

HITCHHIKING WOMEN'S HAIR COLOR¹

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Summary.—To test the effect of women's hair color on the frequency of offering help, male ($n = 1,508$) and female ($n = 892$) French motorists were tested in a hitchhiking situation. Five 20- to 22- yr.-old female confederates wore a wig with blonde, brown, or black hair. Each confederate was instructed to stand by the side of a road frequented by hitchhikers and hold out her thumb to catch a ride. Blonde hair, compared with brown hair or black hair, was associated with a small but significantly larger number of male drivers who stopped to offer a ride (18 vs 14%). No difference was found for those with brown and black hair (14 and 13%, respectively). No effect of hair color was found for female drivers who stopped. The greater attractiveness associated with blonde hair for women appears to explain these data.

Although hair style and color are common striking and obvious features of appearance, psychological research which focuses on women's hair and particularly on women's hair color has received little attention (Hinsz, Matz, & Patience, 2001). A host of previous studies indicate that men and women differ on several mate preferences across cultures. Men (more than women) value physical attractiveness in a mate. In contrast, women (more than men) value good financial prospects and higher status (Buss, 1989; Kenrick, Groth, Trost, & Sadalla, 1993; Shackelford, Schmitt, & Buss, 2005). The importance of physical attractiveness for men, therefore, leads them to react promptly to various differences in the physical appearance of women. Prior studies have indicated that different morphological features of women are associated with varied attractiveness for the men. Furnham, Lavancy, and McClelland (2001), Henss (2000), Singh (1993), and Singh and Luis (1995) reported that lower waist-to-hip ratio of women was associated with greater physical attractiveness when evaluated by men. Another important morphological factor associated with female attractiveness is breast size. Beck, Ward-Hull, and McLearn (1976) noted that males rated more favorably a female's figure with breasts larger than average than they rated other sizes. These results were confirmed by Gitter, Lomranz, Saxe, and Bar-Tal (1983) and Furnham, Hester, and Weir (1990).

Women's hair is another physical feature that influences male perception and judgment. It has often been suggested that men find women with lighter hair color to be more attractive. However, some discrepant results

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have been found. Feinman and Gill (1978) reported that men expressed a preference for women with light hair color. Nevertheless, in a more recent study, Matz and Hinsz (2000) noted no difference when they asked female and male students about their personal preferences and perceived preferences of others for particular hair colors. Men preferred women with brown hair most (44.8%), whereas blondes were preferred next most often (37.9%), and then redheads (17.2%). However, these preferences were not reflected in the women's beliefs about women's hair color preferred by men. Women overestimated men's preferences for blonde hair (82.8%) and, then, underestimated men's preferences for brown (6.9%) and red hair (6.9%).

No difference between men's preference for women's hair colors was found when comparing brown and blonde hair; however, data showed that different perceptions were associated with various hair colors. Matz and Hinsz (2000) presented to male and female students a series of slides of women shown from the neck up. Participants were asked to make judgments concerning the age, physical attractiveness, and perceived health of the targets. Both male and female participants evaluated the women targets with blonde hair as younger than the brown-haired targets, and both were rated as significantly younger than targets with black hair. A similar pattern for judgments of health of the targets was found. Such results may have some evolutionary implication assuming males are under the pressure to disseminate their genes (Shackelford, *et al.*, 2005). Women with blonde hair, who are perceived to be younger and healthier than women with dark hair, might be considered by men to be more fertile (Buss, 1994). Some studies suggest that men are sensitive to feminine traits associated with females' abilities to have children (Manning, Scutt, Whitehouse, & Leinster, 1997; Millsted & Frith, 2003). Then, perhaps, blonde hair may be perceived by men as a sign of fertility, and males seek females perceived to be highly fertile. Symons (1995) found that women's hair color becomes darker, more coarse, and brittle after a full-term pregnancy. Thus, darker hair could be associated for men with less receptivity for mating or sexual solicitation than women with blonde hair. Matz and Hinsz (2000) stated that women with blonde hair were seen as slightly younger ($M=23.5$ yrs.) than women with brown hair ($M=23.8$ yrs.) and black hair ($M=24.3$ yrs.). These authors also noted women with blonde hair were perceived as being significantly more healthy ($M=4.5$) than women with black hair ($M=5.3$). Thus, if women with blonde hair are perceived to be younger, healthy, and more likely to be fertile, then these women might be regarded as more attractive than those with black hair.

