrae et al., 1995). Consistent with this interpretation, participants who watched this testimony were much more variable when categorising the events described as rape or consensual sex, compared to those who watched the chronological testimony. This variability suggests that participants who were presented with the rape event first struggled to reconcile how the events described in the victim's testimony were consistent with two opposing schemas (Kunda et al., 1990).

This pattern of results, however, was consistent with an alternative interpretation. Presenting the rape event first may have caused participants to be less consistent in categorising the victim's testimony as they did not initially use a schema to assist them in this task. Due to the details of this event not being completely consistent with what is described in the rape script—the perpetrator is expected to use force and the victim is expected to physically resist (Littleton et al., 2009)—participants may not have activated their rape schema when this event was presented first. It is also unlikely that participants had an activated consensual sex schema because they evaluated the rape event as more consistent with rape. As such, participants in this condition may not have had an activated schema when they were presented with the rape event and so they evaluated this event based on its details (Brewer & Nakamura, 1984; Sherman et al., 1998). However, since the victim's description of kissing the defendant is strongly associated with the consensual sex schema, this schema may have eventually activated (Krueger & Rothbart, 1988; Littleton et al., 2006). Therefore, participants showed greater variability in their responses because they switched from evaluating the victim's testimony based on its details to relying on an activated schema. To address this alternative explanation, Study 2 assessed whether participants encoded the details of the rape event or encoded it as information that was consistent with their schemas.

Participants who watched the rape-first version of the testimony may have had further difficulty in consistently evaluating the events described as they were not presented in a story format. Research suggests that when events are presented chronologically in a trial, jurors find it easier to mentally organise these events into a story of what occurred in the alleged crime (N. Pennington & Hastie, 1988, 1992). Therefore, participants' evaluations may have converged in the chronological testimony as the events were presented in a story format. This format may have allowed participants to make better sense of the testimony by helping them mentally organise the described events into a coherent story (N. Pennington & Hastie, 1988, 1992). In contrast, participants who watched the testimony in which the rape event (or the logical end to the story) was presented first may have been unable to construct a clear story. This lack of clarity may have led them to feel less certain as to whether the described events were consistent with rape or consensual sex and so they varied to a greater extent when categorising these events. In order to address this, Study 2 provided a more direct assessment of how participants mentally organised the events described in the victim's testimony.

## Study 2

The findings of the first study suggested that participants evaluated the assault as more consistent with rape when the victim described it first compared to last in her testimony.

In the second study, we aimed to replicate this pattern of results by asking participants to evaluate whether the events described were consistent with rape or consensual sex. Further, we investigated a possible reason why presenting the rape event first in the testimony caused participants to categorise it as more consistent with rape. Specifically, we tested whether participants in this condition encoded the details of the rape event or encoded the event as consistent with an activated schema. Research shows that perceivers thoroughly encode the details of information that are inconsistent with their schemas but tend to only remember the overall gist of schema-consistent information (Bartlett, 1932; Sherman et al., 1998). Thus, we assessed participants' memory of the details disclosed in the victim's testimony to test whether they encoded the rape event as schema-consistent or inconsistent information. We also investigated whether presenting the rape event at the start of the victim's testimony influenced how participants mentally organised the events described. N. Pennington and Hastie (1986) tested whether mock jurors organised the events presented at trial into a story by asking them to verbalise their thoughts out loud when choosing a verdict. The authors then examined the extent to which participants connected the elements (i.e. relevant events, actions, and motivations) described in the trial, and whether participants' statements about the alleged crime were organised as a story. Likewise, we assessed the degree to which participants organised the events described in the victim's testimony as a story by asking them to write out their thoughts when deciding a verdict (i.e. their written narrative). This study was also preregistered at the Open Science Framework: <https://osf.io/krzqx>.

Furthermore, we altered the rape event presented in Study 2 to strengthen the manipulation of testimony order. Specifically, the victim first described in the rape event that she was 'penetrated and raped' before recounting the other details of the event. As such, the rape event was introduced more clearly to participants when it was presented at the start of the testimony (compared to Study 1). Based on this change, we made the following prediction:

1. There would be a main effect of testimony order on participants' categorisation of the events described. Specifically, over the duration of the video, participants who watched the rape-first testimony would categorise the events described as more typical of rape than those who watched the chronological testimony.

As in Study 1, we used a continuous measure to assess the likelihood of the defendant's guilt. Further, to improve the ecological validity of the research, participants also decided a verdict for the defendant in Study 2 (Koehler & Meixner, 2017). If presenting the rape event more clearly to participants in the rape-first condition guides them to categorise the testimony as consistent with rape, this may result in them thinking that the defendant is guilty (Nitschke et al., 2021). Based on this change, we made the following hypothesis:

2. Presenting the rape event first would increase participants' perceptions of the likelihood of the defendant's guilt and lead to more guilty verdicts compared to those who watched the chronological testimony.

Consistent with the findings of Study 1, we expected that presenting the rape event first may cause participants to evaluate this event based on its details, rather than use

a schema (Sherman et al., 1998). Alternatively, if participants in this condition only remembered the gist of the rape event, this finding may indicate that they encoded this event as consistent with their rape schema. Based on the former interpretation, we made the following prediction:

3. There would be an interaction between testimony order and event type, such that participants who watched the testimony in which the rape event was presented first would remember more details about this event compared to those who watched the chronological testimony.

Consistent with the findings of Study 1, and N. Pennington and Hastie (1988, 1992) who found that presenting trial events in chronological order assists jurors to organise these events as a story, we made the following prediction:

4. There would be an interaction between testimony order and the information participants include in their written narratives. Specifically, participants who watched the chronological testimony would include more story statements and more connected story elements than those who watched the rape-first testimony. In contrast, participants who watched the rape-first testimony would include more trial statements and more isolated story elements in their narratives.

## **Method**

### ***Participants and design***

Participants ( $N = 234$ ) were members of the community from the United Kingdom and Australia who were recruited through Academic Prolific and paid US\$2.31 to participate. The study was completed online through Qualtrics survey software. Six participants were excluded from the analysis because they did not respond to the event categorisation measure as they watched the victim's testimony. An additional three participants were excluded because they either encountered a software error while watching the victim's testimony ( $N = 2$ ) or they did not meet one of the pre-registered exclusion criteria in that they were missing more than 50% of their data ( $N = 1$ ). The final sample comprised 225 participants (2 non-binary, 124 women, 99 men) aged 18–77 years ( $M = 36.99$ ,  $SD = 13.52$ ). An a priori power analysis suggested that this design was sufficiently powered to detect the moderate effect sizes found in Study 1 (a sample size of 212 was required for a power of .95).

Participants were randomly assigned to one of two conditions formed by the between-subjects manipulation of testimony order (chronological testimony, rape-first testimony). The key dependent variables included participants' categorisation of the events described, their perception of the defendant's guilt, their choice of verdict, their narrative of events, and their memory of the events described. As in Study 1, participants' responses to the event categorisation measure were used to operationalise the repeated measures variable, time in video. The second repeated measures variable, event type, was operationalised by assessing participants' memory of the victim's descriptions of the rape event and the events which occurred before the alleged rape using an open-response test.

