

PREFERENCES FOR PHYSICAL CHARACTERISTICS IN A MATE:  
A TEST OF SIMILARITY, IMPRINTING AND PSYCHODYNAMIC  
PARADIGMS

by


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ACCEPTED


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### ABSTRACT

To date, no single study has compared the current attraction paradigms (similarity-attraction, imprinting, psychodynamic) for their ability to account for individual differences in attractions for physical characteristics. The study to be presented tested how well the three attraction paradigms accounted for individual differences in preferences for physical characteristics in a mate, and in choices of physical characteristics in spouses and dating partners.

The similarity-attraction paradigm (social psychology) proposes that individuals would be attracted to partners with physical characteristics similar to their own. The imprinting paradigm (ethology) proposes that individuals would be attracted to partners with the characteristics of their early primary caretaker (usually female). The psychodynamic paradigm proposes that individuals would be attracted to partners with the physical characteristics of their opposite-sex parent.

147 female and 102 male university students stated preferences for seven physical characteristics in a mate: height, weight, slimness, muscle development, size of

build, hair color, and eye color. Subjects' preferences for the characteristics were compared with their own physical characteristics and their parents' or early caretakers' characteristics (as reported by subjects). For subjects with spouses or regular dating partners, subjects' preferences were also compared with their partners' characteristics (as reported by subjects).

A canonical correlation analysis found significant multivariate relationships between the preferences of each sex and the physical characteristics of subjects, subjects' mothers and subjects' fathers. The univariate correlations for each preference and corresponding physical characteristic were examined next.

The univariate results for women's preferences provided support for the similarity-attraction and psychodynamic paradigms, but no support for the imprinting paradigm. Women's preferences were significantly correlated with their own physical characteristics for: height ( $r=0.45$ ), weight ( $r=0.27$ ), slimness ( $r=0.20$ ), build size ( $r=0.18$ ), hair color ( $r=0.18$ ), and eye color ( $r=0.17$ ) (similarity-attraction). In addition, women's preferences were significantly correlated with their fathers' characteristics for: height ( $r=0.38$ ), weight ( $r=0.41$ ), and muscle development ( $r=0.19$ ) (psychodynamic). No significant correlations were found between women's preferences and their mothers' characteristics

(imprinting).

The univariate results for men's preferences provided support for the psychodynamic, imprinting, and similarity-attraction paradigms. Men's physical preferences were significantly related to their mothers' characteristics for: height ( $r=0.36$ ), weight ( $r=0.29$ ), slimness ( $r=0.37$ ), and build size ( $r=0.42$ ) (psychodynamic and imprinting). In addition, men's preferences were significantly related to their own characteristics for: height ( $r=0.33$ ), slimness ( $r=0.30$ ), and muscle development ( $r=0.23$ ) (similarity-attraction).

The combined pattern of preferences for men and women appeared to best support a combined psychodynamic and similarity model.

For women, the observed relationships between preferences and physical characteristics were weaker for women with partners than women without partners. For men, the relationship between men's preferences and their own physical characteristics were weaker for men with partners, but the correlations between preferences and mothers' characteristics were equally strong for men with and without partners.

The preferences of subjects with partners were strongly related to their partners' characteristics. For women, the correlations ranged from  $r=0.28$  (slimness) to  $r=0.84$  (weight). The correlations for men ranged from  $r=0.15$

(hair color) to  $r=0.79$  (weight). Based on the cross-sectional sample of individuals with and without partners, it was suggested that individuals, particularly women, may shift their preferences from personal and parental characteristics to their partners' characteristics when they establish regular dating relationships.

Actual partner choices provided little support for the three attraction paradigms. Few significant correlations were found between the physical characteristics of partners and the physical characteristics of subjects, or their parents.

In addition, the study found evidence of a general preference for slimness, a strong male preference for women with blond hair and blue eyes, and a weaker female preference for tall men with dark hair.

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## INTRODUCTION

The purpose of this thesis is to investigate how well three current attraction paradigms account for individual differences in personal preferences for physical characteristics and choices for physical characteristics in a spouse or dating partner.

Laboratory and field studies have indicated that individuals vary widely in whom they consider physically attractive (Ilfiffe, 1960; Cross and Cross, 1971), particularly when they are rating the attractiveness of 'average-looking' people (Berscheid and Walster, 1974; Lucker, Beane and Guire, 1981), or are rating persons rather than photographs (Walster, Aronson, Abrahams and Rottman, 1966; Berscheid, Dion, Walster and Walster, 1971). With respect to specific physical characteristics, Wiggins, Wiggins and Conger (1968) found large variabilities in the preferences of males for females' breast, buttocks, and leg sizes. Variation in attractions may also be inferred from mating studies which have found correspondences between the physical characteristics of husbands and wives (Spuhler, 1982).

A positive appraisal of physical appearance on first meeting someone helps to evoke interest and sustain it

through the longer process of getting to know the person (Byrne, 1971; Davis, 1973; Murstein, 1976; Lyman, Hatfield and Macurdy, 1981). More positive affective, personality, and behavioural attributions are made about people who are seen to be more attractive (Berscheid and Walster, 1969, 1974; Miller, 1970; Dion, Berscheid, and Walster, 1972). However, sex differences have been reported in the emphasis placed on physical appearance in choosing spouses and dates. In comparison to females, males have consistently reported a greater emphasis on physical attractiveness in making dating choices (reviewed in Berscheid and Walster, 1969), and selecting mates (Hudson and Henze, 1969). Physical attributes may also play a greater role in defining attractiveness for males than for females (Berg, 1975). Women, on the other hand, tend to place greater importance than men on social variables, such as dress and financial prospects (Berg, 1975; Hudson and Henze, 1969). In summary, while individual differences have been reported in both male and female attractions for physical characteristics, males may be more likely to select dates and spouses on the basis of their physical characteristics.

Three current attraction paradigms generate predictions about the physical characteristics individuals would find attractive in spouses or dating partners. The similarity-attraction paradigm, derived from social psychology (Byrne, 1971) proposed that if the sharing of

specific attributes was rewarding, individuals would be attracted to persons with attributes similar to their own. The psychodynamic position (Freud, 1953), which emphasized the sexual role of the opposite-sex parent in the child's socio-sexual development, proposed that most men would be attracted to women with their mother's attributes, and most women would be attracted to men with their father's attributes. Third, the imprinting paradigm (Scott, 1963), derived from ethological studies (Lorenz, 1937; Hess, 1973) proposed that early social exposure to the primary caretaker would have an impact on future attractions. That is, individuals would become attracted to partners with the characteristics of their early primary caretaker (usually mother).

In an extensive literature review, no study was found that compared how well the three paradigms predicted physical attractions in a single population. In most studies only one paradigm is studied at a time. For example, mating studies have usually examined the physical correspondences between husbands and wives for evidence of marital homogamy (similarity-attraction), but have not attempted to determine whether other physical influences might also shape attractions. The study to be presented compares all three paradigms and also appears to be the first to examine physical attractions by looking at both physical preferences and the physical characteristics of

partners.

The similarity-attraction, imprinting, and psychodynamic paradigms are discussed below in greater detail.

1) Similarity-Attraction Paradigm:

An underlying theme of interpersonal attraction research is that people like people who reward them. According to similarity theory, similarities to the self are rewarding. While most of the research to date has concerned similarities in attitudes and physical attractiveness, theoretically similarity for any variable which is potentially rewarding will promote liking (Byrne, 1971).

The relationship between attitude similarity and liking has been found to be extremely stable. Byrne and his colleagues found that attraction increased as a linear function of the proportion of similar attitudes. Subjects who shared more attitudes with a peer liked the peer more. When the topics varied widely in impact from major to minor importance, a weighted proportion of shared attitudes was found to be more indicative of liking.

In studies of mate selection, the importance of sociocultural similarities in couples has long been established. Homogamy of sociocultural characteristics is

important in defining 'the field of eligibles', the group of potential mates to whom an individual has access (Winch, 1958). People tend to select mates of similar age, socioeconomic status, race, educational level, religion, and marital experience (Burgess and Wallin, 1944; Garrison, Anderson and Reed, 1982; Vandenburg, 1972, Buss, 1984).

Similarities in personality and behavioural variables also appear to be important; significant marital correlations have been observed for neuroticism, dominance, intelligence measures, values (Burgess and Wallin, 1944, Vandenburg, 1972), alcohol consumption, and smoking (Buss, 1984).

These findings have led researchers to propose that mate selection was directed in part by a drive toward homogamy (Burgess and Wallin, 1944; Garrison, Anderson and Reed, 1982; Spuhler, 1982).

With respect to physical appearance, similarity of physical attractiveness has been shown to influence liking. Several researchers have demonstrated that men tend to date women of similar attractiveness (Berscheid and Walster 1969, 1974; Berscheid et. al, 1971; Murstein, 1972). Greater similarity in attractiveness has been found for members of couples who fell in love shortly after meeting, compared to those whose relationships evolved from friendship to love (Feingold, 1982). Berscheid et al. (1971) developed the 'matching hypothesis' to explain selection for similarity of attractiveness. The matching

hypothesis proposed that less attractive individuals would prefer more attractive dates, but choose dates of similar attractiveness because they fear rejection by those more attractive than themselves. Accordingly, self-image was found to influence choice. If a man, for example, believed that he was unattractive, he tended to choose a date less attractive than himself (Stroebe, Insko, Thompson and Layton, 1971).

Physical correspondences other than for physical attractiveness have been found in married couples in studies of 'assortative mating'. Positive assortative mating, or homogamy, is a deviation from random mating in which "like" individuals preferentially mate with each other (Cavalli-Sforza and Bodmer, 1971). Spuhler (1982) documented assortative mating studies for 105 physical characteristics in 40 human populations. The largest marital correlations found in American and English populations were for age. Generally, it has been observed that women tend to marry men slightly older than themselves. Strong though inconsistent evidence for assortative mating was also found for stature and somatotype variables: stature, forearm length, weight, minimum waist circumference, wrist circumference, and arm circumference. Weaker assortative mating was found for hair color and eye color. Although structural head and facial measurements have shown little evidence of

assortative mating, high marital correlations were found for some height-related (Olivier, 1969) facial characteristics: interpalpebral breadth (distance between eyes), ear length, and mouth shape. Such evidence for assortative mating appears to provide direct support for an extension of the similarity-attraction paradigm to physical characteristics.

Selection for similarities in physical characteristics may be rewarding for several reasons. Moreland and Zajonc (1982) have proposed that familiarity alone may be sufficient to promote the liking of another person. Second, a physical resemblance might lead an individual to project that a person is similar in other ways that may be rewarding. Third, selection for physical characteristics linked with activity level, health, and culture may be motivated by a need for social comparison, or the desire to pursue a common lifestyle.

In summary, research on attitudes, attractiveness, and mate selection has indicated that the similarity-attraction paradigm influences attractions for physical characteristics as well as for attitudes, physical attractiveness, sociocultural characteristics, and some behaviours.

## 2) Social Imprinting Paradigm:

The social imprinting position, derived from studies of

animal behaviour (Lorenz, 1937; Scott, 1963; Hess, 1973), proposes that early attachments have permanent effects on attractions and mate selection. Essential to the imprinting approach is the existence of a 'critical period' of rapid neural development early in a child's life during which the child is highly receptive to social stimuli. Changes in brain organization produced during the critical period for socialization become fixed and relatively permanent, inhibiting later changes (Scott, 1963). The child sensually 'fixes on' or permanently bonds with any person in prolonged contact during this period.

Socialization experienced during the critical period has lasting effects on future socialization. It determines the groups of people to whom an individual will become attached and discourages the development of relationships with dissimilar groups (Scott, 1972). Simply put, the individual is stamped, or imprinted, by his or her early experience to prefer certain groups of people over others.

Studies of sexual imprinting in animals directly implicated the effect of early socialization on choices for physical characteristics in a mate. In animal studies, young animals have been shown to visually imprint on the physical characteristics of surrogate caretakers and siblings as well as their natural parents. At maturity, the animals sought out mates with similar physical characteristics to their caretakers or early companions.

For example, when male turkeys were hand-reared from birth, they were found to sexually imprint on their human caretakers. Given the choice to either court a female turkey or a human, the turkey preferred to court the human even though its courtship ritual produced no response by the human (Scott, 1968).

Imprinting mediated by visual cues leads some birds to discriminate in mate selection between birds of the same species which have different forms of a polymorphic trait, such as plumage color. Snowgeese tend to select lifemates with the same plumage color as their parent geese or siblings (Cooke, 1983).

Scott (1963, 1968) proposed the model for human primary socialization. He defined the critical period for socialization as the period beginning with the regular appearance of a social smile (five to six weeks, Spitz and Wolf, 1946), and ending with the appearance of a strong fear response to strangers (around seven and one-half months). Social smiles, which are smiles in response to seeing a human face or mask, indicate that an infant is responding positively and generally to human facial stimuli. At the advent of a regular social smile until the end of critical period, people can easily approach and develop a social relationship with an infant. The end of the critical period is signalled by a gradually increasing fear response to strangers. By approximately seven and

one-half months, the smiling response is largely inhibited in the presence of strangers.

Primary socialization in humans is unique in at least three major aspects from that of other animals. First, the length of time that primary socialization takes allows learning to play a stronger role in behaviour fixation than for other animals. Second, because of the human's ability to speak, later verbal learning may conflict with early nonverbal learning. Long periods of associative learning may nearly duplicate the effects of imprinting (Hess, 1973). For humans then, learned relationships would increase the range of acceptable social stimuli but would not displace the basic bonds to primary caretakers. Third, human fertility and family organization ensure that infants are mainly exposed to older people during the critical period for socialization (Scott, 1963). Most women bear children singly, as opposed to multiple births, and assume the primary caretaker role. In a one-child family in particular, the mother would have the most contact with the child. Consequently the infant would imprint most strongly on the mother, and less strongly on the father unless he played a significant role in the child's care.

— No human studies were found which provided conclusive support for the imprinting paradigm prediction that males and females select the physical characteristics of primary caretakers when choosing mates.

### 3) Psychodynamic Paradigm:

The major proponent of psychodynamic theory and its effects on attraction and mate selection was Freud. Freud's theory of the Oedipus complex emphasized the dominant influence of the opposite-sex parent in the development of the sexuality and attractions of the child. The intensity of the Oedipal conflict and its effects on sexuality were proposed to be much stronger for males than females. For males, Freud considered it to be 'the nuclear complex of the neuroses' (Freud, 1953, p.228).

The attachment and subsequent attraction the young male child feels toward his mother is enhanced by his mother's caring caresses (Freud, 1953). When the child is four or five years old, his interest in his mother takes on a clear sexual coloring. He fixates on her as a sexual partner (Fisher and Greenberg, 1977) and begins to see his father as a rival for his mother's affections. Fear of his father drives the child to unconsciously repress his physical attraction toward his mother, and he resolves the conflict by a closer identification with his father. After a latency period, the child's heterosexual interest resurges at puberty, and he redirects his sexual interest from his mother to young women. If he has successfully resolved his Oedipal conflict (the fear of reprisal from his father),

the young man will tend to be attracted, because of his childhood attraction, to women who resemble his mother.

The extent of attraction for his mother's characteristics depends on the young man's relationship with his mother and how well he resolves his Oedipal conflict. If his relationship with his mother has been a difficult one or he has not resolved his 'Oedipal conflict', he will tend to select someone very different from his mother. A more ambiguous choice could result from unconsciously held feelings.

The major prediction regarding attraction for physical characteristics that flows from this model is that males who have positive relationships with their mothers will be attracted to women with their mothers' physical characteristics. A second prediction is that males who have poor relationships with their mothers will be less likely to be attracted to women who resemble their mothers.

Freud hypothesized that the Oedipal process was less intense for females and less central to the development of their sexuality. The female model has been heavily criticized as vague and empirically contradictory (Fisher and Greenberg, 1977). With regard to the development of female attractions, the model proposes that young girls develop eroticized attitudes toward their fathers which exert a later influence on her sexual choices. According to this model, one would predict that women would be

attracted to men who resembled their fathers, although to a lesser extent than men would find women who resembled their mothers attractive.

Subsequent research has disputed the dynamics of both the male and female Oedipal models (reviewed in Murstein, 1976, and in Fisher and Greenberg, 1977). With respect to mate selection, the dynamics of Freud's models may be of less importance than the recognition that the early mother-son and father-daughter relationships may predispose individuals to select mates similar to their opposite-sex parents (Miller, 1969).

If Freud's predictions regarding parental similarity and opposite-sex attraction are valid, alternative hypotheses may be required to account for predicted behaviour. Positive relationships between the appearances of spouses and opposite-sex parents might be explained by other factors related to sex-role identification, such as positive associations between the 'caring' role of the parent and the sex and appearance of the parent. Alternatively, children may learn to associate femininity with their mothers' appearances and masculinity with their fathers'. The relatively weaker effect of the father's appearance on his daughter's attractions, predicted by the model, might in part be due to the lesser contact daughters have with their fathers or an inherent difference in the way males and females perceive the opposite sex. In

summary, a combination of factors, the caring role of the parent, the identification of sex-roles and sexual attributes, parental contact, and inherent sex differences, may all contribute to the development of the child's attractions and generate similar predictions to those of the psychodynamic hypothesis. (In the study to be presented, no attempt was made to distinguish between these propositions. All were combined together as the psychodynamic prediction.)

Studies which have investigated the connection between attractions and the appearance of the opposite-sex parent have provided inconsistent support for the psychodynamic prediction. Schiller (1932) found correspondences in height, hair color and eye color in women's fathers and husbands in a sample of Eastern European couples. Ham (1983) found a significant correlation for men's mothers' and wives' hair colors in a mixed North American sample. In both studies however, the corresponding relationships for the other sex were weaker.

In an early study of two hundred married men and women, Hamilton and McGowan (1929) found that men who reported that their wives were physically similar to their mothers were more likely to be rated as happily married. Although this group constituted only 17 percent of the sample, 94 percent of these men rated themselves as being happily married, compared to only 33 percent of the men married to

women physically unlike their mothers. No relationship was found between women's marital stability and the reported similarity between women's husbands and fathers.

Miller (1969) tested Freud's hypothesis that females were sexually attracted to their fathers. He asked women to rate different male body types (from Sheldon, 1954) in order of erotic preference and compared their choices with their fathers' body types. Over half the women ranked their fathers' physique as the one most preferred in a lover.

In summary, no studies were found which provided conclusive support for the psychodynamic prediction that men will be attracted to women who resemble their mothers, or women to men who resemble their fathers. The studies looked at resemblance using only a few physical measures, with inconsistent results.

### Introduction to the Study

The study to be presented was designed to test the support for similarity, imprinting, and psychodynamic predictions about physical attraction in a Caucasian population. The study investigated whether personal and parental characteristics were related first, to men's and women's preferences for physical characteristics in a mate, and second, to the physical characteristics of spouses and

regular dating partners.

An assumption made in the use of preferences was that personal attractions or preferences for characteristics consciously or unconsciously guide the choice of a mate, and therefore have predictive value for mate choice. In terms of a theoretical model of mate selection, preferences or attractions might be considered a variable through which psychological mechanisms underlying the process of mate choice would act.

The seven physical features chosen for investigation were height, weight, slimness, size of build, muscle development, hair color and eye color. These variables were considered to be immediately visible characteristics which provided a superficial description of an individual, and therefore might provide the most obvious basis for choosing physical similarities. The variables were also easily discriminable and had broad ranges in the Caucasian population studied.

The following hypotheses and decision rules were developed. The similarity hypothesis predicts that individuals' preferences for physical characteristics (and their partners' characteristics) will be related to their own characteristics. In contrast, the imprinting hypothesis predicts that individuals' preferences (and their partners' characteristics) will be related to their early primary caretakers' (usually mothers)

characteristics. The psychodynamic hypothesis predicts that individuals' preferences (and their partners' characteristics) will be positively related to their opposite-sex parents' characteristics.

For males, the imprinting and psychodynamic hypotheses predict a similar outcome, the development of preferences for their mothers' characteristics and the choice of partners with their mothers' characteristics. One way that might distinguish between imprinting and psychodynamic selection processes would be to consider the affective nature of the relationships between males and their mothers. Imprinting theory would be supported if males' preferences (or partners' characteristics) were related to their mothers' characteristics whether males liked their mothers or not. Psychodynamic theory would be supported if males' preferences (or partners' characteristics) were related to their mothers' characteristics only when males liked their mothers.

While stated in terms of preferences, the following decision rules apply both to subjects' preferences and partners' physical characteristics. The similarity-attraction paradigm would be supported for a physical characteristic and the other paradigms would not if all the following conditions were met:

- (a) the correlation between subjects' preferences for the characteristic and their own characteristics was

positive and significant,

(b) the correlation between subjects' preferences for the characteristic and maternal characteristics was not significant (contradicts imprinting hypothesis and psychodynamic hypothesis for males), and

(c) the correlation between females' preferences for the characteristic and paternal characteristics was not significant (contradicts psychodynamic hypothesis for females).

The imprinting paradigm would be supported for males for a physical characteristic and the other paradigms would not if all the following conditions were met:

(a) the correlations between males' preferences for the characteristic and the characteristics of liked and disliked mothers were positive and significant (contradicts psychodynamic hypothesis), and

(b) the correlation between males' preferences for the characteristic and their own characteristics was not significant (contradicts similarity hypothesis).

The imprinting hypothesis would be supported for females for a physical characteristic and the other paradigms would not if all the following conditions were met:

(a) the correlation between females' preferences for

the characteristic and mothers' characteristics was positive and significant,

(b) the correlation between females' preferences for the characteristic and their own characteristics was not significant (contradicts similarity hypothesis), and

(c) the correlation between females' preferences for the characteristic and their fathers' characteristics was not significant (contradicts psychodynamic hypothesis).

The psychodynamic hypothesis would be supported for males for a physical characteristic and the other paradigms would not if all the following conditions were met:

(a) the correlation between males' preferences for the characteristic and the characteristics of liked mothers was positive and significant,

(b) the correlation between males' preferences for the characteristic and the characteristics of disliked mothers was not significant (contradicts imprinting hypothesis), and

(c) the correlation between males' preferences for the characteristic and their own characteristics was not significant (contradicts similarity hypothesis).

The psychodynamic hypothesis would be supported for

females for a physical characteristic and the other paradigms would not if all the following conditions were met:

(a) the correlation between females' preferences for the characteristic and their fathers' characteristics was positive and significant,

(b) the correlation between females' preferences for the characteristic and their own characteristics was not significant (contradicts similarity hypothesis), and

(c) the correlation between females' preferences for the characteristic and their mothers' characteristics was not significant (contradicts imprinting hypothesis).

Two or more attraction processes would be found to act concurrently if significant positive correlations were found between preferences (or partners' characteristics) and the characteristics of more than one person (subject, mother, father). In such cases, it would be inappropriate to assign support exclusively to the theoretical hypothesis which produced the largest correlation. There is no a priori reason to believe that any of the theoretical positions necessarily exclude the others, or that attractions for all physical characteristics would develop in the same way. Rather, it is conceivable that all three theoretical paradigms may interact to influence attraction

and mate choice.

In addition to the theoretical paradigms, two other factors were examined which the investigator felt would have an effect on preferences for physical characteristics in a mate, the presence of a dating partner or spouse (would subjects prefer their partners' characteristics?) and second, the existence of culturally ideal values for the characteristics examined (would subjects commonly prefer certain values of a characteristic over others?).

