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► **To cite this version:**

S. Demarchi, F. Tomas, A. Franchi, L. Fanton. Cognitive dissonance and false rape allegations: A case study. *La Revue de Médecine Légale*, 2020, 11, pp.122 - 128. 10.1016/j.medleg.2020.04.004 . hal-03491485

HAL Id: hal-03491485

<https://hal.science/hal-03491485>

Submitted on 22 Aug 2022

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Dissonance Cognitive et Fausse Allegation de Viol : Une Etude de Cas
(Cognitive Dissonance and False Rape Allegations: A Case Study)

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Abstract

Aims: Studies showed that consensual sex can be regretted, and may lead to a false allegation of rape. However, none of the previous researches concerning regret as a false allegation of rape described the psychological process as to why the alleged victim might experience regret.

Method: We report a case of false rape allegation motivated by regret of a young woman who had consensual intercourse with an elderly man.

Results: None of the causes of regret mentioned in the literature until then could explain the deceitful report (e.g. misunderstanding, blurred line of consent, or relabelling). In this case, the alleged victim stated that she has experienced regret following inconsistency between her freely consensual intercourse and her religious attitudes and other facts and perceptions regarding this act.

Conclusion: We propose the mental state of cognitive dissonance as a source of her regret. Dissonance reduction strategies were identified, as the victim denied her responsibility and changed the nature of the consensual act (from a consensual sexual intercourse to a rape), and filed a deceitful complaint stating that she was actually raped.

Keywords: Forensic examination, false rape allegations, motives, regret, cognitive dissonance, denial of responsibility

Dissonance Cognitive et Fausse Allegation de Viol : Une Etude de Cas

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Background

According to the World Health Organization, “globally 7% of women report having been sexually assaulted by someone other than a partner” [1]. In Europe, the figures for rape show a dramatic increase of 47% between 2008 and 2015 [2, 3].

Self-reporting rape is not an easy procedure for the victim, and may thus impede one’s wish to file a complaint. For instance, the victim may think that the assault is not serious enough, be concerned with other people knowing about the aggression, wonder about confidentiality, fear reprisal, doubt his/her own responsibility or suppose that he/she is not going to be believed [4, 5, 6, 7, 8]. This echoes a common rape myth emitted by authorities according to which the victim of a rape is lying about the event [9, 10]. Police officers believed that between 16% and 25% of the reported rape cases were false [11]. This is a major problem, as every alleged victim should be auditioned without any type of a priori prejudice. This is also a critical issue because some victims are sometimes pressured to recant. Pressure to recant by police officers have been reported in both the academic literature and the media (see for instance [12] or [13]; for a case of rape recantation under police pressure, see [14]). However, some authors claim that “Research ¹⁷ suggests that recantation is a strong predictor of unfounding (i.e. police determination that ¹⁸ a crime did not occur)”, thus putting at risk the victim’s credibility [15, p. 143].

False Rape Allegations

False rape allegations (hereafter FRA) are a sensitive subject with a difficult differential diagnosis. They can be a deliberate lie and, sometimes, an involuntary and honest mistake that accuses an individual of non-existent sexual violence [16, 17, 18, 19]. Thirty years of research indicating low prevalence of FRA did not convince police officers [20, 21, 22]. There thus seems to be a substantial amount of work to be done on stereotypical beliefs in the judicial system, including credibility assessment methods of ²⁶ alleged victims. Moreover, awareness could be raised, for instance, by insisting on the fact that false allegations of rape only constitute a little part of all the reported cases [23, 24]. The prevalence of FRA varies across studies. For instance, Stewart [25] claims that 90% of reported rape cases were false, whereas Brownmiller [26] reports only 2% of FRA. However, the most recent and reliable studies seem to converge towards a 5% FRA prevalence [18, 19, 27]. Given the potential consequences of the accusation of an innocent person, the recognition of a FRA is an important issue when dealing with people who claim that they have been victims. In this line of thought, one should start exploring the mechanisms involved in FRA. This exploration includes the evaluation of the supposed victim's motivations. De Zutter and colleagues [17] proposed the most recent and extended list of causes explaining the filing of a false allegation of rape: the search for an alibi (e.g. pregnancy, adultery, etc.; [17, 28, 29]), revenge and sympathy or the wish to elicitate attention [20, 30], material gain [17] and mental health problems [30]. Concerning the ⁴⁰ latter, De Zutter and colleagues determined that mental health problems represented less than 4% of the causes of false allegations [17]. The last motive was regret [31, 17]. In this paper, we propose that the psychological stress resulting from a state of cognitive

dissonance [32] can provide an explanation for the regret motive for filing a false allegation of rape. To support this view, we report a case study.