### **Materials and procedure**

Participants followed a similar procedure to Study 1. First, they received instructions on how to respond to the event categorisation measure. Due to the high number of participants not responding to this measure in Study 1, the instructions in Study 2 reminded participants to respond anytime the video of the victim's testimony caused them to update their judgment. The video of the victim's testimony was streamlined from Study 1 (approximately 6.33 min long) in order to minimise the additional time it would take participants to complete the study due to the extra measures added. Specifically, some of the events described before the alleged rape were removed from the video (i.e. the victim finishing work, the conversation the victim had with her friends at the bar, and the defendant tricking the victim into going back to his apartment). The victim's description of the defendant tricking her was specifically removed as such manipulative tactics are not usually reported being used before most sexual assaults (Edwards et al., 2014; Waterhouse et al., 2016). A perpetrator's use of manipulation is more likely to be perceived as consistent with the rape schema than the consensual sex schema (Littleton & Axson, 2003). In Study 1, participants who watched the chronological testimony evaluated this behaviour as depicting rape. Therefore, participants may not have categorised the perpetrator's use of manipulation as congruent with their consensual sex schema, thus framing how they evaluated the remaining testimony. Furthermore, the victim's description of how the defendant tore her skirt was removed from the rape event to improve the ecological validity of the testimony (clothes are not often torn in rape cases; Du Mont et al., 2003). The same events were removed in the video for each condition. The videos for each testimony are available at <https://osf.io/zqsd6/>.

**Written narrative and guilt measures.** Participants were asked to consider a verdict for the defendant and to write down exactly what they were thinking as they did this. Next, participants were asked to decide whether the defendant was guilty or not guilty of committing rape. Participants were then asked the same item used in Study 1 to assess guilt likelihood.

**Event memory.** Participants were asked 16 open-response questions designed to assess their memory of the details of the victim's testimony. Four of these questions assessed participants' memory of the rape event (e.g. 'what did Janine say to Neil when he was allegedly forcing himself onto her?'), while 12 of these questions assessed their memory of the events that occurred before the alleged rape (e.g. 'how did Janine know Neil before the night of the alleged rape?'). Responses were coded either 1, *correct*, or 0, *incorrect*. The number of correct responses were then divided by the number of questions for each cluster to form a percentage of correct answers for each type of event, with higher percentages denoting a greater proportion of correctly remembered details of the events described in the testimony.

**Manipulation check measure.** The same item used in Study 1 assessed the manipulation of testimony order.



## Results

### Overview

As in Study 1, the manipulation check and the main analyses were pre-registered on the Open Science Framework. The exploratory analyses conducted to follow up unexpected results, and the mixed ANOVAs used to assess our fourth prediction, were not pre-registered. Rather than rely on the frequencies observed from the content analysis (as done in N. Pennington & Hastie, 1986), the ANOVAs were conducted to assess whether there were significant differences in the extent to which participants organised the events described as a story on the basis of testimony order.

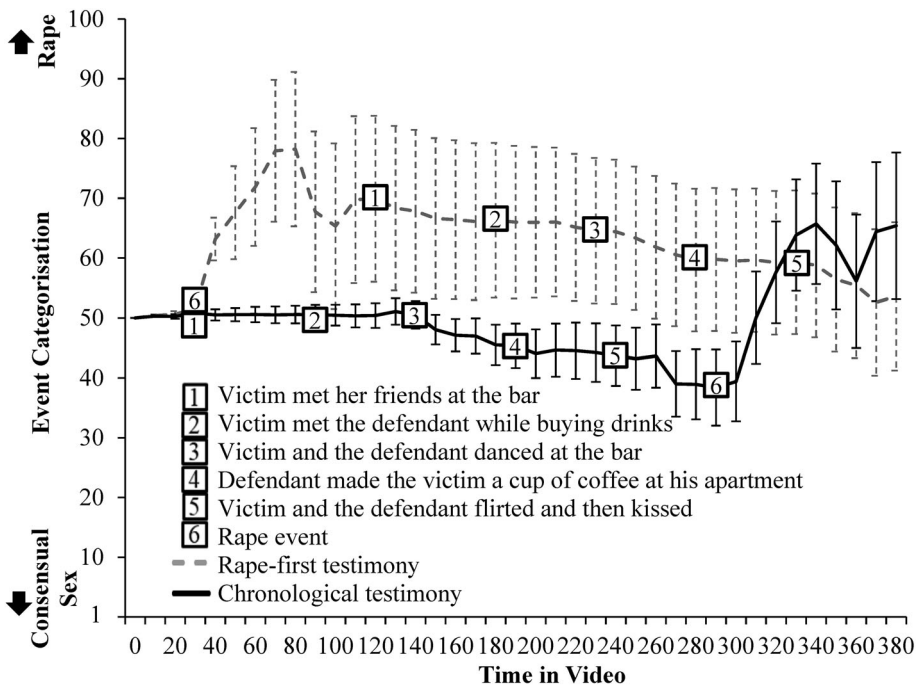
### Manipulation check

Testimony order was successfully manipulated with participants who watched the rape-first version of the testimony reporting that the victim described the assault significantly earlier in the video ( $M = 1.95$ ,  $SD = 1.54$ ) than those who watched the chronological testimony ( $M = 5.46$ ,  $SD = 1.11$ ),  $t(200.12) = -19.50$ ,  $p < .001$ ,  $d = -2.61$ .

### Main analyses

**Testimony order and time in video.** There were significant main effects for testimony order,  $F(1, 223) = 47.35$ ,  $p < .001$ ,  $\eta_p^2 = .18$ , time in video,  $F(3.50, 780.16) = 27.48$ ,  $p < .001$ ,  $\eta_p^2 = .11$ , and a significant interaction between these variables,  $F(3.50, 780.16) = 47.50$ ,  $p < .001$ ,  $\eta_p^2 = .18$  (see Figure 4). Follow-up polynomial contrasts showed a significant quadratic relationship,  $F(1, 223) = 204.89$ ,  $p < .001$ ,  $\eta_p^2 = .48$ . The data indicated an inverted U-shaped relationship between the rape-first condition and time in video. On average, participants in this condition categorised the victim's description of the rape event as more consistent with rape than consensual sex. Participants then tended to evaluate the events that occurred before the alleged rape as more typical of consensual sex. In contrast, the data indicated a U-shaped relationship between the chronological condition and time in video. Participants in this condition tended to not categorise the victim's description of when she met her friends, and when she met the defendant, as consistent with either rape or consensual sex. On average, participants then evaluated the victim's descriptions of her dancing with the defendant, having a cup of coffee with the defendant, flirting with the defendant, and kissing the defendant, as more typical of consensual sex. Participants then tended to categorise the victim's description of the rape event as more consistent with rape. In the last 50 s of the video, participants' categorisation of the events described intersected with those in the rape-first condition. This finding was partially consistent with our first prediction.

**Testimony order and perceptions of guilt.** Participants who watched the rape-first version of the testimony thought the defendant was as likely to be guilty ( $M = 4.33$ ,  $SD = 1.61$ ) as those who watched the chronological testimony ( $M = 4.36$ ,  $SD = 1.75$ ),  $t(223) = -0.12$ ,  $p = .907$ ,  $-d = 0.02$ . Further, participants' choice of verdict was not associated with the order in which the testimony was presented,  $X^2(2, N = 225) = 1.90$ ,  $p = .386$ , *frequency for rape-first condition*: guilty verdicts = 52, not guilty verdicts = 58, *frequency for chronological condition*: guilty verdicts = 61, not guilty verdicts = 53. These findings did not support our second prediction.



