



Differences in the perception of and reasoning about quid pro quo sexual harassment

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Abstract

Quid pro quo (QPQ) sexual harassment, in which sexual compliance is tied to some consequent behavior of the harassing party, can involve two types of social interactions: social exchanges or threats. Two experiments ($N=260$) evaluated how QPQ sexual harassment statements were perceived as different types of social interactions due to the manipulation of three variables. Statements were predicted and found to be perceived differently across how they were posed (positive versus negative value statements), across surrounding work contexts (thriving versus failing), and across sex of the harassed perceiver. These differing perceptions also affected subsequent behaviors in reasoning about the harassment situation. Implications of these results are discussed, along with limitations and future research directions.

Keywords: sexual harassment, human reasoning, social perception, evolutionary theory, Wason selection task

Introduction

Although sexual harassment has been legally recognized and defined in the US for over twenty years it is still an expanding concept; recognized and applied in new ways as courts deal with situations that stretch that definition. Twenty years (and counting) is a long time for a legal system to be working on understanding one sentence:

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when submission to or rejection of this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance or creates an intimidating, hostile or offensive work environment.

(Equal Employment Opportunity Commission (EEOC)
of the United States 1980¹)

This definition has been interpreted to cover a wide (and widening) range of situations: victims of sexual harassment can be either male or female, victims can be of the opposite or the same sex as the harasser, the harasser can be a direct supervisor, a superior who is not a supervisor, an agent of the mutual employer, a co-worker, or even a non-employee. Sexual harassment may also occur without any actual economic injury to or discharge of the victim. Sexual harassment is legally and traditionally divided into two distinct forms: *hostile environment* sexual harassment and *quid pro quo* sexual harassment. Hostile environment sexual harassment covers the last part of the EEOC definition of sexual harassment: When unwelcome sexual conduct unreasonably interferes with an individual's work performance or creates an intimidating, hostile or offensive work environment. This form of harassment has proved to be more difficult to interpret, both legally and in research, although quid pro quo (QPQ) sexual harassment has also been difficult to define unambiguously. Quid pro quo – literally meaning 'something for something' – is an expression describing the legal nature of a contract in which each person receives something for what he or she gives (Walsh 1989). For the purposes of this paper, QPQ sexual harassment can be described as 'the solicitation of sexual compliance through *promises of reward or threats of punishment* [italics added],' a definition taken from Fitzgerald and Hesson-McInnis (1989). This paper focuses on QPQ sexual harassment, and how both gender and the general setting can influence how the harassed party perceives and reasons about it.

The subjective nature of sexual harassment

It was not a moment of hyperbole when McKinney (1994) stated that 'it's sexual harassment as long as it's perceived to be that by the receiver.' The crux of this situation is that the legal definition of sexual harassment has embedded in it several key points that are dependent on the plaintiff's *perception* of a situation (i.e., if it is unwelcome and if it is interfering, intimidating, hostile, or offensive). For this reason, the actual existence or non-existence of sexual harassment as a legal crime, depends on subjective perception and evaluation. The US courts have recognized the dilemma created by this subjective-based definition, and adopted the position that sexual harassment must be recognizable to a 'reasonable person,' thus giving the legal system some power to impose its own (albeit possibly also subjective) perspective as to what is and is not sexual harassment. The US Court of Appeals for the Ninth Circuit, however, found it necessary to amend this guideline to instead use the perspective of a 'reasonable woman,' opening a number of thorny issues that revolve about the existence of multiple and presumably divergent perspectives. (For example, What are these perspectives and how do they differ? When a man is harassed should we use a 'reasonable man' perspective? Should there be 'reasonable homosexual person/man/woman' perspectives?).

We do know that, if a 'reasonable woman' is anything like the 'average woman,' that she perceives more behaviours negatively and considers sexual harassment to be a greater problem than do men (Andrew and Andrew 1997). Men file fewer sexual harassment complaints than women even though they may be victims of the same sexual behaviour, and men are more likely than women to be sexual harassers, in part because they are less likely to view this form of behaviour as unacceptable (Andrew and Andrew 1997; Gutek 1985). Furthermore, women have been found to 'regard male sexual strategies that involve aggression or coercion as more offensive than males [regard them to be]' (Colarelli and Morlan, under review).

Prior research also indicates that there are different perceptions of sexual harassment across various social groups and contexts. Perceptions of sexual harassment can be altered by the severity of the harassment, the past history of interactions, and the status, attractiveness, and personalities of the interactants (e.g., Blumenthal 1998; Gutek, Morasch, and Cohen 1983; Reilly, Carpenter, Dull, and Bartlett 1982). As most of this research has been in the arena of hostile environment harassment, however, it is less clear if such variability occurs in QPQ harassment and if any such variability is qualitatively similar.

Quid pro quo sexual harassment

One might think from a review of the literature that quid pro quo sexual harassment is a simple, clear-cut form of harassment that needs little exploration in terms of how it is perceived and how judgments are made regarding it. A recent edited volume on sexual harassment, for instance (O'Donohue 1997), indexed two pages out of 315 as relating to quid pro quo (QPQ) harassment. Indeed, most taxonomies of the different types of sexual harassment (e.g., Till 1980) identify many more forms of hostile environment harassment. QPQ sexual harassment is consistently seen as encompassing two methods of inducing sexual compliance, which Till called sexual bribery and threat. One of these forms of QPQ sexual harassment involves situations with promises of reward, and we will label this as *social exchanges* (replacing Till's more evaluative label of sexual bribery). The second form of QPQ harassment, *threats*, involves the coercion of a behaviour by attaching punitive consequences to a failure to comply (i.e., granting sexual access).