## METHODS

### Subjects:

The subjects in the study were Caucasian university students solicited from classes and by wall poster at the University of Victoria. 147 women and 102 men took part in the study. The subjects ranged in age from 17 to 45 years. On average, the women were approximately two years younger than the men (for women  $X = 21.1$  yrs.,  $s.d. = 4.76$ ; for men  $X = 22.9$  yrs.,  $s.d. = 5.58$ ). Eighty-nine percent of the sample was unmarried (131 women, 91 men). Of the unmarried subjects, 43.5% of the women ( $n=57$ ) and 47.3% of the men ( $n=43$ ) had no regular dating partners.

Most subjects identified their mothers as their primary female caretakers (96.6% of the women, 98.0% of the men), and their fathers as their primary male caretakers (91.2% of the women, 93.1% of the men). Other females identified as primary female caretakers were stepmothers or adopted mothers ( $n=5$ ) and sisters ( $n=2$ ). Other males identified as primary male caretakers were stepfathers or adopted fathers ( $n=11$ ), mothers' common-law husbands ( $n=2$ ), and one brother-in-law. Six subjects reported the absence of a primary male caretaker from an early age.

Physical Variables Investigated:

Information about preferences and physical characteristics was obtained for the following seven variables: height, weight, slimness, muscle development, size of build, hair color, and eye color.

Procedure:

When the subject entered the room, the experimenter gave the subject a questionnaire and introduced the charts and guides the subject had to use to report preferences and physical characteristics. A copy of the questionnaire is contained in Appendix A. After this introduction the subject filled out the questionnaire. The experimenter stayed in or near the study room to answer any questions that arose. When more than one subject was in the room at one time, subjects were requested not to discuss their responses with each other.

In the first part of the questionnaire, subjects reported personal information (sex, age, marital status) and personal preferences for the seven physical variables in a spouse. A first preference and a range of preferences was reported for each physical variable. After reporting preferences, subjects rated each variable for its importance to the physical appearance of a spouse.

Second, subjects reported their own characteristics for

the seven variables.

Third, if they were married or had regular dating partners, subjects reported the length of their marriage or relationship and the characteristics of their partners for the seven variables. Subjects were requested to report their partners' characteristics at two different periods, 1) when they started dating, and 2) at the present (where the person described had changed).

Fourth, subjects were requested to identify their primary male and female caretakers and to report their characteristics for the seven variables (first female, then male caretaker). Again, they were requested to report characteristics at two different periods, 1) as they recalled their caretakers' characteristics as children, and 2) at the present (where the person described had changed).

Finally, subjects were requested to describe their relationships with each caretaker along four affective dimensions; positiveness of relationship, closeness, friendliness, and compatability.

At the end of the questionnaire, subjects were questioned about prior knowledge of the experimental hypotheses and procedures. The experimenter then measured each subject's height, weight, hair color, and eye color, and estimated their slimness, muscle development, and size of build. Following the experimenter's measurements, the subject was debriefed as to the experimental hypotheses,

and requested not to divulge hypotheses and procedures to other students.

Materials and Scales:

Height. Subjects were requested to report heights according to the following categories: (1) shorter than 5' (2) 5'-5'2" (3) 5'3"-5'4" (4) 5'5"-5'6", (5) 5'7"-5'8" (6) 5'9"-5'10" (7) 5'11"-6' (8) 6'1"-6'2" (9) 6'3"-6'4" (10) taller than 6'4". A height guide was provided to subjects to help them define heights which may have been much shorter or taller than themselves. Three semi-androgynous outlines of figures with the following heights were taped to the wall: 61 inches, 67 inches, and 73 inches. The experimenter measured subjects' heights using a tape measure taped to the wall.

Weight. Subjects were requested to report weights in five-pound categories, ranging from 'less than 80 lbs.' to 'greater than 280 lbs.'. The experimenter measured subjects' weights on a bathroom scale.

Slimness. Slimness was rated on a 9-point scale from (1) very thin to (9) very fat.

Muscle development. Muscle development was rated on a 9-point scale from (1) minimal muscle development to (9)

very muscular.

Size of build. Size of build was rated on a 9-point scale from (1) very small build to (9) very large build.

Hair color. Hair colors were selected from a 15-color, modified Fischer-Saller scale of human hair swatches. The original 32 shades on the scale were grouped into 15 easily distinguishable shade groups (see Table 16, Appendix B). The groups of swatches were taped to a piece of white card and sandwiched between a sheet of clear plexiglass and a piece of board.

Shades from light blond to black, including some reds, were represented on the scale. Grey, white, bright red, and dark black shades were not represented. Subjects were told to write down the name of a color if they could not find it on the scale.

The hair color chart formed an ordinal scale with close to interval scale characteristics. Color swatches were positioned on the original scale according to the percentages of blond hairs and darker hairs in the swatch. In the modification, the swatches were visually grouped by two judges to reproduce as closely as possible an interval scale of hair darkness.

Eye color. Eye colors were selected from a chart made up

of 20 photographic color slides of human irises (Gale, Rosenblood, and Ham, 1984). The chart was illuminated by a light table. The chart described a color and darkness continuum from light blue-green to dark brown eyes.

Position on the scale was moderately well correlated with the darkness of the eye, as measured by the opacity of the iris image on the slide ( $r=0.76$ ). The organization of the eye color chart and the opacity measurements on the color slides are presented in Table 17, Appendix B.

Positiveness of relationship. Positiveness of relationship to a primary caretaker was rated on a 9-point scale from (1) 'very negative' to (9) 'very positive'. A rating lower than '5' indicated a negative attitude.

Closeness. Closeness to a primary caretaker was rated on a 9-point scale from (1) 'very distant' to (9) 'very close'. A rating lower than '5' indicated some distance.

Friendliness. Friendliness to a primary caretaker was rated on a 9-point scale from (1) 'very unfriendly' to (9) 'very friendly'. A rating lower than '5' indicated an unfriendly attitude.

Compatibility. Compatibility with a primary caretaker was rated on a 9-point scale from (1) 'very incompatible' to

(9) 'very compatible'. A rating lower than '5' indicated some incompatibility.

Importance. The importance of a variable to the physical appearance of a spouse was rated on a 9-point scale from (1) 'not at all important' to (9) 'very important'.

The nine-point anchored, non-grounded scales, used for slimness and other physical and attitude variables, provided a cross-modal method of magnitude estimation (Coren, Porac and Ward, 1984) that minimized verbal mediation. Subjects rated the magnitude of a recalled stimulus by marking distance on a partitioned line.

## ANALYSES

Overview. In order to test the support subjects' preferences provided for the similarity, imprinting, and psychodynamic paradigms, multivariate and univariate correlational procedures were used to determine the amount of correspondence between subjects' preferences for physical characteristics and the characteristics of source persons (self, mother, father). To test the support partner choices provided for the paradigms, multivariate and univariate correlational procedures were used to determine the amount of correspondence between partners' characteristics and the characteristics of source persons.

The analytical procedures and the reasons for using them are discussed below.

Correlational Analysis. To enable direct comparisons with other studies, the univariate correlation statistic was chosen to measure the relationship between preferences and physical characteristics and between the physical characteristics of two persons. Univariate correlations have been the most commonly used statistic in research involving physical comparisons, such as studies of assortative mating (Spuhler, 1982).

In this study, a two-step correlational procedure was used due to the large number of comparisons planned.

First, canonical correlation analysis was used as the multivariate test of overlap between two sets of variables to enable the experimenter to interpret the univariate intercorrelation matrices without problems of alpha errors. This is similar to the use of a significant multivariate F-test in manova to allow the experimenter to look at the univariate F-tests. The canonical correlation measures the overlap between two sets of variables in the overall variable space. When a significant canonical correlation is found according to the Greatest Characteristic Root, Wilk's Lambda, or Harris' (1976) procedure, then the univariate correlations between variables in opposite sets may be interpreted without problems of alpha errors (Longman and Rosenblood, 1985). When the multivariate test for a large number of comparisons is not significant, the significance of univariate correlations may be due to chance.

Canonical correlation analysis (SAS, 1982) was used to test the overlap between subjects' preferences (by sex) and: 1) their own characteristics, 2) their primary caretakers' (usually mothers) characteristics (as recalled when the subjects were young), and 3) their opposite-sex caretakers' characteristics (as recalled when the subjects were young; same for males as (2)). In addition, separate canonical correlation analyses were done for subjects with partners and subjects without partners, by sex. Second,

canonical correlation analysis was used to test the overlap between partners' characteristics, for subjects with partners, and: 1) subjects' characteristics, 2) subjects' primary caretakers' (usually mothers) characteristics, and 3) subjects' opposite-sex caretakers' characteristics.

When the GCR test in the canonical correlation analysis was significant (Wilk's Lambda 1-p test was also presented for comparison), the pattern of significance in the univariate intercorrelation matrix between the two sets of variables was interpreted. For example, the correlations between subjects' characteristics and their preferences for those characteristics were examined.

Two sets of intercorrelation matrices were examined based on different numbers of subjects. The canonical correlation analyses included only those males and females whose data were complete for all the variables examined (all preferences and physical characteristics). This was done in order to compare the multivariate relationships between preferences (or partners' characteristics) and the characteristics of different source persons. Thirty-five subjects whose data was incomplete for one or more variables (mother's eye color, for example) were consequently excluded from the multivariate analyses (22 females and 13 males). These subjects were subsequently included in the univariate analyses as it was found that the univariate correlations for the subsets of

data-complete males and females and the larger samples were similar. The Results section will report the univariate correlations for the larger samples (the univariate correlations for the subsets are presented in Appendix C). The major assumption made in interpreting the univariate correlations for the larger samples was that the Type I error rates of the intercorrelation matrices for the subsets and larger samples were the same.

## RESULTS

### 1. Agreement between the Experimenter's Ratings and Self-Reported Ratings of Subjects' Characteristics

Canonical correlation analyses were done to test the overlap between the experimenter's ratings of subjects' characteristics and the subjects' self-reported ratings (computer printouts in Appendix D). All subjects with complete data for the two sets of ratings were included in the analyses ( $n=236$ ). The experimenter's ratings were strongly, significantly related to the subjects' ratings (all subjects:  $n=236$ ,  $r^2=0.9676$ , Roy's Greatest Root = 29.9076,  $F(7,228)=974.1344$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.0004,  $F(49, 1131.48) = 82.5549$ ,  $p<.0000$ ; female subjects:  $n=135$ ,  $r^2=0.9718$ , Roy's Greatest Root = 34.4090,  $F(7,127)=624.2780$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.0003,  $F(49, 618.72)=51.1171$ ,  $p<.0000$ ; male subjects:  $n=101$ ,  $r^2=0.9132$ , Roy's Greatest Root = 10.5234,  $F(7,93)=139.8108$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.0013,  $F(49, 446.11)=24.7219$ ,  $p<.0000$ ).

Table 1 presents the univariate correlations between the experimenter's ratings of males' and females' characteristics, and the subjects' self-reported ratings. High correlations were found for height, weight, and hair

Table 1.  
Correlations between the experimenter's ratings and the self-reported ratings of subjects' characteristics.

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<u>Variables</u>	<u>Males</u>	<u>Females</u>	<u>Overall</u>
Height	.9411 n=101	.9593 n=145	.9719 n=246
Weight	.9289 n=101	.9703 n=139	.9641 n=240
Slimness	.6850 n=102	.6355 n=144	.6584 n=246
Muscle development	.4533 n=102	.2908* n=145	.4811 n=247
Size of build	.3793 n=102	.5244 n=147	.4830 n=249
Hair color	.8674 n=102	.8884 n=145	.8789 n=247
Eye color	.6873 n=102	.7362 n=146	.7177 n=248

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p<.0001, unless otherwise specified. \* p<.0004.

color ( $r > 0.85$ ). Moderate agreement was found for eye color and slimness ( $r > 0.65$ ). Low agreement was found for muscle development and size of build ( $r < 0.50$ ).

Kolmogorov-Smirnoff tests (Siegel, 1956) were used to compare the distributions of experimenter and self-reported ratings for each characteristic to determine whether the range of the experimenter's ratings represented the range and distribution of self-reported ratings in the subject sample. For males, the distributions of ratings were not significantly different for any of the variables ('weight in pounds' was not compared). For females, the distributions of ratings were significantly different for muscle development and size of build. Compared to the experimenter's ratings, women overall, tended to rate themselves as having a wider range of builds ( $D(147,147) = 0.1972$ ,  $p < .01$ ) and generally greater muscle development ( $D(146,146) = 0.3562$ ,  $p < .001$ ).

It is likely that the experimenter's ratings were more accurate in the measurement of subjects' eye colors and slimness. In the case of eye color, the subjects depended on recall of their eye colors whereas the experimenter was able to closely compare each subject's eye and the chart. In the case of slimness, an objective measure, the ponderal index was available for measuring accuracy. The ponderal index, a ratio of height to weight, is a commonly used measure of endomorphy, or fatness. The experimenter's

ratings of subjects' slimness were more related to the subjects' ponderal index values, than were the subjects' ratings of their own slimness (Table 2, below).

Table 2.

Correlations between ratings of slimness and the ponderal index, for the experimenter's ratings and subjects' ratings of subjects' slimness.

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	<u>Experimenter's ratings</u>	<u>Subjects' ratings</u>
Males	0.7381	0.6692
Females	0.7638	0.6320

---

The experimenter's ratings were probably less accurate for muscle development and size of build, as the ratings were made on fully clothed individuals.

Due to the low agreement between the experimenter's and subjects' ratings for some variables, a combination of the two sets of ratings was used in the correlational analysis. Subjects' ratings were used for variables rated along semantic differential scales (slimness, muscle development and size of build). As these scales contained no objective referents, subjects' ratings provided the necessary self-reference points for measuring similarities between preferences (or physical characteristics) and the physical

characteristics of parents, subjects, and partners.

The experimenter's ratings were used for variables measured with instruments or charts: height, weight, hair color, and eye color. For height, weight, and hair color, there was good agreement between the experimenter's and the subjects' ratings. For eye color, which showed moderate agreement, subjects chose colors from the same visual charts used by the experimenter. As objective visual stimuli were provided, subjects' ratings of their own eye colors should not have affected their preference choices and their ratings of others' eye colors.

In summary, the experimenter's measurements were used in the analysis of variables which showed good experimenter-subject agreement, and/or, were objectively measured (height, weight, hair color, and eye color). Subjects' self-reported ratings were used in the analysis of variables which were measured using semantic differential scales (slimness, muscle development, and size of build).

## 2. Results for the Similarity-Attraction Paradigm

The similarity-attraction paradigm would predict that subjects would: 1) prefer physical characteristics similar to their own, and 2) choose partners with physical characteristics similar to their own.

### 1) Preferences:

#### Canonical Correlation Analysis:

Canonical correlation analyses were done to test the overlap between women's and men's preferences for physical characteristics and their own physical characteristics (computer printouts in Appendix D). Women's preferences were significantly related to their own characteristics ( $n=125$ ;  $r^2=0.3216$ , Roy's Greatest Root = 0.4740,  $F(7,117)=7.9227$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.4279,  $F(49,567.95)=2.1090$ ,  $p<.0000$ ). Men's preferences were also significantly related to their own characteristics ( $n=89$ ;  $r^2=0.3714$ , Roy's Greatest Root = 0.5908,  $F(7,81)=6.8362$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.2717,  $F(49,385.18)=2.3002$ ,  $p<.0000$ ).

#### Univariate Correlations:

Women: Table 3 presents the univariate correlations between women's preferences for physical characteristics and their own, their mothers', their fathers', and their

Table 3.  
Correlations between females' preferences and familial and partners' characteristics for all females.

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>	<u>Maternal</u>	<u>Paternal</u>	<u>Partner</u>
Height	.4548** n=146	.1584 n=147	.3810** n=145	.6902** n=90
Weight	.2757** n=140	.1139 n=147	.4139** n=143	.8380** n=90
Slimness	.2013* n=143	-.0518 n=145	.0234 n=144	.2844** n=90
Muscle development	.1022 n=146	-.0384 n=147	.1873* n=145	.3978** n=89
Size of build	.1810* n=147	.0687 n=147	.1474 n=145	.5866** n=89
Hair color	.1831* n=144	.0068 n=144	.0832 n=141	.5982** n=86
Eye color	.1690* n=146	.1112 n=145	-.0134 n=142	.4671** n=88

\*  $p < .05$ . \*\*  $p < .01$ .

partners' (where applicable) physical characteristics.

Women's preferences were significantly related to their own characteristics for all of the examined variables except muscle development (see boxed area). Apart from height ( $r=0.45$ ), correlations for these variables ranged from  $r=0.17$  to  $r=0.28$ . Subjects' preferences for height, slimness, build size, hair color, and eye color were more related to subjects' characteristics than to subjects' mothers' and subjects' fathers' characteristics.

Men: Table 4 presents the simple correlations between men's preferences for physical characteristics and their own, their mothers', and their partners' (where applicable) physical characteristics.

Men's preferences were significantly related to their own characteristics for height, slimness, and muscle development (see boxed area). The correlations for these variables ranged from  $r=0.23$  to  $r=0.33$ . The correlation for muscle development was greater for subjects' than for subjects' mothers' muscle development.

## 2) Physical Characteristics of Partners:

For subjects with partners, canonical correlation analyses were done to test the overlap between women's and men's partners' characteristics and their own characteristics (computer printouts in Appendix D).

Women's partners' characteristics were significantly

Table 4.  
Correlations between males' preferences and familial and partners' characteristics for all males.

<u>Variables</u>	<u>Source</u>		
	<u>Subject</u>	<u>Maternal</u>	<u>Partner</u>
Height	.3302** n=100	.3560** n=101	.5770** n=59
Weight	.0641 n=99	.2871** n=100	.7895** n=56
Slimness	.3056** n=102	.3698** n=102	.3744** n=59
Muscle development	.2317* n=102	.1087 n=102	.4972** n=59
Size of build	.0639 n=102	.4253** n=102	.3415** n=59
Hair color	.1491 n=101	.0793 n=101	.1489 n=59
Eye color	-.0598 n=101	.0406 n=98	.3577** n=58

\*  $p < .05$ . \*\*  $p < .01$ .

related to their own characteristics ( $n=78$ ,  $r^2=0.3527$ , Roy's Greatest Root = 0.5448,  $F(7,70)=5.4484$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.3462,  $F(49, 329.34)=1.5617$ ,  $p<.0131$ ). Men's partners' characteristics were also significantly related to their own characteristics ( $n=51$ ,  $r^2=0.4950$ , Roy's Greatest Root = 0.9801,  $F(7,43)=6.0205$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.1580,  $F(49,192.26)=1.7198$ ,  $p<.0053$ ).

Table 5 presents the univariate correlations between the physical characteristics of subjects and their partners. Only one correlation, for muscle development, was significant for women ( $r=0.3161$ ,  $n=89$ ). A small effect ( $r=0.19$ ) was also found for slimness, although it was not significant for the size of sample. The physical characteristics of men and their partners were not significantly correlated for any of the variables examined (Table 5).

Table 5.  
Correlations between subjects' characteristics and their partners' characteristics.

<u>Variables</u>	<u>Males</u>	<u>Females</u>
Height	.0638 n=59	.0456 n=89
Weight	.0438 n=57	.1878 n=86
Slimness	.0947 n=59	-.0741 n=89
Muscle development	.0575 n=59	.3161** n=89
Size of build	.0583 n=59	.0456 n=89
Hair color	-.0640 n=59	.0819 n=89
Eye color	-.1553 n=58	.1637 n=89

\*\*  $p < .01$ .

### 3. Results for the Imprinting Paradigm

The imprinting paradigm would predict that subjects would: 1) prefer physical characteristics similar to those of their primary caretaker (usually mother), and 2) choose partners with physical characteristics similar to those of their primary caretaker (usually mother).

#### 1) Preferences:

##### Canonical Correlation Analysis:

Canonical correlation analyses were done to test the overlap between women's and men's preferences for physical characteristics and their primary caretakers' (mothers) physical characteristics (computer printouts in Appendix D). Women's preferences were significantly related to their mothers' characteristics ( $n=125$ ,  $r^2=0.1538$ , Roy's Greatest Root = 0.1817,  $F(7,117)=3.0379$ ,  $p<.0057$ ; Wilk's Lambda (1-7) was not significant). Males' preferences were strongly related to their mothers' characteristics ( $n=89$ ,  $r^2=0.4081$ , Roy's Greatest Root = 0.6895,  $F(7,81)=7.9789$ ,  $p<.0000$ ; Wilks' Lambda (1-7) = 0.2565,  $F(49,385.18)=2.4160$ ,  $p<.0000$ ).

##### Univariate Correlations:

Women: The simple correlations between women's preferences for physical characteristics and their mothers'

characteristics ranged from  $r=-0.05$  to  $r=0.16$ . None were significant (see Table 6, boxed area).

Men: Men's preferences were significantly related to their mothers' characteristics for height, weight, slimness, and size of build (see Table 7, boxed area). The largest correlation was found for size of build ( $r=0.42$ ). The correlations for height, slimness, and build were larger than the corresponding correlations relating preferences for these variables to subjects' characteristics.

## 2) Physical Characteristics of Partners:

For subjects with partners, canonical correlation analyses were done to test the overlap between subjects' partners' characteristics and subjects' primary caretakers' characteristics (computer printouts in Appendix D). Men's and women's partners' characteristics were significantly related to their primary caretakers' characteristics (women:  $n=78$ ,  $r^2=0.2841$ ; Roy's Greatest Root = 0.3968,  $F(7,70)=3.9678$ ,  $p<.0010$ ; Wilk's Lambda (1-7) was not significant; men:  $n=51$ ,  $r^2=0.4930$ , Roy's Greatest Root = 0.9723,  $F(7,43)=5.9730$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.1734,  $F(49,192.26)=1.6174$ ,  $p<.0119$ ).

The simple correlations between subjects' partners' characteristics and their primary caretakers'

Table 6.  
Correlations between females' preferences and familial and partners' characteristics for all females.

<u>Variables</u>	<u>Subject</u>	<u>Source</u>		
		<u>Maternal</u>	<u>Paternal</u>	<u>Partner</u>
Height	.4548** n=146	.1584 n=147	.3810** n=145	.6902** n=90
Weight	.2757** n=140	.1139 n=147	.4139** n=143	.8380** n=90
Slimness	.2013* n=143	-.0518 n=145	.0234 n=144	.2844** n=90
Muscle development	.1022 n=146	-.0384 n=147	.1873* n=145	.3978** n=89
Size of build	.1810* n=147	.0687 n=147	.1474 n=145	.5866** n=89
Hair color	.1831* n=144	.0068 n=144	.0832 n=141	.5982** n=86
Eye color	.1690* n=146	.1112 n=145	-.0134 n=142	.4671** n=88

\*  $p < .05$ . \*\*  $p < .01$ .

Table 7.  
Correlations between males' preferences and familial and partners' characteristics for all males.

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Partner</u>
Height	.3302** n=100	.3560** n=101	.5770** n=59
Weight	.0641 n=99	.2871** n=100	.7895** n=56
Slimness	.3056** n=102	.3698** n=102	.3744** n=59
Muscle development	.2317* n=102	.1087 n=102	.4972** n=59
Size of build	.0639 n=102	.4253** n=102	.3415** n=59
Hair color	.1491 n=101	.0793 n=101	.1489 n=59
Eye color	-.0598 n=101	.0406 n=98	.3577** n=58

\*  $p < .05$ . \*\*  $p < .01$ .

characteristics are presented in Table 8. The physical characteristics of women's mothers and women's partners were significantly correlated for only one of the variables examined, slimness ( $r=.22$ ). The physical characteristics of men's mothers and men's partners were significantly correlated for height ( $r=0.36$ ). A small effect was also found for weight ( $r=0.20$ ) although it was not significant for the size of sample.

Table 8.  
Correlations between subjects' mothers' characteristics and subjects' partners' characteristics.