**Figure 4.** Two-way Interaction Between Testimony Order and Time in Video on Event Categorisation in Study 2. Event Categorisation was Measured on a Sliding Scale of 1 (Consensual Sex) to 100 (Rape). The Numbered Squares on Each Line Represent When Each Event Starts Being Described in Each Testimony. Error Bars Represent the Standard Deviation for Each Participant's Response Over the Duration of the Video.

**Testimony order and event memory.** To test our third prediction, a 2 (testimony order) by 2 (event type) mixed factorial ANOVA assessed how accurate participants were in remembering the details of the events described in the victim's testimony. There were significant main effects for event type,  $F(1, 223) = 5.11, p = .025, \eta_p^2 = .02$ , and testimony order,  $F(1, 223) = 6.06, p = .015, \eta_p^2 = .03$ , but no significant interaction,  $F(1, 223) = 0.78, p = .378, \eta_p^2 < .01$ . Participants correctly remembered more details about the rape event ( $M = 49.33\%, SD = 27.03$ ) than the events which occurred before the alleged rape ( $M = 45.00\%, SD = 20.98$ ). Unexpectedly, participants who watched the chronological testimony correctly remembered more details about the events described ( $M = 50.29\%, SD = 19.89$ ) than those who watched rape-first version of the testimony ( $M = 43.96\%, SD = 18.69$ ). These findings did not support our third prediction.

**Written narratives.** To test our fourth prediction, participants' responses to the written narrative measure were coded using content analysis based on N. Pennington and Hastie (1986). This analysis was conducted to test if participants who watched the chronological testimony were more likely to organise the events described as a story than those who watched the rape-first version of the testimony.

Two independent raters coded whether the statements made by participants in their written narratives were either (a) *story statements* or (b) *trial statements*. Story statements

referred to the events that occurred, the people that were present, and the stereotypical beliefs relevant to the night of the alleged rape. In contrast, trial statements referred to the events that occurred during the trial. A segment of text was considered a *statement* when it was written as a whole sentence or when both raters agreed it was an individual thought (this was obvious for responses which lacked sentence structure). This statement, 'Neil pushed Janine back and pinned her down when he raped her.', would be considered a story statement as it is an explicit reference to an action that occurred on the night of the alleged rape. In contrast, the statement, 'Janine said during her testimony that Neil pushed her back and pinned her down when he raped her.', would be considered a trial statement as it refers to an action which Janine described during the trial. Statements were not coded if they were irrelevant to what occurred on the night of the alleged rape (20.94% of statements). Interrater agreement in this phase of the analysis was nearly perfect ( $\kappa = .853$ ), with any disagreements between the two raters resolved through discussion.

The continuous measures *number of story statements* and *number of trial statements* were derived from this coding and used as the repeated measures variable *statement type* in an exploratory analysis. A 2 (testimony order) by 2 (statement type) mixed factorial ANOVA assessed whether there were significant differences between the number of story and trial statements included in participants' written narratives on the basis of testimony order. There was a significant main effect for statement type,  $F(1, 223) = 132.18, p < .001, \eta_p^2 = .37$ , such that participants wrote more story statements ( $M = 2.48, SD = 1.78$ ) than trial statements ( $M = 0.80, SD = 0.98$ ) in their written narratives. Unexpectedly, there was no significant main effect of testimony order,  $F(1, 223) = 0.07, p = .799, \eta_p^2 < .01$ , or interaction,  $F(1, 223) = 0.18, p = .670, \eta_p^2 < .01$ , suggesting that participants did not differ in how they organised their written narratives into story related and trial related information on the basis of testimony order.

Participants' responses were then coded into specific *story elements*. Story elements were events, actions, inferred psychological and physical states, and consequences that were either described in the victim's testimony (e.g. the defendant pushed her back-action), or participants claimed that the elements occurred on the night of the alleged rape (e.g. this would have made the victim scared-psychological state). Story elements also included participants' stereotypical beliefs about what usually occurs, or does not occur, in a common rape (e.g. it is common for rape victims to freeze during the assault). One coder identified the story elements in each written narrative. Two raters then indicated whether they agreed with the coding. Both raters agreed with the coding for the majority of participants' responses (83.04% and 88.39% agreement) and demonstrated substantial interrater reliability ( $\kappa = .601$ ) in regard to whether they agreed or disagreed with the coding of each response. This procedure was used to organise the data for the final part of the content analysis.

Next, two independent raters coded the identified story elements as either (a) *connected* or (b) *isolated* in each response. A story element was coded as *connected* when the element was either causally or temporally related to another story element in a narrative response. For example, in the following passage of text—'she agreed to go home with the defendant which would have made him unsure as to whether she consented or not'—the action 'she agreed to go home', is *causally connected* to the psychological state, 'unsure as to whether she consented or not', due to the phrase 'which would

have made him'. Therefore, each element would be coded as *connected*. In contrast, if the phrase, 'which would have made him', was not present in this passage, each element would be coded as *isolated*. In a second example—when the defendant showed indications of wanting to move on to the next level, she did not resist—the action 'showed indications of wanting to move on to the next level' is *temporally connected* to the action 'she did not resist' due to the word 'when'. As such, each element would be coded as connected. Interrater agreement in this phase of the analysis was nearly perfect ( $\kappa = .898$ ).

The continuous measures *number of connected elements* and *number of isolated elements* were derived from this coding and used as the repeated measures variable *element type* in an exploratory analysis. A 2 (testimony order) by 2 (element type) mixed factorial ANOVA assessed whether there were meaningful differences in the extent to which participants connected the story elements in their narrative responses on the basis of testimony order. There was a significant main effect for element type,  $F(1, 223) = 287.26, p < .001, \eta_p^2 = .56$ , suggesting that participants included more elements that were connected ( $M = 5.76, SD = 3.85$ ) rather than isolated ( $M = 0.97, SD = 1.10$ ) in their written narratives. Unexpectedly, there was no significant main effect of testimony order,  $F(1, 223) = 0.35, p = .558, \eta_p^2 < .01$ , or interaction,  $F(1, 223) < 0.01, p = .958, \eta_p^2 < .01$ , indicating that participants did not differ in the extent to which they connected the story elements in their narrative responses on the basis of testimony order. Therefore, there was no support for our fourth prediction.

### **Exploratory analyses**

**Response time for written narratives.** The results of the content analysis suggested that participants were able to organise the events described into a story regardless of which testimony they watched. This finding was unexpected, given that the results of Study 1 suggested that participants found it more difficult to evaluate whether the victim's testimony depicted rape or consensual sex when the rape event was presented first. However, this finding may be attributed to the measure used in the current study. N. Pennington and Hastie (1986) did not assess how difficult it was for mock jurors to construct their stories from the evidence presented at trial. Their later research, however, suggested that jurors found it more difficult to construct their stories when the evidence was presented in a non-chronological format (N. Pennington & Hastie, 1992).