Note that both exchange-based and threat-based sexual harassment are situations in which the involved parties both get 'something for something' (i.e., they are both quid pro quo situations). These two situations, however, can be distinguished from one another by the intentions of the proffering party (the harasser). In exchange-based QPQ the proffering party intends to help the person given the offer, and if that person willingly accepts the QPQ offer (i.e., it is welcome) it actually may become no longer sexual harassment.² If the person given the QPQ offer is unwilling to accept the offer (and indeed finds it offensive) then it is a situation of sexual harassment. In threat-based QPQ the proffering party has no intention to help the person being given the offer; they only intend to induce the behaviour they want. The harassed recipient of a threat-based QPQ stands to get 'something' for their compliance, but that something is usually the avoidance of some loss made impending by the other party.

In the language of operant conditioning, exchange-based sexual bribery is an example of one-trial of positive reinforcement: increasing the probability of a particular behaviour by proposing a positive consequence for the occurrence of that behaviour. Threat-based sexual harassment is an example of one-trial of negative reinforcement: increasing the probability of a particular behaviour by proposing to remove a negative consequence. One can also frame this distinction in terms of how the harasser uses his or her power: a social exchange is the potential use of that power to benefit the harassed party, whereas a threat is the potential use of that power to hurt the harassed party.

The purpose of this research is to explore a model that predicts systematic variations in the perception of and reasoning about QPQ sexual harassment.

This model predicts that substantial differences will occur in the perception of QPQ sexual harassment situations based not only on the sex of the perceiver, but also on how the QPQ arrangement is constructed and the larger situational context within which the harassment occurs. Of course, it should go without saying that the goal here is not to justify sexual harassment in any way, but to provide a more accurate understanding of some of the factors that affect the perceptions of sexual harassment and how people subsequently respond to harassment situations.

Perceptions of quid pro quo sexual harassment as exchange-based and threat-based

Beyond the moral, ethical, and legal assessments of a quid pro quo offer involving sexual access, it is fundamentally a social interaction. That is, the labeling of an event as sexual harassment is a value judgment (that it is morally, ethically, or legally wrong), and this can be separated from the determination of what type of social interaction the event is. These are not orthogonal issues by any means, and understanding how QPQ situations are interpreted as social interactions may help in understanding how different QPQ situations do or do not get perceived as sexual harassment. In the case of QPQ situations that involve sexual access, the two categories of social situations appear to be those of social exchanges and threats.

Sex differences in valuing sexual access

Studd and colleagues (Studd 1996; Studd and Gattiker 1991) have developed an evolutionary explanation of sex differences in sexual harassment perceptions and behaviours. Under this perspective, the conflict that arises in cases of sexual harassment is the result of an imbalance of the sexual interests, desires, or goals among men and women within sociosexual interactions (Studd 1996). Evolutionary theory explains this imbalance through the differences between the sexes in reproductive biology: females are obligated to invest a greater amount of time and effort towards caring for offspring (initially, due to internal fertilization, gestation, childbirth, and breastfeeding), and they also have historically been limited in terms of reproductive options by the amount of resources provided by male parental investment (Trivers 1972). Because of their greater parental investment in the risks of pregnancy and the large amount of resources required to raise offspring, human females will be more selective in choosing a sexual partner (Daly and Wilson 1983). Specifically, females will tend to choose sexual partners who have the potential to provide economic resources or parental energy over the period required to raise offspring. Males, in contrast, are physically obligated to provide very little initial investment of time and

energy towards offspring. The reproductive success of males is limited by their ability to gain sexual access to fertile females. Thus, males seem to have evolved psychological mechanisms that cause them to more aggressively search and compete for sexual opportunities (Studd and Gattiker 1991).

One of the results of these intersexual dynamics is differing views over the granting of sexual access to oneself. Women will typically view sexual access as a very significant and important event that carries the possibility of large personal costs. Men will typically perceive fewer costs and more benefits to granting such access, and will be less restrictive in terms of granting others sexual access to themselves. This sex difference has been directly measured as a personality trait called *sociosexual orientation*. Sociosexual orientation refers to differences in individuals' implicit prerequisites to entering a sexual relationship (Gangestad and Simpson 1990; Simpson and Gangestad 1991, 1992; Snyder et al. 1986; also defined simply as 'propensity to engage in casual sex'; Bailey et al. 2000). There is a very consistent sex difference in sociosexual orientation, with males exhibiting more permissive attitudes and unrestricted sexual behaviors than women. Additionally, sociosexual orientation is correlated with a number of sexual attitudes and behaviours (see, for example, Simpson et al. 1999).

It should also be noted that several other biologists and evolutionary psychologists have suggested that females (in humans as well as other species) do to some extent view and use their sexuality as a commodity, or resource, that can be exchanged for other resources (e.g., food, paternal support, protection, strategic alliances; e.g., Hrdy 1997, 1999). Although this can be interpreted as a rather cynical view of intersexual relations, it is also a view that sees women as being much more proactive in using their sexuality to advance their interests (and the interests of their offspring) than some more traditional views that tend to regard women primarily as passive victims.

In summary, women should assign a higher value to sexual access (to themselves), as compared to men. In a QPQ sexual harassment situation the victim is confronting an offer of 'something for something' where that something they are to provide is sexual access. All other factors aside, women should be less likely to see the item offered to them as an equitable trade for their granting sexual access. This would lead women to be less likely to perceive the social situation as a social exchange and more likely to perceive it as a threat.

