Sixty-five female undergraduate students who were either standing or reclining listened to a tape-recorded counterattitudinal speech containing either strong or weak arguments. Their evaluations revealed a significant interaction between posture (standing or reclining) and quality of arguments (strong or weak) on a measure of attitude change. Strong arguments became more convincing and weak arguments became even weaker when the subjects listened to the arguments in the reclining condition. Standing subjects reported being more distracted from attending to the message than did reclining subjects; they also were less persuaded by strong arguments and more persuaded by weak arguments than were reclining subjects. These results support an information processing explanation of the effect of posture on persuasion. (RL)
Presented at MPA, Detroit, 1981

EFFECTS OF RECIPIENT POSTURE ON PERSUASION

Martin Heesacker and Richard E. Petty
University of Missouri, Columbia

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Martin Heesacker
Richard E. Petty
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Address all correspondence to:
Martin Heesacker
Psychology Department
210 McAlester Hall
University of Missouri
Columbia, MO 65211
(314/882-4552, or 442-3595)
The literature on persuasion indicates that several characteristics of the 
content of a persuasive message can influence the amount of attitude 
change that will occur. Such factors as intelligence, involvement and 
perceived similarity to the speaker have been found to affect the amount of 
persuasion that results (cf. Eagly & Himmelstein, 1972).

One recipient characteristic that has not received much attention is 
the position of the message recipient. People normally exposed 
to mass media communications while they are sitting do it is not unusual 
for them to be exposed to a communication while lying, sitting, or standing in 
the kitchen.

In an initial investigation of the effects of posture on persuasion, 
Petty, Wells, and Brock (1975) had subjects listen to a taped message while 
either standing, sitting, or lying. They found that reclining subjects were 
frequently more persuaded than standing subjects, with sitting subjects 
reporting an intermediate level of persuasion. The goal of the present study 
was to distinguish between two possible explanations of the posture effect 
observed by Petty et al.

The first explanation would contend that lying is a more comfortable (or 
acceptable) position than standing, and that the positive affect associated 
with lying (or the negative affect associated with standing) became linked 
with the persuasive message. There is considerable evidence that just such 
classical conditioning of attitudes may occur (cf. Staats & Staats, 1957).

An alternative explanation would contend that subjects in the reclining 
position were more motivated and/or able to process the good arguments in 
the message, and were more persuaded than standing subjects because they were 
better able to realize the cogency of the arguments presented. There is some 
evidence in the literature that reclining is associated with more thinking.
than other postures. For example, Berdach & Bakan (1967) found that reclining subjects were able to generate more childhood memories than sitting subjects.

Two communications were employed in the present research. Both messages argued that seniors be required to pass a comprehensive exam in their declared major before being granted a degree, but the messages differed in their presentation of 8 key arguments. One message contained arguments that elicited predominantly favorable thoughts in pilot tests (strong message), whereas the other contained arguments that elicited predominantly counterevagments in a pretest (weak message). Undergraduates read one message in either a standing or reclining position.

This design allows a test between the explanations for the posture effect observed by Petty et al. The classical conditioning interpretation predicts that reclining subjects will show greater attitude change to both messages since reclining should always be more comfortable than standing. The information processing hypothesis, on the other hand, predicts that reclining subjects should be more persuaded than standing subjects for the strong message only. Reclining subjects should be less persuaded by the weak message because here, more thought should lead to a better realization of the flaws in the message.

Method

65 female undergraduates at the University of Missouri participated in order to earn extra credit in an introductory psychology course. The design was a 2 (Argument quality: strong or weak) X 2 (Body posture: standing or reclining) factorial. Subjects were run in groups of 3 to 5 in cubicles constructed so that subjects could have no visual or verbal contact with one another. Upon arrival at the lab, participants read that they would be rating the sound and comfort of head phones allegedly designed for use in either a
standing or reclining position (see Petty, et al., 1975). Then subjects were instructed to take their randomly assigned positions (standing or lying on a cot) and put on headphones, over which they heard several minutes of instrumental music followed by a speech advocating senior comprehensive exams for college students. Subjects heard either the strong version of the message which provided persuasive statistical and data-based evidence for the exams, or the weak version which provided anecdotal and personal evidence (see Petty, Hammond, & Williams, 1980).

After hearing the tape, subjects completed a measure of opinion about the topic; they were asked to rate the concept "senior comprehensive exams" on four 9-point semantic differential scales (harmful-beneficial, wise-foolish, good-bad, favorable-unfavorable) that were summed to form a general measure of evaluation. Following the key attitude measure, subjects completed some manipulation check measures and other ancillary items. Next, subjects were given 2½ minutes to list their thoughts while listening to the tape (cf. Petty & Cacioppo, 1977). Finally, they were given 2½ minutes to list as many of the arguments provided in the communication as they could remember. Two judges, blind to the manipulations rated each thought as + (in favor of the exam proposal), - (opposed), or 0 (neutral/irrelevant). Also, two judges, blind to the posture manipulation rated each argument recalled for accuracy. Similar statements of the same argument were only counted once. For analysis, the average of the two judges' ratings was employed. Upon completion of the dependent measures, subjects were debriefed, thanked, and dismissed.

Results

A 2 X 2 analysis of variance on each of the dependent measures yielded the following main effects. A main effect for the sum of the semantic differentials, $F(1, 59) = 9.76, p < .01$, indicated that the strong arguments induced
more acceptance (M=10.29) than the weak ones (M=6.1). A main effect for negative thoughts, $F(1,61)=7.55$, $p<.01$, indicated that standing subjects generated fewer counterarguments (M=.30) than reclining subjects (M=1.13). A main effect on a question assessing distraction, $F(1,61)=5.99$, $p<.05$, indicated that reclining was less distracting (M=4.26) than standing (M=5.56).

Also, several interactions were obtained. Of most interest was the Arguments X Posture interaction, $F(1,59)=6.80$, $p<.05$, on the semantic differential measure (see Figure 1). This interaction indicated that in the reclining position the strong arguments became significantly more persuasive and the weak arguments became significantly less persuasive.

An interaction was also obtained on the number of counterarguments generated, $F(1,61)=6.13$, $p<.05$, indicating that posture affected the production of negative thoughts to the weak arguments, but not to the strong. Specifically, reclining subjects generated more counterarguments to the weak arguments than did standing subjects. Finally, an interaction on the distraction measure, $F(1,61)=9.50$, $p<.01$, revealed that the increased distraction effect of standing over reclining was significant for the weak message only.

Summary

The present study provided strong support for the information processing interpretation of posture effects over the classical conditioning hypothesis. Standing subjects reported being more distracted from attending to the message than reclining subjects, and consistent with the previously identified effects of distraction on persuasion (cf. Petty, Wells, & Brock, 1976), standing subjects
were less persuaded by strong arguments, but more persuaded by weak arguments than reclining subjects. No support emerged for the notion that the comfort associated with reclining would become conditioned to all messages. This study, along with other recent work in attitudes (cf. Lagly & Himmelfarb, 1978) further documents the importance of the extent of message processing and elaboration as a mediator of attitude change.
References


FIGURE 1
EFFECTS OF BODY POSTURE AND ARGUMENT QUALITY ON ATTITUDE CHANGE

SUMMED SEMANTIC DIFFERENTIAL SCALE

Favorable

Strong Arguments

Standing

Weak Arguments

Reclining

Body Position

[Graph showing the effects of body posture and argument quality on attitude change]