When considering helping behavior, discrepant results were found when hair color was involved. Juni and Roth (1985) asked male and fe-

male confederates to encounter male and female street pedestrians and to solicit them for money. Confederates either wore brunette wigs or blonde wigs. Analyses showed that the hair color of male and female confederates was not associated with helping behavior for either male or female participants, so the hypothesis that blonde hair might influence helping behavior was not supported. However, recently, Lynn (in press) found the reverse. In his study, waitresses completed an on-line survey about their physical characteristics, self-perceived attractiveness and sexiness, and average tips earned. Higher tips were associated with having blonde hair. The inconsistent results of these two studies could perhaps be explained by methodological factors. In Juni and Roth's study, the sample tested by each confederate was small (9 pedestrians) with no control for the female confederates' attractiveness; only blonde and dark hair were evaluated. In Lynn's study, data were collapsed across the men and women, patron analysis was correlational as the study was not an experiment.

The effect of the attractiveness of women's hair color on men's behavior remains in question. In this experiment, women's hair color was tested in a classical request for help in which nonverbal and physical attributes of the solicitor were the only factors which could be used to influence compliance in a helping solicitation, namely, hitchhiking. In previous investigations, motorists were influenced by such factors. Apparel worn by the hitchhiker was associated with variation in motorist's behavior (Crassweller, Gordon, & Tedford, 1972). Morgan, Lockard, Fahrenbruch, and Smith (1975) and Guéguen (2007) tested female hitchhikers' bust size, noting male motorists offered rides more frequently to a female confederate with an accentuated bust compared to an average one. Guéguen and Fischer-Lokou (2004) showed that when women who were hitchhiking were smiling, male motorists stopped more frequently to offer a ride than when the same women hitchhikers were not smiling. However, when hitchhikers were men, smiling had no effect on male motorists' behavior. Hitchhiking appears to be a good setting to evaluate some social psychological variables and human behavior to test the relation of appearance of female hitchhikers and male drivers' behavior. In studies on hitchhiking, women received more rides than men (Clifford & Cleary, 1971; Pomazal & Clore, 1973; Snyder, Grether, & Keller, 1974; Morgan, *et al.*, 1975; Guéguen, 2001; Guéguen & Fischer-Lokou, 2004). Such a sex difference suggests that male motorists are more sensitive to cues related to female hitchhikers. One might hypothesize hair color of female hitchhikers could be associated with male motorists' behavior. An experiment was conducted in France where hitchhiking is legal, so one frequently sees hitchhikers on the side of the road. Mermet (2007) found that 78.5% of men and women ages 15 to 65 years old have hitchhiked. Of the motorists who stopped, 95.7% were

men. According to previous studies showing blonde hair was associated with higher positive impression, it was hypothesized that women hitchhikers with blonde hair color could be associated with more male drivers stopping than women with dark or brown hair color. Women drivers were included in the analysis given the hypothesis that the physical appearance of a female hitchhiker was not a decisive factor which could influence their behavior.

METHOD

Participants

Drivers (1,508 men, 892 women), each driving alone in a car, 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 in a place at which hitchhikers often wait for a motorist and the speed limit was 70 km per hour.

Procedure

Five young Caucasian women of 19 to 22 years were confederates. They were selected from a group of female students who volunteered and were rated by 24 male students to possess an average physical attractiveness; also, all had brown hair. In the three conditions, three different wigs, which varied only in hair color, were used; one model was used (mid-long hair and current style). Except for the color of the wig used for the three conditions (blonde, dark, and brown), the same clothes were worn by the confederate, pair of neat jeans, sneakers of light color, and a white figure-hugging shirt. In the three conditions, the confederate was instructed not to use cosmetics.

Each hitchhiker was instructed to test 480 drivers. After the passage of 120 drivers, the confederate stopped and was replaced by another confederate. Only one confederate acted at a time. The female confederates stood at the side of the road so motorists' visibility of them was good and the road zone was broad, which made stopping and restarting vehicles quite easy and safe. The experiment took place between 2 p.m. and 5 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 used two hand-held counters, one to count the female motorists and the other to count the male motorists. The convergence between the two observers' evaluation was high ($r = .98$). The confederate was also instructed to count the number of motorists and to change her wig after 40 motorists passed along the road on which the ex-

periment was carried out (about 18 to 27 min.). The order of wig color was random. When a car came, the confederate was instructed to hold her thumb (a nonverbal behavior that means in France somebody is a hitchhiker) and to look along the side of the road. Drivers who stopped were counted as helpers. 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 the help. This information procedure was used in accord with the suggestion of the Ethic Committee of the laboratory prior to the experiment. To prevent problems, a male observer discreetly observed the female confederate from a distance of 30 m from the confederate. It was not possible for the motorists to see this observer. He was instructed to come near the confederate if he was needed due to aggressive behavior. Fortunately, no intervention by this observer was required. This procedure was adapted on suggestion by the Ethics Committee.

