

# Sex as Factor in Salt and Pepper Passage: Updating the Research

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## ABSTRACT

This paper reports a proposal to examine the factor of sex in salt passage. Eighty undergraduates (40 males, 40 females) complete questionnaire with snacks and drinks on hand and a salt shaker and a pepper shaker on the table. They are asked by another male or female who is ostensibly also completing questionnaire, but who is actually a confederate of the experimenter, to pass the salt or pepper. It is anticipated that all participants comply, but would be slower to respond to pepper than to salt and to someone of the same sex compared to someone of the sex opposite. Response times would be slowest when a male asked a male to pass the pepper. Implications for similarity theory and attraction theory are discussed and suggestions are made for the future research.

**Key words:** sex differences, salt and pepper passage.

## INTRODUCTION

Various writers in English literature (but, strangely, not French literature) seem to have alluded to the simple act of passing the salt from one person to another, and philosophers have speculated about its symbolic meaning (Pencil, 1976). Prompted by these ideas, research has apparently examined conditions under which salt is passed: two review reports state that frequency with which a person passes salt is associated with variables, including politeness of the request to pass salt, number of people around the table, and both attitudes and race of sender and person receiving (Pacanowsky, 1978; Pencil 1976). However, there are no reports of personality having the effect. Both Pacanowsky and

Pencil observe that more work is required, particularly on sex differences. Because this does has not been done, the first purpose of present experiment is to examine whether sex of recipient (the person who made the request) and sex of sender are factors in salt passage.

From similarity theory (Ajzen, 1974; Byrne & Nelson, 1965), it can be predicted that people might be more likely to pass salt to people of the same sex than to people of sex opposite. That is, we act favourably towards people who we think are like us. Parenthetically, “like” may have two meanings here: we may like people because we perceive them to be like us. As the old English saying goes “Birds of a feather flock together”. On the other hand, from the

theories of sexual attraction (Kulik & Harackiewicz, 1979), it can be predicted that people might be more likely to pass salt to people of sex opposite than to people of the same sex (assuming that the participants were heterosexual in their orientation). That is, we act favourably towards people that we are attracted to or who we think might be attracted to us. In this case, because heterosexual attraction is involved, it is more akin to another old saying "Opposites attract." (Where opposite refers to biological sex). It is expected that the results would be support attraction theory. That is, people would be less likely to respond in a favourable manner when the person asking is same sex as they are.

The second purpose of present research was to extend the investigation to passage of pepper. If pepper has psychological characteristics that are different from salt, then people may not act the same way when requested to pass it. For example, salt and paper are often paired together, which would imply that results would not differ for requests to pass pepper or salt. On the other hand because pepper is more likely to tickle the nostrils than salt, people might be more hesitant about passing it in case it sets off the sneezing fit, which can be embarrassing. This interesting possibility is hypothesized here. Indeed, the effect might be exaggerated when the two people are men. That is, males would be particularly hesitant to pass pepper to a male requester.

## **MATERIALS AND METHODS**

### **SUBJECTS (PARTICIPANTS)**

Eighty French-speaking undergraduate volunteers (40 men, 40 women) take part in this experiment, conducted completely in French (en français). They are recruited from introductory psychology courses and assigned 2 credit points towards their final

grade. Four conditions are formed: recipient and sender both male, recipient and sender both female, recipient male and sender female, and recipient female and sender male.

### **MATERIALS AND PROCEDURE**

The materials are a salt shaker with salt, a pepper shaker with pepper, and a questionnaire about music preferences. Details of questionnaire are not given because it only serves as part of the cover story given to participants.

Participants are tested one-by-one in laboratory setting. They sign up for study of music preferences. When participant arrive, the experimenter explains that they and the other participant will sit opposite each other at a table and complete questionnaire, taking approximately 20 minutes. The other participant is actually an undergraduate student who is in league with the experimenter and who plays the role of recipient. That is, he/she always makes the request and true participants are always senders (they are asked to pass the salt or pepper). Because salt and pepper shakers are placed closer to sender, the two ostensible participants are given their places according to a rigged random draw.

When students are seated, they complete questionnaire at their own pace. Each student is provided two good-sized bowls, one filled to brim with unsalted peanuts and one with unsalted potato chips, and a choice of water, orange juice and cranberry juice to drink. They are told that they can snack and drink as they wish.

Two students, one male and one female, are confederates. Each of them is paired with male or female participant to form the four groups of male-male, female-female, male-female and female-male recipient-sender pairings. The confederates are instructed to complete questionnaire as if they were real participant, but to ask the participant to pass salt or pepper. The first

request is made after five minutes and the second one after six minutes. For half of the participants, first request is for salt and second is for pepper and for other half the requests are made in the order opposite. The first and second requests are delivered as follows respectively (translated from the French to the English): “Excuse me, would you pass the salt (pepper)?” and “Sorry to bother you again, but would you pass the pepper (salt)?” If request is honoured, recipient returns the salt or pepper shaker.

The behavior of sender (complying or not complying with the request) is independently observed by two experimenters through a one-way mirror. In addition, using stopwatches, they independently record the time from when the request was made until sender touched the shaker.

## STATISTICAL METHODS AND RESULTS

Datas are analyzed using SPSS (PASW Statistics 18), with alpha at 0.05.

### COMPLIANCE BEHAVIOUR

It is expected that every participant honours requests to pass salt and pepper. That is, 20 out 20 people in each of four sex conditions comply completely. However, differences will show up on response time.

### RESPONSE TIME FOR COMPLIANCE

Recorded response times for the two experimenters should be close (within 200 ms of each other). Final data for analysis consist of the mean of the two estimated times for each participant.