Several studies have shown that decision-making difficulty is associated with a longer response time (see Goldhammer et al., 2014; Wright & Ayton, 1988, for examples). To ensure participants were engaging with the written narrative measure, we recorded how long they took to answer this measure using a timer embedded within the Qualtrics survey. Therefore, to further explore whether participants in the rape-first condition found it more difficult to construct a coherent story, the time taken to answer the written narrative measure was analysed using an analysis of covariance (ANCOVA). To control for the difference in length of responses, the number of words written in each narrative was included as a covariate in this analysis. Longer responses were significantly associated with a longer time taken to write the narratives,  $F(1, 222) = 129.56, p < .001, \eta^2 = .37, r = .60$ . There was also a significant effect of testimony order,  $F(1, 222) = 12.31, p = .001, \eta^2 = .05$ . After controlling for length of responses, participants who watched the rape-first version of the testimony took significantly longer to write their narratives ( $M =$

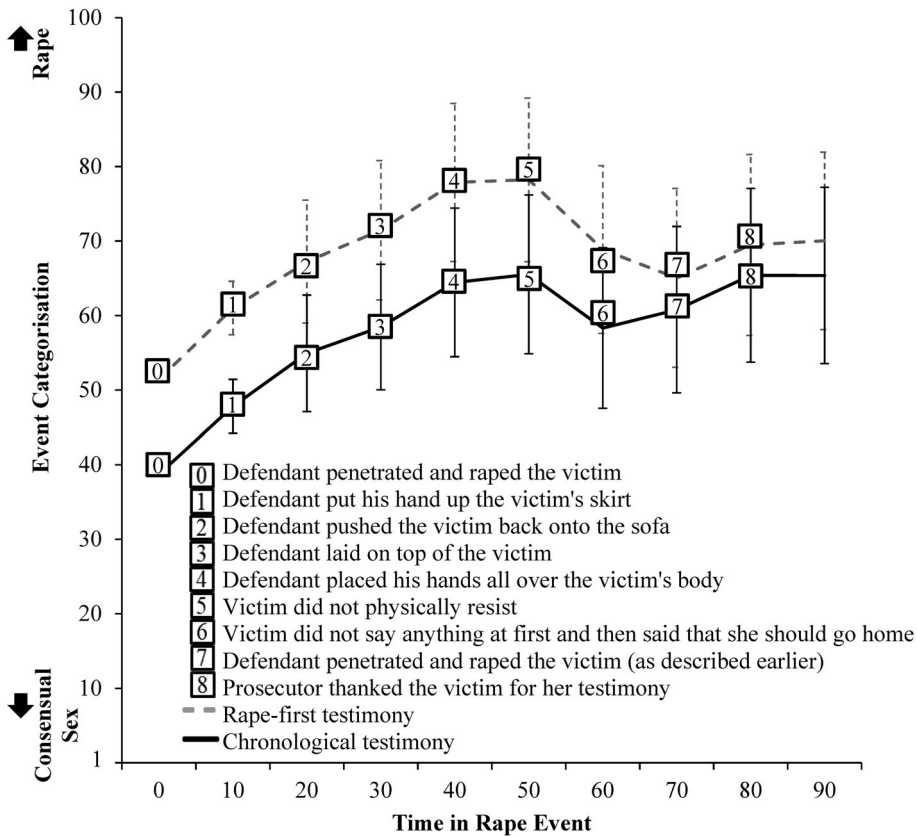
364.91 s,  $SD = 338.95$ ) than those who watched the chronological testimony ( $M = 265.39$  s,  $SD = 167.47$ ).

**How participants categorised the rape event.** To test whether the effect of testimony order on how participants categorised the rape event observed in Study 1 was replicated in Study 2, we explored whether participants differed in how they categorised this event on the basis of testimony order. We conducted a 2 (testimony order) by 9 (time in rape event) mixed factorial ANOVA. Time in rape event was operationalised in the same way as in Study 1. There were significant main effects for testimony order,  $F(1, 223) = 15.61$ ,  $p < .001$ ,  $\eta_p^2 = .07$ , time in rape event,  $F(3.03, 674.72) = 102.25$ ,  $p < .001$ ,  $\eta_p^2 = .31$ , and a significant interaction between both variables,  $F(3.03, 674.72) = 6.52$ ,  $p < .001$ ,  $\eta_p^2 = .03$ . Follow-up polynomial contrasts showed a significant linear relationship,  $F(1, 223) = 9.91$ ,  $p = .002$ ,  $\eta_p^2 = .04$ , suggesting that the differences between the versions of the testimony were fairly constant over the duration of the rape event (see [Figure 5](#)). As in Study 1, participants who watched the rape-first version of the testimony categorised the rape event as more consistent with rape than those who watched the chronological testimony.

## Discussion

Since we strengthened the manipulation of testimony order in Study 2, we expected that presenting the rape event first would cause participants to evaluate the victim's testimony as more consistent with rape. Further, we expected this change would make participants in this condition more likely to find the defendant guilty. There was mixed support for these hypotheses. However, the findings of Study 2 reliably demonstrated that presenting the rape event first in the victim's testimony caused participants to evaluate this event as more consistent with rape compared to when the testimony was presented chronologically. Further, participants who watched the rape-first version of the testimony changed their initial categorisation when the victim described events that were more strongly associated with the consensual sex script.

Study 2 provided information which may explain these findings. Participants who watched the rape-first version of the testimony remembered fewer details about the events described than those who watched the chronological testimony. It is unlikely that this finding can be attributed to a recency effect in the chronological condition, considering participants in this condition remembered more details about all the events described rather than just the rape event. Instead, and unexpectedly, this finding suggested that participants who watched the rape-first version of the testimony relied on their schemas to a greater extent when evaluating the described events (Bartlett, 1932; Sherman et al., 1998). This finding is counter to our hypothesis that participants who watched the rape-first version of the testimony would evaluate the rape event by thoroughly encoding its details. Instead, this finding is consistent with our alternative interpretation—that is, presenting the rape event first activated participants' rape schema and so they evaluated this event based on its gist meaning (Littleton & Axsom, 2003; Sherman et al., 2000). Supporting this explanation, Lang (1989) found that presenting news stories in broadcast order (i.e. the ending of the story first, followed by the beginning) caused participants to encode fewer details about the story compared to when it was presented chronologically. Lang (1989) argued that perceivers



**Figure 5.** Two-way Interaction Between Testimony Order and Time in Rape Event on Event Categorisation in Study 2. Event Categorisation was Measured on a Sliding Scale of 1 (Consensual Sex) to 100 (Rape). The Numbered Squares Represent When Each Behaviour Starts Being Described in the Rape Event. Error Bars Represent the Standard Deviation for Each Participant’s Response Over the Duration of the Rape Event.

rely on their schemas to make sense of stories presented in broadcast order, as it is more difficult to understand the message of the story without knowing the other information. Therefore, presenting the rape event first may have caused participants to rely on their rape and consensual sex schemas to understand the events described in the victim’s testimony.

Contrary to our predictions, participants who watched the rape-first version of the testimony were as likely to organise the events described into a story as those who watched the chronological testimony. This finding suggested that jurors are still able to construct a coherent story of what occurred in the alleged rape even when the evidence is not presented in a format which assists this process (N. Pennington & Hastie, 1986). However, the results from the exploratory analyses showed that participants took longer to construct their story when the rape event was presented first. This finding is consistent with research which shows that presenting evidence in a non-chronological order makes it more difficult for jurors to construct a story of what occurred in the alleged crime (N. Pennington & Hastie, 1988, 1992). Therefore, although participants were able to construct a

story when the rape event was presented first in the victim's testimony, they may have found it more challenging.