RESULTS

The number of drivers who stopped by sex conditions is presented in Table 1.

No difference was found among the five confederates measuring the three wigs ($p > .20$), and no difference was found among the confederates irrespective of the three wigs worn ($p > .10$), so data were collapsed across confederates. With the frequencies observed, a chi-square dependency test was applied. Male motorists' responses were significantly differently distributed for the three hair color conditions ($\chi^2_2 [N=1,508]=7.22, p < .03; r = .07$). Follow-up analysis showed that the response to blonde hair was statistically greater than that for dark hair ($\chi^2_1 [N=1,004]=6.34, p < .02; r = .08$) and for brown hair ($\chi^2_1 [N=996]=3.85, p < .05; r = .06$). However, the difference in distribution of responses for brown hair and dark hair was not statistically different ($\chi^2_1 [N=1,016]=0.31, ns; r = .02$). For the female motorists, however, the number of persons responding to hair color of the confederate were not significantly different ($\chi^2_2 [N=1,892]=0.41, ns$;

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

Group		Wig Hair Color			χ^2_2	<i>p</i>
		Blonde	Brown	Black		
Male motorists (<i>n</i> = 1508)	%	18.9	14.3	13.1	7.22	.03
	<i>f</i>	93/492	72/504	67/512		
Female motorists (<i>n</i> = 892)	%	8.1	6.8	7.3	0.41	.20
	<i>f</i>	25/308	20/296	21/288		

^aTo obtain the percentage, the number of drivers who stopped was divided by the number of drivers tested in each wig condition ($(93/491) \times 100 = 18.9\%$).

$r = .02$) and no statistically significant difference was found in distribution for these comparisons. Overall, more male motorists stopped (15.4%) than female motorists (7.4%; $\chi^2_1 [N = 1,508] = 32.87, p < .001; r = .12$).

DISCUSSION

The hypothesis was supported: more drivers stopped for young women rated as being of average attractiveness with blonde hair color. This finding is congruent with the results of Lynn (in press) who stated that waitresses with blonde hair reported receiving significantly more tips than waitresses with any other hair color. However, the present results are not consistent with those of Juni and Roth (1985) who found that female confederates wearing blonde wigs when soliciting street pedestrians for money change did not receive more help than when wearing brunette wigs. This contradiction could be explained by the difference in the sample sizes of the two studies (36 pedestrians tested in Juni and Roth's study vs 800 motorists in the present study), by the difference in attractiveness of the women confederates (average in the present experiment and not controlled in Juni and Roth's study), or by the difference in the type of request for help. In the present study and in Lynn's (in press), no verbal solicitation was made but was in Juni and Roth's study. It might be useful to evaluate the interaction between hair color and type of solicitation for help.

Overall, irrespective of hair color, more men motorists than women stopped as reported previously in studies on hitchhiking behavior (Clifford & Cleary, 1971; Pomazal & Clore, 1973; Snyder, *et al.*, 1974; Morgan, *et al.*, 1975; Guéguen, 2001; Guéguen & Fischer-Lokou, 2004). Such a sex difference may perhaps be understood by the perception that stopping to offer help to an unknown hitchhiker is more dangerous for women than for men.

Previous research focusing on perception and judgment of female targets, hair color showed that those with blonde hair were perceived as younger and healthy than brown-haired targets (Matz & Hinsz, 2000). Present results suggest that blonde hair is not only associated with more positive evaluation of age and health, but also has greater behavioral interest of men. Helping women confederates with blonde hair is also consistent with being young and in good health, physical components associated with fertility (Manning, *et al.*, 1997; Millsted & Frith, 2003). Men are reported as being more sensitive to such physical traits (Buss, 1994). Thus, when becoming blondes, the present confederates also may have become more attractive to men motorists, as reflected by more male drivers offering their help.

This experiment had some limitations. Only blonde, brown, and black colors were tested, not red hair color; in France, red hair color occurs in about 4% (Mermet, 2007) and is sometimes associated with negative con-

notations. One could add a test for this color associated with drivers' behavior. No one has yet assessed associations of men's hair color.

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