Case Presentation

In 2015, a single solitary housekeeper in her early twenties reported an instance of sexual violence to the French National Police. According to the protocol established by the court, she was immediately directed to a Forensic Medical Unit to be examined by a medical examiner.

During the interview the alleged victim stated that she had gone to work for the first time at a retired man's residence two days earlier. When she finished cleaning the room, the old man arrived and asked her to undress and climb onto the bed, threatening her with his cane. After she had complied, he violently grasped her and tried to have forced sexual intercourse. He did not achieve his goal because of erectile problems and her struggling. He then proceeded with several penetrations but she escaped. She went to the police station the next day.

Physical examination found a 25 mm-diameter purple bruise on her right breast compatible with a love bite, a 5 by 10 mm erythematous zone on the inner side of the right small lip and the absence of traumatic anal and genital lesions. On a psychological aspect, the alleged victim presented emotional lability with unmotivated crying, declared that she felt 'dirty' and that she had talked about this incident to no-one. Given the anamnestic elements, the absence of specificity of the general body injuries and of the psychological manifestations, the forensic examiner did not exclude the possibility of sexual assault or false allegations. At

the end of the examination, the victim was offered an appointment⁶⁵ with a psychologist of the victimology unit.

The alleged victim was subjected to a psychiatric assessment conducted by a psychiatric expert of the Court to detect any pre-existing pathology, determine other explanatory elements in line with the various aetiologies of the false allegations, and evaluate the impact of the reported facts. The psychiatric assessment (psychological screening) was based on the DSM-V and ICD-10-CM differential diagnosis [33, 34]. No pre-existing cognitive disorder, cerebral disease, brain injury, or other insult leading to cerebral dysfunction were revealed. No pre-existing and acute psychiatric pathology (bipolar, depressive, psychotic disorders such as schizophrenia, but also anxiety and mood, somatoform, dissociative, factitious disorders, etc.) nor post-traumatic psychiatric symptomatology were revealed. Because of the absence of psychiatric pathological disorder, no complementary scale nor further investigation were used and conducted. Thus, mental health problems as a source of false report were disregarded [16]. Moreover, she had not consumed alcohol or taken illicit substances. Thus, at this stage, there was no evidence to support or exclude the existence of sexual violence or false allegations, apart from a contradictory narrative between the alleged perpetrator and the alleged victim.

In the course of the police investigation, the alleged perpetrator was interviewed and acknowledged several sexual deeds. Nevertheless, he mentioned that his health did not allow him to keep a young woman by force or to have an erection, and that all the acts had been freely consented to. After their encounter, he would then have taken the alleged victim to her home by car.

A confrontation has been conducted in the office of the 'Brigade de Protection de la Famille' (Family Protection Brigade), a specialized service dealing with, among others, sexual violence. The alleged perpetrator, the alleged victim and two investigators of the BPF were present. During the confrontation, the alleged victim asked to speak separately to the female investigator. Then, she confessed that her allegation was false: she had freely initiated and consented to the sexual intercourse. Due to the age of the alleged perpetrator and her religious beliefs (e.g. the avoidance of premarital and extramarital sexual intercourse), she explained that she was unable to take on the acts freely consented to.

Because no illicit substances were taken by the perpetrator, victim nor the alleged perpetrator, there was no blurred line of consent. When asked, she displayed a clear understanding of what constitutes a rape in the legal sense of the term. She also claimed that there had been no violence or physical assault before or after the consensual sexual intercourse.

Discussion

In France, rape is defined as any act of sexual penetration, whatever its nature, committed against another person or on the perpetrator, by violence, constraint, threat or surprise (Article 222-23 of the French penal code). Rape is punishable by 15 years of criminal imprisonment to life imprisonment when accompanied by torture or barbarity (Articles 222-23, 222-24, 222-25, 222-26 of the French penal code).

To qualify the criminal facts, the magistrates rely on the materiality of the facts based on the forensic findings, results of forensic analyses, and the police investigation, to then

decide in agreement with the *beyond a reasonable doubt* standard. Given the lack of specificity of extra-genital lesions, beating or violence signs, and psychological manifestations and that investigations revealed the consensual nature of the penetrations, the magistrate considered this case to be a false allegation. Finally, the prosecutor of the Republic closed the case.

In this case, in which the absence of rape was suggested by evidence and legally confirmed by the magistrate, none of the above-mentioned motives seemed to explain the FRA [17]: the alleged victim did not seek an alibi because she did not have to justify or explain any previous problematic behavior (e.g. pregnancy, adultery, skipping school, etc.,) to anyone, as she is an isolated woman [17, 29]). Revenge is an action by which a person takes back from someone the advantage that had been taken from her, or acts in such a way to return the favor for an evil act that has been previously experienced. Thus, revenge cannot be considered to be a relevant motive in this case because both alleged victim and defendant had met for the first time and did not have any conflict of any kind during their interaction. Sympathy and attention-seeking behavior [20, 30] were rejected in terms of their relevance to the FRA motives due to the fact that the alleged victim was solitary. Mental health issues [30] were dismissed because the psychiatric examination did not reveal any kind of mental pathology or post-traumatic psychiatric symptomatology. Concerning material gain, the police investigation did not find any threat, pressure or constraint from the alleged victim against the alleged perpetrator to obtain any kind of gain (money, objects, material advantage, etc.).