## General discussion

The aim of the current research was to investigate whether varying the order in which the victim's testimony is presented can influence how jurors evaluate this evidence in a case of rape. Specifically, we tested whether presenting events that are more consistent with the rape schema at the start of this testimony would guide participants to evaluate subsequent events as depicting rape. Across two studies, participants who watched the rape-first version of the testimony evaluated the rape event—and the majority of the testimony—as more typical of rape than those who watched the chronological testimony. However, participants in the rape-first condition started to evaluate the testimony as consensual sex when the victim described events that were more consistent with the consensual sex schema (Littleton et al., 2006). These events may have influenced participants' overall verdicts in this condition, as unexpectedly, they were as likely to find the defendant guilty as those who watched the chronological testimony.

Participants' verdicts in the rape-first condition may have also been impacted by their apparent difficulty in interpreting the victim's testimony. Specifically, the results from the memory test in Study 2 suggested that presenting the rape event first in the victim's testimony may have activated participants' rape schema (Brewer & Nakamura, 1984; Sherman et al., 1998). However, participants in this condition may have also had their consensual sex schema activated when the victim described behaviours that were more commonly associated with this other schema (Kunda & Thagard, 1996). As such, participants who watched the rape-first version of the testimony may have constructed their story of what occurred during the alleged rape using schemas with conflicting assumptions (N. Pennington & Hastie, 1993). According to Kunda and colleagues (1990), perceivers may use causal reasoning to reconcile why information is consistent with two opposing schemas. Unlike when a single schema is activated (Devine & Sharp, 2009), causal reasoning requires greater time and cognitive effort to evaluate information (Kunda & Thagard, 1996). Therefore, participants who watched the rape-first version of the testimony varied to a greater extent when evaluating whether the events described depicted rape or consensual sex and took longer to organise these events into a story of what occurred in the alleged rape (N. Pennington & Hastie, 1993).

These findings suggest that presenting the victim's testimony with the rape event first may disrupt jurors' abilities to efficiently evaluate and organise the events described. Further, even after their rape schema is activated, jurors may still not categorise events that are more associated with the consensual sex script as consistent with their rape schema. This information may instead activate jurors' consensual sex schema, causing them to evaluate these events as consistent with consensual sex. This is inconsistent with research which shows that jurors may reinterpret behaviours associated with the consensual sex schema as depicting rape when they are first exposed to cues consistent with the rape script (McKimmie et al., 2014). However, McKimmie and colleagues (2014) only found evidence of this in cases that are more consistent with the rape script (i.e. the victim was attacked by a stranger outside). Therefore, jurors are unlikely to reinterpret

these behaviours in most rape trials because the evidence is often weakly associated with the rape schema (Edwards et al., 2014; Millstead & McDonald, 2017).

Presenting the assault at the start of the victim's testimony may need to be used in combination with other trial interventions to help jurors reinterpret behaviours that deviate from the rape schema. Research suggests that interventions which educate jurors about what frequently occurs in sexual offences may cause them to update their schemas about this crime (Ellison & Munro, 2009b; Goodman-Delahunty et al., 2010). Using this type of intervention, the jury could receive, for example, information before the presentation of the victim's testimony detailing that most rapes will occur in a hook-up context (Judicial Studies Board, 2010). Thus, if a juror's rape schema is activated after the victim describes the assault first in her testimony, they may continue to categorise the consensual activity described prior to the alleged rape (discussed later in the testimony) as consistent with this schema (Kunda & Thagard, 1996; Rumelhart, 1980). Future research should investigate whether both interventions would help jurors evaluate the victim's testimony without being affected by stereotypes that undermine her credibility.

Our findings suggested that participants who watched the chronological testimony may have evaluated the events described more consistently through the creation of a coherent story of what occurred (N. Pennington & Hastie, 1988, 1992). However, this format may not be the most effective way of presenting the victim's testimony. Across both studies, participants in this condition evaluated the events leading up to the assault as consistent with consensual sex (although only just below the midpoint of the scale). These prior events may have framed how participants evaluated the assault as they did not categorise this event as depicting rape to the same extent as those who watched the rape-first version of the testimony (Kunda & Thagard, 1996; N. Pennington & Hastie, 1993). Therefore, as expected, presenting the victim's testimony as is usually done in trial may cause jurors to rely on their consensual sex schema when they evaluate the victim's description of the alleged assault.

### **Limitations**

Although this research advances our knowledge on how jurors interpret the victim's testimony in cases of rape, it is not without limitations. We obtained data from a mostly student sample in Study 1, which may have limited the field validity and generalisability of the findings. However, there is substantial evidence to suggest that the findings of trial research sampling students is generalisable to the general population (Bornstein et al., 2017). Most importantly, the main findings of Study 1 were replicated in Study 2 which sampled from the community and whose demographics were more comparable to genuine jurors (Goodman-Delahunty et al., 2017).

As most jurisdictions do not allow extensive assessment of jurors' attitudes before trial (Lieberman, 2011), we did not measure participants' beliefs in rape myths. However, since rape myths help perceivers understand what is typical in cases of rape (Smith & Skinner, 2017; Wheatcroft et al., 2009), the extent to which jurors endorse these myths may influence which events they think are consistent with the rape schema (Bohner et al., 2009). Therefore, whether presenting the assault first in the victim's testimony activates jurors' rape schema may depend on the extent to which they believe in rape myths. To



address this limitation, future research should explore the impact changing the order of events has on mock jurors' categorisation of the victim's testimony while controlling for their beliefs in rape myths.

The videos used in this research depicted the prosecutor's examination-in-chief of the victim, without the defence's cross-examination or presentation of evidence. By highlighting behaviours that are consistent with jurors' consensual sex scripts (Burgin & Flynn, 2019), the defence counsel can influence jurors' stories of what occurred in the alleged rape (N. Pennington & Hastie, 1993). Further, jurors who watch a rape-first version of the victim's testimony may find it difficult to efficiently construct a coherent story over the duration of the trial. Specifically, they may struggle to fit additional evidence into a story which was difficult to construct to begin with (N. Pennington & Hastie, 1988, 1992). To ensure that trial interventions are effective in improving how jurors evaluate the victim's testimony, it is important for future research to incorporate ecologically valid materials into their methodology (Krauss & Lieberman, 2017). Future research should assess the effectiveness of presenting the rape-first version of the victim's testimony over the course of the trial.

In Study 2, we assessed the extent to which participants organised their thoughts about the case as a coherent story (see N. Pennington & Hastie, 1986 for a similar measure and analysis). Although this analysis provided insightful conclusions about how changing the order of testimony can influence jurors' stories, it is still unknown whether participants' reasons for their verdicts differed based on testimony order. Other research in legal decision-making has assessed why jurors choose certain verdicts by asking them to explain the reasons for their decisions, and then analysing their responses using pathfinder analysis (see Lippert & Golding, 2016; Magyarics et al., 2015). Therefore, future research should use more rigorous analyses to investigate whether changing the order of testimony can influence jurors' reasons for their verdicts in cases of rape.

The videos used in this research depicted a male defendant and a female victim. Therefore, our findings and conclusions are limited to cases that are consistent with this gender dynamic. For example, in cases involving a female defendant and a male victim, presenting the assault first may not activate jurors' rape schema as perpetrators of male rape are typically expected to be men (Anderson, 2007; Kassing et al., 2005). To address this limitation, future research should investigate the impact varying the order of testimony has on juror decision-making in cases of rape, which include different combinations of defendant and victim gender.