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<u>Variables</u>	<u>Males</u>	<u>Females</u>
Height	.3644** n=59	-.0170 n=90
Weight	.1990 n=56	.0818 n=90
Slimness	.0360 n=59	.2172 n=89
Muscle development	.1753 n=59	-.0169 n=89
Size of build	.1536 n=59	-.0208 n=89
Hair color	.1744 n=59	.0325 n=89
Eye color	-.0462 n=57	.1607 n=88

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\*  $p<.05$ . \*\* $p<.01$ .

#### 4. Results for the Psychodynamic Paradigm

The psychodynamic paradigm would predict that subjects would: 1) prefer physical characteristics similar to those of their opposite-sex parent, and 2) choose partners with physical characteristics similar to those of their opposite-sex parent.

##### 1) Preferences:

###### Canonical Correlation Analysis:

Canonical correlation analyses were done to test the overlap between women's preferences and women's fathers' physical characteristics, and between men's preferences and men's mothers' physical characteristics (computer printouts in Appendix D). Women's preferences were significantly related to their fathers' physical characteristics ( $n=125$ ,  $r^2=0.2687$ , Roy's Greatest Root = 0.3675,  $F(7,117)=6.1424$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.5386,  $F(49, 567.95)=1.5023$ ,  $p<.0177$ ). Men's preferences were strongly related to their mothers' characteristics, as discussed under the results for the imprinting paradigm ( $n=89$ ,  $r^2=0.4081$ , Roy's Greatest Root = 0.6895,  $F(7,81)=7.9789$ ,  $p<.0000$ ; Wilks' Lambda (1-7) = 0.2565,  $F(49,385.18)=2.4160$ ,  $p<.0000$ ).

### Univariate Correlations:

Women: Women's preferences were significantly related to their fathers' characteristics for height, weight, and muscle development (Table 9, boxed area). The correlations for weight ( $r=0.41$ ) and muscle development ( $r=0.19$ ) were greater than the correlations relating preferences to subjects' characteristics.

Men: Men's preferences were significantly related to their mothers' characteristics for height, weight, slimness, and size of build, as discussed under the results for imprinting (see boxed area, Table 7). The largest correlation was found for size of build ( $r=0.42$ ). The correlations for height, slimness, and build were larger than the corresponding correlations relating preferences for these variables to subjects' characteristics.

Initially it was hoped that the nature of the relationship between mothers and sons would help to differentiate support for the imprinting and psychodynamic paradigms. However, too few males expressed negative ( $n=6$ ) or unfriendly ( $n=3$ ) attitudes toward their mothers to analyze preferences separately for males with positive and negative relationships with their mothers.

## 2) Physical Characteristics of Partners:

For subjects with partners, canonical correlation

Table 9.  
Correlations between females' preferences and familial and partners' characteristics for all females.

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>	<u>Maternal</u>	<u>Paternal</u>	<u>Partner</u>
Height	.4548** n=146	.1584 n=147	.3810** n=145	.6902** n=90
Weight	.2757** n=140	.1139 n=147	.4139** n=143	.8380** n=90
Slimness	.2013* n=143	-.0518 n=145	.0234 n=144	.2844** n=90
Muscle development	.1022 n=146	-.0384 n=147	.1873* n=145	.3978** n=89
Size of build	.1810* n=147	.0687 n=147	.1474 n=145	.5866** n=89
Hair color	.1831* n=144	.0068 n=144	.0832 n=141	.5982** n=86
Eye color	.1690* n=146	.1112 n=145	-.0134 n=142	.4671** n=88

\*  $p < .05$ . \*\*  $p < .01$ .

analyses were done to test the overlap between subjects' partners' characteristics and subjects' opposite sex parents' characteristics (computer printouts in Appendix D). Men's and women's partners' characteristics were significantly related to their opposite sex parents' characteristics (women:  $n=78$ ,  $r^2=0.2769$ ; Roy's Greatest Root = 0.3829,  $F(7,70)=3.8287$ ,  $p<.0014$ ; Wilk's Lambda (1-7) was not significant; men:  $n=51$ ,  $r^2=0.4930$ , Roy's Greatest Root = 0.9723,  $F(7,43)=5.9730$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.1734,  $F(49,192.26)=1.6174$ ,  $p<.0119$ ).

Table 10 presents the univariate correlations between subjects' partners' characteristics and their opposite sex parents' characteristics. The physical characteristics of women's fathers and women's partners were significantly correlated for only one of the variables examined, size of build ( $r=0.27$ ). The physical characteristics of men's mothers and men's partners were significantly correlated for height ( $r=0.36$ ), as discussed under the results for imprinting. A small effect was also found for weight ( $r=0.20$ ), although it was not significant for the size of sample.

Table 10.  
 Correlations between subjects' opposite-sex parents' characteristics and subjects' partners' characteristics.

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<u>Variables</u>	<u>Males</u>	<u>Females</u>
Height	.3644** n=56	-.0445 n=90
Weight	.1990 n=56	.1644 n=90
Slimness	.0360 n=59	.0253 n=90
Muscle development	.1573 n=59	.1202 n=89
Size of build	.1536 n=59	.2658* n=89
Hair color	.1744 n=59	.1116 n=88
Eye color	-.0462 n=57	.1575 n=88

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\*  $p < .05$ . \*\*  $p < .01$ .

## 5. Comparisons Between Subjects With Partners and Subjects Without Partners

Women: Canonical correlation analyses were done to test the overlap between preferences and the physical characteristics of subjects and their parents for women with partners and women without partners (computer printouts in Appendix D). The preferences of women without partners were significantly related to their own characteristics ( $n=47$ ,  $r^2=0.6039$ , Roy's Greatest Root = 1.5245,  $F(7,39)=8.4936$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.1006,  $F(49,171.96)=2.0075$ ,  $p<.0006$ ), their mothers' characteristics ( $n=47$ ,  $r^2=0.3488$ , Roy's Greatest Root = 0.5356,  $F(7,39)=2.9840$ ,  $p<.0132$ ; Wilk's Lambda (1-7) was not significant), and their fathers' characteristics ( $n=47$ ,  $r^2=0.5786$ , Roy's Greatest Root = 1.3729,  $F(7,39)=7.6490$ ,  $p<.0000$ ; Wilk's Lambda (1-7) was not significant). The preferences of women with partners were also significantly related to their own characteristics ( $n=78$ ,  $r^2=0.3277$ , Roy's Greatest Root = 0.4874,  $F(7,70)=4.8743$ ,  $p<.0002$ ; Wilk's Lambda (1-7) = 0.3275,  $F(49,329.34)=1.6528$ ,  $p<.0059$ ), their mothers' characteristics ( $n=78$ ,  $r^2=0.2368$ , Roy's Greatest Root = 0.3103,  $F(7,70)=3.1027$ ,  $p<.0066$ ; Wilk's Lambda (1-7) was not significant), and their fathers' characteristics ( $n=78$ ,  $r^2=0.2729$ ; Roy's Greatest Root = 0.3752,  $F(7,70)=3.7524$ ,  $p<.0017$ , Wilk's Lambda (1-7)

was not significant).

Table 11 presents the univariate correlations between preferences and physical characteristics for women with and without partners. Generally, the correlations between women's preferences and their own characteristics, and between their preferences and their fathers' characteristics were smaller and fewer for women with partners than women without partners. The preferences of women without partners were more strongly related to their own heights, weights, hair colors, and muscle development (similarity-attraction). The correlations for physical characteristics ranged from  $r=0.19$  to  $r=0.61$ . In contrast, the correlations for women with partners ranged from  $r=-0.05$  to  $r=0.33$ , and the correlations for muscle development and hair color were not significant. The preferences of women without partners were also more strongly related to their fathers' heights, weights, and muscle development (psychodynamic). For women with partners, the correlation for muscle development was not significant.

Men: Canonical correlation analyses were done to test the overlap between men's preferences and their own characteristics, and between men's preferences and their mothers' characteristics for men with and without partners (computer printouts in Appendix D). The preferences of men without partners were significantly related to their own

Table 11.  
Comparison of females with partners and females without partners. Correlations between preferences and familial characteristics.

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>		<u>Father</u>	
	<u>Partner</u>		<u>Partner</u>	
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Height	.3342** n=89	.6107** n=57	.2721** n=90	.5319** n=55
Weight	.2533* n=86	.2922* n=54	.3338** n=90	.5108** n=53
Slimness	.2034 n=89	.1927 n=54	.1203 n=90	-.1433 n=54
Muscle development	-.0503 n=90	.3670** n=56	.0160 n=90	.4499** n=55
Size of build	.1613 n=90	.2135 n=57	.1368 n=90	.1373 n=55
Hair color	.0645 n=87	.3760** n=57	.1235 n=86	.0144 n=55
Eye color	.1340 n=89	.2354 n=57	.0220 n=88	-.0723 n=54

\*  $p < .05$ . \*\*  $p < .01$ .

characteristics ( $n=38$ ,  $r^2=0.6268$ , Roy's Greatest Root = 1.6799,  $F(7,30)=7.1994$ ,  $p<.0000$ ; Wilk's Lambda (1-7) was not significant) and their mothers' characteristics ( $n=38$ ,  $r^2=0.6518$ , Roy's Greatest Root = 1.8717,  $F(7,30)=8.0215$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.0676,  $F(49,126.26)=1.8035$ ,  $p<.0047$ ). The preferences of men with partners were also significantly related to their own characteristics ( $n=51$ ,  $r^2=0.4776$ , Roy's Greatest Root = 0.9143,  $F(7,43)=5.6163$ ,  $p<.0001$ ; Wilk's Lambda (1-7) = 0.1886,  $F(49,192.26)=1.5264$ ,  $p<.0236$ ) and their mothers' characteristics ( $n=51$ ,  $r^2=0.4008$ , Roy's Greatest Root = 0.6688,  $F(7,43)=4.1085$ ,  $p<.0016$ ; Wilk's Lambda (1-7) was not significant).

Table 12 presents the univariate correlations between preferences and physical characteristics for males with and without partners. Compared to males with partners, the preferences of males without partners were more strongly related to their mothers' weights, builds, hair colors, and eye colors (imprinting and psychodynamic) (Table 12). However, preferences for height were less related to mothers' heights, and the correlations for slimness and build for males with partners were still moderately significant ( $r>.30$ ).

The preferences of males without partners were also more strongly correlated to their own characteristics for slimness, muscle development, and hair color (similarity-attraction) (see Table 12). However,

Table 12.  
Comparison of males with partners and males without partners. Correlations between preferences and familial characteristics.

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>		<u>Mother</u>	
	<u>Partner</u>		<u>Partner</u>	
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Height	.4025** n=59	.2625 n=41	.4089** n=59	.2270 n=42
Weight	.0927 n=58	.0574 n=41	.2574 n=58	.3793* n=42
Slimness	.1707 n=59	.4878** n=43	.3730** n=59	.3696* n=43
Muscle development	.1909 n=59	.2872 n=43	.1506 n=59	.0583 n=43
Size of build	.1199 n=59	.0539 n=43	.3507** n=59	.4665** n=43
Hair color	.0642 n=58	.3162* n=43	.0066 n=58	.1639 n=43
Eye color	-.1538 n=58	.0997 n=43	-.0698 n=57	.1854 n=41

\*  $p < .05$ . \*\*  $p < .01$ .

preferences for height were less related to subjects' heights than for males with partners.

## 6. Preferences and Partners' Characteristics:

Canonical correlation analyses indicated that for men and women with partners, preferences for physical characteristics were strongly related to their partners' characteristics (women:  $n=78$ ,  $r^2=0.7798$ , Roy's Greatest Root = 3.5414,  $F(7,70)=35.4142$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.0375,  $F(49,329.34)=6.1101$ ,  $p<.0000$ ; men:  $n=51$ ,  $r^2=0.7850$ , Roy's Greatest Root = 3.6513,  $F(7,43)=22.4295$ ,  $p<.0000$ ; Wilk's Lambda (1-7) = 0.0452,  $F(49,192.26)=3.2960$ ,  $p<.0000$ ; computer printouts in Appendix D).

Women: For women with partners, the simple correlations relating preferences to partners' characteristics tended to be large (see boxed area, Table 13) and were greater than the corresponding correlations for subjects, subjects' mothers, and subjects' fathers. High correlations were found for weight, height, size of build, and hair color ( $r>0.45$ ).

Men: Males' preferences for physical characteristics were strongly related to their partners' characteristics, though to a lesser extent than was found for women's preferences (see boxed area, Table 14). High correlations were found for height, weight, and muscle development

Table 13.

Correlations between females' preferences and familial and partners' characteristics for all females.

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>	<u>Maternal</u>	<u>Paternal</u>	<u>Partner</u>
Height	.4548** n=146	.1584 n=147	.3810** n=145	.6902** n=90
Weight	.2757** n=140	.1139 n=147	.4139** n=143	.8380** n=90
Slimness	.2013* n=143	-.0518 n=145	.0234 n=144	.2844** n=90
Muscle development	.1022 n=146	-.0384 n=147	.1873* n=145	.3978** n=89
Size of build	.1810* n=147	.0687 n=147	.1474 n=145	.5866** n=89
Hair color	.1831* n=144	.0068 n=144	.0832 n=141	.5982** n=86
Eye color	.1690* n=146	.1112 n=145	-.0134 n=142	.4671** n=88

\*  $p < .05$ . \*\*  $p < .01$ .

Table 14.  
Correlations between males' preferences and familial and partners' characteristics for all males.

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Partner</u>
Height	.3302** n=100	.3560** n=101	.5770** n=59
Weight	.0641 n=99	.2871** n=100	.7895** n=56
Slimness	.3056** n=102	.3698** n=102	.3744** n=59
Muscle development	.2317* n=102	.1087 n=102	.4972** n=59
Size of build	.0639 n=102	.4253** n=102	.3415** n=59
Hair color	.1491 n=101	.0793 n=101	.1489 n=59
Eye color	-.0598 n=101	.0406 n=98	.3577** n=58

\*  $p < .05$ . \*\*  $p < .01$ .

Stepwise bonferroni analysis indicated that all significant correlations between subjects' preferences and partners' characteristics exceeded the significance criterion for the family error rate ( $m=7$ ) at the  $\alpha=0.05$  level, one-tailed ( $n=56$ ).

( $r > 0.45$ ). Moderate correlations were found for slimness, size of build, and eye color ( $r > 0.30$ ). Notably, men's preferences for hair color were not significantly related to their partners' hair colors.

## DISCUSSION

Table 15 summarises the support provided by men's and women's preferences for similarity, imprinting, and psychodynamic paradigms. The findings of the study are discussed in the context of these three theoretical positions below.

### Similarity-Attraction Paradigm

For both men and women, preferences for physical characteristics in a mate were related to their own characteristics, providing support for the similarity-attraction paradigm. However, there was a notable sex difference in the strength of the 'similarity-attraction effect'. Women's preferences were strongly related to their own characteristics; men's were less so. As well, a second factor, the presence of a partner, influenced the strength of the observed relationships.

The findings for all women subjects indicated that women's preferences for male characteristics were significantly related to their own characteristics for all the physical variables examined except muscle development. Within the context of marital correlations found in assortative mating, the correlation for height ( $r=0.45$ ) was

Table 15.

Amount of support\* for similarity, imprinting, and psychodynamic paradigms provided by preferences for each physical characteristic.

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<u>Variable</u>	<u>Hypotheses</u>		
	<u>Similarity</u>	<u>Imprinting</u>	<u>Psychodynamic</u>
MALES			
Height	moderate	moderate	moderate
Weight	no	moderate	moderate
Slimness	moderate	moderate	moderate
Muscle dev.	low	no	no
Size of build	no	moderate	moderate
Hair color	no	no	no
Eye color	no	no	no
FEMALES			
Height	strong	low	moderate
Weight	low	no	moderate
Slimness	low	no	no
Muscle dev.	no	no	low
Size of build	low	no	no
Hair color	low	no	no
Eye color	low	no	no

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\*  $r < 0.15$  indicated 'no' support.

$r > 0.15$  and  $r < 0.30$  indicated 'low' support.

$r > 0.30$  and  $r < 0.45$  indicated 'moderate' support.

$r > 0.45$  indicated 'strong' support.

larger than the marital correlations for height found in the assortative mating literature (Spuhler, 1982); the correlations for weight and hair color lay in the range of documented marital correlations.

For women overall the similarity effect appeared to be the strongest effect observed. The relationships for height, slimness, size of build, hair color, and eye color were greater than those between preferences and parental characteristics. In comparison, the psychodynamic effect was weaker, and the imprinting effect, nonexistent.

The grouping of all women subjects together masked the effect of the presence of a partner on patterns of preferences. / Women without spouses or regular dating partners were more likely to express preferences related to their own characteristics than women with partners. / The preferences of women without partners were more correlated to their own characteristics for: height ( $r=0.61$ ), muscle development ( $r=0.37$ ), build size ( $r=0.21$ ), hair color ( $r=0.38$ ) and eye color ( $r=0.23$ ). / Women with partners, on the other hand, tended to express preferences related to their partner's characteristics, and expressed fewer and generally weaker preferences related to their own characteristics. /

In summary, the similarity-attraction effect was found to be strongest for women who reported not having a regular dating partner or spouse. While the effect was also

observed for women with partners, the similarity relationships for preferences and characteristics tended to be fewer and weaker. For women overall, the findings suggest that the similarity-attraction paradigm plays a role in the development of expressed physical preferences, primarily for body variables, such as height and weight, but also for hair and eye colors.

Men overall expressed fewer preferences related to their own characteristics than did women. Their preferences for physical characteristics in a mate tended to be more related to their mothers' than their own characteristics, giving greater support to the psychodynamic than the similarity hypothesis. However, men did express preferences which were significantly related to their own heights ( $r=0.33$ ), slimness ( $r=0.23$ ) and muscle development ( $r=0.23$ ). Although the relationships for slimness and height were smaller than those for maternal characteristics, the relationship for muscle development was greater.

A 'partner effect' was found for men as well as for women. Males with partners tended to express preferences related to their partners' characteristics, and expressed fewer and weaker preferences related to their own characteristics than did men without partners. One anomaly occurred however; the relationship for height was greater for men with partners.

In summary, the similarity effect on preferences for physical characteristics in a mate was stronger for women than men, and stronger for subjects without partners than with partners. In contrast to the predominance of the effect for women, the similarity-attraction effect appeared weaker for men's preferences than the psychodynamic or imprinting effects (maternal characteristics). These results question the importance of a similarity-attraction process as a primary process in the development of men's physical attractions. However, the patterns of male and female preferences indicates that the similarity-attraction paradigm may operate for attractions for physical characteristics, as well as for attitudes and other attributes.

Whereas men's and women's preferences were to some extent related to their own characteristics, the actual physical choices they made in selecting partners indicated little support for a similarity-attraction process of partner or mate selection. The only significant relationship found between subjects' and partners' characteristics was found for women, for muscle development ( $r=0.32$ ). Contrary to some findings in the assortative mating literature (Spuhler, 1982), couples did not assort for height, weight, hair color, or eye color.

The lack of evidence for assortative behaviour for physical characteristics by dating couples provides little

support for a assortative genetic model of mate selection. While it should be noted that the studies documented by Spuhler involved married couples rather than dating couples, dating is considered to be a stage of mate selection, during which interests are compared, and intimacy and rapport are developed (Bolton, 1961; Davis, 1973; Murstein, 1976). In effect, while screening for a mate may be more intense than for a dating partner, the process for selecting dating partners might be expected to parallel mate selection.

In review, the similarity hypothesis appears to influence the development of women's attractions, but has little influence on their selection of dating partners. For men, the influence is weaker for attractions, and was not observed at all for partner selection. As a model for the development of attractions, the similarity hypothesis, alone, appears to have limited value for men. An attraction model is needed which incorporates the similarity effect for women and accounts for the sex difference.

#### Imprinting Paradigm

The imprinting hypothesis that attractions are related to the characteristics of the primary, usually female, caretakers received no support from the physical preferences of women in the study and only equivocal

support from the preferences of men.

Women expressed no preferences significantly related to their mothers' (primary caretaker) characteristics for any of the examined variables; this was true for women with and without partners. The largest correlation, found for height ( $r=0.16$ ), was small in comparison to the correlations for subjects' heights ( $r=0.33$ ) and subjects' fathers' heights ( $r=0.31$ ).

The situation for men was more complex. Men's preferences were strongly related to their mothers' characteristics, which provided possible support for both the imprinting and psychodynamic paradigms. Men expressed preferences significantly related to their mothers' heights ( $r=0.36$ ), weights' ( $r=0.29$ ), slimness, ( $r=0.37$ ), and size of build ( $r=0.42$ ). These correlations were larger than those for subjects' characteristics. In addition, the correlations for slimness and size of build were as large as, or larger than, the corresponding correlations for partners' slimness and build for men with partners. The only maternal 'body' variable not significantly related to preferences was muscle development. Preferences for the coloration variables, hair color and eye color, were not related to mothers' hair and eye colors.

The presence of partners did not substantially reduce the size of the relationships between men's preferences and their mothers' characteristics. Men with partners were

almost as likely to express preferences related to their mothers' weights and size of build as men without partners, and as or more likely to express preferences related to their mothers' heights and slimness.

The strong relationship observed between men's preferences and their mothers' characteristics provided support for both the imprinting and psychodynamic paradigms. Unfortunately, the critical test designed to differentiate between the imprinting and psychodynamic paradigms for men - the effect of the mother-son relationship on preferences - failed because too small a sample of men with poor relationships with their mothers entered the study. In this situation, the findings for women's preferences become critical for testing the imprinting hypothesis. The findings for women provided some support for the psychodynamic paradigm (discussed in the following section), but no support for the imprinting paradigm. If an imprinting effect existed for men, it would be necessary to speculate why mens' attractions would be generated primarily according to a biological (imprinting) paradigm, while womens' preferences were related to social (similarity) and psychosexual paradigms. Scott's (1963,1968) model for imprinting in children did not provide any rationale for restricting the influence of the early female caretaker to men. Repeated exposure to any facial stimuli during the critical period was proposed

to be sufficient for imprinting.

The imprinting effect, like the similarity effect, was minimal in accounting for men's and women's actual choices of physical characteristics in partners. For women, mothers' slimness was related to their male partners' slimness ( $r=0.22$ ). For men, mothers' heights were related to partners' heights ( $r=0.36$ ). This study did not replicate Ham's (1983) observation of a significant relationship between men's mothers' and wives' hair colors. Ham's correlation was  $r=0.23$  and in this study it was  $r=0.17$  (Table 8, includes girlfriends as well as wives).

In summary, the usefulness of the imprinting hypothesis in explaining the pattern of preferences and subsequent partner choices for physical characteristics was questioned for two reasons. The first was the sex difference in the occurrence of preferences related to the primary female caretakers' characteristics. Whereas men's preferences were related to their mothers' characteristics, women's were not. The sex difference was not predicted by Scott's (1963) model of primary socialization for human infants. Second, few significant correlations were found for mothers' and partners' characteristics for both men and women. The correlations that were observed were inconsistent for men and women and with earlier findings.

### Psychodynamic Paradigm

The preferences of both men and women provided support for the psychodynamic paradigm that attractions for physical characteristics in a mate would be related to the characteristics of the opposite-sex parent. As well, of the three theoretical positions tested, the psychodynamic position best predicted the observed sex difference in the relative strengths of the relationships of preferences to personal and parental characteristics.