Differences in the value of the offered item

In addition to women being more likely than men to perceive QPQ sexual harassment as a threat situation, both men and women should also be sensitive to the value of the item offered in exchange for sexual access. For example, what would you do if a stranger offered you a million dollars for one night of sex, and you happened to be in dire need of money at the time? While some people might describe this as an ‘indecent proposal,’ it can also be perceived more easily as a social exchange than can the situation of a boss offering to refrain from firing a perfectly competent employee unless they grant sexual access.

At least two factors should regularly come into play in the valuation of what is offered in a QPQ situation: what is the typical value of what is offered (e.g., a million dollars) and how does the context impact the value of what is offered (e.g., how badly you need it). The typical value of something is what it is normally considered to be worth; an ounce of gold is worth more than a sandwich, which is worth more than a punch in the stomach. Within any particular culture and time, most people should be able to generally agree on typical values. The context of a specific situation, however, can alter the actual value of an item. Someone stranded on a desert island may value a sandwich more than gold; a person choking on something may value a punch to the stomach more than a sandwich.

Recall that the element that distinguishes social exchanges from threats is the intent of the person proposing the interaction (which in the case of sexual harassment is the harasser). Any QPQ situation is basically an attempt to manipulate the behaviour of another person (getting them to give you something), but a social exchange is a situation that is intended to benefit both parties. A threat is a situation that is intended to benefit only the person proposing the interaction and is not designed to benefit the other person. A QPQ interaction, including a sexual harassment situation, should be perceived as a social exchange when the typical value of the offered item is positive (e.g., a job promotion) and perceived as a threat when the typical value of the offered item is negative (e.g., the prospect of losing one’s job).³ Additionally, the context should interact with these typical values in such a way that:

- 1 An offered item that is typically negative should be perceived as even more negative within a ‘thriving’ context (e.g., one’s job is threatened even though you are a good employee and the company is doing well).
- 2 An offered item that is typically negative should be perceived as less negative within a ‘failing’ context (e.g., one’s job is threatened when you are a new/poor employee and the company is doing badly).
- 3 An offered item that is typically positive should be perceived as even

more positive within a ‘thriving’ context (e.g., one is offered a promotion when you are a good employee and the company is doing well).

- 4 An offered item that is typically positive should be perceived as less positive within a ‘failing’ context (e.g., one is offered a promotion even though you are a new/poor employee and the company is doing badly).

In situations (1) and (4) there is a ‘mismatch’ between the typical value of the item and the context, indicating that the person offering the interaction is manipulating the situation for their own benefit and is not concerned about the other person’s interests. Situations (2) and (3) show some concordance between the typical value of the item and the context, indicating a QPQ social interaction that is mutualistic rather than wholly manipulative.

Reasoning about social exchanges and threats

Once a situation of QPQ sexual harassment has occurred and been perceived by the harassed party as either a social exchange or a threat, what is likely to follow? Ultimately there are issues (hopefully) of reporting the incident, administrative action, and possibly legal action. More immediately and fundamentally, however, there is the issue of how the harassed party reacts. Unlike hostile environment harassment, the QPQ situation requests an acceptance or denial response from the person receiving the offer. In other words, the person being offered the QPQ must *reason* about the social interaction: draw inferences about what is entailed by the situation and decide upon a conclusion to guide their actions. QPQ situations in general, and QPQ sexual harassment in particular, appear to be situations that call for deontic reasoning (i.e., reasoning about permission and entitlement, as opposed to reasoning about states of the material world). It may be possible, however, to consider reasoning about social exchanges and threats in an even more specific manner.

Cosmides and colleagues (Cosmides 1989; Cosmides and Tooby 1991, 1992; Rutherford, Cosmides, and Tooby 1996) have developed theories of how humans reason specifically about social exchanges and threats. Briefly, they posit that the mind contains specific abilities, or adaptations, that have developed over evolutionary history in order to efficiently and accurately deal with recurrent situations (i.e., during what is called the Environment of Evolutionary Adaptation, or EEA). Information from anthropology and archaeology indicate our ancestors have been living in social groups for tens of thousands of years, and were therefore subjected to the recurrent problems of successful social interactions. Because abilities that are tailored to specific categories of situations are normally superior in their performance to more general mechanisms, they inferred that the human mind contains

evaluation and reasoning procedures that are specialized for dealing with social situations such as social exchanges and threats.

Nearly all of the work with reasoning about social exchanges and threats has dealt with people evaluating what would violate the structure of the interaction, and all of this work has used a well-known reasoning paradigm called the Wason selection task (Wason 1966). The Wason selection task (WST) involves a conditional statement, such as 'If you travel to Boston, then you take the train,' usually some instructions and surrounding text to place the conditional in a context, and four cards (actually pictures of cards) with the four different possible states of affairs on them (e.g., Boston, New York [not-Boston], train, car [not-train]; see Appendix). The cards are said to each be different instances relevant to the conditional rule, and the other side of each card is said to contain the corresponding state of affairs regarding the other part of the rule in that situation. Subjects are told to indicate which cards they must see the other side of in order to test for violations of the conditional rule. The Wason selection task provides a fairly simple and concise window into human reasoning processes, and as such has become the most popular reasoning task in psychology (Newstead et al. 1994).

Using the Wason selection task, Cosmides and Tooby (1991, 1992; Cosmides 1989) established that people are particularly good at checking for violations, or cheaters, in the context of social exchange contracts (that is, individuals who receive conditional benefits and fail to provide the associated benefits). A QPQ sexual harassment situation can very easily be framed as a conditional statement (e.g., If you spend the night with me, then I will give you a promotion), and if this statement is perceived as a social exchange, it is predicted that a subsequent evaluation of a Wason card selection task will tend to produce the card selections that correspond to cheating in a social exchange (i.e., 'spent the night' and 'did not get promotion').