In this case, several elements point towards the regret motive, as negative feelings (i.e., disgust [35, 36, 37, 38], shame, sorrow) have been expressed by the alleged victim [17]. However, previous articles regarding regret as a FRA motive provide a social, external

explanation to the source of regret [17, 31]. But in this case, and according to the evidence collected by the police, no one would have been able to influence the alleged victim, as she lived isolated from any type of social life. And, to our knowledge, none of the previous articles relies on sociocognitive processes as an explanation for regret as a FRA motive [17, 31, 39, 40].

We thus propose cognitive dissonance as a cause for the alleged victim's regret leading to a FRA. Cognitive dissonance as the source of regret has, to our knowledge, not been considered in the literature on motives for false allegations [17, 31, 39, 40], nor actually in the literature about regret after casual sex (e.g. [41, 42, 43, 44, 45, 46, 47]). In other words, cognitive dissonance has never been considered as a cognitive process when regret is experienced after a regretted sexual intercourse (regardless the filing of a FRA or not).

To date, false allegations due to regret were only considered to be the result of external pressure. But regret is also commonly labeled as a counterfactual emotion, from an inner discrepancy between the actual reality and what it should or could have been, or, in other words, from a cognitive dissonance [48, 49]. This discontinuity is highlighted by some authors [50, 51].

According to the original proposal of Festinger [32], the cognitive dissonance is a state of discomfort created by a discrepancy between two cognitions as, for example, a discrepancy between a freely produced behaviour that has not been forced and can no longer be denied, and the existence of cognition, values, opinions, beliefs and attitudes contrary to this behaviour. Some moderator variables allow dissonance to emerge, such as the knowledge of aversive consequences, perceived freedom, foreseeable consequences at the time of the

choice, etc. (for a review about factors for a dissonance arousal to occur, see [52]). According to Festinger, the uncomfortable dissonance state will motivate the person to try to reduce the dissonance [32].

Trivialization [53], attitude change [54], self-affirmation [55], cognitive restructuring [56] or value affirmations [57] are, for instance, modes of reduction of the dissonance arousal [58, 59]. Thus, the person experiencing dissonance is motivated to change his or her attitudes or beliefs in the direction of the discrepant behavior. Doing so reduces the discomfort he or she experiences. The denial of responsibility has been proposed as another mode of reduction [60]. According to those authors, the “denial of responsibility is an efficient mode of reduction when emotions such as guilt, shame, or disgust at oneself are activated by a counterattitudinal behavior.” [60, p. 731].

First, in the present FRA case, there was a discrepancy between the freely consented sexual act and the alleged victim’s stated adherence to religious precepts (e.g. not to be tempted to satisfy sexual needs outside of marriage). And religion has been considered a high source of cognitive dissonance (e.g. [61]). Second, the alleged victim had to support the entire responsibility of her act because she initiated it [62]. Her free transgression of her internalized highly moral religion values aroused a cognitive dissonance state and lead her to experience guilt or other negative feelings [63, 64]. This motivated their reduction. Third, this reduction needed to conciliate facts and cognition (see figure 1 for a summary ¹⁷² diagram of the case).

[Include Figure 1 above here]

Contrary to acts, cognition and attitudes can be changed. Several main ways were available for the alleged victim to reduce her cognitive dissonance: some can be used at high personal and cultural costs such as changing her belief and obedience to religion (an attitude change [54]), or decreasing the importance of the sexual intercourse prohibited by her religious precepts though (trivialization [53]). Another way to reduce dissonance can be used at a lower cost by changing the explanation of the act by denying her responsibility. This denial does not change her obedience to her religion. As claimed by Gosling [60, p. 181 731], “denial of responsibility is an efficient mode of reduction when emotions such as guilt, shame, or disgust at oneself are activated by a counterattitudinal behavior”.

During the confrontation with the elderly man, she stated that she was unable to take on the acts freely consented to (i.e. expression of negative feelings such as shame or guilt) and never claimed that she renounced her religion or wanted to become an apostate. Thus, the alleged victim could only reduce her state of cognitive dissonance by changing the circumstances of the sexual act: she denied her responsibility using external justifications of her counterattitudinal behavior. She changed a freely consented sexual intercourse into a physical aggression for which she was not responsible. Her denial of responsibility reduced the negative feelings consecutive to the dissonance arousal. This ‘newly relabelled’ physical sexual aggression compelled her to file a false allegation of rape.