Women in general expressed preferences for male height, weight and muscle development related to their fathers' heights ( $r=0.38$ ), weights ( $r=0.41$ ), and muscle development ( $r=0.19$ ). Preferences for height and muscle development were more related to women's fathers' characteristics than to their personal characteristics. As found with the similarity-attraction effect on preferences, the presence of a partner affected how strongly preferences were related to paternal characteristics. The preferences of women without spouses or regular dating partners were strongly related to their fathers' characteristics for height ( $r=0.53$ ), weight ( $r=0.51$ ), and muscle development ( $r=0.45$ ); the correlations were weaker for women with partners. In summary, the pattern of women's preferences provided good support for a psychodynamic attraction paradigm, as well as a similarity-attraction paradigm. Both paradigms accounted best for the preferences of women without partners.

As stated in the discussion of the imprinting paradigm, the preferences of men were strongly related to their mothers' characteristics, providing apparent support for both the imprinting and psychodynamic paradigms. The correlations for height, weight, slimness and build were greater for maternal than subjects' personal characteristics, and were almost as great for men with partners as for men without partners. However, when the male and female patterns are examined together, the overview provides greater support for the psychodynamic position than the imprinting position. Both men and women expressed preferences related to their opposite-sex parents' physical characteristics, but only men expressed preferences related to their primary caretakers (mothers). These results suggest that the development of attractions may be affected more by the sexual roles of parents than by persistent contact with primary caretakers during a critical neural period in infancy.

The sex difference in the strength of the psychodynamic effect on attractions was predicted by Freud when he proposed a weaker Oedipal effect for women than men (Freud, 1953; Fisher and Greenberg, 1977). Freud proposed that the Oedipal process was less intense for females and less central to the development of their sexuality. In contrast, the Oedipal process was decisive in the sexual development of males. Given a less intense Oedipal effect

for women, one would expect that the attractions of women would be less related to their fathers' characteristics than the attractions of males to their mothers', as was observed.

The alternative sex-role hypotheses proposed in the initial discussion of the psychodynamic paradigm might also account for a sex difference in the strength of attractions for parental characteristics. If the combined sexual and caring role of the parent is important to the development of attractions, then the lesser contact women have with their fathers compared to mother-son contact might result in a diminished attraction for paternal characteristics.

Thus the psychodynamic paradigm provides an explanation for the sex differences in the observed patterns of attractions and the rationale for more than one familial influence on the development of women's attractions. The process which appeared to 'compensate' for the weakened Oedipal (or contact) effect on women's attractions was the similarity-attraction process, which also appeared to act in the development of men's attractions. It would appear then, that both the psychodynamic and the similarity-attraction processes to act concurrently in the development of attractions for opposite-sex characteristics.

The psychodynamic paradigm, like the similarity-attraction paradigm generally failed to account

for the actual patterns of selection for physical characteristics in partners. Two relevant relationships were significant, the first for women's partners' and fathers' size of build ( $r=0.26$ ), the second for men's mothers' and partners' heights ( $r=0.36$ ).

#### Summary of Support for Similarity, Imprinting and Psychodynamic Paradigms

In summary, evidence was provided for two hypothetical processes which proposed a familial influence on the development of physical attractions, the psychodynamic process and the similarity-attraction process. Women's preferences for physical characteristics in a mate were observed to be primarily related to their own characteristics (similarity-attraction), and second, to their father's characteristics (psychodynamic). Men's preferences were most related to their mothers' characteristics (likely support for psychodynamic processes, but possibly support for imprinting process) but were also related to their own characteristics (similarity-attraction). The observation that women's preferences were not related to their mothers' or primary female caretakers' characteristics cast doubt on the importance of a critical early socialization or imprinting process on adult attractions. Rather a combined similarity-psychodynamic process was proposed in which the

two component processes differed in strength for men and women.

In general, while attractions for physical characteristics were related to subjects' and their opposite-sex parents' characteristics, the predictive value of the psychodynamic and similarity-attraction processes in identifying an individual's attractions was low. The largest correlations for preferences and the physical characteristics of source persons were in the range of  $r=0.35$  to  $r=0.46$ , accounting for approximately 12-21% of the variance in the preferences for a physical characteristic. While this indicates an important role for the psychodynamic and similarity-attraction processes in the development of attractions, the probability of accurately predicting an individual's attractions on the basis of these processes would be small. One might only suggest, for example, that if the person were male, his preference for size of build in a mate would be positively related to his mothers' build and more related to his mother's build than his own. In other words, if his mother had a large build, he would likely prefer a woman with a large build. (The large amount of unexplained variance in most of the preferences examined suggests that other processes act in the development of expressed attractions in addition to the processes investigated. )

The similarity-attraction, imprinting, and

psychodynamic processes appeared to have little influence on the actual selection of physical characteristics in a spouse or dating partner. Only a few significant correlations were found between subjects' partners' characteristics and subjects' and subjects' parents' characteristics.

### Partner Effects

Both men and women, but particularly women, expressed preferences which were strongly related to their partners' appearances. The physical preferences of women with partners were more related to their partners' physical characteristics than to their own or their fathers' (correlations ranged from  $r=0.28$  to  $r=0.84$ ). Partners' characteristics influenced men's preferences to a lesser extent than for women (correlations ranged from  $r=0.15$  to  $r=0.79$ ; notably, men's preferences for hair color were not related to their partners' hair colors).

As discussed above, men and women with partners tended to be less influenced by familial characteristics in their expressed attractions than men and women without partners. This cross-sectional comparison raises the possibility that a shift in preferences from subject's and opposite-sex parent's to partner's appearance occurs when an individual establishes a regular dating relationship. Such a shift would help to explain the weakness of the link between the

hypothetical attraction processes and actual selection of partners. A longitudinal study, comparing preferences before and after the development of regular dating relationships could be used to determine whether a shift occurred.

While a shift in attractions would suggest that selection for the examined physical characteristics in a mate is a malleable process, it does not disconfirm selection for other attributes according to a similarity-attraction/psychodynamic model. It does suggest, however, that if these selection processes are important, selection for the examined physical characteristics is fairly flexible for many individuals, and is secondary to selection for other physical characteristics or personality or social attributes. Researchers have suggested that the role of physical characteristics in mate selection is greater when the initial contact is made in a 'pickup' situation than when individuals establish their relationship after meeting each other through work, family or friends (Davis, 1973; Murstein, 1976). In the present study, it would have been worthwhile to ask subjects how they met their partners, to see whether subjects who met their partners in a 'pickup' situation were more likely to have partners similar to themselves or their opposite-sex parent in appearance than subjects who started to date their partners after knowing

them for a while.

### Other Factors

In the analysis of men's preferences for physical characteristics, significant relationships were found between men's preferences for height and weight and their fathers' heights ( $r=0.31$ ) and weights ( $r=0.29$ ) (these relationships compared in size to those for subjects' heights and mothers' weights). Although to a lesser extent than mothers' and subjects' characteristics, fathers' physical characteristics also appear to play a role in the development of their son's attractions (see Appendices C and D). With respect to partner choice, a significant relationship was found between men's partners' weights and fathers' weights ( $r=0.27$ ).

The results of the study were analyzed further to determine whether commonly held standards of attractiveness might account for some of the variance in subjects' preferences (see Appendix E). For several of the physical characteristics, some value or values of the characteristic were generally preferred over others. Pictures of attractive physical appearances emerged from the study that were consistent with popular definitions of opposite-sex attractiveness.

The findings for slimness confirmed those of other researchers (Gacsaly and Borges, 1979; Gitter, Lomranz and

Saxe, 1982). A person's slimness was generally rated as important in the evaluation of opposite-sex physical attractiveness. Women expressed strong preferences for men of average slimness; most men preferred women who were slightly slimmer than average. Individuals concurred that a slim (to average) body was most attractive. This preference was for the most part independent of the appearances of subjects, subjects' parents and partners.

Less consensus was found for an attractive muscle development or size of build, although women tended to prefer moderate to large muscle development and moderate to large builds to a greater extent than these characteristics were found in the male population. Notably, as other researchers have found, women expressed little attraction for highly muscled physiques (Lavrakas, 1975; Litman, Powell and Steward, 1983). Men tended to prefer women with moderately small builds and average muscle development (these preferences were somewhat related to mothers' and partners' characteristics).

Another cultural ideal identified in the study was a male preference for blond, blue-eyed women. Such preferences were largely unrelated to subjects', subjects' parents and partners' characteristics, and were inconsistent with the relatively low availability of women with these characteristics (particularly blond hair). Perhaps due to an inability to attain their physically

ideal women, men did not attach much importance to either hair or eye color in assessing a woman's physical attractiveness. Nor did they translate their preferences into partner choices. The preferred female coloration was consistent with the Hollywood fantasy images of California girls and blond bombshells. The pervasiveness of the blond image suggests that men associate physical fairness with desirable feminine attributes, and provides an interesting avenue for research.

For women, there was some evidence to support a broadly held preference for a tall and dark male appearance, as found by other researchers (Berscheid and Walster, 1969; Feinman and Gill, 1978; Wagatsuma and Kleinke, 1979). The evidence for such a romantic ideal, however, was less clearcut than the male preference for fair-haired women. Women tended to prefer tallness in males (around 6 feet) to a greater extent than it was found in the male sample, but height preferences were correlated with familial and partner heights. Approximately 58% of the women indicated a preference for medium brown or darker hair. This preference however may have been related to a greater availability of males with dark hair in the population.

In summary, the study found evidence of a general preference for slimness, a strong male preference for blond hair and blue eyes in women, and a weaker female preference for tall men with dark hair.

### Limitations to the Scope of the Study

- 1) While the results of the study were of theoretical interest, they were of limited value for predicting whom an individual would find physically attractive. In an examination of preferences for physical characteristics, the study found support for similarity-attraction and psychodynamic effects on the development of physical attractions. Partners and shared standards of opposite-sex physical attractiveness were also found to influence expressed attractions. When the number of variables important to attraction and mate selection are considered (social experiences, sociocultural standards, proximity), the amount of variance in preferences accounted for by the physical characteristics of subjects, subjects' parents and partners was impressive. However, the percentages of variance accounted for by the paradigms were not large enough to enable a person to accurately predict the preferences of an individual, particularly one without a partner.
- 2) The study found that selection for highly visible characteristics in a partner, such as stature and hair color, were not related in any consistent manner to the three theoretical selection processes. However, a key question to be answered is whether the physical

characteristics chosen for study validly represented overall physical appearance. The strong relationships between mens' and womens' preferences and their partners' characteristics would suggest that the characteristics chosen had some value. But men and women attached only moderate importance to most of the physical characteristics in evaluating physical attractiveness (slimness, height, muscle development, and build) (see Appendix F). Hair and eye color were rated low in importance. While the design was intended to measure 'general looks', similarities based on other physical features, such as face, skin, and figure, were not assessed. Nor was a more gestalt or multivariate similarity assessed between persons, based on the variety of looks and gestures that would make one person, for example, say to another, "she reminds me of your mother". What makes one person appear similar to another has not been determined.

- 3) A more objective set of ratings for slimness, muscle development and build size might have been obtained by having the experimenter and subjects rate a set of figure outlines to identify individual differences in visually defining the scales, or by anchoring the scales visually. An assumption in the use of self-reported characteristics for making self-referenced comparisons is that subjects rate other

persons' physical characteristics using the same criteria they use to rate their own. This assumption has been found to be inaccurate in the assessment of personality characteristics (R.D. Gifford, personal communication, February, 1984). Some evidence does exist, however, to suggest that individuals use their own heights and weights as reference points for evaluating the heights and weights of others (Fillenbaum, 1961).

- 4) A factor that may have affected the generalizability of the observed patterns for the sample in this study was the self-selection of the sample into an attraction study. Differences between this sample and the general population were not investigated.

#### Possible Future Studies

One way a researcher might investigate attractions for the purpose of prediction would be to visually expose individuals to many members of the opposite sex. Ratings of attractiveness made by each individual could be related to various physical features of the stimulus persons, and more gestalt features such as warmth, or style. Preference patterns could then be related to personal and parental attributes. This type of repeated measures study would provide a more comprehensive basis for measuring an individual's attractions. It would consequently generate

better comparisons between preferences and the physical features of family members, and better predictions.

The investigation of similarities between subjects' partners and subjects and subjects' parents in the study presented depended exclusively on subjects' ratings of the physical characteristics of parents and partners, and looked at isolated physical characteristics. Perhaps one way to increase the objectivity of measurements and investigate more overall facial similarity would be to have subjects bring wedding photographs of their parents and photographs of their partners to the study. Independent judges could then rate the facial similarity between subjects' partners and subjects and subjects' parents.

A examination of changes in physical preferences over time (from prior to puberty to marriage) would make an interesting study that would help to clarify the role of parental and subjects' physical attributes in the formation of attractions. The preferences of a group of males and females could be followed over this period of time to determine whether preferences were malleable and shifted according to romantic 'crushes', or were stable and related to subjects' and parental attributes until a regular dating relationship was established, or followed other patterns. Two types of information about physical attractions might be obtained annually, information on specific physical characteristics, and a qualitative physical description of

what an individual would like in a partner. The descriptions could then be compared with descriptions and physical characteristics of subjects, their parents, and their current partners.

## CONCLUSIONS

The study found strong support for a similarity-attraction process and a psychodynamic process in the development of men's and women's attractions for physical characteristics in a mate. Preferences for physical characteristics in a mate were related to subjects' characteristics, providing support for a similarity-attraction process, and to opposite-sex parental characteristics, providing support for a psychodynamic-attraction process. The similarity-attraction paradigm was shown to operate for physical characteristics, in addition to attitudes and overall attractiveness, as found by earlier researchers.

The sex of the respondent and the presence of a partner affected the extent of the observed similarity-attraction and psychodynamic-attraction effects. Males tended to state preferences more related to their mothers' appearance (psychodynamic), whereas women tended to state preferences more related to their own characteristics (similarity).

The observed relationships between preferences and physical characteristics were weaker for women with partners than women without partners. Similarly, the preferences of men with partners were less related to their own characteristics. However, the correlations between

preferences and mothers' characteristics were strong for men with and without partners. Individuals with partners tended to state preferences strongly related to their partners' characteristics.

Based on the cross-sectional sample of subjects with and without partners, it was suggested that individuals, particularly women, may shift their preferences from personal and parental characteristics to their partners' characteristics when they establish regular dating relationships.

While preferences for physical characteristics in a mate appeared to operate somewhat according to theoretical attraction processes, actual partner choices provided minimal support a similar model of mate selection. Few relationships were found between partners' and parental or subjects' appearances. As a corollary to the little support for a selection process based on similarity between partners, minimal support was provided for an assortative mating process. The self-selection and nature of the sample (few married couples) may have affected the generalizability of these results to general mate selection. However, for the subjects in the study, more important factors than familial physical characteristics appeared to have intervened in the selection of partners.

With regard to standards of attractiveness, a strong consensus was observed that slimness was preferable to

skinniness or overweight. In addition, two 'ideals' of opposite-sex attractiveness emerged from the study. Males tended to prefer blue-eyed blond women. Females expressed a weaker preference for tall, dark-haired men.

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RESPONSE BOOKLET

Subject No. \_\_\_\_\_

Age \_\_\_\_\_ Sex (M/F) \_\_\_\_\_

Marital Status (tick appropriate category):

 Single     Single (Divorced)     Married / Common-law
Preferences

In this part of the questionnaire, I'd like you to indicate some of the physical characteristics you would like in a spouse.

For each of the four characteristics listed below, please select your first preference for that characteristic in a spouse. For height and weight, select your preferences using the scales on this page. For hair and eye colors, select your preferences using the experimenter's charts.

But first sit back for a minute and think about the person you'd like to marry ...

Height: Select the height you would most prefer in a spouse (tick the appropriate category).

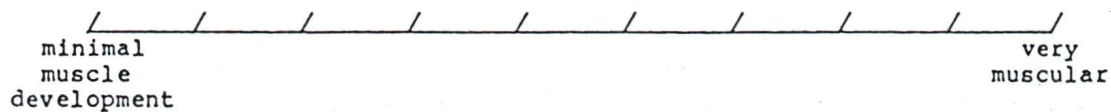
- |  |   |
|--|---|
| <input type="checkbox"/> shorter than 5' | <input type="checkbox"/> 5'9" - 5'10"     |
| <input type="checkbox"/> 5' - 5'2"       | <input type="checkbox"/> 5'11" - 6'       |
| <input type="checkbox"/> 5'3" - 5'4"     | <input type="checkbox"/> 6'1" - 6'2"      |
| <input type="checkbox"/> 5'5" - 5'6"     | <input type="checkbox"/> 6'3" - 6'4"      |
| <input type="checkbox"/> 5'7" - 5'8"     | <input type="checkbox"/> taller than 6'4" |

Weight: Select the weight you would most prefer in a spouse from the page of weight categories attached to the questionnaire.

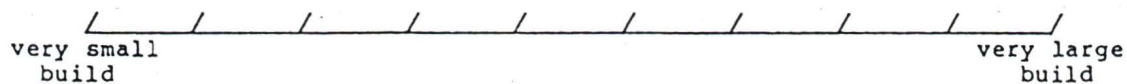
Preferred weight category \_\_\_\_\_

Now indicate the weight you would most prefer in a spouse, using the following scale (put a tick at the appropriate place on the scale).

Muscle Development: Indicate the muscle development you would most prefer in a spouse (put a tick at the appropriate place on the scale).



Size of Build: Indicate the size of build you would most prefer in a spouse (put a tick at the appropriate place on the scale).



Hair Color: Number of preferred hair color from chart \_\_\_\_\_

Eye Color: Number of preferred eye color from chart \_\_\_\_\_

Range of Preferences

Now that you have stated your first preferences, I'd like you to indicate the range for each characteristic that you would find acceptable in a spouse. For height, weight, and body type measurements, indicate the minimum acceptable value in a spouse and the maximum acceptable value in a spouse. For hair and eye colors, indicate the colors that you would find unacceptable.

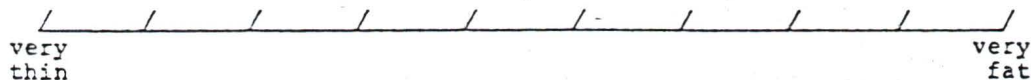
Height: Select the minimum and maximum heights you would find acceptable in a spouse (tick the appropriate categories).

- |  |   |
|--|---|
| <input type="checkbox"/> shorter than 5' | <input type="checkbox"/> 5'9" - 5'10"     |
| <input type="checkbox"/> 5' - 5'2"       | <input type="checkbox"/> 5'11" - 6'       |
| <input type="checkbox"/> 5'3" - 5'4"     | <input type="checkbox"/> 6'1" - 6'2"      |
| <input type="checkbox"/> 5'5" - 5'6"     | <input type="checkbox"/> 6'3" - 6'4"      |
| <input type="checkbox"/> 5'7" - 5'8"     | <input type="checkbox"/> taller than 6'4" |

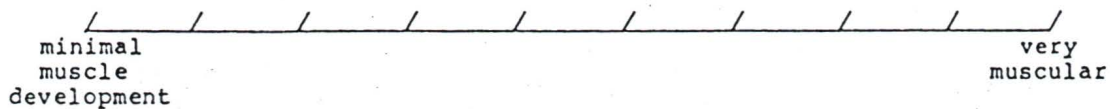
Weight: Select the minimum and maximum weights you would find acceptable in a spouse from the page of weight categories attached to the questionnaire.

Weight categories \_\_\_\_\_

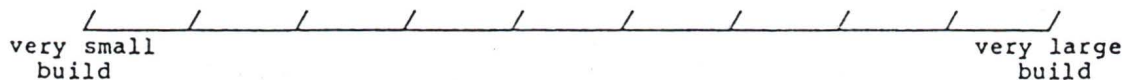
Now indicate the minimum and maximum weights you would find acceptable in a spouse, using the following scale (put ticks at the appropriate places on the scale).



Muscle Development: Indicate the minimum and maximum muscle development you would find acceptable in a spouse (put ticks at the appropriate places on the scale).



Size of Build: Indicate the minimum and maximum size of build you would find acceptable in a spouse (put ticks at the appropriate places on the scale).



Hair Color: Which hair colors would you find unacceptable in a spouse? Indicate the numbers below. If you find them all acceptable, put a tick here \_\_\_\_.

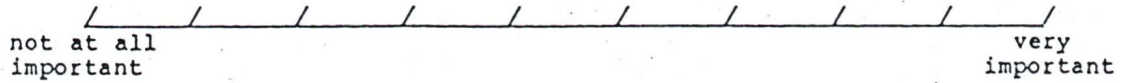
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Eye Color: Which eye colors would you find unacceptable in a spouse? Indicate the numbers below. If you find them all acceptable, put a tick here \_\_\_\_.

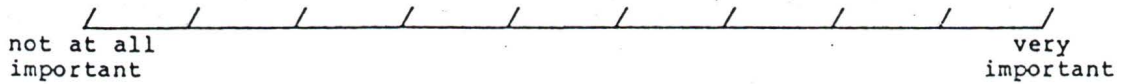
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Height, weight, hair color, eye color, and physique are the characteristics that I'm interested in looking at. But how important would you say they are to you in choosing the physical appearance of a spouse? For each characteristic, put a tick at the appropriate place on the scale.

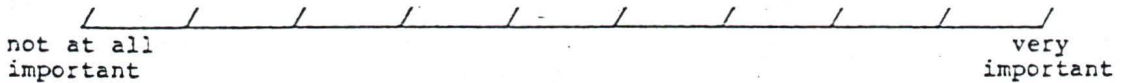
Height



Weight



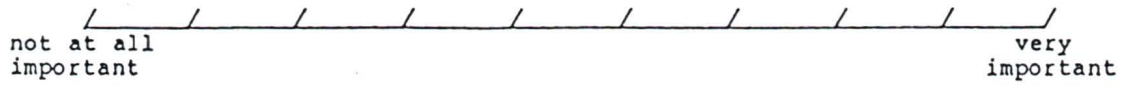
Muscle Development



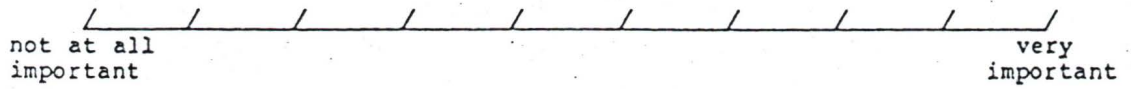
Size of Build



Hair Color



Eye Color



Subject Characteristics

Now that you have some experience using the scales and charts, I'd like you to rate your own height, weight, hair color, eye color, and physique.

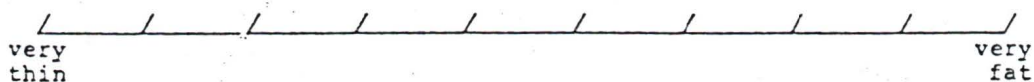
Height: Put a tick beside your height category.

- |  |   |
|--|---|
| <input type="checkbox"/> shorter than 5' | <input type="checkbox"/> 5'9" - 5'10"     |
| <input type="checkbox"/> 5' - 5'2"       | <input type="checkbox"/> 5'11" - 6'       |
| <input type="checkbox"/> 5'3" - 5'4"     | <input type="checkbox"/> 6'1" - 6'2"      |
| <input type="checkbox"/> 5'5" - 5'6"     | <input type="checkbox"/> 6'3" - 6'4"      |
| <input type="checkbox"/> 5'7" - 5'8"     | <input type="checkbox"/> taller than 6'4" |

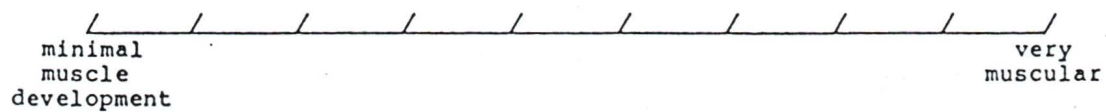
Weight: Select your weight from the page of weight categories attached to the questionnaire.