Reasoning about threats has also been subjected to the same type of theorizing as has reasoning about social exchanges. Violations of threats, however, are a bit more complicated:

Although there is only one way to violate the terms of a social contract, there are two ways of violating the terms of a threat: Either the person making the threat can be bluffing (i.e., he does not carry out the threat, even though the victim refuses to comply), or he can be planning to double-cross the person he is threatening (i.e., the victim complies with his demand, but the threatener punishes him anyway). The evidence indicates that people are good at detecting both bluffing and double-crossing.

(Cosmides and Tooby 1991)

If a QPQ sexual harassment situation phrased as a conditional statement is perceived as a threat, and there are no specific instructions to look for one type of threat violation or the other (bluffing or double-crossing), it should be more difficult to clearly select which outcome situations are relevant to searching for violations. Therefore, it is predicted that a QPQ statement perceived to be a threat situation will lead to a wider variety of different card selections than under the social exchange interpretation (i.e., some people will search for bluff violations, some people will search for double-cross violations, some people may search for both, and some people may search for neither because there is insufficient information).

Predictions

The two experiments reported in this paper were conducted to assess the perception of, and reasoning about, quid pro quo sexual harassment as a social interaction across three variables: (a) the sex of the person perceiving the QPQ situation, in the role of the harassed person; (b) the value of the QPQ statement (negative – sexual access to avoid the elimination of employment – or positive – sexual access in order to get a promotion); and (c) the situational context in which the QPQ statement occurred (*thriving* – prospering company, good employee – or *failing* – faltering company, new employee). The predictions tested in these experiments were:

- 1 Overall, more females than males will perceive QPQ statements as threats, as opposed to social exchanges.
- 2 Negative-value QPQ interactions (i.e., requesting sex in exchange for not being fired) will be more often perceived as a threat, as compared to positive-value QPQ interactions (i.e., requesting sex in exchange for a promotion).
- 3 More participants will perceive: (a) a negative-value QPQ statement within a thriving context, and (b) a positive-value QPQ statement within a failing situation context, as threats, as compared to (a) a negative-value QPQ statement within a failing context, and (b) a positive-value QPQ statement within a thriving context, respectively.
- 4 In a subsequent Wason selection task, participants will attempt to make card selections that conform to searching for violations in whatever type of interaction they perceive the situation to be. A situation perceived to be a social exchange has two clear selections for checking for violations (i.e., cheater): ‘paying the cost’ (providing sexual access) and ‘not receiving the consequence’ (losing one’s position anyway/not getting a promotion). A situation perceived to be a threat is more ambiguous because threats can be violated in two different ways (by bluffing or by double-crossing).

Card selections when the situation is perceived as a threat should be relatively less focused on the above two situations.

Experiment 1 method

Participants

A total of 120 undergraduates (60 females and 60 males) from a mid-sized university in the southeast United States received extra credit in courses to participate in this study. Their average age was 22.3 years.

Materials and procedure

Participants were given paper and pencil questionnaires that solicited their age and gender, followed by a brief explanation about how statements can be interpreted as threats or exchanges. A two-by-two between-subjects design was used, using the variables of participant sex (male and female) and type of context story within the task. The two context stories described situations in which a company was either doing very well and the protagonist was a good employee (thriving context), or doing poorly and the protagonist was a new employee (failing context). The story was written in the second person, inviting each participant to take the perspective of the employee. The dependent variables were: (a) whether the statement, 'If you spend the night with me, then I won't eliminate your position,' was perceived as a threat or as an exchange,⁴ and (b) the card selections within a Wason selection task as to what relevant situations would constitute a violation of this statement (see Appendix A for the questionnaire). Participants completed the questionnaires in groups of eight or less. Before the participants were given the questionnaire, the participants signed a consent sheet and all participants completed the questionnaire within ten minutes.

Results

Social exchange or threat?

Figure 1 shows the percentages of males and females that perceived the conditional statement as a threat within the thriving and failing contexts. The clear majority of participants in every condition (85.8% overall) perceived the statement as a threat. Within the thriving context, 100% of the females perceived the statement as a threat, as compared to 83.3% of the males. Within the failing context, 86.7% of the males perceived the statement to be a threat, as compared to 73.3% of the females. A 2×2

ANOVA, with the responses dummy-coded by participants' response (see Rosenthal and Rosnow 1984), revealed no main effects (for context: $F(1, 116)=0.61$, $p=0.58$, $\eta=0.38$, and for sex: $F(1, 116)=0.01$, $p=0.93$, $\eta=.01$), but a significant interaction ($F(1, 116)=5.80$, $p=0.018$, $\eta=0.05$). Pair-wise comparisons with difference of proportions tests were used to more finely describe the interaction: males did not respond differently to the thriving and failing context stories (83.3% v. 86.7%; $z=0.37$, $p=0.36$, effect size, $h=0.10$),⁵ however females unanimously viewed the thriving context story rule as a threat and significantly fewer females viewed the failing context story in the same manner (73.3% v. 100%; $z=3.04$, $p=0.002$, $h=1.09$).