A Paradoxical Situation

However, an apparent paradoxical situation occurs with the denial of responsibility as a mode of reduction of the cognitive dissonance experienced after a consensual but regretful

sexual intercourse. First, regret is a counterfactual emotion emerging from cognitive dissonance [48, 50, 51, 49]. Second, regret is not rare after casual sex [65, 66, 43, 44, 67, 68, 46, 69]: from 35% [46, 70] to more than 70% [44] of the participants reported regret after consensual sex. Third, regret is a FRA motive [17, 31, 39, 40]. But fourth, - *and this is the paradox!* - FRA are rare [18, 19, 27]. Thus, if our proposal is relevant, many women should file a deceitful complaint to the judicial authority to reduce their psychological discomfort due to the arousal of cognitive dissonance. But it is not the case.

This paradox can be easily solved by taking into account other modes of reduction of the dissonance such as the trivialization of the counterattitudinal behavior [53]. Trivialization was firstly proposed by Festinger and defined as "decreasing the importance of the elements involved in the dissonant relation" [32, p. 264]. According to a seminal study involving trivialization, "[...] in their daily lives, people may often simply trivialize the attitude or the action in order to reduce their dissonance. It seems likely that people will be especially likely to rely on trivialization when the dissonance do not involve highly important cognitive elements. On the other hand, when the dissonance involves attitudes or behavior that are linked to important life concerns or outcomes, it seems unlikely that trivialization will be the least resistant path to dissonance reduction" [53, p. 259].

Thus, trivialization is the most probable way to reduce dissonance after a consensual but regretted sexual intercourse, especially when the dissonance does not involve highly important cognitive elements. But in the present case, cognitive dissonance experienced by the alleged victim was linked to an important life concerns, namely her religion. Thus, trivialization can not have been used to reduce the negative feeling due to consensual sexual intercourse

(nor the use of an attitude change because a religion shift is a very costly personal investment process [54]).

Cognitive Dissonance is not Exclusive to Regretful Sexual Intercourse

This case study assessed the existence of cognitive dissonance as the source of regret in the case of FRA. But cognitive dissonance could also help understand the motives of anger, and alibi. As far as the motive of anger is concerned, one of its sources is frustration, which may arise from an unsolved state of cognitive discomfort [71, 72, 73]. Finally, the alibi motive, stating that false rape allegations are filed in order to cover an adulterous consensual encounter, seems as well to be explainable through cognitive dissonance arising from the clash between morals and acts. However, no study or theoretical considerations have been developed concerning these suppositions. It thus seems important to consider the elaboration of a model explaining how cognitive dissonance induces false rape allegation motives, and describing what factors are at play in the process. Depending on the careful examination of case studies, these might include sociocognitive attributes (e.g., cognitive dissonance, attitudes towards rape, environment pressure, social desirability, threat of the self-concept; see [74, 75]).

For professionals, this can potentially increase the detection of FRA: when there are inconsistencies between the statements of an alleged victim and other material evidence from the investigation, one must first be interested in the motivations already documented in the literature. If none of them are suitable, then the hypothesis of a cognitive dissonance arousal reduced by a denial of responsibility may be raised. This might be particularly relevant in

situations with a conflict between the social or cultural norms of the alleged victim, and consented but regretful sexual intercourse.

Conclusion

Until now, FRA studies have dealt with prevalence (e.g., [26, 18, 21]), motives (e.g., [17, 29, 20, 30, 31]) or detection (e.g., [76, 77]), but most remained on a descriptive level. However, the authors would strongly encourage scholars to go beyond the descriptive level of motive classification and attempt to establish the origin of the motivation for filing a false rape allegation. If this meta-motive (i.e., the reduction of cognitive dissonance) was found in other cases, important implications may result for professionals and investigators. First, it would help authorities understand how FRA are, in the end, related to sociocognitive factors. Everybody experiences cognitive dissonance in daily life situations. False rape allegations, if resulting from a dissonant state, may be considered as being less immoral, thus helping fight some common rape myths such as 'She is lying about being ²⁵² raped'. Secondly, scholars should investigate further potential meta-motives.

Understanding the roots of FRA is a step closer to the development of tools to help professionals distinguish true from deliberately or accidentally false rape allegations. We thus encourage researchers to develop a general sociocognitive model of the production of false rape allegations to better understand their origins, development and expression.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Funding

No funding sources.

Ethics

This study was carried out in accordance with the recommendations of the WMA Declaration of Helsinki. The protocol was approved by the Ethics Committee of the Hospices Civils de Lyon (HCL). The participant gave written informed consent in accordance with the Declaration of Helsinki. Publication of this case have been authorized by the Prosecutor of the Republic.