Weight category \_\_\_\_\_

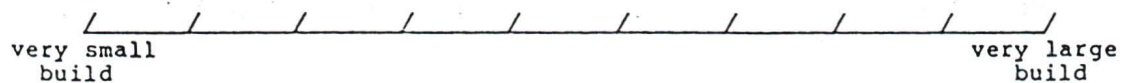
Now indicate your weight on the following scale (put a tick at the appropriate place on the scale).



Muscle Development: Indicate your muscle development (put a tick at the appropriate place on the scale).



Size of Build: Indicate your size of build (put a tick at the appropriate place on the scale).



Hair color: Number for your hair color from chart \_\_\_\_\_

Eye Color: Number for your eye color from chart \_\_\_\_\_



Spouse and Dating Partner Characteristics

This part of the questionnaire is for those of you who are married, living common-law, or are going out with someone on a regular basis. If you do not fall into one of these categories, please put a tick here \_\_\_\_\_ and skip this page.

Now that you have described your own characteristics, I would like you to describe the characteristics of your spouse or dating partner, using the same scales and charts. First indicate all his or her characteristics when you started dating. Second, if he or she has changed in appearance since you started dating, go back and indicate the present values for those characteristics which have changed. Put the changed value in parentheses ( ).

How long have you and your partner been married / living together / going out on a regular basis? \_\_\_\_\_

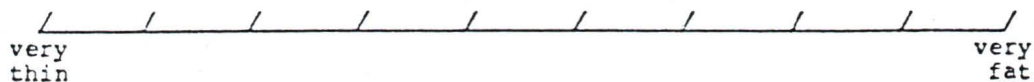
Height: Put a tick beside your partner's height category.

- |  |   |
|--|---|
| <input type="checkbox"/> shorter than 5' | <input type="checkbox"/> 5'9" - 5'10"     |
| <input type="checkbox"/> 5' - 5'2"       | <input type="checkbox"/> 5'11" - 6'       |
| <input type="checkbox"/> 5'3" - 5'4"     | <input type="checkbox"/> 6'1" - 6'2"      |
| <input type="checkbox"/> 5'5" - 5'6"     | <input type="checkbox"/> 6'3" - 6'4"      |
| <input type="checkbox"/> 5'7" - 5'8"     | <input type="checkbox"/> taller than 6'4" |

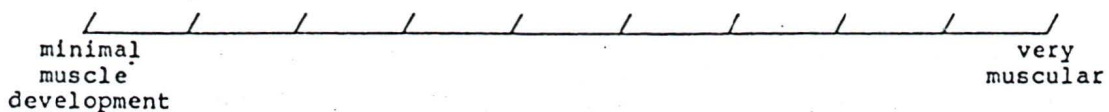
Weight: Select your partner's weight from the page of weight categories attached to the questionnaire.

Weight category \_\_\_\_\_

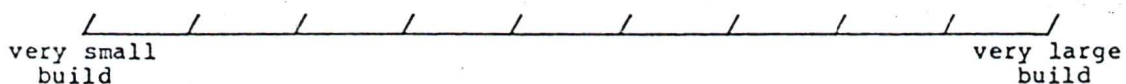
Now indicate your partner's weight on the following scale (put a tick at the appropriate place on the scale).



Muscle Development: Indicate your partner's muscle development (put a tick at the appropriate place on the scale).



Size of Build: Indicate your partner's size of build (put a tick at the appropriate place on the scale).



Hair color: Number for hair color from chart \_\_\_\_\_

Eye Color: Number for eye color from chart \_\_\_\_\_

Caretaker Characteristics

In this part of the questionnaire, I would like you to indicate the physical characteristics of your early caretakers. For most of you, your primary female caretaker will be your mother, and your primary male caretaker will be your father. If, however, you feel that others were closer to you when you were growing up and were more responsible for you than your parents (that is, you lived with them and they cared for you), please indicate them as your primary caretakers. If you come from a single parent household and only wish to designate one parent or caretaker, please do so. If you are uncertain about designating a caretaker, or recalling characteristics, please mention this to the experimenter.

Who was your primary female caretaker (tick appropriate category)?

- mother                       stepmother/adopted mother  
 other (specify) \_\_\_\_\_  
 no primary female caretaker

Who was your primary male caretaker?

- father                       stepfather/adopted father  
 other (specify) \_\_\_\_\_  
 no primary male caretaker

Primary Female Caretaker

First I'd like you to rate the physical characteristics of your primary female caretaker, using the same charts and scales as you used for your own characteristics. First indicate what she looked like when you were young. For example, what was her hair color when you were young, or her weight? Second, after you have indicated all her earlier characteristics, go back and indicate the present values for those characteristics which have changed.

Put the changed value in parentheses ( ).

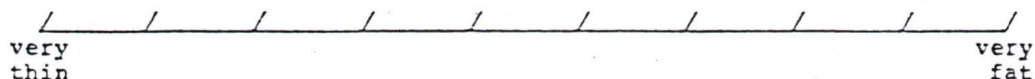
Height: Tick the appropriate category.

<input type="checkbox"/> shorter than 5'	<input type="checkbox"/> 5'9" - 5'10"
<input type="checkbox"/> 5' - 5'2"	<input type="checkbox"/> 5'11" - 6'
<input type="checkbox"/> 5'3" - 5'4"	<input type="checkbox"/> 6'1" - 6'2"
<input type="checkbox"/> 5'5" - 5'6"	<input type="checkbox"/> 6'3" - 6'4"
<input type="checkbox"/> 5'7" - 5'8"	<input type="checkbox"/> taller than 6'4"

Weight: Select the weight of your primary female caretaker from the page of weight categories attached to the questionnaire.

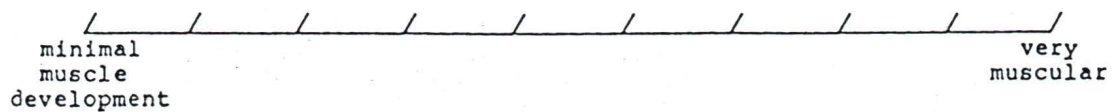
Weight category \_\_\_\_\_

Now indicate the weight of your primary female caretaker on the following scale (put a tick at the appropriate place on the scale).

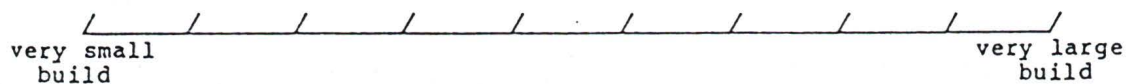




Muscle Development: Indicate the muscle development of your primary female caretaker (put a tick at the appropriate place on the scale).



Size of Build: Indicate the size of build of your primary female caretaker (put a tick at the appropriate place on the scale).



Hair color: Number from chart \_\_\_\_\_

Eye Color: Number from chart \_\_\_\_\_

Primary Male Caretaker

Now rate the physical characteristics of your primary male caretaker, using the same charts and scales. First indicate what he looked like when you were young. Second, after you have indicated all his earlier characteristics, go back and indicate the present values for those characteristics which have changed. Put the changed value in parentheses ( ).

Height: Tick the appropriate category.

- |  |   |
|--|---|
| <input type="checkbox"/> shorter than 5' | <input type="checkbox"/> 5'9" - 5'10"     |
| <input type="checkbox"/> 5' - 5'2"       | <input type="checkbox"/> 5'11" - 6'       |
| <input type="checkbox"/> 5'3" - 5'4"     | <input type="checkbox"/> 6'1" - 6'2"      |
| <input type="checkbox"/> 5'5" - 5'6"     | <input type="checkbox"/> 6'3" - 6'4"      |
| <input type="checkbox"/> 5'7" - 5'8"     | <input type="checkbox"/> taller than 6'4" |

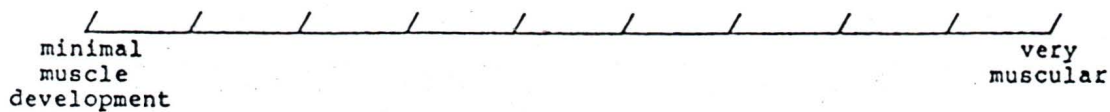
Weight: Select the weight of your primary male caretaker from the page of weight categories attached to the questionnaire.

Weight category \_\_\_\_\_

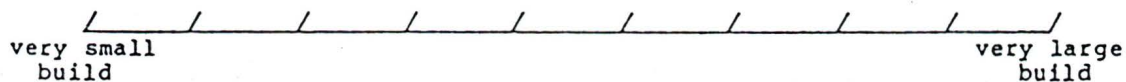
Now indicate the weight of your primary male caretaker on the following scale (put a tick at the appropriate place on the scale).



Muscle Development: Indicate the muscle development of your primary male caretaker (put a tick at the appropriate place on the scale).



Size of Build: Indicate the size of build of your primary male caretaker (put a tick at the appropriate place on the scale).



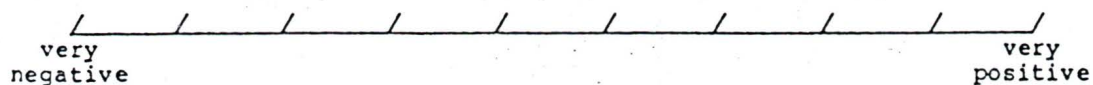
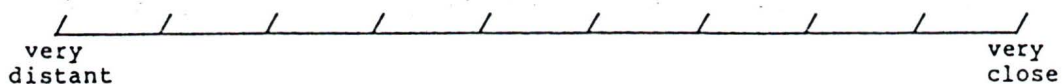
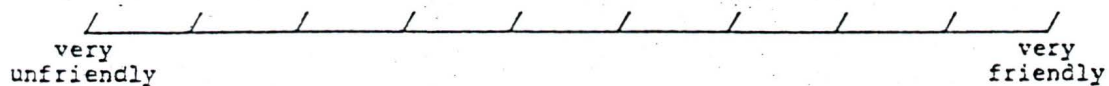
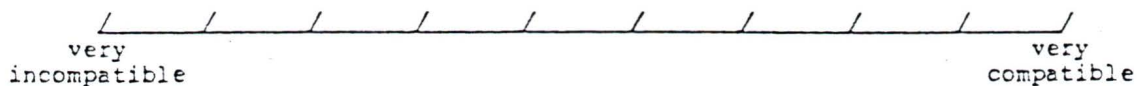
Hair color: Number from chart \_\_\_\_\_

Eye Color: Number from chart \_\_\_\_\_

Relationship with Caretakers

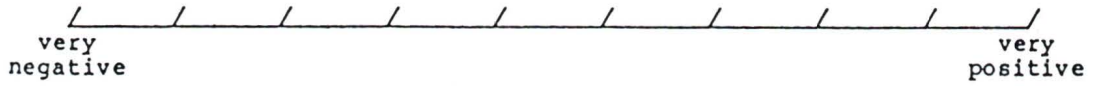
In this last part of the questionnaire, I'd like you to indicate your feelings toward your primary caretakers.

There are four scales for each caretaker. Indicate how you feel about your caretaker by placing a tick at the appropriate place on each scale.

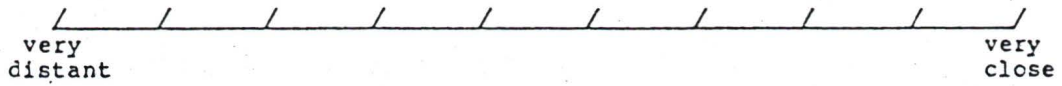
Primary FEMALE CaretakerRelationship:Closeness:Friendliness:Compatibility:

Primary MALE Caretaker

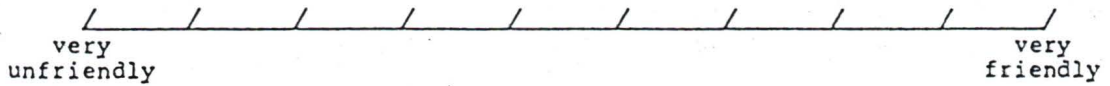
Relationship:



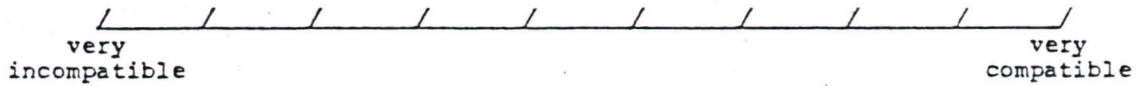
Closeness:



Friendliness:



Compatibility:



THANKS!

Comments

Before you participated in this study, did you hear anything about it beside what the experimenter told you when she was asking for subjects? Please indicate anything you heard below.

APPENDIX B: Descriptions of hair color and eye color charts.

Table 16.  
Modifications to the Fischer-Saller Hair Color Chart.

<u>Modified Chart #</u>	<u>Fischer-Saller Chart Letter</u>	<u>Color</u>	<u>Color Category</u>
1	A	Light Blond	BLOND
2	B		
3	D E	Medium Blond	
3.5	1	Light Red Blond	
4	C F G		
5	K	Dark Blond	
5.5	2	Medium Red Blond	
6	H I	Dark Blond	
6.5	3 L V	Light Red Brown	LIGHT BROWN
7	N	Light Brown	
8	M O		
8.5	VI	Red	RED
9	P Q	Medium Brown	BROWN
10	R S		
11	T		
12	U		
13	V W	Dark Brown	
14	X		
15	Y	Dark Brown/Black	DARK BROWN/ BLACK

## APPENDIX B continued

Table 17.

Densitometer measurements of iris coloration and color groups on color slide eye color chart.

<u>Slide number</u>	<u>Eye color</u>	<u>Overall reading</u>	<u>Color densities (4:30 position)</u>		
			<u>cyan</u>	<u>magenta</u>	<u>yellow</u>
1	blue-green	.67	.63	.66	.72
2		.89	.88	.93	1.06
3		1.02	.93	.98	1.15
4		1.06	1.27	1.28	1.63
5	blue	.74	.71	.70	.74
6		.84	.78	.93	.94
7		.87	.87	.94	.95
8		.89	.90	.90	.85
9		1.13	1.11	1.13	1.11
10	green/hazel	.80	.62	.77	.99
11		.96	.81	.97	1.27
12	<i>hazel</i>	.96	.67	.94	1.29
13	blue-brown*	.90	.86	.90	.94
14		.93	.83	.89	.99
15		1.05	.84	1.04	1.26
16	brown	1.21	.92	1.30	1.66
17		1.30	1.03	1.40	1.93
18		1.41	1.02	1.38	1.71
19		1.68	1.47	1.94	2.26
20		1.91	1.69	2.20	2.50

\* Densitometer measurements were made on the outer blue perimeter of the eye.

APPENDIX C: Correlational tables for data-complete subjects.

Table 18.

Correlations between females' preferences and familial characteristics for all data-complete females (n=125).

---

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Paternal</u>
Height	.5042**	.1315	.3953**
Weight	.3154**	.1107	.3714**
Slimness	.1826*	-.0588	-.0036
Muscle development	.0822	-.0436	.2059*
Size of build	.1161	.0199	.1479
Hair color	.1907*	-.0233	.0617
Eye color	.2154*	.1526	.0681

---

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 19.  
Correlations between females' preferences and familial and partners' characteristics for data-complete females with partners (n=78).

---

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>	<u>Maternal</u>	<u>Paternal</u>	<u>Partner</u>
Height	.3896**	.1047	.2846**	.6788**
Weight	.2978**	.1172	.2838**	.8510**
Slimness	.2026	-.0557	.0894	.3402**
Muscle development	-.0919	-.1807	.0473	.3844**
Size of build	.0631	-.0277	.1288	.5934**
Hair color	.0599	.0171	.1358	.5686**
Eye color	.1947	.2096	.0902	.3945**

---

\* p<.05. \*\* p<.01.

Appendix C continued.

Table 20.  
Correlations between females' preferences and familial characteristics for data-complete females without partners (n=47).

---

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Paternal</u>
Height	.6710**	.1573	.5703**
Weight	.3476*	.1063	.4884**
Slimness	.1439	-.0811	-.1627
Muscle development	.3827**	.2228	.4688**
Size of build	.2083	.0327	.1532
Hair color	.4094**	-.0815	-.0670
Eye color	.2693	.0677	.0339

---

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 21.  
Correlations between females' partners' characteristics  
and familial characteristics for data-complete  
females with partners (n=78).

---

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Paternal</u>
Height	.0827	.0077	-.0401
Weight	.2043	.0748	.1068
Slimness	-.0956	.1819	-.0148
Muscle development	.3101**	.0529	.0906
Size of build	-.0434	-.0271	.1991
Hair color	.0908	.0296	.1092
Eye color	.1955	.2000	.1945

---

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 22.  
Correlations between males' preferences and familial characteristics for all data-complete males (n=89).

---

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Paternal</u>
Height	.3085**	.3786**	.3475**
Weight	.0569	.3685**	.3092**
Slimness	.2547*	.3132**	.0543
Muscle development	.2855**	.0586	-.0324
Size of build	.0719	.3710**	.0638
Hair color	.2181*	.0965	.1343
Eye color	-.0306	.0774	.0611

---

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 23.  
Correlations between males' preferences and familial  
and partners' characteristics for data-complete males  
with partners (n=51).

<u>Variables</u>	<u>Source</u>			
	<u>Subject</u>	<u>Maternal</u>	<u>Paternal</u>	<u>Partner</u>
Height	.4198**	.4812**	.4579**	.5659**
Weight	.0801	.3898**	.2476	.8073**
Slimness	.1011	.2736*	-.0306	.3194*
Muscle development	.2626	.0691	-.1456	.4289**
Size of build	.1313	.2531	.1176	.3074*
Hair color	.1529	.0048	.2509	.1091
Eye color	-.1066	-.0211	-.0040	.2593

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 24.  
Correlations between males' preferences and familial characteristics for data-complete males without partners (n=38).

---

<u>Variables</u>	<u>Source</u>		
	<u>Subject</u>	<u>Maternal</u>	<u>Paternal</u>
Height	.1335	.1723	.1042
Weight	.0563	.3385*	.3946*
Slimness	.4601**	.3641*	.1676
Muscle development	.3242*	.0402	.0920
Size of build	.0583	.4286**	.0191
Hair color	.3247*	.2010	-.0737
Eye color	.0797	.1890	.1572

---

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 25.  
Correlations between males' partners' characteristics  
and familial characteristics for data-complete  
males with partners (n=51).

---

<u>Variables</u>	<u>Subject</u>	<u>Source</u>	
		<u>Maternal</u>	<u>Paternal</u>
Height	.0537	.4651**	.1186
Weight	.0426	.3359*	.2843*
Slimness	.1096	.0331	.1527
Muscle development	.0675	.1394	.0559
Size of build	.0773	.1639	.1519
Hair color	.0132	.1853	.1104
Eye color	-.1275	-.0594	-.0990

---

\*  $p < .05$ . \*\*  $p < .01$ .

Appendix C continued.

Table 26.  
Correlations between the experimenter's ratings and the self-reported ratings of subjects' characteristics for subjects with complete sets of ratings.

---

<u>Variables</u>	<u>Source</u>		
	<u>Males</u> n=101	<u>Females</u> n=135	<u>Overall</u> n=236
Height	.9411	.9661	.9744
Weight	.9289	.9767	.9663
Slimness	.6910	.5751	.6269
Muscle development	.4640	.2754	.4852
Size of build	.3732	.5017	.4692
Hair color	.8669	.8800	.8739
Eye color	.6911	.7255	.7117

---

p<.01, unless otherwise specified.

## APPENDIX D: Canonical Correlation Analyses

Preferences and Physical CharacteristicsAll data-complete females:

1. Preferences and subjects' characteristics
2. Preferences and mothers' characteristics
3. Preferences and fathers' characteristics

Data-complete females with partners:

4. Preferences and subjects' characteristics
5. Preferences and mothers' characteristics
6. Preferences and fathers' characteristics
7. Preferences and partners' characteristics

Data-complete females without partners:

8. Preferences and subjects' characteristics
9. Preferences and mothers' characteristics
10. Preferences and fathers' characteristics

All data-complete males:

11. Preferences and subjects' characteristics
12. Preferences and mothers' characteristics
13. Preferences and fathers' characteristics

Data-complete males with partners:

14. Preferences and subjects' characteristics
15. Preferences and mothers' characteristics
16. Preferences and fathers' characteristics
17. Preferences and partners' characteristics

Data-complete males without partners:

18. Preferences and subjects' characteristics
19. Preferences and mothers' characteristics
20. Preferences and fathers' characteristics

Partners' Characteristics and Familial Characteristics

Data-complete females with partners:

21. Partners' characteristics and subjects' characteristics
22. Partners' characteristics and mothers' characteristics
23. Partners' characteristics and fathers' characteristics

Data-complete males with partners:

24. Partners' characteristics and subjects' characteristics
25. Partners' characteristics and mothers' characteristics
26. Partners' characteristics and fathers' characteristics

The Experimenter's Ratings and Subjects' Ratings of

Subjects' Characteristics:

27. All subjects
28. Females
29. Males

CANONICAL CORRELATIONS  
PREFERENCES AND SUBJECTS  
DATA COMPLETE FEMALES

(1)

CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H<sub>0</sub>: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.567078450	0.476606951	0.060924097	0.4740	0.321577968	0.427896416	2.1095	49	567.95	0.0000
2	0.415462963	0.272677536	0.074301863	0.2086	0.172609473	0.630723054	1.5203	36	494.59	0.0293
3	0.342441720	0.219859283	0.079271824	0.1328	0.117266331	0.762303935	1.2773	25	421.28	0.1696
4	0.260306756		0.083713918	0.0727	0.067801262	0.863571836	1.0725	16	348.91	0.3801
5	0.223582731		0.085313485	0.0526	0.049989238	0.926381684	0.9931	9	280.03	0.4458
6	0.153336330	0.086270070	0.087691208	0.0241	0.023512030	0.975127568	0.7350	4	232	0.5689
7	0.037325037	-0.366300998	0.089677542	0.0014	0.001393158	0.998606842	0.1632	1	117	0.6869

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.4278964	2.109499	49	567.9506	.00003265974
PILLAI'S TRACE	0.7541495	2.018151	49	819	.00006920411
HOELLING-LAWLEY TRACE	0.9662979	2.155154	49	765	0.0000139813
ROY'S GREATEST ROOT	0.4740087	7.922717	7	117	7.55049E-08

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR093	0.4416466045	-.0343440890	-.2004668609	0.1377624438	-.0176145329	-.0943894350	0.0818756748	HEIGHT
VAR094	-.0192766337	0.0441317400	0.0673548180	-.0085778189	-.0308176196	0.0027609710	0.0167689862	WEIGHT
VAR032	0.3165759251	0.4775495676	-.5996959787	0.4013872902	0.5524663663	0.0294517254	-.0765338904	SUBJECT FAT
VAR033	-.0116320449	0.0754404371	-.0286337434	0.3287724546	-.4046902179	-.0900404208	-.3750649989	SUBJECT MUSCLE
VAR034	-.0068707133	-.5034229550	-.0946403691	-.4436411078	0.1591115958	0.5109754462	-.2788403750	SUBJECT BUILD
VAR098	0.0616521198	-.0645374150	0.1743696108	0.0224081436	0.1472504022	-.1636979088	-.1095318387	HAIR COLOR
VAR099	-.0494595542	-.0371679454	0.0264875482	0.1043861606	-.0106639431	0.1468155565	0.0898668865	EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.3100632384	-.3760661223	-.2183174439	0.0387379958	-.0042663235	-.1579418751	0.1811679438	PREF HEIGHT
VAR006	0.0064987516	0.0228853401	0.0519500069	0.0141425483	0.0026843640	0.0379854026	-.0660980929	PREF WEIGHT
VAR007	0.2905806966	-.1224283477	-.5471475941	0.0278599142	0.8846665375	1.0036048261	0.5159658083	PREF FAT
VAR008	-.0895315779	-.0106909041	-.2618499779	0.8373693855	0.3689507344	-.4210458162	-.3056904255	PREF MUSCLE
VAR009	0.1750799386	0.7938550543	0.2216022457	-.4009269325	-.5016242650	-.3074119541	0.9184120103	PREF BUILD
VAR010	0.0145257211	0.0027684161	0.0912185221	-.0306382464	0.1854749477	-.0997407013	-.0099370320	PREF HAIR
VAR011	-.0252692547	-.0891221825	0.0892437214	0.0950783867	-.0611638494	0.0318432055	0.0889878351	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND MOTHERS  
DATA COMPLETE FEMALES