### ***Conclusions and implications***

Aside from these limitations, the findings of the current research are an important contribution to our understanding of how to guide jurors to evaluate a rape victim's testimony based on her behaviours which indicate non-consent. This research suggests that presenting these behaviours first in the victim's testimony may activate jurors' rape schema, causing them to initially categorise this testimony as depicting rape (Axelrod, 1973; Littleton & Axsom, 2003). However, jurors who watch this testimony may still categorise some of the victim's other behaviours as consistent with consensual sex, causing them difficulty in reconciling how the events described can be consistent

with two opposing schemas (Kunda et al., 1990; Littleton et al., 2006). This discrepancy between both activated schemas, along with the non-chronological order of this testimony, may disrupt jurors' abilities to consistently evaluate the victim's testimony and to efficiently organise the events described into a coherent story (N. Pennington & Hastie, 1993). Therefore, prosecutors may wish to continue presenting the victim's testimony in a chronological order to help jurors remember the details about this evidence and help them construct a clear narrative of what occurred. A consequence of presenting testimony in this order, however, is that jurors may evaluate the assault based on the events that are consistent with the consensual sex schema. As such, future research should assess the effectiveness of other interventions in combination with the rape-first version of the testimony in helping jurors reinterpret the victim's behaviours that are not associated with the rape script. The development of such interventions is needed to reduce the influence of stereotypes that undermine the victim's credibility in rape trials.

## Open Scholarship



This article has earned the [Center for Open Science](#) badges for Open Data, Open Materials, and Pre-registered. The data and materials are openly accessible at <https://osf.io/2w5gr/> (data: Study 1) and <https://osf.io/axjru/> (data: Study 2), <https://osf.io/6mwvx/> (materials: Study 1) and <https://osf.io/zqsd6/> (materials: Study 2), and <https://osf.io/64ng7/> (preregistration: Study 1) and <https://osf.io/krzqx/> (preregistration: Study 2).

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## CRedit author statement

**Harrison Lee:** Conceptualisation, Methodology, Software, Formal analysis, Project administration, Writing–Original Draft.

**Blake McKimmie:** Supervision, Resources, Conceptualisation, Methodology, Software, Writing–Review & Editing.

**Barbara Masser:** Supervision, Resources, Conceptualisation, Methodology, Writing–Review & Editing.

**Jason Tangen:** Supervision, Conceptualisation, Methodology, Software, Writing–Review & Editing.

## Declaration of interest statement

We declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Data availability statement

The data presented in this research can be found at <https://osf.io/2w5gr/> (Study 1) and <https://osf.io/axjru/> (Study 2).

## ORCID

Harrison D. H. Lee  <http://orcid.org/0000-0001-8879-894X>

Blake M. McKimmie  <http://orcid.org/0000-0002-2750-6111>

Barbara M. Masser  <http://orcid.org/0000-0001-9385-6497>

Jason M. Tangen  <http://orcid.org/0000-0002-0649-2566>

## References

- Anderson, I. (2007). What is a typical rape? Effects of victim and participant gender in female and male rape perception. *British Journal of Social Psychology, 46*(1), 225–245. <https://doi.org/10.1348/014466606X101780>
- Anderson, I., & Doherty, K. (2008). *Accounting for rape*. Routledge.
- Australian Bureau of Statistics. (2019, June 27). 4510.0 - Recorded Crime - Victims, Australia, 2018. <https://www.abs.gov.au/ausstats/abs@nsf/mf/4510.0>
- Axelrod, R. (1973). Schema theory: An information processing model of perception and cognition. *The American Political Science Review, 67*(4), 1248–1266. <https://doi.org/10.2307/1956546>
- Bartlett, F. C. (1932). *Remembering*. Cambridge University Press.
- Bohner, G., Eyssel, F., Pina, A., Siebler, F., & Viki, T. (2009). Rape myth acceptance: Affective, behavioral, and cognitive effects of beliefs that blame the victim and exonerate the perpetrator. In M. Horvath, & J. Brown (Eds.), *Rape: Challenging contemporary thinking* (pp. 17–45). Willan.
- Bornstein, B. H., Golding, J. M., Neuschatz, J., Kimbrough, C., Reed, K., Magyarics, C., & Luecht, K. (2017). Mock juror sampling issues in jury simulation research: A meta-analysis. *Law and Human Behavior, 41*(1), 13–28. <https://doi.org/10.1037/lhb0000223>
- Brewer, W. E., & Nakamura, G. V. (1984). The nature and functions of schemas. In R. S. Wyer Jr, & T. K. Srull (Eds.), *Handbook of social cognition* (pp. 119–160). Erlbaum.
- Bryden, D. P., & Lengnick, S. (1997). Rape in the Criminal Justice system. *The Journal of Criminal Law & Criminology, 87*(4), 1194–1384. <https://doi.org/10.2307/1144018>
- Buckles, T. (2007). *Crime scene investigation, criminalistics, and the law*. Thomson Delmar Learning.
- Burgin, R., & Flynn, A. (2019). Women's behavior as implied consent: Male "reasonableness" in Australian rape law. *Criminology & Criminal Justice, https://doi.org/10.1177/1748895819880953*
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology, 38*(2), 217–230. <https://doi.org/10.1037/0022-3514.38.2.217>
- Burt, M. R., & Albin, R. S. (1981). Rape myths, rape definitions, and probability of conviction. *Journal of Applied Social Psychology, 11*(3), 212–230. <https://doi.org/10.1111/j.1559-1816.1981.tb00739.x>
- Carver, C. S., Ganellen, R. J., Froming, W. J., & Chambers, W. (1983). Modeling: An analysis in terms of category accessibility. *Journal of Experimental Social Psychology, 19*(5), 403–421. [https://doi.org/10.1016/0022-1031\(83\)90019-7](https://doi.org/10.1016/0022-1031(83)90019-7)
- Cook, N. K., & Messman-Moore, T. L. (2018). I said No: The impact of voicing Non-consent on Women's perceptions of and responses to rape. *Violence Against Women, 24*(5), 507–527. <https://doi.org/10.1177/1077801217708059>