Author Contributions

Conception or design of the work: SD, FT, LF. Data collection: AF, LF. Data analysis and interpretation: SD, FT, LF. Drafting the article: SD, FT, LF. Critical revision of the article: SD, FT, LF.

References

- [1] World Health Organisation. Violence against women, 2017. <https://www.who.int/news-room/fact-sheets/detail/violence-against-women>, Last accessed on 2019-11-23.

- [2] Eurostat. Crime and criminal justice statistics, 2017. URL http://ec.europa.eu/eurostat/statistics-explained/index.php/Crime_and_criminal_justice_statistics.
- [3] Eurostat. Recorded offences by offence category - police data, 2017. URL http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=crim_off_cat&lang=en.
- [4] Laura Finkelson and Robert Oswald. College date rape: Incidence and reporting. *Psychological reports*, 77(2):526–526, 1995.
- [5] Bonnie Fisher, Francis T Cullen, and Michael G Turner. *The sexual victimization of college women*. US Department of Justice, Office of Justice Programs, National Institute of Justice, 2000.
- [6] Bonnie Fisher, Leah E Daigle, Francis T Cullen, and Michael G Turner. Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal justice and behavior*, 30(1):6–38, 2003.
- [7] Marjorie R Sable, Fran Danis, Denise L Mauzy, and Sarah K Gallagher. Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health*, 55(3):157–162, 2006.
- [8] Wendy A Walsh, Victoria L Banyard, Mary M Moynihan, Sally Ward, and Ellen S Cohn. Disclosure and service use on a college campus after an unwanted sexual experience. *Journal of Trauma & Dissociation*, 11(2):134–151, 2010.

- [9] Martha R Burt. Cultural myths and supports for rape. *Journal of personality and social psychology*, 38(2):217–230, 1980.
- [10] Diana L Payne, Kimberly A Lonsway, and Louise F Fitzgerald. Rape myth acceptance: Exploration of its structure and its measurement using the illinois rape myth acceptance scale. *Journal of Research in Personality*, 33(1):27–68, 1999.
- [11] Karl Ask. A survey of police officers’ and prosecutors’ beliefs about crime victim behaviors. *Journal of Interpersonal violence*, 25(6):1132–1149, 2010.
- [12] Lisa Avalos. Prosecuting rape victims while rapists run free: The consequence of police failure to investigate sex crimes in britain and the united states. *Michigan Journal of Gender & Law*, 23:1–67, 2016.
- [13] Ashley Fantz, Sergio Hernandez, and Sonam Vashi. Where police failed rape victims, 2017. <https://edition.cnn.com/interactive/2018/11/investigates/police-destroyed-rapekits/springfield.html>, Last accessed on 2019-11-23.
- [14] T. Christian Miller and Ken Armstrong. An unbelievable story of rape. *ProPublica*, Dec 2015. URL <https://www.propublica.org/article/false-rape-accusations-an-unbelievable-story>.
- [15] Eryn Nicole O’Neal. “victim is not credible”: The influence of rape culture on police perceptions of sexual assault complainants. *Justice Quarterly*, 36(1):127–160, 2019.

- [16] Ann Wolbert Burgess and Robert Hazelwood. *False rape allegations*, pages 181–201. Boca Raton, FL: CRC Press, 2009.
- [17] André WEA De Zutter, Robert Horselenberg, and Peter J van Koppen. Motives for filing a false allegation of rape. *Archives of sexual behavior*, pages 1–8, 2017.
- [18] André WEA De Zutter, Robert Horselenberg, and Peter J van Koppen. The prevalence of false allegations of rape in the united states from 2006-2010. *Journal of Forensic Psychology*, 2(119):2, 2017. doi: <https://doi.org/10.4172/2475-319X.1000119>.
- [19] Claire E Ferguson and John M Malouff. Assessing police classifications of sexual assault reports: A meta-analysis of false reporting rates. *Archives of sexual behavior*, 45(5):1185–1193, 2016.
- [20] Liz Kelly, Julia Lovett, Linda Regan, et al. *A gap or a chasm?: attrition in reported rape cases*. Home Office Research, Development and Statistics Directorate London, 2005.
- [21] Philip NS Rumney. False allegations of rape. *The Cambridge Law Journal*, 65(1): 128–158, 2006.
- [22] Candida L Saunders. The truth, the half-truth, and nothing like the truth: Reconceptualizing false allegations of rape. *British journal of criminology*, 52(6): 1152–1171, 2012.

