

BUST SIZE AND HITCHHIKING: A FIELD STUDY¹

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Summary.—To test the effect of a woman's bust size on the rate of help offered, 1200 male and female French motorists were tested in a hitchhiking situation. A 20-yr.-old female confederate wore a bra which permitted variation in the size of cup to vary her breast size. She stood by the side of a road frequented by hitchhikers and held out her thumb to catch a ride. Increasing the bra-size of the female-hitchhiker was significantly associated with an increase in number of male drivers, but not female drivers, who stopped to offer a ride.

A host of previous studies show that men and women differ in preferences for mate characteristics across cultures. Men more than women value physical attractiveness in a mate, whereas women more than men value good financial prospects and higher status (2, 12, 17). The importance of physical attractiveness for men therefore leads them to react to differences in the physical appearance of women. Prior studies have indicated different morphological features of women are associated with varied attractiveness for the men. Furnham, Lavancy, and McClelland (7), Henss (11), Singh (18), and Singh and Luis (20) reported that lower waist-to-hip ratio of women was associated with greater physical attractiveness when evaluated by men, with high attractiveness at .70 (19). Another important morphological factor associated with female attractiveness is breast size. Millsted and Frith (14) consider that large breasts have become over-sexualised as highly prized objects of sexual desire. Previous researchers found that females with large breasts are highly valued. Beck, Ward-Hull, and McLearn (1976) noted that males rated a female's figure with breasts larger than average breast size more favorably than others. Wildman and Wildman (22) stated that the bust was the most sexually stimulating female body part for males and that men preferred larger busts than women typically possess. Gitter, Lomranz, Saxe, and Bar-Tal (8) found that female figures with large breasts were preferred by males, whereas there was no such difference in women's preferences. Furnham, Hester, and Weir (6) also observed through men's evaluation of female silhouettes with three varying sizes of breasts that males displayed a preference for larger breasts. Given these studies, greater attractiveness seems associated with large breasts of women. Further, in previous studies evaluation scales have been considered but not behavioral effects of breast size.

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When considering men with respect to women's breast size only one experiment was found. Morgan, Lockard, Fahrenbruch, and Smith's (15) test of female hitchhiker's bust size indicated male motorists offered rides more frequently to a female confederate with an accentuated bust compared to a normal one. In the preset experiment bust size was combined with eye contact (a female confederate with eye contact+an accentuated bust compared with another female confederate with normal bust but no eye contact). Thus the effect of bust size alone on men's courtship behavior remains unassessed. Given that most studies testing the association of a woman's breast size and attractiveness to males were conducted in a laboratory setting and only with the evaluation of silhouettes, photographs, or written descriptions, it became important to conduct an experiment to assess this association of breast size in a field setting, with more ecological validity and with behavioral measures. The experiment of Morgan, *et al.* (15) was conducted in a field setting and used behavioral measurements but some methodological problems persisted in the evaluation of the role of breast size. The use of hitchhiking to explore the role of some psychological variables on human behavior is appropriate. The positive relation of nonverbal behavior such as gaze (15, 21) or smile (9, 10) and driver behavior has been found. Apparel worn by the hitchhiker is also associated with variation in motorists' behavior (4). Hitchhiking appeared to be a good setting to evaluate some social psychological variables and human behavior. Then testing the effect of the appearance of female-hitchhikers on male drivers' behavior seems suitable. In studies on hitchhiking, females received more rides than males (3, 9, 10, 15, 16, 21) and also more drivers who offered help were males.

An evaluation of the effect of the bust size of a female hitchhiker was then carried out where the bust size of a female confederate was controlled experimentally. The experiment was conducted in France where hitchhiking is legal and so one frequently sees hitchhikers on the side of the road. Mermet (13) found that 78.0% of French people have hitchhiked. Of the motorists who stopped, 96.3% were males. According to previous studies it was hypothesized that increase in bust size would be associated with greater number of male drivers stopping to help the female hitchhiker, whereas no difference would be found for female drivers.