(2)

CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.392173371	0.193157716	0.075991007	0.1818	0.153799953	0.615974447	1.1608	49	567.95	0.2174
2	0.315867617	0.062260922	0.080842829	0.1108	0.099772352	0.727930055	1.0303	36	494.59	0.4235
3	0.272156978	.	0.083151021	0.0800	0.074069421	0.808606641	0.9918	25	421.28	0.4768
4	0.264225617	.	0.083533063	0.0751	0.069815177	0.873290784	0.9889	16	348.91	0.4683
5	0.216253755	.	0.085602968	0.0491	0.046765686	0.938835769	0.8175	9	280.03	0.6005
6	0.122368138	.	0.088457950	0.0152	0.014973961	0.984895063	0.4431	4	232	0.7774
7	0.011531137	.	0.089790710	0.0001	0.000132967	0.999867033	0.0156	1	117	0.9009

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.6159744	1.160781	49	567.9506	0.2174112
PILLAI'S TRACE	0.4593295	1.173789	49	819	0.1978335
HOELLING-LAWLEY TRACE	0.5120281	1.141987	49	765	0.2388999
ROY'S GREATEST ROOT	0.1817537	3.037883	7	117	0.005683082

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR055	0.1042474488	0.2524234562	0.0077728396	0.3313565035	0.1089625099	-.1627404387	-.0039926674	MOTHER HEIGHT
VAR057	0.0150836864	-.0481952332	0.0716821781	-.0163356406	-.0093730213	0.0308990815	-.0061572504	MOTHER WEIGHT
VAR059	0.6052464538	0.2125104500	-.4885791251	0.1233511525	0.0833434148	-.0726641180	0.4506050566	MOTHER FAT
VAR061	-.3463142600	-.2505009414	-.0098262613	0.4431462884	0.0038074739	0.2834525578	0.3078361201	MOTHER MUSCLE
VAR063	-.1565457965	0.2910136118	-.3196012916	-.1548335437	-.3502785567	0.3587078373	-.4366147383	MOTHER BUILD
VAR065	-.0395374670	0.0388440384	0.0063123968	0.0300557190	0.2841136099	0.0422203358	-.0972788267	MOTHER HAIR
VAR067	-.0127351979	0.1107839026	0.0725939610	-.0397078334	-.0710403426	0.0362505869	0.1090449618	MOTHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	-0.219938080	0.213146767	0.099664263	0.060685011	-0.075407154	-0.413773870	0.245354328	PREF HEIGHT
VAR006	0.029611083	-0.026652109	0.011029347	0.013475582	0.034223146	0.007870426	-0.078487487	PREF WEIGHT
VAR007	-1.056974665	0.280128872	-0.516787596	0.966963105	-0.032067807	0.213596663	-0.104835969	PREF FAT
VAR008	-0.201498840	0.166185611	-0.442507517	-0.532390132	0.727137460	-0.327563384	-0.035152623	PREF MUSCLE
VAR009	0.706119438	-0.326787052	0.042269868	0.436044524	-0.192647922	0.398290871	1.033079658	PREF BUILD
VAR010	-0.103558182	-0.192144503	-0.003721914	-0.034560816	0.056909259	-0.039192970	0.017298194	PREF HAIR
VAR011	-0.021411734	0.082807853	0.142458331	0.005634137	0.083449286	0.045944986	0.039281466	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND FATHERS  
DATA COMPLETE FEMALES

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.518396605	0.414378028	0.065669532	0.3675	0.268735040	0.538624355	1.5023	49	567.95	0.0177
2	0.354185481	0.154638831	0.078537146	0.1434	0.125447355	0.736565246	0.9907	36	494.59	0.4872
3	0.310763986		0.081130027	0.1069	0.096574255	0.842219448	0.7972	25	421.28	0.7468
4	0.236588597	0.137377026	0.084776023	0.0593	0.055974159	0.932250882	0.5066	16	348.91	0.9436
5	0.103085488		0.088848353	0.0107	0.010626618	0.987526869	0.1609	9	280.03	0.9974
6	0.041924755		0.089644806	0.0018	0.001757685	0.998133654	0.0542	4	232	0.9945
7	0.010433246		0.089792876	0.0001	0.000108853	0.999891147	0.0127	1	117	0.9103

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.5386244	1.502316	49	567.9506	0.01773163
PILLAI'S TRACE	0.559224	1.451227	49	819	0.02546175
HOELLING-LAWLEY TRACE	0.6897364	1.538333	49	765	0.01187047
ROY'S GREATEST ROOT	0.3674934	6.14239	7	117	.0000398117

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR069	0.2067454912	0.0429009719	0.2774451881	-.3546762543	-.1295891660	-.0481747158	-.0656792180	FATHER HEIGHT
VAR071	0.0235684304	-.0449861267	-.0315925381	0.0561545401	0.0145941261	-.0136876332	-.0099362255	FATHER WEIGHT
VAR073	0.0358333083	0.2109395326	0.5092168061	-.1331958245	-.7984401531	0.3905865346	0.1635680351	FATHER FAT
VAR075	0.2544376126	0.2117705836	0.3534254621	0.3015840515	0.2290075003	0.2641905421	-.4621094621	FATHER MUSCLE
VAR077	-.2161159979	0.2930369197	-.2536384939	-.1517656324	0.5796525502	-.0006587552	0.7580044552	FATHER BUILD
VAR079	0.0050658193	-.1118565331	-.0743009536	-.1541706349	0.0225791846	0.1824859324	-.0390365543	FATHER HAIR
VAR081	0.0696146701	0.1152273609	-.0923913966	-.0008221935	-.0567124563	-.0295545410	-.0306562838	FATHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.2895490712	0.2774932501	0.0423170884	-.2111403873	-.0606873415	0.1868633205	-.3141666978	PREF HEIGHT
VAR006	0.0151575160	-.0481841737	-.0290987627	-.0111392305	0.0217801331	-.0259341856	0.0679308505	PREF WEIGHT
VAR007	-.2398488655	-.4051212468	0.8436923281	-.7770666188	0.7013894403	0.5533023073	-.3465591735	PREF FAT
VAR008	0.1559569787	0.7915630050	0.1373214729	0.0186946140	0.5739665250	-.2577240895	0.3446352187	PREF MUSCLE
VAR009	0.1188141506	-.4474814664	0.4475410188	1.0499959270	-.5419803703	0.0707954268	-.4943913796	PREF BUILD
VAR010	0.0179025173	-.0169559684	-.0672965185	0.0253032253	0.1571193561	-.1103196758	-.1062642340	PREF HAIR
VAR011	0.0337241992	0.0218520844	-.0676365593	0.0583065328	0.0260222582	0.1650156125	0.0276221020	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND SUBJECTS  
DATA COMPLETE FEMALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.572450209	0.317457123	0.076615782	0.4874	0.327699242	0.327519625	1.6528	49	329.34	0.0059
2	0.548897918	.	0.079625517	0.4312	0.301288925	0.487162361	1.4245	36	288.2	0.0615
3	0.414886046	0.256754364	0.094344493	0.2079	0.172130431	0.697230054	1.0060	25	246.68	0.4598
4	0.335066513	0.224325467	0.101166272	0.1265	0.112269568	0.842197951	0.7421	16	205.33	0.7487
5	0.199695050	-0.014487642	0.109416044	0.0415	0.039878113	0.948709113	0.4025	9	165.64	0.9324
6	0.105041515	.	0.112703167	0.0112	0.011033720	0.988113203	0.2069	4	138	0.9342
7	0.029369960	.	0.113862275	0.0009	0.000862595	0.999137405	0.0604	1	70	0.8065

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.3275196	1.652788	49	329.3396	0.00594579
PILLAI'S TRACE	0.9651626	1.599318	49	490	0.007825303
HOTELLING-LAWLEY TRACE	1.306579	1.660841	49	436	0.004674506
ROY'S GREATEST ROOT	0.4874295	4.874295	7	70	0.0001611572

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR093	-.2202970886	0.1887227454	0.1883935489	-.4568649284	0.1431737391	0.00798886426	0.0221264515	HEIGHT
VAR094	0.0637948312	-.0175690775	0.0258210341	0.0243823737	-.0389900263	0.0271280779	-.0346314878	WEIGHT
VAR032	-.3265349099	-.4215120964	0.3863853923	-.4965773755	0.4421986317	-.0726901422	0.5521215343	SUBJECT FAT
VAR033	0.4328958645	0.1406621149	-.1776585942	-.3365510064	-.1683665319	0.0096134335	0.3362189919	SUBJECT MUSCLE
VAR034	-.3007925809	0.3077340580	-.0824885499	0.5072246126	-.0648497818	-.5900056136	0.0634281772	SUBJECT BUILD
VAR098	-.0252295077	0.1218740220	0.0776107295	0.0960418275	0.0676291050	0.2328676633	0.0992967916	HAIR COLOR
VAR099	0.1100263249	-.0302730285	-.0098729851	0.0381108328	0.1116295942	-.1128449867	-.0736058380	EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	-0.364006617	0.328905346	-0.053952774	-0.254133168	0.033193462	0.191541794	0.163412619	PREF HEIGHT
VAR006	0.047858097	0.003745125	0.040988937	0.025523272	0.021055151	-0.025361036	-0.053483549	PREF WEIGHT
VAR007	-1.009014347	0.060093746	0.455706360	0.579872350	0.455151307	-0.495302660	0.555483092	PREF FAT
VAR008	-0.223972932	-0.341338054	-0.225993584	-0.377013401	0.756994183	0.417476095	-0.320636616	PREF MUSCLE
VAR009	0.376221635	-0.473924969	0.519216026	-0.143023522	-0.851248837	0.259358609	0.606419655	PREF BUILD
VAR010	-0.081262259	-0.062655167	0.030989035	0.098265616	-0.028703572	0.154216171	-0.113519503	PREF HAIR
VAR011	0.076699432	0.090834247	-0.033869738	0.042637167	0.058717313	0.069723301	0.117807429	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND MOTHERS  
DATA COMPLETE FEMALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.486617068	0.228555625	0.086975148	0.3103	0.236796171	0.477531617	1.0533	49	329.34	0.3841
2	0.442192672		0.091677368	0.2431	0.195534359	0.625693424	0.9021	36	288.2	0.6333
3	0.326312223	0.093968120	0.101826092	0.1192	0.106479667	0.777775198	0.6906	25	246.68	0.8646
4	0.250029122	-0.021786421	0.106836381	0.0667	0.062514562	0.870461666	0.5962	16	205.33	0.8848
5	0.201281450		0.109343552	0.0422	0.040514222	0.928506866	0.5696	9	165.64	0.8206
6	0.165088164		0.110854683	0.0280	0.027254102	0.967713006	0.5708	4	138	0.6843
7	0.071929839	-0.190287217	0.113370956	0.0052	0.005173902	0.994826098	0.3641	1	70	0.5482

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.4775316	1.053345	49	329.3396	0.384143
PILLAI'S TRACE	0.674267	1.065911	49	490	0.3589743
HOTELLING-LAWLEY TRACE	0.8146225	1.035497	49	436	0.4125818
ROY'S GREATEST ROOT	0.310266	3.10266	7	70	0.006578625

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR055	0.1833188783	-0.0636917139	-0.1131908196	-0.1613533670	0.3673766453	0.0122508932	0.0710753721	MOTHER HEIGHT
VAR057	0.0400908877	0.0331359674	-0.0193431042	0.0711367723	-0.0468752041	-0.0279699067	-0.0538092733	MOTHER WEIGHT
VAR059	0.0135434141	0.5189435431	0.1538725026	-0.2353134696	0.3034942064	0.2737176230	0.4821871515	MOTHER FAT
VAR061	0.1986546868	-0.2781286838	0.3556198559	0.4329597869	0.1059226898	-0.1421920596	0.2269460508	MOTHER MUSCLE
VAR063	-0.0299131200	-0.2577158463	0.4623246336	-0.5758861005	-0.1694847449	0.0577265686	-0.2118720058	MOTHER BUILD
VAR065	-0.0138178601	-0.1117276354	-0.0197701283	0.0599524728	0.11944452829	0.2285415301	-0.0947840939	MOTHER HAIR
VAR067	0.1071190357	-0.0410621099	-0.0245905533	-0.0441898698	-0.0947514485	0.0083898571	0.0995218198	MOTHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.0453677517	-0.0911672424	-0.4311542609	-0.0670243734	0.1605762270	-0.3556689733	0.1400955020	PREF HEIGHT
VAR006	-0.0043396135	0.0152676042	0.0273830188	0.0345222977	0.0074562186	0.0378634836	-0.0700011146	PREF WEIGHT
VAR007	-0.1959673449	-0.8968801368	0.3506751833	0.0558587255	1.1021163642	-0.2609984908	0.2738991701	PREF FAT
VAR008	-0.5787649486	0.0085069266	-0.6335825832	-0.5089457410	0.1161367041	0.4389273959	-0.0915597328	PREF MUSCLE
VAR009	0.2442341742	0.8337615811	0.4529398652	0.3858175512	-0.0520839012	-0.0365802477	0.8384244837	PREF BUILD
VAR010	-0.2006530342	-0.0161459254	-0.0340770095	0.1137302879	-0.0528040585	0.0093782210	0.0338305297	PREF HAIR
VAR011	0.1290716579	-0.0631752812	-0.0881840869	0.0538259362	-0.0039724245	0.0713761110	0.0530613389	PREF EYE

CANONICAL CORRELATIONS  
 PREFERENCES AND FATHERS  
 DATA COMPLETE FEMALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.522355929	0.353614012	0.082865782	0.3752	0.272855717	0.514886267	0.9389	49	329.34	0.5929
2	0.380257150	0.138744038	0.097482389	0.1690	0.144595505	0.708093673	0.6547	36	288.2	0.9377
3	0.295555248	0.025681459	0.104005789	0.0957	0.087352905	0.827788114	0.5150	25	246.68	0.9749
4	0.241367414	.	0.107321435	0.0619	0.058258229	0.907018845	0.4166	16	205.33	0.9773
5	0.180880146	.	0.110232057	0.0338	0.032717627	0.963129036	0.2863	9	165.64	0.9778
6	0.064417673	.	0.113487681	0.0042	0.004149637	0.995706180	0.0743	4	138	0.9899
7	0.012032635	.	0.113944077	0.0001	0.000144784	0.999855216	0.0101	1	70	0.9201

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.5148863	0.9388594	49	329.3396	0.5928756
PILLAI'S TRACE	0.6000744	0.9376272	49	490	0.5959584
HOULLING-LAWLEY TRACE	0.7399925	0.9406318	49	436	0.5900356
ROY'S GREATEST ROOT	0.3752429	3.752429	7	70	0.001656525

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR059	0.0211776696	0.2505250574	0.3337982986	-.0984733626	-.1321998871	0.0903214470	-.1981011428	FATHER HEIGHT
VAR071	0.0348331309	-.0236624508	-.0289513961	0.0359051432	0.0681551997	-.0084026558	-.0081645696	FATHER WEIGHT
VAR073	-.2914648839	0.4323094083	0.2932415917	0.4855872534	-.3886469975	0.6060005833	0.1051092323	FATHER FAT
VAR075	0.4144256938	0.2187519696	0.1062808494	0.4190085341	-.3574199890	-.4580340405	0.0025267919	FATHER MUSCLE
VAR077	-.1143563562	0.0775173828	-.2921795782	-.7772816460	0.1776820587	-.1544442033	0.6609302870	FATHER BUILD
VAR079	0.0578959425	-.1510117925	0.1934758305	-.0203717394	-.0541857279	0.0304219280	0.0673924983	FATHER HAIR
VAR081	0.0943544682	0.0222189974	-.0923630887	-.0344837890	-.0677889510	0.0908896843	-.0272531143	FATHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.1713283024	0.2938958869	0.2026066806	-.1211466726	-.3868257613	-.2056627897	-.0963449359	PREF HEIGHT
VAR006	0.0231047457	-.0326435873	0.0004041441	-.0258574192	0.0728577493	0.0275366153	0.0157551907	PREF WEIGHT
VAR007	-.6099971212	0.1386649816	1.2074917302	0.0448092355	0.2394388376	-.5178061429	-.3878378938	PREF FAT
VAR008	-.0822890324	0.6278157978	-.5309189662	-.4634202048	0.2322276947	-.2967008118	-.4129208138	PREF MUSCLE
VAR009	0.1933066491	0.1293443123	-.0695951893	1.2445630709	-.0674349823	0.3189286656	0.3188789148	PREF BUILD
VAR010	0.0692297350	-.0428001042	-.0746215874	0.0503883035	0.0748898756	-.1914835613	-.0404037264	PREF HAIR
VAR011	0.0495325879	-.0273770135	0.0272217715	0.0099848081	-.0686740952	0.0891632696	-.1501339046	PREF EYE

CANONICAL CORRELATIONS  
 PARTNERS AND PREFERENCES  
 DATA COMPLETE FEMALES  
 FEMALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.883065409	0.855952581	0.025093804	3.5414	0.779804517	0.037523452	6.1101	49	329.34	0.0000
2	0.686481537	0.593743756	0.060255868	0.8913	0.471256900	0.170409728	3.9728	36	288.2	0.0000
3	0.579621510	0.410608885	0.075674256	0.5059	0.335961095	0.322292108	3.5163	25	246.68	0.0000
4	0.547837101		0.079758103	0.4288	0.300125489	0.485351244	3.4258	16	205.33	0.0000
5	0.453461916	0.406147202	0.090527124	0.2589	0.205627709	0.693483241	2.9871	9	165.64	0.0025
6	0.353607441	0.334502864	0.099711149	0.1429	0.125038223	0.872995255	2.4244	4	138	0.0510
7	0.047408352	-0.488622823	0.113704444	0.0023	0.002247552	0.997752448	0.1577	1	70	0.6925

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.03752345	6.11013	49	329.3396	9.38384E-25
PILLAI'S TRACE	2.220061	4.64454	49	490	2.12512E-19
HOELLING-LAWLEY TRACE	5.771476	7.336336	49	436	2.70040E-33
ROY'S GREATEST ROOT	3.541419	35.41419	7	70	1.34332E-20

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	0.0061146023	-.2766397950	0.3399339754	0.1154524625	0.2221026841	-.0581808762	-.0476244069	PARTNER HEIGHT
VAR041	0.0526300935	0.0151465692	-.0325726363	-.0417250061	-.0379136392	0.0065556265	0.0078695271	PARTNER WEIGHT
VAR043	-.1302154298	-.4070684876	0.5515121746	0.2999564451	0.0862306885	0.7897905308	0.1002106985	PARTNER FAT
VAR045	0.1043101558	0.0768968594	-.0121719763	0.0949301770	0.3106661462	-.2880461303	0.6557505823	PARTNER MUSCLE
VAR047	-.0860141740	0.3324619952	-.1233721244	0.6367361802	-.1187054593	-.0616496880	-.4351937332	PARTNER BUILD
VAR049	0.0159552635	-.1224355725	-.1997783209	0.0825818370	0.0348634551	-.0317515174	0.0704358831	PARTNER HAIR
VAR051	0.0239782481	0.0571476662	0.0123970143	-.0531104996	0.1335226449	0.0699426954	-.0569697007	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.0487716873	-.3447899666	0.3214487340	0.0379694595	0.2985669242	-.0067991001	-.2396865855	PREF HEIGHT
VAR006	0.0519906642	0.0245144791	-.0406287772	-.0331505101	-.0482470397	0.0058015072	0.0129564016	PREF WEIGHT
VAR007	-.2090758882	-.4034924891	0.3512194594	0.3550552380	-.5279232086	1.1267978451	-.5677814767	PREF FAT
VAR008	0.1664346046	0.3343011264	-.2944633612	0.1850986089	0.3846093295	-.2128426345	-.8696941174	PREF MUSCLE
VAR009	0.0190638400	0.1449358912	0.2416632553	0.8076128178	0.0792168726	-.1013865983	1.0330831923	PREF BUILD
VAR010	0.0198254015	-.0920827145	-.1968401641	0.0851758818	0.0557848811	0.0218543148	-.0132687024	PREF HAIR
VAR011	0.0112348390	0.0472889796	0.0573406370	-.0753434061	0.1272765137	0.1004387512	0.0404451271	PREF EYE

CANONICAL CORRELATIONS  
 PREFERENCES AND SUBJECTS  
 DATA COMPLETE FEMALES WITHOUT PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.777098326	0.663352313	0.058404441	1.5245	0.603881809	0.100599699	2.0075	49	171.96	0.0006
2	0.709262492	0.621399784	0.073270796	1.0123	0.503053283	0.253963845	1.5473	36	152.07	0.0370
3	0.504798386	0.251750017	0.109870589	0.3420	0.254821411	0.511048440	1.0420	25	131.52	0.4194
4	0.434682741		0.119587933	0.2330	0.188949085	0.68506661	0.9085	16	110.62	0.5615
5	0.307187882	0.066545044	0.133528685	0.1042	0.094364395	0.845577815	0.7151	9	90.199	0.6938
6	0.224772770	0.057169828	0.139992776	0.0532	0.050522798	0.933684377	0.6632	4	76	0.6195
7	0.128969688	-0.065519833	0.144989528	0.0169	0.016633180	0.983366820	0.6597	1	39	0.4216

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.1005997	2.007464	49	171.9579	0.000557092
PILLAI'S TRACE	1.712226	1.804076	49	273	0.001761063
HOTELLING-LAWLEY TRACE	3.286038	2.098083	49	219	0.0001557202
ROY'S GREATEST ROOT	1.524499	0.493638	7	39	.00000276166