- [23] Joanne Belknap. Rape: Too hard to report and too easy to discredit victims. *Violence Against Women*, 16(12):1335–1344, 2010.
- [24] William T O’Donohue. Understanding false allegations of sexual assault. In *Handbook of Sexual Assault and Sexual Assault Prevention*, pages 537–549. Springer, 2019.
- [25] CH Stewart. A retrospective survey of alleged sexual assault cases. *Police Surgeon*, 28: 32–35, 1981.
- [26] Susan Brownmiller. *Against our will: Men, women and rape*. Ballantine, New York, 1975.
- [27] David Lisak, Lori Gardinier, Sarah C Nicksa, and Ashley M Cote. False allegations of sexual assault: An analysis of ten years of reported cases. *Violence Against Women*, 16(12):1318–1334, 2010.
- [28] Laurent Fanton, Patrice Schoendorff, Pierre Achache, Alain Miras, and Daniel Malicier. False rape: a case report. *The American journal of forensic medicine and pathology*, 20(4):374–377, 1999.
- [29] Eugene J Kanin. False rape allegations. *Archives of sexual behavior*, 23(1):81–92, 1994.
- [30] James J McNamara, Sean McDonald, and Jennifer M Lawrence. Characteristics of false allegation adult crimes. *Journal of forensic sciences*, 57(3):643–646, 2012.

- [31] Eryn Nicole O’Neal, Cassia Spohn, Katharine Tellis, and Clair White. The truth behind the lies: The complex motivations for false allegations of sexual assault. *Women & Criminal Justice*, 24(4):324–340, 2014.
- [32] Leon Festinger. *A theory of cognitive dissonance*. Row Peterson, Evanston, IL, 1957.
- [33] American Psychiatric Association et al. *Diagnostic and statistical manual of mental disorders (DSM-5 R)*. American Psychiatric Pub, 2013.
- [34] World Health Organization et al. *The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research*, volume 2. World Health Organization, 1993.
- [35] Laith Al-Shawaf, David MG Lewis, and David M Buss. Disgust and mating strategy. *Evolution and Human Behavior*, 36(3):199–205, 2015.
- [36] Laith Al-Shawaf, David MG Lewis, and David M Buss. Sex differences in disgust: Why are women more easily disgusted than men? *Emotion review*, 10(2):149–160, 2018.
- [37] Joshua M Tybur, Debra Lieberman, and Vladas Griskevicius. Microbes, mating, and morality: individual differences in three functional domains of disgust. *Journal of personality and social psychology*, 97(1):103, 2009.
- [38] Joshua M Tybur, Angela D Bryan, Debra Lieberman, Ann E Caldwell Hooper, and Leslie A Merriman. Sex differences and sex similarities in disgust sensitivity.

Personality and Individual Differences, 51(3):343–348, 2011.

[39] CJW Veraart. *Valse zeden: valse aangiften in zedenzaken*. Balans, Amsterdam, 1997.

[40] CJW Veraart. *Valse zeden: onterechte aangiften in zedenzaken*. BZZTôH, Den Haag, 2003.

[41] Mons Bendixen, Kelly Asao, Joy P Wyckoff, David M Buss, and Leif Edward Ottesen Kennair. Sexual regret in us and norway: Effects of culture and individual differences in religiosity and mating strategy. *Personality and Individual Differences*, 116: 246–251, 2017.

[42] Mons Bendixen and Leif Edward Ottesen Kennair. Advances in the understanding of same-sex and opposite-sex sexual harassment. *Evolution and Human Behavior*, 38(5): 583–591, 2017.

[43] Elaine M Eshbaugh and Gary Gute. Hookups and sexual regret among college women. *The Journal of Social Psychology*, 148(1):77–90, 2008.

[44] Maryanne L Fisher, Kerry Worth, Justin R Garcia, and Tami Meredith. Feelings of regret following uncommitted sexual encounters in canadian university students. *Culture, Health & Sexuality*, 14(1):45–57, 2012.

- [45] Andrew Galperin, Martie G Haselton, David A Frederick, Joshua Poore, William Von Hippel, David M Buss, and Gian C Gonzaga. Sexual regret: Evidence for evolved sex differences. *Archives of Sexual Behavior*, 42(7):1145–1161, 2013.
- [46] Leif Edward Ottesen Kennair, Mons Bendixen, and David M Buss. Sexual regret: Tests of competing explanations of sex differences. *Evolutionary Psychology*, 14(4): 1474704916682903, 2016.
- [47] Leif Edward Ottesen Kennair, Joy P Wyckoff, Kelly Asao, David M Buss, and Mons Bendixen. Why do women regret casual sex more than men do? *Personality and Individual Differences*, 127:61–67, 2018.
- [48] Giorgio Coricelli and Aldo Rustichini. Counterfactual thinking and emotions: regret and envy learning. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 365(1538):241–247, 2010.
- [49] Daniel Kahneman and Amos Tversky. *The simulation heuristics*, pages 201–208. Cambridge University Press, New York, NY, 1981.
- [50] Thomas Gilovich, Victoria Husted Medvec, and Serena Chen. Commission, omission, and dissonance reduction: Coping with regret in the " monty hall" problem. *Personality and Social Psychology Bulletin*, 21(2):182–190, 1995.