METHOD

Subjects

Drivers (774 men and 426 women) solicited at the entry of a famous peninsula ("Presqu'île de Rhuys") of Brittany in France were the participants. The experiment was conducted during the beginning of the summer holidays on sunny days. The place in which the experiment was conducted was one at which hitchhikers waited for motorists.

Procedure

A young woman of 20 yr. was the confederate in this experiment. She was selected from members of a group of female students who volunteered for this experiment. She was selected because she was rated by 15 male students to possess an average physical attractiveness and because she had a bust size smaller than young women of their age typically possess on the average. By adding a latex leaf, the size of the bra cup was increased to simulate a "B" size cup (average in France) and "C" size cup (the size immediately larger than the average size of the cup of young women in France). Except for the type of bra used according to the different experimental conditions, the same clothes were worn, a pair of neat jeans, sneakers of light color, and a white figure-hugging shirt which highlighted the bust. In the three experimental conditions, the confederate was instructed not to use cosmetics, and her hair-style remained constant across conditions.

The female confederate stood at the side of the road in good visibility of motorists and with a broad road zone, making a stop and restarting of vehicles easy and safe. The experiment took place between 2 p.m. and 6 p.m. during weekends on sunny pleasant days in early summer. Two observers waiting in a car parked on the opposite side of the road 500 meters behind the place at which the confederate stood were instructed to count the number of motorists on the opposite side and to note if the motorist was a man or a woman. Each of them used two hand-held counters (one to count the female motorists and the other to count the male motorists). The agreement between the two observers' counts was high ($r = .98$). The confederate was also instructed to count the number of motorists and to change her bra after 100 motorists passed along the side of the road on which the experiment was carried out (about 40 to 50 minutes). When a car came, the confederate was instructed to hold her thumb out (a nonverbal behavior that means in France somebody is a hitchhiker) and to look along the side of the road. That a driver stopped qualified the person as a helper. The confederate was then instructed to debrief the participant. She explained to the driver that she was conducting an experiment on hitchhiking. Then, the driver was warmly thanked for help. This information procedure was used in accord with the suggestion of the Ethics Committee of the laboratory prior to evaluating the experiment. To prevent problems, a male observer discreetly observed the female confederate from a distance of 30 meters away from the confederate. It was not possible for the motorists to see the observer who observed the scene. No intervention by this observer was required.

RESULTS

The number of drivers who stopped by sex conditions is presented in Table 1. A chi-square dependency test was applied. In male motorists re-

sponses in the three conditions were significantly different [$\chi_{1,2}^2(N=774)=7.16, p<.03, r=.10$]. Follow-up analysis showed that the "C" cup condition was statistically different from the "A" cup condition [$\chi_1^2(N=518)=6.83, p<.01, r=.11$] but not the "B" cup condition [$\chi_1^2(N=506)=2.78, p=.09, r=.07$]. Also the two smaller cup conditions were not statistically different from each other [$\chi_1^2(N=524)=0.88, ns, r=.02$]. For the female motorists, however, number of persons responding in each condition were not significantly different [$\chi_2^2(N=426)=0.30, ns, r=.03$].

TABLE 1
FREQUENCY AND PERCENT OF MOTORISTS WHO STOPPED BY
EXPERIMENTAL CONDITION AND SEX OF MOTORIST

Motorists' Sex	n	Bra Cup Size			
		A	B	C	
Male	774	%	14.92	17.79	24.00
		f	40/268	46/256	60/250
Female	426	%	9.09	7.64	9.33
		f	12/132	11/144	14/150

DISCUSSION

Apparent increases in bust size of a young woman of average rated attractiveness was associated with a larger number of male drivers who stopped. This behavioral measurement is congruent with the evaluation of female attractiveness by bust size found previously (1, 6, 22). Present results suggest large breasts are not only associated with more positive evaluation but also males' greater behavioral interest. Greater attractiveness of larger bust size (5) was expected to induce more male drivers to help a woman.

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