- Devine, P. G., & Sharp, L. B. (2009). Automaticity and control in stereotyping and prejudice. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 61–87). Psychology Press.
- Du Mont, J., Miller, K.-L., & Myhr, T. L. (2003). The role of “real rape” and “real victim” stereotypes in the police reporting practices of sexually assaulted women. *Violence Against Women, 9*(4), 466–486. <https://doi.org/10.1177/1077801202250960>
- Edwards, K. M., Probst, D. R., Tansill, E. C., Dixon, K. J., Bennett, S., & Gidycz, C. A. (2014). In their Own words: A content-analytic Study of College Women’s resistance to sexual assault. *Journal of Interpersonal Violence, 29*(14), 2527–2547. <https://doi.org/10.1177/0886260513520470>
- Ellison, L., & Munro, V. E. (2009a). Of ‘normal sex’ and ‘real rape’: Exploring the use of socio-sexual scripts in (mock) jury deliberation. *Social & Legal Studies, 18*(3), 291–312. <https://doi.org/10.1177/0964663909339083>
- Ellison, L., & Munro, V. E. (2009b). Turning mirrors into windows? Assessing the impact of (mock) juror education in rape trials. *The British Journal of Criminology, 49*(3), 363–383. <https://doi.org/10.1093/bjc/azp013>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G\*power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fiske, S. T., & Linville, P. W. (1980). What does the schema Concept Buy us? *Personality and Social Psychology Bulletin, 6*(4), 543–557. <https://doi.org/10.1177/014616728064006>
- Goldhammer, F., Naumann, J., Stelter, A., Tóth, K., Rölke, H., & Klieme, E. (2014). The time on task effect in reading and problem solving is moderated by task difficulty and skill: Insights from a computer-based large-scale assessment. *Journal of Educational Psychology, 106*(3), 608–626. <https://doi.org/10.1037/a0034716>
- Goodman-Delahunty, J., Cossins, A., & O’Brien, K. (2010). Enhancing the credibility of complainants in child sexual assault trials: The effect of expert evidence and judicial directions. *Behavioral Sciences & the Law, 28*(6), 769–783. <https://doi.org/10.1002/bsl.936>
- Goodman-Delahunty, J., Martschuk, N., & Cossins, A. (2017). What Australian jurors know and do not know about evidence in child sexual abuse. *Criminal Law Journal, 41*, 86–103. <https://researchoutput.csu.edu.au/en/publications/what-australian-jurors-know-and-do-not-know-about-evidence-in-chi>
- Gravelin, C. R., Biernat, M., & Bucher, C. (2019). Blaming the Victim of Acquaintance Rape: Individual, situational, and sociocultural factors. *Frontiers in Psychology, 9*, 1–22. <https://doi.org/10.3389/fpsyg.2018.02422>
- Hammond, E. M., Berry, M. A., & Rodriguez, D. N. (2011). The influence of rape myth acceptance, sexual attitudes, and belief in a just world on attributions of responsibility in a date rape scenario. *Legal and Criminological Psychology, 16*(2), 242–252. <https://doi.org/10.1348/135532510X499887>
- Jehle, J. (2012). Attrition and conviction rates of sexual offences in Europe: Definitions and criminal justice responses. *European Journal on Criminal Policy and Research, 18*(1), 145–161. <https://doi.org/10.1007/s10610-011-9163-x>
- Judicial Studies Board. (2010). *Crown court benchbook*. Judicial Studies Board.
- Kassing, L. R., Beesley, D., & Frey, L. L. (2005). Gender role conflict, homophobia, age, and education as predictors of male rape myth acceptance. *Journal of Mental Health Counseling, 27*(4), 311–328. <https://doi.org/10.17744/mehc.27.4.9wfm24f52kqgav37>
- Kleider, H. M., Knuycky, L. R., & Cavrak, S. E. (2012). Deciding the fate of others: The cognitive underpinnings of racially biased juror decision making. *Journal of General Psychology, 139*(3), 175–193. <https://doi.org/10.1080/00221309.2012.686462>
- Koehler, J. J., & Meixner, J. B., Jr (2017). Jury simulation goals. In M. B. Kovera (Ed.), *The psychology of juries* (pp. 161–183). American Psychological Association.
- Krahé, B., Bieneck, S., & Scheinberger-Olwig, R. (2007). Adolescents’ sexual scripts: Schematic representations of consensual and nonconsensual Heterosexual interactions. *The Journal of Sex Research, 44*(4), 316–327. <https://doi.org/10.1080/00224490701580923>
- Krauss, D. A., & Lieberman, J. D. (2017). Managing different aspects of validity in trial simulation research. In M. B. Kovera (Ed.), *The psychology of juries* (pp. 185–205). American Psychological Association.

- Krueger, J., & Rothbart, M. (1988). Use of categorical and individuating information in making inferences about personality. *Journal of Personality and Social Psychology*, 55(2), 187–195. <https://doi.org/10.1037/0022-3514.55.2.187>
- Kunda, Z., Miller, D. T., & Claire, T. (1990). Combining Social concepts: The role of causal reasoning. *Cognitive Science*, 14(4), 551–577. [https://doi.org/10.1207/s15516709cog1404\\_3](https://doi.org/10.1207/s15516709cog1404_3)
- Kunda, Z., & Thagard, P. (1996). Forming impressions from stereotypes, traits, and behaviors: A parallel-constraint-satisfaction theory. *Psychological Review*, 103(2), 284–308. <https://doi.org/10.1037/0033-295X.103.2.284>
- Lang, A. (1989). Effects of chronological presentation of information on processing and memory for broadcast news. *Journal of Broadcasting & Electronic Media*, 33(4), 441–452. <https://doi.org/10.1080/08838158909364093>
- Lieberman, J. D. (2011). The utility of scientific jury selection: Still murky After 30 years. *Current Directions in Psychological Science*, 20(1), 48–52. <https://doi.org/10.1177/0963721410396628>
- Lippert, A. M., & Golding, J. M. (2016). Scamming elders: The effect of witness testimony on courtroom perceptions of elder financial abuse. *American Journal of Forensic Psychology*, 34(2), 5–31. <https://psycnet.apa.org/record/2016-23530-001>
- Littleton, H., Tabernik, H., Canales, E. J., & Backstrom, T. (2009). Risky situation or harmless fun? A qualitative examination of college women's bad hook-up and rape scripts. *Sex Roles: A Journal of Research*, 60(11-12), 793–804. <https://doi.org/10.1007/s11199-009-9586-8>
- Littleton, H. L., & Axsom, D. (2003). Rape and Seduction Scripts of University students: Implications for rape attributions and unacknowledged rape. *Sex Roles: A Journal of Research*, 49(9-10), 465–475. <https://doi.org/10.1023/A:1025824505185>
- Littleton, H. L., Axsom, D., & Yoder, M. (2006). Priming of consensual and nonconsensual sexual scripts: An experimental test of the role of scripts in rape attributions. *Sex Roles: A Journal of Research*, 54(7-8), 557–563. <https://doi.org/10.1007/s11199-006-9017-z>
- Littleton, H. L., & Dodd, J. C. (2016). Violent attacks and damaged victims: An exploration of the rape scripts of European American and african American U.S. College women. *Violence Against Women*, 22(14), 1725–1747. <https://doi.org/10.1177/1077801216631438>
- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly*, 18(2), 133–164. <https://doi.org/10.1111/j.1471-6402.1994.tb00448.x>
- Macrae, C. N., Bodenhausen, G. V., & Milne, A. B. (1995). The dissection of selection in person perception: Inhibitory processes in social stereotyping. *Journal of Personality and Social Psychology*, 69(3), 397–407. <https://doi.org/10.1037/0022-3514.69.3.397>
- Magyarics, C. L., Lynch, K. R., Golding, J. M., & Lippert, A. (2015). The impact of frequency of behavior and type of contact on judgments involving a criminal stalking case. *Law and Human Behavior*, 39(6), 602–613. <https://doi.org/10.1037/lhb0000151>
- Malamuth, N. M. (1981). Rape proclivity Among males. *Journal of Social Issues*, 37(4), 138–157. <https://doi.org/10.1111/j.1540-4560.1981.tb01075.x>
- Masser, B., Lee, K., & McKimmie, B. M. (2010). Bad woman, bad victim? Disentangling the effects of victim stereotypicality, gender stereotypicality and benevolent sexism on acquaintance rape victim blame. *Sex Roles: A Journal of Research*, 62(7-8), 494–504. <https://doi.org/10.1007/s11199-009-9648-y>
- Masters, N. T., Casey, E., Wells, E. A., & Morrison, D. M. (2013). Sexual scripts among young heterosexually active Men and women: Continuity and change. *Journal of Sex Research*, 50(5), 409–420. <https://doi.org/10.1080/00224499.2012.661102>
- McKimmie, B. M., Masser, B. M., & Bongiorno, R. (2014). What counts as rape? The effect of offense prototypes, victim stereotypes, and participant gender on How the Complainant and defendant are perceived. *Journal of Interpersonal Violence*, 29(12), 2273–2303. <https://doi.org/10.1177/0886260513518843>
- McKimmie, B. M., Masser, B. M., Nitschke, F., Lee, H., & Schuller, R. A. (2020). The impact of schemas on decision-making in cases involving allegations of sexual violence. *Current Issues in Criminal Justice*, 32(4), 1–20. <https://doi.org/10.1080/10345329.2020.1829780>
- Millsteed, M., & McDonald, C. (2017, February 2). *Attrition of sexual offence incidents across the Victorian Criminal Justice System*. Crime Statistics Agency. <https://www.crimestatistics.vic.gov>