- [51] Thomas Gilovich and Victoria Husted Medvec. The experience of regret: what, when, and why. *Psychological review*, 102(2):379–395, 1995.
- [52] Joel Cooper. Cognitive dissonance: Where we've been and where we're going. *International Review of Social Psychology*, 32(1–11), 2019. doi: <https://doi.org/10.5334/irsp.277>.
- [53] Linda Simon, Jeff Greenberg, and Jack Brehm. Trivialization: the forgotten mode of dissonance reduction. *Journal of personality and social psychology*, 68(2):247–260, 1995.
- [54] Leon Festinger and James M Carlsmith. Cognitive consequences of forced compliance. *The journal of abnormal and social psychology*, 58(2):203–210, 1959.
- [55] Claude M Steele and Thomas J Liu. Dissonance processes as self-affirmation. *Journal of personality and social psychology*, 45(1):5–19, 1983.
- [56] Michael R Leippe and Donna Eisenstadt. Generalization of dissonance reduction: Decreasing prejudice through induced compliance. *Journal of personality and social psychology*, 67(3):395–413, 1994.
- [57] Daniel Randles, Michael Inzlicht, Travis Proulx, Alexa M Tullett, and Steven J Heine. Is dissonance reduction a special case of fluid compensation? evidence that dissonant cognitions cause compensatory affirmation and abstraction. *Journal of personality and social psychology*, 108(5):697–710, 2015.

- [58] Léon Festinger. Reflections on cognitive dissonance: 30 years later. In Eddie Harmon-Jones and Judson Mills, editors, *Cognitive dissonance: Progress on a pivotal theory in social psychology*, pages 381–385. American Psychological Association Washington, DC, 1999.
- [59] Irem Metin and Selin Metin Camgoz. The advances in the history of cognitive dissonance theory. *International Journal of Humanities and Social Science*, 1(6): 131–136, 2011.
- [60] Patrick Gosling, Maxime Denizeau, and Dominique Oberlé. Denial of responsibility: a new mode of dissonance reduction. *Journal of personality and social psychology*, 90(5): 722–733, 2006.
- [61] Timothy C Brock. Implications of conversion and magnitude of cognitive dissonance. *Journal for the Scientific Study of Religion*, 1(2):198–203, 1962.
- [62] Fritz Heider. *The psychology of interpersonal relations*. Psychology Press, 2013.
- [63] J Ean-Léon Beauvois and Nicole Dubois. The norm of internality in the explanation of psychological events. *European Journal of Social Psychology*, 18(4):299–316, 1988.
- [64] Andrew J Elliot and Patricia G Devine. On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of personality and social psychology*, 67(3):382–394, 1994.

- [65] Sandra L Caron and Eilean G Moskey. Regrettable sex: An exploratory analysis of college students' experiences. *Journal of Psychology & Human Sexuality*, 14(1):47–54, 2002.
- [66] Nigel Dickson, Charlotte Paul, Peter Herbison, and Phil Silva. First sexual intercourse: age, coercion, and later regrets reported by a birth cohort. *Bmj*, 316 (7124):29–33, 1998.
- [67] William F Flack Jr, Kimberly A Daubman, Marcia L Caron, Jenica A Asadorian, Nicole R D'Aureli, Shannon N Gigliotti, Anna T Hall, Sarah Kiser, and Erin R Stine. Risk factors and consequences of unwanted sex among university students: Hooking up, alcohol, and stress response. *Journal of Interpersonal Violence*, 22(2):139–157, 2007.
- [68] Justin R Garcia and Chris Reiber. Hook-up behavior: A biopsychosocial perspective. *Journal of Social, Evolutionary, and Cultural Psychology*, 2(4):192, 2008.
- [69] Sara B Oswald, Kenzie A Cameron, and Jeffrey J Koob. Sexual regret in college students. *Archives of sexual behavior*, 34(6):663–669, 2005.
- [70] Elizabeth L Paul and Kristen A Hayes. The casualties of casual sex: A qualitative exploration of the phenomenology of college students' hookups. *Journal of Social and Personal Relationships*, 19(5):639–661, 2002.
- [71] Leonard Berkowitz and Eddie Harmon-Jones. Toward an understanding of the determinants of anger. *Emotion*, 4(2):107–130, 2004.