In summary, females viewed this QPQ statement in the thriving condition as more threatening than males, as predicted, but this pattern did not hold in the failing context condition. Females reading the failing context were less likely to perceive this same statement as a threat than females in the thriving context condition (as predicted), but they were also somewhat lower than males in the failing condition (contrary to the prediction regarding sex differences; 73.3% v. 86.7%: $z=1.30$, $p=0.10$, $h=0.34$). There was no effect of the thriving and failing conditions on the perceptions of males (83.3% v. 86.7%: $z=0.37$, $p=0.36$, $h=0.10$).

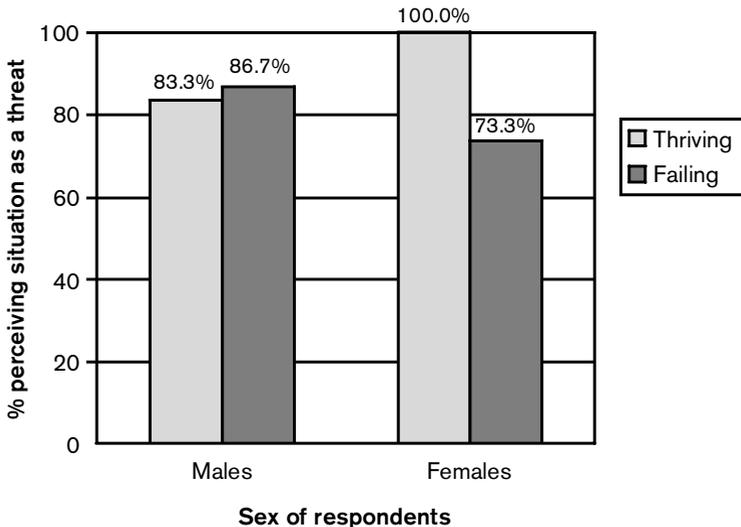


Figure 1 Percentages of males and female in Experiment 1 that perceived a negative-value QPQ statement ('if you spend the night with me, then I won't eliminate your position') as a threat, sorted by thriving and failing contexts

Wason selection task results

Out of the seventeen participants (a small minority) who perceived the context as an exchange situation, four (23.5%) selected just the predicted cards of ‘spent the night with supervisor’ (logically known as *modus ponens*) and ‘supervisor eliminated their position’ (*modus tollens*) to search for ‘cheater’ violations. Although this was not a high percentage of participants, this was the most common combination of selected cards. Out of the 103 participants who perceived the context as a threat situation, sixteen (15.5%) selected just the cards of ‘spent the night with supervisor’ and ‘supervisor eliminated their position’ (see Figure 2).

Experiment 2

Experiment 1 found some support for the hypotheses outlined here, but also some discrepancies. As predicted, more females than males found QPQ statements to be threats, but this effect was only found for the thriving context (in which, remarkably, every woman in the sample perceived the situation as a threat). Also as predicted, the change from a thriving to a failing context led to a drop in the percentage of people interpreting the situation as a threat, but this was found only for women. In summary, the

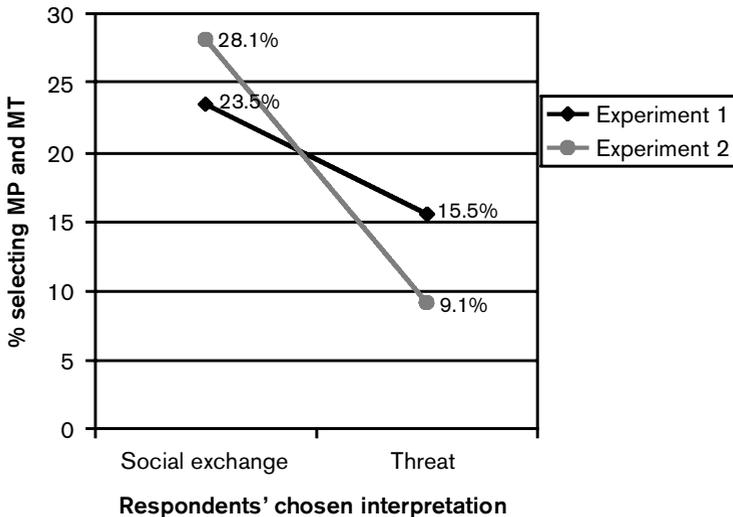


Figure 2 Percentages of participants selecting the card combination of ‘Spent night with supervisor’ and ‘Supervisor eliminated position/supervisor gave them a promotion’ (logical inferences of *modus ponens* and *modus tollens*) as the necessary situations to check, comparing across both the participants’ perceptions of whether the statement was a social exchange or a threat and across Experiments 1 and 2

results for the female participants follow quite nicely with the predictions made for this study, but the results for the male participants did not fit as well. Men did not appear to be influenced by the change of context.

The goals of Experiment 2 were: (a) to again assess the perception of and reasoning about quid pro quo sexual harassment, with regard to both gender and context, and (b) to expand this research to statements involving the negotiation of sexual access by making it contingent on a positive-value item (obtaining a promotion). As in Experiment 1, it was predicted that females will more often perceive QPQ statements as threats than males, but it was predicted that a QPQ situation will be more often seen as a coercive threat in a thriving context situation as compared to a failing context. Also as in Experiment 1, it was predicted that participants who perceive the situation to be a social exchange will more often make the Wason selection task card selections of 'providing sexual access' and 'not getting the promotion' (corresponding to the logical inferences of *modus ponens* and *modus tollens*).

In addition to these predictions it will be possible to compare across the two types of QPQ statements in these two experiments (negative versus positive values), and test the prediction that negative-value QPQ statements (Experiment 1) will be more often perceived as threats, and positive-value QPQ statements will be more often perceived as social exchanges.