- au/sites/default/files/embridge\_cache/emshare/original/public/2017/01/fd/8d51b2494/201702\_02\_SexualOffenceAttrition\_FinalReport.pdf
- Muehlenhard, C. L., & Linton, M. A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counselling Psychology*, 34(2), 186–196. <https://doi.org/10.1037/0022-0167.34.2.186>
- Nitschke, F. T., Masser, B. M., McKimmie, B. M., & Riachi, M. (2021). Intoxicated But Not incapacitated: Are There effective Methods to assist juries in interpreting evidence of voluntary Complainant intoxication in cases of rape? *Journal of Interpersonal Violence*, 36(9-10), 4335–4359. <https://doi.org/10.1177/0886260518790601>
- Office for National Statistics. (2018, February 8). *Sexual offences in England and Wales: year ending March 2017*. <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/sexualoffencesinenglandandwales/yearendingmarch2017>
- Office of Public Affairs. (2012, January 6). *An Updated Definition of Rape*. The United States Department of Justice Archives. <https://www.justice.gov/archives/opa/blog/updated-definition-rape>
- Pennington, D. C. (1982). Witnesses and their testimony: Effects of ordering on juror verdicts. *Journal of Applied Social Psychology*, 12(4), 318–333. <https://doi.org/10.1111/j.1559-1816.1982.tb00868.x>
- Pennington, N., & Hastie, R. (1986). Evidence evaluation in complex decision making. *Journal of Personality and Social Psychology*, 51(2), 242–258. <https://doi.org/10.1037/0022-3514.51.2.242>
- Pennington, N., & Hastie, R. (1988). Explanation-based decision making: Effects of memory structure on judgment. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 14(3), 521–533. <https://doi.org/10.1037/0278-7393.14.3.521>
- Pennington, N., & Hastie, R. (1992). Explaining the evidence: Tests of the story model for juror decision making. *Journal of Personality and Social Psychology*, 62(2), 189–206. <https://doi.org/10.1037/0022-3514.62.2.189>
- Pennington, N., & Hastie, R. (1993). The story model for juror decision making. In R. Hastie (Ed.), *Inside the juror: The psychology of juror decision making* (pp. 192–221). Cambridge University Press.
- Planty, M., & Krebs, C. (2013, May 31). *Female Victims of Sexual Violence, 1994-2010*. Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/fvsv9410.pdf>
- Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension: Perspectives from cognitive psychology, linguistics, artificial intelligence, and education* (pp. 33–58). Erlbaum.
- Ryan, K. M. (1988). Rape and Seduction scripts. *Psychology of Women Quarterly*, 12(2), 237–245. <https://doi.org/10.1111/j.1471-6402.1988.tb00939.x>
- Sampson, R. (2011, August). *Acquaintance Rape of College Students*. [https://popcenter.asu.edu/sites/default/files/problems/PDFs/Acquaintance\\_Rape\\_of\\_College\\_Students.pdf](https://popcenter.asu.edu/sites/default/files/problems/PDFs/Acquaintance_Rape_of_College_Students.pdf)
- Sexual Offences Act. (2003). (UK) s. 1.
- Sherman, J. W., Lee, A. Y., Bessenoff, G. R., & Frost, L. A. (1998). Stereotype efficiency reconsidered: Encoding flexibility under cognitive load. *Journal of Personality and Social Psychology*, 75(3), 589–606. <https://doi.org/10.1037/0022-3514.75.3.589>
- Sherman, J. W., Macrae, C. N., & Bodenhausen, G. V. (2000). Attention and stereotyping: Cognitive constraints on the construction of meaningful Social impressions. *European Review of Social Psychology*, 11(1), 145–175. <https://doi.org/10.1080/14792772043000022>
- Sinclair, H. C., & Bourne, L. E. (1998). Cycle of blame or just world: Effects of legal verdicts on gender patterns in rape-myth acceptance and victim empathy. *Psychology of Women Quarterly*, 22(4), 575–588. <https://doi.org/10.1111/j.1471-6402.1998.tb00178.x>
- Smith, O., & Skinner, T. (2017). How rape myths are used and challenged in rape and sexual assault trials. *Social & Legal Studies*, 26(4), 441–466. <https://doi.org/10.1177/0964663916680130>
- Stewart, T. L., Whiteside, S. P., & Golding, J. M. (2000). The effectiveness of expert witnesses in civil trials involving repressed memories of sexual assault. *American Journal of Forensic Psychology*, 18(4), 27–62. <https://psycnet.apa.org/record/2000-16075-002>
- Stone, V. A. (1969). A primacy effect in decision-making by jurors. *Journal of Communication*, 19(3), 239–247. <https://doi.org/10.1111/j.1460-2466.1969.tb00846.x>

- Stuart, S. M., McKimmie, B. M., & Masser, B. M. (2019). Rape perpetrators on trial: The effect of sexual assault-related schemas on attributions of blame. *Journal of Interpersonal Violence, 34*(2), 310–336. <https://doi.org/10.1177/0886260516640777>
- Studebaker, C. A. (2017). Integrating concepts of trial advocacy into juror decision-making research. In M. B. Kovera (Ed.), *The psychology of juries* (pp. 59–82). American Psychological Association.
- Suarez, E., & Gadalla, T. M. (2010). Stop Blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence, 25*(11), 2010–2035. <https://doi.org/10.1177/0886260509354503>
- Süssenbach, P., Eyssel, F., Rees, J., & Bohner, G. (2017). Looking for blame: Rape myth acceptance and Attention to victim and perpetrator. *Journal of Interpersonal Violence, 32*(15), 2323–2344. <https://doi.org/10.1177/0886260515591975>
- Waterhouse, G. F., Reynolds, A., & Egan, V. (2016). Myths and legends: The reality of rape offences reported to a UK police force. *The European Journal of Psychology Applied to Legal Context, 8* (1), 1–10. <https://doi.org/10.1016/j.ejpal.2015.04.001>
- Wheatcroft, J. M., Wagstaff, G. F., & Moran, A. (2009). Revictimizing the victim? How rape victims experience the UK legal system. *Victims & Offenders, 4*(3), 265–284. <https://doi.org/10.1080/15564880903048529>
- Wright, G., & Ayton, P. (1988). Decision time, subjective probability, and task difficulty. *Memory & Cognition, 16*(2), 176–185. <https://doi.org/10.3758/BF03213487>