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR093	0.3714030732	-.1541221403	-.0778387241	-.0082070522	-.0295382849	-.0470185283	-.1707271380	HEIGHT
VAR094	-.0242407231	-.0194370916	0.0187274168	0.0187614254	0.0425041911	0.0652473007	0.0150707953	WEIGHT
VAR032	0.2125476887	-.1497268473	-.4860962818	0.0592247139	0.5702473565	-.7348013141	-.3158108942	SUBJECT FAT
VAR033	0.2135590233	0.2912096339	-.2247167102	0.3797238268	-.1339188453	0.1847048555	-.0123275616	SUBJECT MUSCLE
VAR034	-.0596637897	0.0495245454	0.0382788193	-.2628805747	-.5192424553	-.4180254824	0.6523627490	SUBJECT BUILD
VAR098	0.0361921368	0.0038430514	0.2442100473	0.1819090094	-.0723735238	-.0941374671	-.0018052152	HAIR COLOR
VAR099	0.0596157168	0.1200290169	0.0074392692	-.1288433167	0.0984721140	0.0488048756	0.0463477560	EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.384527507	0.054153036	0.070903491	-0.329225298	-0.216496947	-0.124127578	0.098869053	PREF HEIGHT
VAR006	-0.023105342	-0.036100011	0.004964411	0.021783685	0.081986580	-0.026617502	-0.072680283	PREF WEIGHT
VAR007	0.740744906	0.797835696	-0.725198249	-0.159349976	0.789851245	0.468984731	0.422322669	PREF FAT
VAR008	0.220300266	0.538381945	0.090890464	0.573304775	0.003505882	-0.652818157	-0.461282025	PREF MUSCLE
VAR009	0.140782068	-0.442128646	-0.027728251	0.302505450	-1.186073981	1.202324184	0.539603375	PREF BUILD
VAR010	0.047393789	0.018021712	0.185150710	0.056166832	0.119769502	-0.027742720	0.060993448	PREF HAIR
VAR011	0.008257037	0.061211568	0.056105217	-0.050619094	-0.037559388	0.067333195	-0.168258636	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND MOTHERS  
DATA COMPLETE FEMALES WITHOUT PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.590579790	0.325305532	0.096016489	0.5356	0.348784488	0.292390076	0.9618	49	171.96	0.5503
2	0.497918032	0.182748642	0.110887797	0.3296	0.247922367	0.448991264	0.8449	36	152.07	0.7175
3	0.431141284	0.034119862	0.120035032	0.2283	0.185882807	0.597001219	0.7837	25	131.52	0.7564
4	0.402403563	.	0.123566883	0.1932	0.161928628	0.733311155	0.7388	16	110.62	0.7490
5	0.331462818	.	0.131242862	0.1234	0.109867600	0.874998454	0.5653	9	90.199	0.8221
6	0.126095372	.	0.145097625	0.0162	0.015900030	0.982998095	0.1636	4	76	0.9562
7	0.033461580	.	0.147276869	0.0011	0.001119677	0.998880323	0.0437	1	39	0.8355

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.2923901	0.961784	49	171.9579	0.5503386
PILLAI'S TRACE	1.071406	1.006859	49	273	0.4672979
HOTELLING-LAWLEY TRACE	1.427486	0.9114271	49	219	0.6415417
ROY'S GREATEST ROOT	0.53559	2.984001	7	39	0.01318827

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR055	-.1506111076	0.0485109174	0.0651995967	0.4066166675	-.2441322088	0.1312726287	-.0776069599	MOTHER HEIGHT
VAR057	-.0162200093	0.0409906283	-.0021868626	-.0509726408	0.0383250638	0.0345032878	0.0102546857	MOTHER WEIGHT
VAR059	-.5162519586	-.5394575849	-.3079926390	0.8219859772	0.1967385933	-.1890358730	-.1580129687	MOTHER FAT
VAR061	0.5572529162	0.4690110955	-.1694596444	0.3354990005	0.2159937123	-.0398518695	-.0992461015	MOTHER MUSCLE
VAR063	0.2085299984	-.2005646575	-.1080062258	-.3134752598	-.1452666035	-.0847566889	0.8089956960	MOTHER BUILD
VAR065	0.0649073604	0.0023548022	0.3086066840	0.0770467062	0.0073736198	0.0975156659	-.0259947885	MOTHER HAIR
VAR067	-.0351665535	-.0847646102	-.1600538194	-.0325080314	-.0064387436	0.1270068419	-.0257567477	MOTHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.307982284	-0.035423363	-0.067095982	-0.142554333	-0.291108284	-0.068620103	0.333014816	PREF HEIGHT
VAR006	-0.060768579	0.017789782	-0.007530333	0.042845403	0.038709847	0.086876894	0.010058735	PREF WEIGHT
VAR007	0.907819865	0.005190082	-0.902689351	0.524525385	-0.454331089	0.226607955	-0.766035991	PREF FAT
VAR008	0.444491380	-0.490853165	0.177095070	0.319014900	0.718380887	0.370639504	0.298671030	PREF MUSCLE
VAR009	0.163687028	0.448274676	1.030995056	-0.113692148	-0.667376969	-1.193100594	-0.511899566	PREF BUILD
VAR010	0.066861341	0.150305152	-0.066599042	-0.013597262	0.133022753	0.026748053	0.041738586	PREF HAIR
VAR011	0.039008355	-0.017505966	0.118079233	-0.074515049	-0.037017004	0.144046242	-0.018375836	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND FATHERS  
DATA COMPLETE FEMALES WITHOUT PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.760640305	0.656042395	0.062135922	1.3729	0.578573674	0.181399464	1.4026	49	171.96	0.0593
2	0.559355260	0.294414787	0.101310567	0.4553	0.312878306	0.430441698	0.8939	36	152.07	0.6434
3	0.505057789	.	0.109831965	0.3424	0.255083370	0.626441724	0.7058	25	131.52	0.8437
4	0.348951559	0.123845962	0.129488363	0.1387	0.121767190	0.840955482	0.4033	16	110.62	0.9792
5	0.183475970	-0.248020738	0.142478554	0.0348	0.033663432	0.957554162	0.1802	9	90.199	0.9957
6	0.092046996	.	0.146192732	0.0085	0.008472649	0.990911649	0.0869	4	76	0.9863
7	0.024919128	.	0.147350400	0.0006	0.000620963	0.999379037	0.0242	1	39	0.8771

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.1813995	1.402617	49	171.9579	0.05927408
PILLAI'S TRACE	1.31106	1.283978	49	273	0.1110932
HOTELLING-LAWLEY TRACE	2.353325	1.50256	49	219	0.02606551
ROY'S GREATEST ROOT	1.372894	7.648981	7	39	.00000837623

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR069	0.3323307489	0.1746438182	-.0425053323	-.3987934104	-.0168768962	0.0857893446	-.1636184472	FATHER HEIGHT
VAR071	-.0020489322	-.0133571674	0.0480599857	0.0468619986	0.0088289205	-.0395895235	0.0332320590	FATHER WEIGHT
VAR073	0.3768816273	0.1598515258	-.3362724669	-.2474944849	-.7463058902	0.4410148598	-.4364699884	FATHER FAT
VAR075	-.2676879416	0.4730751359	0.4967293839	-.0192183438	-.1487051132	-.0453334018	-.1963672743	FATHER MUSCLE
VAR077	-.2407043385	-.2147783808	-.3754413845	0.2971707098	0.6093053442	0.6284696584	-.0493926292	FATHER BUILD
VAR079	0.0202894347	-.0151288265	-.0209954390	-.1076344284	-.0258982383	0.1411063017	0.2639549844	FATHER HAIR
VAR081	0.0245100561	0.1159339640	-.0806013526	0.04133390279	0.0127149920	-.0996826795	0.0111677048	FATHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.197513902	0.262498107	-0.129229174	0.056667778	0.309762799	-0.307548611	-0.053996078	PREF HEIGHT
VAR006	0.044599682	-0.008699098	-0.000922807	-0.004925177	-0.056886729	0.079386336	0.058487187	PREF WEIGHT
VAR007	-0.437151872	0.106185972	0.446820315	-0.834970143	0.946133247	-0.142537293	0.862572941	PREF FAT
VAR008	-0.266953856	0.909798023	-0.076530408	0.058661073	-0.145211927	0.619246574	0.038000763	PREF MUSCLE
VAR009	-0.245980227	-0.564981669	1.020954820	0.487460718	0.275148046	-0.802408360	-1.035306521	PREF BUILD
VAR010	0.038265073	-0.024333371	-0.061055277	-0.021968614	0.121505437	0.170968848	-0.039678740	PREF HAIR
VAR011	-0.006474367	0.031371662	0.020884296	0.181290393	0.006311788	0.003724005	0.096945305	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND SUBJECTS  
DATA COMPLETE MALES

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.609409931	0.458950829	0.067011068	0.5908	0.371380463	0.271702816	2.3002	49	385.18	0.0000
2	0.561139033	.	0.073034356	0.4596	0.314877015	0.432221399	1.9674	36	336.5	0.0012
3	0.489361588	0.429633585	0.001072263	0.3149	0.239474764	0.630866879	1.5185	25	287.54	0.0570
4	0.300577801	0.092251898	0.096969334	0.0993	0.090347014	0.829514720	0.9422	16	238.93	0.5216
5	0.237094874	0.083261505	0.100607928	0.0596	0.056213979	0.911902378	0.8257	9	192.42	0.5932
6	0.183798810	.	0.102999185	0.0350	0.033782003	0.966217297	0.6933	4	160	0.5976
7	0.000851669	.	0.106600281	0.0000	0.000000725	0.999999275	0.0001	1	81	0.9939

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.2717028	2.300202	49	385.1847	.00000640263
PILLAI'S TRACE	1.106076	2.171530	49	567	0.0000157879
HOTELLING-LAWLEY TRACE	1.559106	2.331841	49	513	.00000267088
ROY'S GREATEST ROOT	0.5907873	6.836253	7	81	.00000222189

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR093	0.205272262	0.0837068481	0.1476712325	0.2930691066	0.0869530620	0.1973608620	-.2448485243	HEIGHT
VAR094	-.0120469938	-.0116510773	-.0289411691	-.0065133914	-.0082870527	0.0119193400	0.0568787203	WEIGHT
VAR032	0.7665010192	-.4728256558	0.4930545332	0.1993651849	-.2372065526	0.1151584980	-.5039484371	SUBJECT FAT
VAR033	-.5360788970	-.3115308251	0.4468442863	0.3393197605	0.1267113042	-.0026294315	0.1010847532	SUBJECT MUSCLE
VAR034	-.0003421396	0.7208726332	0.1362353258	-.5630848043	0.1673064946	0.1308129170	-.1808955932	SUBJECT BUILD
VAR098	0.0988815658	-.0715790497	-.0098471782	-.0525644579	0.2385987960	-.0638889226	0.0220147784	HAIR COLOR
VAR099	-.0806263086	-.0541830216	-.0497835967	-.0327642624	-.0666389747	0.1636626545	-.1117568860	EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	-.0663246601	0.3811088655	-.0317387013	0.4253585722	-.0691329416	0.0913226778	-.2445602838	PREF HEIGHT
VAR006	0.0330660134	-.0107579139	-.0355104497	-.0400767308	0.0189197471	0.0254720621	0.0668641097	PREF WEIGHT
VAR007	-.0749398971	-.1098898921	0.4820145589	0.5228022065	-.8262932104	0.0563076132	0.2299880605	PREF FAT
VAR008	-.6857794725	0.2755232390	0.1010628944	-.0275328561	0.1698741947	0.2231910291	0.3569879120	PREF MUSCLE
VAR009	0.4759593864	-.2882521161	0.4830732216	0.1628677845	0.3375754114	-.0874796980	-.0176353219	PREF BUILD
VAR010	-.0462410026	-.1335353963	-.1010457655	0.1126974975	0.1022675618	0.0179294229	-.0205799231	PREF HAIR
VAR011	0.0466983114	0.0768803618	0.0899764469	-.0414236477	0.1025069939	0.1081932891	-.0703585071	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND MOTHERS  
DATA COMPLETE MALES

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.638842648	0.524913490	0.063094628	0.6095	0.408119929	0.256516722	2.4160	49	385.18	0.0000
2	0.554423583	0.437698165	0.073832953	0.4438	0.307385509	0.433393071	1.9604	36	336.5	0.0012
3	0.491294091	0.428196629	0.080870242	0.3102	0.241369883	0.625734918	1.5471	25	287.54	0.0493
4	0.364854257	0.268114851	0.092409865	0.1536	0.133118629	0.824822142	0.9717	16	238.93	0.4885
5	0.179296503	.	0.103173448	0.0332	0.032147265	0.951482140	0.4414	9	192.42	0.9112
6	0.119847106	.	0.105069222	0.0146	0.014363329	0.983085655	0.3426	4	160	0.8488
7	0.050874271	.	0.106324456	0.0026	0.002588191	0.997411809	0.2102	1	81	0.6478

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.2565167	2.415971	49	385.1847	.00000170264
PILLAI'S TRACE	1.139093	2.248957	49	567	0.000006258
HOTELLING-LAWLEY TRACE	1.655444	2.475927	49	513	4.58961E-07
ROY'S GREATEST ROOT	0.6895315	7.978864	7	81	2.41813E-07

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR055	0.2340531848	0.1493470100	-.1628519418	0.0309911072	0.2530067856	0.1540394267	0.0451784169	MOTHER HEIGHT
VAR057	-.0128313701	-.0674132780	0.0062125630	-.0366710312	-.0099504060	0.0197565676	0.0192172527	MOTHER WEIGHT
VAR059	0.1176934347	0.3980729822	0.3235460120	0.5785109787	0.2506285802	0.2913266441	-.5149410123	MOTHER FAT
VAR061	-.0289474540	0.0890526433	0.2232499031	0.1134138466	-.2855705039	0.3992684462	0.6000027150	MOTHER MUSCLE
VAR063	0.2038720166	0.1495781602	0.3402967587	-.4555921108	0.1058114649	-.6621930058	-.0147051969	MOTHER BUILD
VAR065	-.0252726277	-.1236939561	0.0129258500	0.1703514242	0.0749323571	-.0964214983	0.0822103960	MOTHER HAIR
VAR067	-.1137476504	0.0676946168	0.0180930560	-.1297709536	0.0908768969	0.0762867081	0.0202281475	MOTHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.2636624325	-.0348817192	-.3510845146	0.3904223948	0.0886387116	0.2000931897	0.1009475821	PREF HEIGHT
VAR006	-.0225968355	-.0563277704	0.0310252647	-.0483583539	0.0385592895	-.0254742874	-.0208214320	PREF WEIGHT
VAR007	-.2444565557	-.5434238668	0.5565918455	0.8964856623	-.1181196301	0.4914268387	0.5179391839	PREF FAT
VAR008	-.2931412155	-.0524752610	-.0292464214	0.5816297517	0.1510806107	-.3889782597	-.4016550381	PREF MUSCLE
VAR009	0.6402466575	0.7707320279	0.4664874005	-.4586184728	-.0085069940	0.1410561410	-.1398084632	PREF BUILD
VAR010	-.1155506159	0.0899243413	-.0482442093	-.0313834829	0.1267439463	0.1133438794	-.0205653850	PREF HAIR
VAR011	0.0439944529	0.0152786056	-.0176264772	0.0369285030	0.0739832630	-.1312036102	0.1361339523	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND FATHERS  
DATA COMPLETE MALES

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.534943006	0.370266466	0.076095162	0.4009	0.286164105	0.431069376	1.4172	49	385.18	0.0399
2	0.459743804	0.327828206	0.084068841	0.2680	0.211364365	0.603877416	1.1377	36	336.5	0.2760
3	0.354436751	0.167914128	0.093208644	0.1437	0.125625410	0.765724233	0.8569	25	287.54	0.6657
4	0.297650144		0.097156035	0.0972	0.088595608	0.875739347	0.6629	16	238.93	0.8289
5	0.169561825	-0.062806472	0.103535469	0.0296	0.028751213	0.960868036	0.3536	9	192.42	0.9552
6	0.091635505		0.105705228	0.0085	0.008397066	0.989311954	0.2155	4	160	0.9295
7	0.040066419		0.106354071	0.0023	0.002310381	0.997689619	0.1876	1	81	0.6661

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.4310694	1.417153	49	385.1847	0.03987186
PILLAI'S TRACE	0.7512081	1.391077	49	567	0.04470235
HOELLING-LAWLEY TRACE	0.9501635	1.42109	49	513	0.0359392
ROY'S GREATEST ROOT	0.4008822	4.63878	7	81	0.0002094279

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR069	0.1022984978	0.0992498417	0.2458674084	0.2028435558	0.0975270333	0.1317331290	-.1337082308	FATHER HEIGHT
VAR071	0.0317398841	0.0095268753	-.0241564810	-.0243979984	0.0162065237	-.0327083607	0.0140642922	FATHER WEIGHT
VAR073	0.0189868613	-.2042491875	-.3105021672	0.4014117323	0.1848378021	0.6135251813	-.1870021427	FATHER FAT
VAR075	-.4776238640	0.2266750032	0.1710952757	-.1239089623	0.6807430771	-.2677851087	0.2401060684	FATHER MUSCLE
VAR077	0.0223943928	-.3956448031	0.2904947092	0.0147488311	-.6740495947	0.2492021600	0.4267707864	FATHER BUILD
VAR079	-.0143861719	0.2096955925	-.0353331907	0.0131260618	-.0578599683	0.0167821771	0.0882490987	FATHER HAIR
VAR081	-.0030593454	-.0410955081	-.0102835811	0.1557837909	0.0206899170	-.0992312323	0.0000898662	FATHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.1605692578	-.1881567540	0.5444039017	0.1852193589	-.0875245963	0.0676697018	-.0200524876	PREF HEIGHT
VAR006	0.0368146740	0.0294828274	-.0434935380	-.0733732124	0.0044697007	-.0047277388	-.0034086757	PREF WEIGHT
VAR007	-.3450603959	-.4418653459	0.6256087278	-.4917155467	0.7238302835	0.6279008105	0.3557966947	PREF FAT
VAR008	0.1610034590	-.5305224152	-.0031014756	-.1981333778	-.0583398222	-.3683425824	0.5268469980	PREF MUSCLE
VAR009	0.1260805523	0.4211585293	-.5853347054	0.8483901030	-.0333041319	0.4601342527	0.0539875690	PREF BUILD
VAR010	0.0197129249	0.1492101735	0.0674001883	0.0386773479	0.0730279475	-.1201878903	0.0749356304	PREF HAIR
VAR011	0.0911206107	-.1132899047	-.0148954609	0.0333927321	0.0951725920	-.0326406406	-.1116713848	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND SUBJECTS  
DATA COMPLETE MALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF HD: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.691092850	0.523761296	0.073877197	0.9143	0.477609328	0.188580359	1.5264	49	192.27	0.0236
2	0.623612220	0.495658704	0.088423694	0.6364	0.388892201	0.360994083	1.2305	36	169.63	0.1919
3	0.529724360	0.409945351	0.101737407	0.3901	0.280607898	0.590722101	0.8914	25	146.38	0.6166
4	0.380775602	0.206615879	0.120970480	0.1691	0.144609534	0.821140653	0.5115	16	122.84	0.9372
5	0.168091489	.	0.137425531	0.0291	0.028254749	0.959960025	0.1880	9	99.934	0.9950
6	0.110049955	.	0.139708603	0.0123	0.012110993	0.987872103	0.1285	4	84	0.9717
7	0.004136638	.	0.141418938	0.0000	0.000017112	0.999982088	0.0007	1	43	0.9785

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.1885804	1.526421	49	192.2652	0.02357711
PILLAI'S TRACE	1.332102	1.443729	49	301	0.03520586
HOELLING-LAWLEY TRACE	2.151121	1.549058	49	247	0.01701866
ROY'S GREATEST ROOT	0.9142781	5.616268	7	43	0.0001207202

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR093	0.2018731473	0.0415316656	0.0187235022	0.4236329069	0.0054316395	0.1512206539	0.2496149016	HEIGHT
VAR094	-0.0292766533	-0.0322391802	-0.0095230762	-0.0178365554	0.0321884358	-0.0463861421	-0.0242992471	WEIGHT
VAR032	0.3481490102	0.4917985692	-0.6502199142	0.7005822645	-0.1879215706	-0.0757741335	0.2462777499	SUBJECT FAT
VAR033	-0.5574852428	0.4562337422	0.2982589272	0.3712540586	0.2152400477	-0.1312459320	0.0874112670	SUBJECT MUSCLE
VAR034	0.6265167897	-0.0105804937	0.3834532174	-0.6859881068	-0.0785140808	0.1995050056	0.2192917105	SUBJECT BUILD
VAR098	0.0182420483	0.0303554072	-0.1110931033	-0.0534607652	0.1412492354	0.1930684432	-0.0541810205	HAIR COLOR
VAR099	-0.0666291681	-0.0236438602	0.0002829337	-0.0041386018	-0.0726158681	-0.0584132088	0.2105237149	EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.0844082144	-0.3024556955	0.4064879800	0.2130566763	0.1133941986	-0.2900300042	-0.0393822020	PREF HEIGHT
VAR006	0.0105832793	-0.0247262132	-0.0394049364	-0.0206392213	-0.0089173108	0.0707489684	0.0271588988	PREF WEIGHT
VAR007	-0.077153876	-0.3393382486	0.1434814203	0.5467362045	-0.2006834022	-0.5042012762	1.1887274051	PREF FAT
VAR008	-0.4622195818	-0.0210894344	0.7390637288	-0.1580340523	-0.1076219806	0.2839383036	0.2909872306	PREF MUSCLE
VAR009	0.4920006997	0.9344077078	-0.3311649002	0.4917078283	-0.0816998670	0.3061143553	-0.6196028002	PREF BUILD
VAR010	-0.1453419421	-0.0501731252	-0.0250441678	0.1254478481	0.1078703455	0.0575302441	-0.0308340939	PREF HAIR
VAR011	0.0913169736	0.0614603148	0.0776263796	-0.0443924431	0.1404835507	-0.0011030899	0.0694736424	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND MOTHERS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.633067554	0.320551541	0.084743279	0.6688	0.400774528	0.210196174	1.4112	49	192.27	0.0533
2	0.606710707	.	0.089364454	0.5825	0.368097882	0.350779771	1.2695	36	169.63	0.1595
3	0.529743079	.	0.101734602	0.3901	0.280627730	0.555117258	1.0052	25	146.38	0.4644
4	0.413345087	0.284509829	0.117258929	0.2061	0.170854161	0.771668969	0.6798	16	122.84	0.8092
5	0.188356680	.	0.138403976	0.0368	0.035478239	0.930679420	0.3327	9	99.934	0.9622
6	0.137668155	.	0.138741065	0.0193	0.018952521	0.964912828	0.3784	4	84	0.8235
7	0.128243327	.	0.139095491	0.0167	0.016446351	0.983553649	0.7190	1	43	0.4012

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.2101962	1.41116	49	192.2652	0.0533133
PILLAI'S TRACE	1.291231	1.389415	49	301	0.05274877
HOTELLING-LAWLEY TRACE	1.920329	1.382061	49	247	0.05885501
ROY'S GREATEST ROOT	0.6688209	4.108471	7	43	0.001556924

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR055	0.2976894610	-.0303629859	-.2547166170	0.0994224210	0.0881052929	-.1011877504	0.2069655438	MOTHER HEIGHT
VAR057	-.0253347396	-.0430073248	0.0298159968	0.0395624412	-.0405592072	0.0038503784	-.0218564103	MOTHER WEIGHT
VAR059	0.2946640874	0.7072121578	0.1059364446	0.0772748454	0.6341529729	-.4084572473	0.1883402361	MOTHER FAT
VAR061	0.2164071142	0.1857330473	0.3070661359	-.0881918728	-.6159922313	-.2378055147	0.0672980144	MOTHER MUSCLE
VAR063	-.0629920068	-.1879403901	0.1672927588	-.1771185564	-.0015483497	1.0766022547	0.0333452175	MOTHER BUILD
VAR065	-.1278322237	-.1129508162	0.0923343119	-.0580094103	0.0581863952	-.0748622909	0.1712093081	MOTHER HAIR
VAR067	-.0402503069	0.0793765189	-.1054581263	0.1285049169	-.1066112234	0.0896346461	0.0129174508	MOTHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.3019994292	-.2480306461	-.1660267752	-.1588950277	0.0674921682	0.0509014594	0.4416728396	PREF HEIGHT
VAR006	-.0478366119	-.0140992843	0.0176509003	0.0675327341	0.0207122865	0.0056786095	-.0265340820	PREF WEIGHT
VAR007	-.1892595299	-.2748459338	0.7401090504	-.1375815353	-.4208409745	0.5125273476	1.0552768431	PREF FAT
VAR008	-.3370622917	0.2569897054	0.0517093989	-.1529124694	0.5956797697	-.2770610758	0.5699946769	PREF MUSCLE
VAR009	0.8481177773	0.6921956303	0.1764507710	0.3496460613	-.2114936610	-.1457906274	-.7301420786	PREF BUILD
VAR010	-.0342449144	0.1010788280	-.1509227752	0.0884467569	-.0478991243	0.0544502191	0.0930224077	PREF HAIR
VAR011	0.0502208829	0.0114721375	0.0299620061	-.0611698156	0.1316611591	0.1403192019	-.0189415786	PREF EYE