Method

Participants

A total of 140 undergraduates (80 females and 60 males) from a mid-sized university in the southeast United States received extra credit in courses to participate. The average age was 21.6 years.

Materials and procedure

The materials and procedures used in Experiment 2 were generally the same as those in Experiment 1, but with the conditional rule changed to, 'If you spend the night with me, then I will give you a promotion.' The positive context story was also changed to reflect this different conditional rule (see Appendix A).

Results

Social exchange or threat?

Figure 3 shows the percentages of males and females that perceived the conditional statement as a threat within the thriving and failing contexts. Within the thriving context condition, 33.0% of the females perceived the statement as a threat, as compared to only 13.3% of the males. Within the failing context condition, 40.0% of the females perceived the statement to be a threat, as compared to 35.0% of the males. A 2×2 ANOVA found only marginal main effects (for sex: $F(1, 136) = 3.25, p = 0.07, \eta = 0.02$, for context: $F(1, 136) = 2.53, p = 0.11, \eta = 0.02$) and no interaction ($F(1, 136) = 0.91, p = 0.34, \eta = 0.01$). Directional pair-wise comparisons with difference of proportions tests, however, found that females overall were significantly more likely to perceive the QPQ statement as a threat (37.5%) than were males (23.3%; $z = 1.79, p = 0.04, h = 0.31$). More specifically, males evaluating the thriving context condition were significantly less likely to interpret the situation as a threat than males in the failing context condition or females in either condition (13.3% v. 33.3%, $z = 1.83, p = 0.04, h = 0.48$; 13.3% v. 35.0%, $z = 2.06, p = 0.02, h = 0.52$; 13.3% v. 40.0%; $z = 2.45, p = 0.01, h = 0.62$). In summary, females in the thriving context viewed this QPQ statement as more threatening than males in the same context, as predicted, but there was no statistical difference between the females across

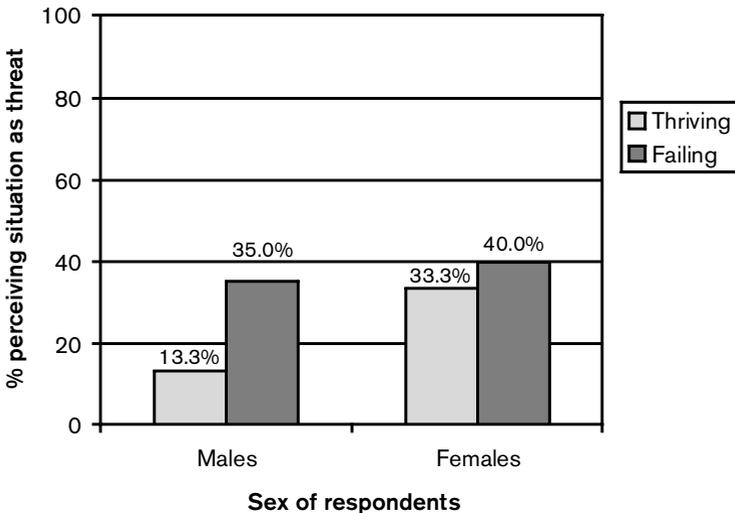


Figure 3 Percentages of males and female in Experiment 2 that perceived a positive-value QPQ statement ('if you spend the night with me, then I will give you a promotion') as a threat, sorted by thriving and failing contexts

the thriving and failing context conditions or between the responses of the females and the responses of males in the failing context condition.

As predicted, most participants judged the positive-value QPQ statement as a social exchange (overall, only 31% perceived the statement as a threat). In direct comparison with the results of Experiment 1 (see Figure 1), this second statement was significantly less likely than the negative-value QPQ statement to be viewed as a threat (31% v. 86%: $z=8.92$, $p<0.001$, $h=1.19$).

Selection task results

Out of the ninety-six participants who perceived the QPQ statement as a social exchange, twenty-seven (28.1%) selected just the predicted 'cheater' cards of 'spent the night with supervisor' (*modus ponens*) and 'supervisor eliminated their position' (*modus tollens*). Although this was not a high percentage of participants, this was again the most common combination of selected cards. Out of the forty-four participants (a minority) who perceived the QPQ statement as a threat, four participants (9.1%) selected just the target cards of 'spent the night with supervisor' and 'supervisor eliminated their position.' As shown in Figure 2, the relative percentages of the card selections across the perceptions of a social exchange versus the perception of a threat are fairly consistent and in accord with the predictions of this research. Because of the very low proportions obtained in both experiments for certain outcomes (Experiment 2, only four persons selected the target cards out of the forty-four who interpreted the situation as a threat, and in Experiment 1, four persons selected the target cards out of the seventeen who interpreted the situation as a social exchange), the results were collapsed across the experiments to achieve adequate (and more similarly sized) samples for statistical analysis. Altogether, twenty participants out of 147 who perceived a QPQ statement as a threat selected just the target cards (13.6%). Thirty-one participants out of 113 who perceived a QPQ statement as a social exchange selected just the target cards (27.4%), which is a significantly greater proportion (13.6% v. 27.4%: $z=2.78$, $p=0.003$, $h=0.35$).

Discussion

The results of these studies provide various levels of support for the predictions made in this paper. Very strong support exists for one prediction: the majority of participants, no matter what their sex or what context story was read, interpreted negative-value QPQ statements as threats, whereas the majority of all participants interpreted positive-value QPQ statements as social exchanges. This strongly indicates that QPQ sexual harassment is, in fact, not a unitary construct.