Data were entered into SPSS as expected to occur and then analysed as follows. To check for order effect, response time data (see Table 1) are examined first with a 2 X 2 X 2 X 2 (Sex of Receiver X Sex of Sender X Substance X Order of Presentation) mixed model ANOVA with repeated measures on substance and order. As expected, order was not significant and

did not interact significantly with any other variables. Data were collapsed over it and a 2 X 2 X 2 (Sex of Receiver X Sex of Sender X Substance) mixed ANOVA was conducted.

From the entered data analyzed, all effects were significant: sex of receiver,  $F(1, 76) = 81.03, p < .001$ , sex of sender,  $F(1, 76) = 7.58, p = .007$ , sex of receiver X sex of sender,  $F(1, 76) = 349.97, p < .001$ , substance,  $F(1, 76) = 50.34, p < .001$ , sex of recipient X substance,  $F(1, 76) = 22.96, p < .001$ , sex of sender X substance,  $F(1, 76) = 10.98, p = .001$ , and the three-way interaction,  $F(1, 76) = 13.15, p = .001$ .

Overall, response times are slower for pepper than for salt (see Table 1). Table 1 also shows that two-way interaction between sex of recipient and sex of sender occurs because both male and female senders respond more quickly when recipient was of sex opposite. That is, they are slower with own sex. For the significant three-way interaction, inspection of Table 1 shows that the sex interaction pattern just described occurs for both salt and pepper, but difference in time is greatest when a male recipient requested a male sender to pass pepper.

**Table 1: Mean Response Times (sec) in Each Condition**

Recipient	Sender	n	Salt		Pepper	
			M	SD	M	SD
Male	Male	20	3.48	0.51	5.13	1.17
	Female	20	1.99	0.55	2.43	0.33
Female	Male	20	1.51	0.43	1.69	0.35
	Female	20	3.04	0.43	3.27	0.48

## DISCUSSION

Despite suggestions for future research (Pacanowsky, 1978; Pencil 1976), it has been approximately 40 years since the question of salt passage has been reviewed as empirically investigated. Consistent with the previous reports, and as expected, the present analysis found that participants

respond positively to a request to pass salt. In addition, expanding on these results, they also respond positively to a request to pass pepper. However, in the present experiment, there is a perfect rate of compliance. That is, every sender honours the request to pass salt and pepper. This is unusual, because previous reported compliance rates were lower (Pacanowsky, 1978; Pencil 1976). Most of past research was dated in 1960s and 70s in U.S.A. This sample of students here is from Québec, Canada, and is speaking the French. Notably, compliance has been found to be higher in Canada than in some other countries (Pacanowski, 1976), although not United States. Future research after this project might compare rates of salt and pepper passing for provinces within Canada with states within the U.S.A in order to explore intra-country variations. Speculatively, people from some states and provinces may be more agreeable than people from other states and provinces. Perhaps les Québécois are extremely agreeable. It might also be interesting to compare the English Quebecers with the French Quebecers (les québécois français). To focus on the agreeable possibility, it would be useful to administer a personality test of the Big Five traits [openness, conscientiousness, extraversion, agreeableness, and neuroticism (OCEAN); McCrae & Costa, 1987] to examine if compliance varies with agreeableness.

Although *rates* of compliance do not vary with sex of recipient or sex of sender here, *time to fulfil the request* is related to both factors. This is an interesting result because sex differences in salt or pepper passage were not examined before. In particular, both males and females are faster to respond when request is made by member of sex opposite. This is consistent with theories of sexual attraction (Kulik & Harackiewicz, 1979) and inconsistent with similarity theory (Ajbzn, 1974; Byrne &

Nelson, 1965), according to which people would respond faster to members of same sex. That is, in the present experiment, senders may respond more quickly to person making the request because they are attracted to them or because they are trying to make themselves attractive to the other. It will be interesting to see if female confederate reports any male participants attempting to make further contact with her. Of course, for professional reasons, this invitation would have to be politely turned down. Future investigation might examine if rate or response time for salt and pepper passage would vary with physical attractiveness of recipient (and perhaps also sender). A result positive would be consistent with previous reports of a positive relationship between compliance and attractiveness (Debevec, Mardin & Kernan, 1986).

Present experiment also extends previous research by examining whether results would be different for a request to pass pepper compared to pass salt. Although arguments were made for both possibilities, it is expected and shown in these data that senders are slower to respond to pepper request than to salt request. This is consistent with speculation that pepper is more likely to induce sneezing fits, making participants more hesitant about complying. They did comply, but it takes them longer to do so. This might occur because it is less usual to shake pepper over peanuts and chips than it is shake salt. If the request was perceived as surprising, this might slow response time. Further research might investigate the reasons why people are slower to pass pepper than to pass salt.

In addition, a particularly interesting interaction is shown between sex and substance because the slower response time to person of the same sex is exaggerated when the two people were males and when the request is to pass pepper. Perhaps males

would find it highly unusual for another male to ask for pepper on his snack food. However, although highly reliable, any difference like this should be replicated before explanations are tested.

One weakness of present proposal is that no systematic data is collected on sexual orientation. From the expected results, participants would probably be heterosexual. It might be interesting to do another study with people who are attracted to members of their own sex. Of course, additional conditions and controls would be necessary to distinguish similarity theory from attraction theory.

## CONCLUSION

In sum, present analysis shows that people at a table are extremely willing to comply with a request to pass salt or pepper. Perhaps this simply reflects standard norms of politeness. However, they are faster to honour request made by a member of sex opposite, perhaps reflecting a conscious or unconscious motive to be seen as attractive. They also pass pepper more slowly than salt, particularly with people both men. Hopefully, results can replicate this analysis.

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