- [72] Bernard Burnes and Hakeem James. Culture, cognitive dissonance and the management of change. *International Journal of Operations & Production Management*, 15(8):14–33, 1995.
- [73] John Dollard, Neal E Miller, Leonard W Doob, Orval Hobart Mowrer, and Robert R Sears. *Frustration and aggression*. New Haven, CT: Yale University Press, 1939. doi: <https://doi.org/10.1037/10022-000>.
- [74] Joshua Aronson, Hart Blanton, and Joel Cooper. From dissonance to disidentification: Selectivity in the self-affirmation process. *Journal of Personality and Social Psychology*, 68(6):986–996, 1995.
- [75] Claude M Steele. The psychology of self-affirmation: Sustaining the integrity of the self. In *Advances in experimental social psychology*, volume 21, pages 261–302. Elsevier, 1988.
- [76] André WEA De Zutter, Robert Horselenberg, and Peter J van Koppen. Detecting the true nature of allegations of rape. *Journal of Police and Criminal Psychology*, 32(2): 114–127, 2017.
- [77] Laura Hunt and Ray Bull. Differentiating genuine and false rape allegations: A model to aid rape investigations. *Psychiatry, Psychology and Law*, 19(5):682–691, 2012.

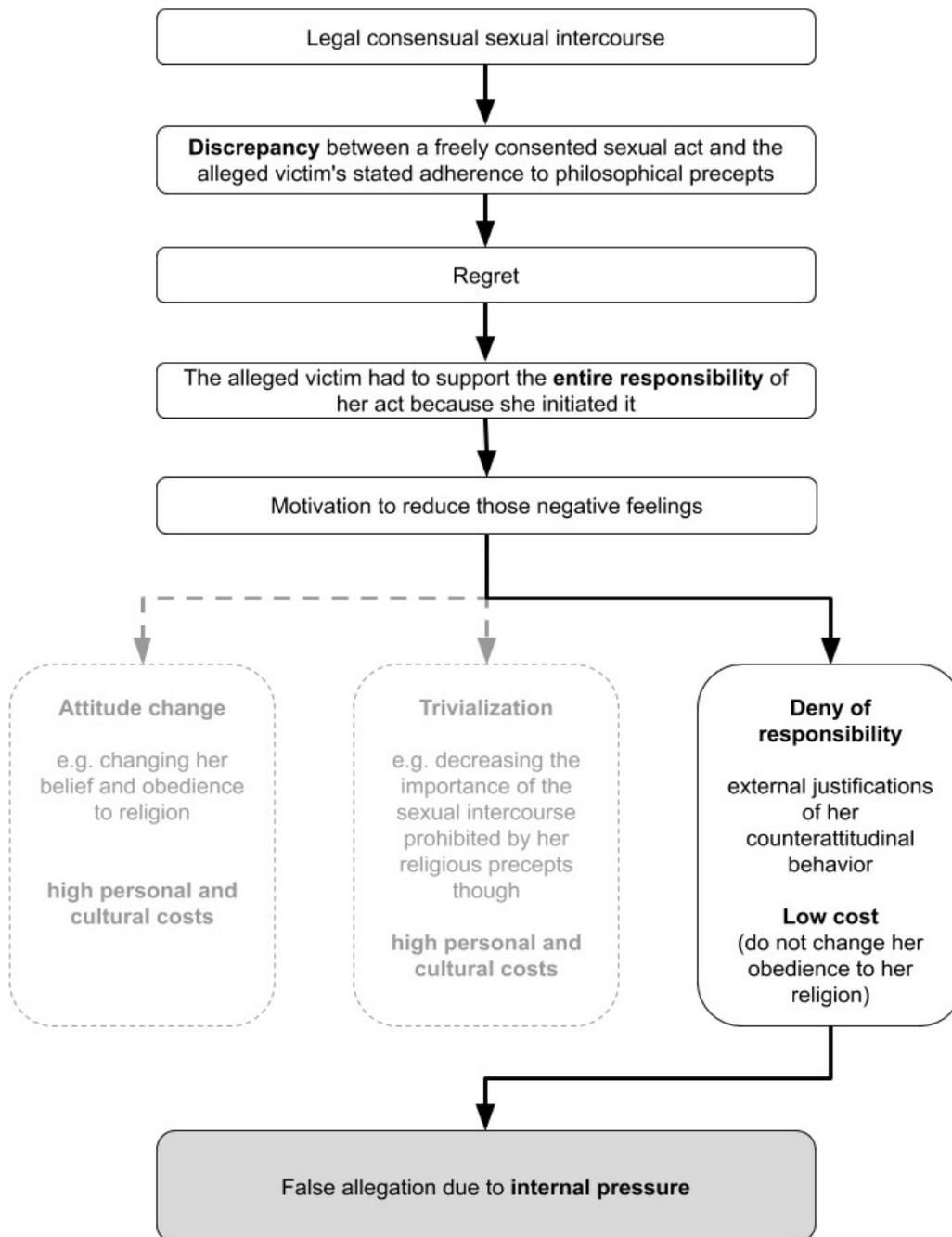


Figure 1. Summary diagram of the case