The predicted effects of the 'thriving' and 'failing' context stories, as well as effects of the perceiver's sex, were supported less strongly. A higher percentage of females compared to males perceived a QPQ statement as a threat in most conditions, but not significantly so in all cases, and the opposite pattern (non-significant) was obtained with a negative-value QPQ statement in a failing context. In the second experiment (positive-value QPQ statements), males reading the thriving context were differentially affected, with only 13.3% perceiving it as a threat. Again, it seems possible that there is a confluence in this condition between the nature of the QPQ statement, the context, and the value that a person places on allowing sexual access. Although we do not yet have what we consider a truly satisfying explanation for the findings in this study, at the same time we feel that there may be theoretically and practically important phenomena here to explore, and further research is being planned.

For those who viewed a condition as a social exchange, the most common combination of card selections in the Wason selection task was the pattern predicted by a so-called evolved 'cheater-detection' mechanism (i.e., 'slept with supervisor' and 'no promotion/position eliminated'; Cosmides and Tooby 1992), and this combination was selected significantly more often in those circumstances than when the situation was viewed as a threat condition. Performances on the Wason selection task were modest across all conditions, possibly because the stimuli were designed to be generic in terms of cueing participants into either a social exchange or threat interpretation. Past research (e.g., Cosmides 1989) has used situations and stimuli that are more explicit in terms of describing the nature of the situation and context. Specifically, social exchange situations in which the experimenter wishes to elicit a search for 'cheaters' usually includes some explicit indication that cheating is a real possibility. Similarly, threat situations in research stimuli typically specify whether the violation of primary concern is bluffing or double-crossing. None of these more specific elements were used in these studies because the stimuli had to be kept generic enough that participants could read them either as social exchanges or as threats. Nevertheless, the interpretations that were placed upon the situations did influence the cards selected.

Limitations and implications

The results of these studies hold implications and raise new questions for several theoretical and real-world concerns. An evolutionary perspective suggests that sex differences in social perceptions will continue to exist as an evolved human disposition, but without more precise specifications of the proximate mechanisms that mediate those perceptions little further can be said about the ease or difficulty in changing this pattern. Individual

differences in how males and females perceive social situations may also exist based on personality and life-history factors (e.g., reproductive value, sociosexual orientation, marital status, etc.), and this issue is largely unexplored. These personality and life-history factors are also likely to have some influence not only on perceptions of the extent that the behaviour is viewed as insulting, offensive, unacceptable, or unwanted, but also on recognition of whether sexual harassment exists or not, and even decisions made regarding compliance or resistance in QPQ harassment.

Even in academic circles, it appears that people can in good faith have important differences in what is perceived as sexual harassment (as well as in other issues in sexual relations; see Buss and Malamuth 1996). Just as it appears that there are differences in how a 'reasonable person,' a 'reasonable woman,' and other hypothetical yardsticks may perceive possible sexual harassment situations, there are differences in how socioculturalists, feminists, evolutionary psychologists, and other meta-theoretical positions tend to view sexual harassment. It should therefore be reiterated that this research can accommodate roles for differential power structures, subjective perceptions, and cultural norms in its conceptualization of sexual harassment, even though the dominant approach taken (and supported) here has been evolutionary and hence less focused on such issues. Indeed, we hope that eventually the nature and causes of sexual harassment can be better understood by integrating these various elements into a comprehensive model.

In the meantime, a recent focus in the domain of sexual harassment research and prevention has been on the education of employees as to what constitutes sexual harassment. Educational efforts may be more effective if they are able to explicitly describe and discuss these two subtypes of QPQ harassment and clarify that neither is considered acceptable behaviour. Perhaps even the Equal Employment Opportunity Commission (EEOC) and similar organizations in other countries may consider these different perceptions if and when they develop revised guidelines for sexual harassment.

Archival research on legal cases involving QPQ sexual harassment may also be illuminating. Are negative-value QPQ situations different from positive-value QPQ situations in their plaintiffs, their development, and their disposition? For instance, social exchanges are a ubiquitous part of everyday life (e.g., every time one exchanges money for a product), whereas threats are less common and less socially accepted. This suggests that negative-value QPQ sexual harassment (usually perceived as threats) may be more easily recognized and lead to plaintiffs that are the actual recipients of the harassing behaviours. On the other hand, it is possible that positive-value QPQ sexual harassment (usually perceived as social exchanges) will disproportionately lead to plaintiffs who are third-party employees that lose

employment opportunities to others who complied with sexual advances (i.e., secondary sexual harassment).

Further research may also investigate the role of perspective taking in reasoning (Gigerenzer and Hug 1992). The present studies used stimuli with a second-person perspective, inviting the participants to place themselves in the situation described. Given that the preponderance of sexual harassment is perpetrated by males and directed towards females, are people able to use only their own perspective or are they influenced by the perspective typical of the harassed sex? If the latter turns out to be the case, this may contribute to explaining some of the sex differences in perception and reasoning that were found here (also see Haselton and Buss 2000). Another issue that arises from the nature of the stimuli used here is that the gender of the harassing supervisor is not explicitly stated. For the majority of participants, it is presumed that they infer the harassing supervisor is of the opposite sex. This presumption could be questioned, although none of the participants gave any indication that they found the supervisor's gender to be problematic to completing the task. Other possible avenues of research include the use of the negation of the antecedent in QPQ sexual harassment-type statements (e.g., 'If you don't sleep with me, then I will fire you'), and investigating if performance on the Wason selection task is changed in QPQ situations that are clearly specified as either social exchanges or threats (and clearly specify the type of imminent risk: cheating, bluffing, or double-crossing).

Finally, there are several respects in which the current research should be considered only an approximation of real-world sexual harassment situations. Some considerations that often exist in actual QPQ sexual harassment situations were not included in this study. First, sexual coercion usually does not occur in a vacuum; it typically occurs along with other forms of harassment such as verbal sexual insults and unwanted sexual attention (Schneider et al. 1997). Second, whereas positive- and negative-value QPQ statements were treated dichotomously in these studies, they are not necessarily orthogonal in reality (that is, non-compliance with a benefit-oriented QPQ can lead to punishment (e.g. *Miller v. Bank of America*, 1979 and *Barnes v. Costle*, 1977)). In fact, research on deontic reasoning (reasoning about permissions and obligations, of which social exchanges and threats are examples) generally indicates that these sorts of situations tend to elicit a biconditional interpretation (i.e., given 'If you do A, then I will do B,' people tend to assume that it is also the case that 'If you do not do A, then I will not do B'). In other words, there are indications that people may often sensibly assume that rewards and punishments are interrelated. Third, it should be noted that these studies were only written simulations of a QPQ sexual harassment situation, using undergraduate participants who often have quite limited experience with

workplace sexual harassment, as compared to somewhat older people with families and careers.

Appendix A: Stimuli used in Experiments 1 and 2

When a person makes a statement to another person that statement can be interpreted a number of different ways. Some statements are threats. A person who makes a threat can either act as the threat indicates, bluff (have no intention to follow through on the threat), or double-cross (carry out the threat whether or not the other person complies). Other statements are exchanges. A person who makes an exchange can either act as the exchange indicates, or they can cheat (let the other person act and not do as they indicated they would). This is a story about a statement made by a person.

You work in a large company, in an office that is run by a particular supervisor.

Positive (Exp. 1): The company is doing well, you are a good employee, and you have no particular reason to believe that your job is in any kind of jeopardy.

Positive (Exp. 2): The company is doing well, you are an established employee, and you are looking forward to many years of productive employment.

Negative (Exp. 1 & 2): The company is doing poorly, you are a new employee, and you are very concerned that your job may be in jeopardy.

You were quite surprised, then, when the supervisor came to your office and told you the following:

Exp. 1: 'If you spend the night with me, then I won't eliminate your position.'

Exp. 2: 'If you spend the night with me, then I will give you a promotion.'

What kind of statement is this? (circle one)

A threat

An exchange

You want to know if this supervisor has ever failed to act as indicated after issuing a statement like this.

You discreetly ask around the office and call former employees. You discover that this supervisor has actually made exactly the same statement to at least four other people. The cards below have information about what happened with these four people. Each card represents one person. One side of a card tells whether or not the person spent the night with the supervisor; and the other side of the card tells whether or not the supervisor downsized that person's job.

The supervisor may not have acted as indicated by the statement when dealing with some of these people. Circle only the card(s) you definitely need to turn over to **see if the supervisor violated the statement in dealing with any of these four people.**

- | | | | |
|----|---|----|--|
| A. | Spent the night with supervisor | B. | Supervisor . . . (Exp. 1: eliminated their position/
Exp. 2: did not give them a promotion) |
| C. | Supervisor . . . (Exp. 1: did not eliminate their position/
Exp. 2: gave them a promotion) | D. | Did not spend the night with supervisor |

Notes

- 1 Other nations, while of course not having this exact definition of sexual harassment, often have similar laws or legal standards. The UK, for example, has no specific law against sexual harassment (and therefore no legal definition of it), but sexual harassment is recognized as a form of sex discrimination under the Sex Discrimination Act of 1975 (i.e., an employee is treated less favorably than others on the grounds of sex) and UK tribunals commonly use the European Commission guidelines regarding sexual harassment that include the key elements covered in this paper (the conduct is unwanted and can include hostile environment and quid pro quo situations). Sexual harassment cases in the UK thus have the same relationship with issues discussed here, such as the subjective nature of the offense and the possibility of secondary sexual harassment.
- 2 One essential feature in the legal definition of sexual harassment is that the sexual situation must be *unwelcome* (Roberts 1995). A welcome sexual advance, an eagerly received request for sexual favours, or conduct of a sexual nature that is enjoyed by the recipient is *prima facie* not sexual harassment (issues of morality are a different matter, and not considered here). Thus, situations of prostitution, marrying someone for their money, or having sex with someone in order to acquire social status through association with them, all fail to be

situations of sexual harassment because they are entered into with mutual consent. If a quid pro quo offer is made, however, and the recipient of the offer actually welcomes it, sexual harassment may still have occurred. A positive-value quid pro quo situation can lead to what is called *secondary* sexual harassment. In this situation the victim is another person, outside of the QPQ arrangement, who is adversely affected (and presumably finds the existence of such an arrangement unwelcome). For example, if my co-worker gets a promotion by having sex with our mutual supervisor and I get no promotion because (as I see it) I did not have sex with that supervisor, I could claim sexual harassment.

- 3 A situation being perceived as a social exchange (or as a threat) in no way implies that the QPQ offer will be accepted, although it may have some influence on the manner in which the situation is evaluated and either rejected or accepted.
- 4 As this paper does not deal with the separate issue of people's judgments regarding if harassment has occurred or not, both experiments used context stories in which there could be little doubt that QPQ sexual harassment had occurred.
- 5 Cohen (1988) recommends the effect size estimate b for difference of proportions tests. His conventions for interpreting b refer to smaller than 0.20 as marginal/negligible, around 0.20 as small, around 0.50 as medium, and around or larger than 0.80 as large.

Author note

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