CANONICAL CORRELATIONS  
PREFERENCES AND FATHERS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H<sub>0</sub>: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.604356144	0.281801340	0.089767722	0.5754	0.365246349	0.273879079	1.1402	49	192.27	0.2642
2	0.575907877		0.094516966	0.4963	0.331664123	0.431473027	0.9940	36	169.63	0.4867
3	0.452036114	0.259253643	0.112523790	0.2568	0.204336648	0.645593095	0.7320	25	146.38	0.8175
4	0.335795752	0.078658317	0.125474856	0.1271	0.112758787	0.811389759	0.5436	16	122.84	0.9185
5	0.261180403		0.131774270	0.0732	0.068215203	0.914508644	0.4153	9	99.934	0.9243
6	0.131777235		0.138965541	0.0177	0.017365240	0.981459074	0.1974	4	84	0.9391
7	0.034589925		0.141252151	0.0012	0.001196463	0.998803537	0.0515	1	43	0.8215

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.2738791	1.140184	49	192.2652	0.2641791
PILLAI'S TRACE	1.100783	1.146246	49	301	0.245775
HOTELLING-LAWLEY TRACE	1.547649	1.114488	49	247	0.2931226
ROY'S GREATEST ROOT	0.5754143	3.534688	7	43	0.004377087

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR069	0.2457066279	-.0809746646	0.1433541544	-.0929527620	0.0534197830	0.0844233693	0.2048870564	FATHER HEIGHT
VAR071	0.0093505184	0.0054232757	-.0282931257	0.0266470150	-.0428278947	-.0032275637	-.0173217232	FATHER WEIGHT
VAR073	-.1049758539	0.4515675887	0.3105775818	0.1947288389	0.2380847495	0.3503350898	0.5177023652	FATHER FAT
VAR075	-.3814691361	-.3714441845	-.0303036276	-.3563437211	-.4956772186	0.3738094296	-.1816164965	FATHER MUSCLE
VAR077	0.1698086311	0.1132125328	0.1156049554	-.1595867497	0.6300494490	-.0653994524	-.6156764907	FATHER BUILD
VAR079	-.0075003988	-.1535439602	0.0506354321	0.1321445056	-.0020521018	-.0087098382	-.0522869974	FATHER HAIR
VAR081	0.0417871915	0.0882275984	0.1437431337	-.0386880602	-.0715347196	-.0390420003	-.0200124965	FATHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.3977243000	-.1137027113	0.1248372183	-.4655136059	0.0162565387	0.0182001436	0.0613247995	PREF HEIGHT
VAR006	0.0030359412	-.0176271872	-.0623997706	0.0650287304	0.0088618093	-.0013156711	0.0014121485	PREF WEIGHT
VAR007	-.2379252183	-.6074746894	-.3340309449	-.8044801218	0.3899826683	-.0490759503	0.9468059883	PREF FAT
VAR008	0.1780473036	0.1793027212	-.3371046137	-.2720361476	-.3671216716	-.7314365559	0.2022064067	PREF MUSCLE
VAR009	-.0791674074	0.7457038176	0.7609407293	0.7289150030	0.4755745500	0.2169286631	0.0707035616	PREF BUILD
VAR010	0.0610833568	-.1132223069	0.0944022040	0.0768100724	-.1227012577	-.0331358879	0.0915798067	PREF HAIR
VAR011	0.0427966937	0.1248647370	-.0639772982	-.0530812608	-.0640342398	0.1066106425	0.0698315857	PREF EYE

CANONICAL CORRELATIONS  
 PARTNERS AND PREFERENCES  
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 MALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.886006217	0.845338582	0.030404599	3.6513	0.785007017	0.045243187	3.2960	49	192.27	0.0000
2	0.739419260	0.648829656	0.064100523	1.2062	0.546740853	0.210440295	2.0076	36	169.63	0.0017
3	0.582460692	0.433233648	0.093442682	0.5135	0.339260458	0.464282510	1.3433	25	146.38	0.1431
4	0.483409153	0.377748956	0.108373390	0.3049	0.233684409	0.702670993	0.9400	16	122.84	0.5261
5	0.222456913		0.134422827	0.0521	0.049487078	0.916947275	0.4027	9	99.934	0.9310
6	0.185897737		0.136534121	0.0358	0.034557969	0.964686806	0.3809	4	84	0.8217
7	0.027968881	-1.370361509	0.141310728	0.0008	0.000782258	0.999217742	0.0337	1	43	0.8553

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.04524319	3.296015	49	192.2652	2.42544E-09
PILLAI'S TRACE	1.98952	2.439155	49	301	.00000236701
HOELLING-LAWLEY TRACE	5.7646	4.151185	49	247	6.05532E-14
ROY'S GREATEST ROOT	3.651315	22.4295	7	43	1.95700E-12

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	-.0398449523	0.2757563910	-.3674589668	-.0398774546	0.1615274909	-.0553702572	0.0251788235	PARTNER HEIGHT
VAR041	0.0894229377	-.0482787024	0.0280668376	0.0096962662	-.0254709732	-.0285005720	-.0154253760	PARTNER WEIGHT
VAR043	-.0569262962	0.6210597895	-.0603706969	-.6741403997	-.4457843240	0.1506142145	0.3186511589	PARTNER FAT
VAR045	0.0220211936	0.4570073190	0.2728026929	0.4039669219	-.0299921959	-.5045446286	0.0160551727	PARTNER MUSCLE
VAR047	-.0562565694	-.1582042281	-.1919633850	0.3583617520	0.1390360437	0.8925008695	0.0725248733	PARTNER BUILD
VAR049	-.0102064578	-.0202996271	0.0522035005	-.0653201796	0.1288497721	0.0911614925	0.2973612189	PARTNER HAIR
VAR051	0.0270124815	0.0872487884	0.0293172438	0.0533628160	0.1115165692	-.0035731384	-.2325452322	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	0.0602992442	-.0303853137	-.3366317527	-.1286391108	0.0122907695	-.3597104699	0.3791906064	PREF HEIGHT
VAR006	0.0630635939	-.0067148714	0.0485905587	0.0200849788	-.0110157154	0.0363937632	-.0170953649	PREF WEIGHT
VAR007	0.0043641595	0.2396646070	0.4801184155	-.9210951175	-.0223269016	-.0684059528	1.0458343125	PREF FAT
VAR008	-.1068121227	0.1263547095	0.4020253051	0.4021196010	-.4304087267	-.5520154711	0.3485499516	PREF MUSCLE
VAR009	-.2399290743	0.7691876990	-.5162961254	0.3891564944	0.4214372769	0.6507204304	-.5316494411	PREF BUILD
VAR010	-.0117557013	-.0729259671	0.0393043176	0.1160673729	0.1559032525	-.0027077353	0.1054346419	PREF HAIR
VAR011	0.0499132589	0.0973517630	0.0220770109	-.0506640343	0.0577150304	-.1452881537	-.0722047546	PREF EYE

CANONICAL CORRELATIONS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.791735763	0.678098771	0.061346219	1.6799	0.626845518	0.115467233	1.3656	49	126.27	0.0856
2	0.643693420	0.452914069	0.096281710	0.7075	0.414341219	0.309435472	0.9572	36	112.54	0.5452
3	0.515176309	0.268207776	0.120766406	0.3613	0.265406628	0.528354533	0.7351	25	98.088	0.8089
4	0.411663235	0.167555833	0.136538847	0.2040	0.169466619	0.719247619	0.5918	16	83.124	0.8817
5	0.313732437	0.102653824	0.148217517	0.1092	0.098428042	0.866006876	0.4621	9	68.295	0.8949
6	0.198564895	-0.051376492	0.157917061	0.0410	0.039428018	0.960552143	0.2947	4	58	0.8802
7	0.004544623		0.164395592	0.0000	0.000020654	0.999979346	0.0006	1	30	0.9803

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.1154672	1.36555	49	126.2665	0.085644
PILLAI'S TRACE	1.613937	1.204217	49	210	0.1175518
HOTELLING-LAWLEY TRACE	3.102918	1.41124	49	156	0.05863871
ROY'S GREATEST ROOT	1.679855	7.19938	7	30	.00004461067

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR093	0.0606710761	0.1989239386	-0.1864324924	0.2170947425	-0.0128409414	0.3558355651	-0.0663093574	HEIGHT
VAR094	0.0008427892	-0.0195134799	0.0233160037	-0.0069195411	0.0015725217	-0.0377118572	-0.0431117429	WEIGHT
VAR032	0.6886977923	0.8149586659	-0.1916724995	-0.1382366274	-0.3184993957	0.4515599341	0.3865831992	SUBJECT FAT
VAR033	-0.4315009497	0.3391335653	0.2277341663	-0.1812482253	0.5671139811	0.0696982863	0.0014665544	SUBJECT MUSCLE
VAR034	-0.4479308110	-0.0482223931	-0.3954165351	0.6649240695	-0.2929855347	-0.1333527819	0.2636040775	SUBJECT BUILD
VAR098	0.1496774369	0.0273801927	0.0087412602	0.1702509602	0.00872005884	-0.0834518481	0.0767599491	HAIR COLOR
VAR099	-0.0150555400	0.0028730244	0.1808760151	0.0316878476	-0.1409636500	0.0793237311	-0.0124602781	EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	-0.0889717131	-0.1234440139	-0.3905877911	-0.1436573881	0.2423339215	0.5333415733	0.0124609740	PREF HEIGHT
VAR006	0.0356714320	-0.0000746713	0.0155129428	0.0555718501	-0.0524123936	-0.0458829372	0.0564839747	PREF WEIGHT
VAR007	-0.4807945631	1.0679257560	-0.0983339208	-0.4095710834	-0.2332270523	0.4125107753	0.3736591139	PREF FAT
VAR008	-0.6187375991	-0.0206645698	0.0907472893	0.4102861434	0.0546434798	-0.0085654243	0.2491580794	PREF MUSCLE
VAR009	0.3931861377	0.0743033168	-0.2025289052	-0.3188723015	0.7914228029	-0.4450754303	-0.3657690483	PREF BUILD
VAR010	0.0892678250	-0.0509801320	0.1759919817	-0.0081425775	0.0890406352	0.0716274787	0.0326468120	PREF HAIR
VAR011	0.0367109244	0.0397531073	-0.0602298264	0.1606916959	-0.0444977195	0.0741820791	-0.0952840425	PREF EYE

CANONICAL CORRELATIONS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.807324117	0.694688795	0.057248293	1.8717	0.651772229	0.067638817	1.8035	49	126.27	0.0047
2	0.711381365	0.570253586	0.081202669	1.0246	0.506063446	0.194237285	1.4141	36	112.54	0.0873
3	0.601813320	0.424095898	0.104857082	0.5678	0.362179272	0.393243391	1.1206	25	98.088	0.3356
4	0.509129667	0.372710749	0.121784830	0.3499	0.259213018	0.616542194	0.8911	16	83.124	0.5813
5	0.371038537	0.200881157	0.141766245	0.1596	0.137669596	0.832280006	0.5946	9	68.295	0.7971
6	0.182805002	-0.177809058	0.158905156	0.0346	0.033417669	0.965152107	0.2594	4	58	0.9027
7	0.038466496	-1.319777635	0.164155731	0.0015	0.001479671	0.998520329	0.0445	1	30	0.8344

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.06763882	1.803517	49	126.2665	0.004662894
PILLAI'S TRACE	1.951795	1.656992	49	210	0.008047401
HOTELLING-LAWLEY TRACE	4.009693	1.82365	49	156	0.002954349
ROY'S GREATEST ROOT	1.871684	8.021501	7	30	.00001726724

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR055	0.1856073779	-.0269678389	-.1222762751	-.0613939256	0.1466798023	0.3383436814	0.0152724468	MOTHER HEIGHT
VAR057	-.0342539561	-.0163037396	0.0746533920	-.0287782920	0.0010813639	0.0016859756	0.0010522119	MOTHER WEIGHT
VAR059	0.1799327794	-.0267394391	-.3857540376	0.7999393551	-.1955018556	0.4555554793	0.0029800009	MOTHER FAT
VAR061	-.2112410093	0.2647859812	0.1444312226	0.0032884852	0.4364034897	0.1250593943	-.6886626035	MOTHER MUSCLE
VAR063	0.5888635284	0.3016107111	0.0676008415	0.0645975694	-.0455339615	-.3294697909	0.3543261141	MOTHER BUILD
VAR065	-.0464910229	-.0976914278	-.0047056358	0.0980420033	0.1761271613	-.0627448119	0.0222221338	MOTHER HAIR
VAR067	-.0925143735	0.1537288962	0.0197390906	-.0188685767	-.0147011708	0.1018824105	0.0676464435	MOTHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	-.0366974804	-.5987650364	-.3701043457	0.0311969481	-.0296777883	0.0858974508	0.1833281248	PREF HEIGHT
VAR006	-.0001975916	0.0235569748	0.0912090479	-.0152494313	0.0478247600	-.0350016624	-.0050150944	PREF WEIGHT
VAR007	-.5257608661	-.2790252755	0.1817317610	1.1800216336	-.1812144959	0.3107904502	-.0635545787	PREF FAT
VAR008	-.2220577292	-.1032569441	-.1157793336	0.1423296753	0.3142165960	-.3122565685	-.5788796075	PREF MUSCLE
VAR009	0.8690107071	0.2954607454	-.4428977810	0.1220142989	-.2657986594	-.0417835918	0.3675943708	PREF BUILD
VAR010	-.0950846773	0.0917958662	-.0768952944	-.0486617007	0.0080691948	-.1069308683	0.1359552932	PREF HAIR
VAR011	0.0026758828	-.0191515652	-.0090700214	-.0356688123	0.1720387600	0.1327164609	-.0002551538	PREF EYE

CANONICAL CORRELATIONS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.777623974	0.660414817	0.064987077	1.5297	0.604699044	0.169290969	1.0793	49	126.27	0.3608
2	0.566272367	0.286972937	0.111682086	0.4720	0.320664394	0.428278674	0.6659	35	112.54	0.9186
3	0.475880387	0.247601851	0.127168840	0.2928	0.226462143	0.630437540	0.5188	25	98.088	0.9688
4	0.344858393	0.033916482	0.144847458	0.1350	0.118927311	0.815005422	0.3598	16	83.124	0.9878
5	0.229497001	-0.172878627	0.155740278	0.0556	0.052668873	0.925014965	0.2470	9	68.295	0.9858
6	0.151154207	-0.186208298	0.160642866	0.0234	0.022847594	0.976443124	0.1739	4	58	0.9509
7	0.026941899	-1.922207871	0.164279656	0.0007	0.000725866	0.999274134	0.0218	1	30	0.8836

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.169299	1.079304	49	126.2665	0.3607601
PILLAI'S TRACE	1.346995	1.021198	49	210	0.4443188
HOTELLING-LAWLEY TRACE	2.509192	1.141207	49	156	0.2691044
ROY'S GREATEST ROOT	1.529718	6.555935	7	30	.00009771791

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR069	0.1590439718	-.0688341366	0.2877690481	0.1428151517	0.3058392314	0.0895904004	-.0839755771	FATHER HEIGHT
VAR071	0.0234106420	0.0396684062	-.0009896499	-.0200553825	-.0244147143	-.0196055281	0.0201600841	FATHER WEIGHT
VAR073	-.1480333077	0.1452692740	-.0001728510	0.5963691534	0.0792560423	0.2422906003	-.5843762459	FATHER FAT
VAR075	0.5992389832	-.5053692470	0.7072288291	0.2076743848	-.5429180308	-.1688876604	0.3336034659	FATHER MUSCLE
VAR077	-.9682817710	0.1607989539	-.4024513902	-.2526458800	0.3009076138	0.6035794729	0.0388979518	FATHER BUILD
VAR079	0.2131343449	-.0486606737	-.0759383369	-.0098657384	-.0247481880	0.1913076163	0.0201765702	FATHER HAIR
VAR081	0.0543721091	-.0357591965	-.0114736052	0.1316687947	0.0281009290	-.0995191262	0.1195997362	FATHER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR005	-.3368177212	0.1494572374	0.0796314935	-.3683023468	0.1686403628	0.1606444407	0.4557054420	PREF HEIGHT
VAR006	0.0401553368	0.0454849569	-.0310701519	0.0095658010	-.0258734608	-.0617338281	-.0585268154	PREF WEIGHT
VAR007	-.6329417093	0.1241631500	1.0146533825	0.3008166194	-.4054809084	-.3972990016	0.2343514016	PREF FAT
VAR008	-.4848335726	0.3522943880	-.1130341116	0.1961097197	-.1451088415	0.2269600350	-.3768208607	PREF MUSCLE
VAR009	0.7481443068	-.1505488722	0.1692730503	0.0391399012	-.0206609088	0.6727876209	0.4420438801	PREF BUILD
VAR010	0.0570720220	-.0362189480	0.0769434238	-.1201340681	0.1082161757	0.0427590062	-.1314197718	PREF HAIR
VAR011	-.0184535512	0.0898538394	-.0542895680	0.0921949793	0.1510679903	-.0611798437	0.0501348472	PREF EYE

CANONICAL CORRELATIONS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.593871979	0.450915460	0.073768513	0.5448	0.352683927	0.346223900	1.5617	49	329.34	0.0131
2	0.469176536	0.163428621	0.088874820	0.2823	0.220126622	0.534860657	1.2260	36	288.2	0.1841
3	0.446452280	.	0.091245996	0.2489	0.199319638	0.685830126	1.0543	25	246.68	0.3975
4	0.322368646	.	0.102117617	0.1160	0.103921544	0.856559195	0.6671	16	205.33	0.8242
5	0.180846444	-0.079962395	0.110233446	0.0338	0.032705436	0.955897544	0.3443	9	165.64	0.9587
6	0.108237877	.	0.112625478	0.0119	0.011715438	0.988217633	0.2051	4	138	0.9352
7	0.008229368	.	0.113952859	0.0001	0.000067722	0.999932278	0.0047	1	70	0.9453

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.3462239	1.561681	49	329.3396	0.01311513
PILLAI'S TRACE	0.9205403	1.514181	49	490	0.01672715
HOEHLING-LAWLEY TRACE	1.237745	1.573343	49	436	0.01039937
ROY'S GREATEST ROOT	0.5448404	5.448404	7	70	0.0005067025

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	-0.0997729972	0.0163942548	0.0189351911	-0.2161344627	0.3501339324	0.0340903341	-0.2816492673	PARTNER HEIGHT
VAR041	0.0044121664	-0.0049841855	-0.0207675065	0.0787547249	-0.0241653749	-0.0024514358	0.0087044578	PARTNER WEIGHT
VAR043	-0.6357428560	0.0872745541	-0.1566394372	-0.3672971610	0.5751931344	-0.5572045197	0.0741241837	PARTNER FAT
VAR045	-0.1691236842	0.4339576864	0.3569945946	0.1035310326	0.1161095562	0.5082585830	0.0924789663	PARTNER MUSCLE
VAR047	0.4894217984	-0.3229506568	0.4302609347	-0.2304603720	0.0413136608	-0.3160604807	0.2493992613	PARTNER BUILD
VAR049	-0.0809958228	-0.1426050541	0.0569037285	0.0211877133	0.0132290246	0.1627888633	0.1090977120	PARTNER HAIR
VAR051	0.0794447211	0.0614048789	-0.1183518222	-0.0274098878	0.0758778769	0.0088620413	0.0458757106	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR093	-0.2795551984	0.0144882001	0.3036515673	0.3023360999	0.2062821527	-0.2118478398	0.0035566183	HEIGHT
VAR094	0.0846967460	-0.0215244719	-0.0230323432	0.0149309063	-0.0230030554	-0.0070501103	-0.0110625337	WEIGHT
VAR032	-0.2816459702	-0.1515268271	0.9396982110	-0.0949352016	0.3514168840	0.2021943961	0.1099084316	SUBJECT FAT
VAR033	0.2297796875	0.5414658282	0.2060099564	0.1017435399	0.0137325009	0.0178728153	-0.3069415795	SUBJECT MUSCLE
VAR034	-0.4490552121	0.1068425973	-0.4353236218	0.0800555744	-0.2562695821	0.4855470062	0.3085147954	SUBJECT BUILD
VAR098	-0.0052287656	-0.1081012399	-0.0826973015	0.0294489926	0.2116333082	0.0645553059	-0.1761329355	HAIR COLOR
VAR099	0.0831235509	0.0598760367	-0.0327393126	-0.0282643049	0.0299356122	0.0081383305	0.1784863167	EYE COLOR

CANONICAL CORRELATIONS  
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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.532977770	0.371313298	0.081588331	0.3968	0.284065303	0.500616056	0.9814	49	329.34	0.5131
2	0.385672845	0.152312353	0.097009676	0.1747	0.148743544	0.699248211	0.6795	36	288.2	0.9195
3	0.286825711	.	0.104585155	0.0896	0.082268988	0.821430728	0.5366	25	246.68	0.9673
4	0.253946733	.	0.106611379	0.0689	0.064488943	0.895066984	0.4742	16	205.33	0.9572
5	0.168557904	.	0.110722755	0.0292	0.028411767	0.956767937	0.3373	9	165.64	0.9614
6	0.120005473	.	0.112319394	0.0146	0.014401313	0.984746320	0.2662	4	138	0.8993
7	0.029407843	.	0.113862021	0.0009	0.000864821	0.999135179	0.0606	1	70	0.8063

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.5006161	0.9813851	49	329.3396	0.5130995
PILLAI'S TRACE	0.6232447	0.9773696	49	490	0.5197962
HOTELLING-LAWLEY TRACE	0.7748078	0.9848869	49	436	0.5057624
ROY'S GREATEST ROOT	0.3967754	3.967754	7	70	0.001052741

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	0.1377043441	0.2284264264	0.0398989335	-.1412407947	-.3342516957	0.2172229380	0.0940321092	PARTNER HEIGHT
VAR041	-.0109559164	-.0058010099	0.0230695317	-.0251768662	0.0701270821	-.0221001411	-.0248528111	PARTNER WEIGHT
VAR043	0.2703529708	0.8636436283	-.0536614177	-.1016294640	-.5456996386	-.5231434593	0.3462058539	PARTNER FAT
VAR045	-.2132230291	0.4477425769	-.2316037993	0.2840571335	0.2179647676	0.4487497209	-.0793428175	PARTNER MUSCLE
VAR047	-.4767366263	-.4208639097	0.2672998975	0.2343753087	-.3462080153	-.1008073248	0.2916521004	PARTNER BUILD
VAR049	-.0955476935	-.0107703271	-.1420303543	-.0588190939	0.0980521251	0.0614617999	0.1512996002	PARTNER HAIR
VAR051	0.1218096579	0.0078346341	0.0858961396	0.0740083920	0.0287137285	0.0129178774	0.0635242828	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR055	0.1301921658	0.1206316557	0.2971146508	0.1751938825	0.0858316784	-.2189912589	-.1043103618	MOTHER HEIGHT
VAR057	0.0297143014	-.0075507473	-.0092515323	-.0869414547	0.0369101926	0.0374248789	0.0516484388	MOTHER WEIGHT
VAR059	-.3741450975	0.5545250858	0.3650339578	0.3352207362	-.1857967441	0.1427015248	-.0089461085	MOTHER FAT
VAR061	0.3055544529	0.4251171050	-.3720150844	-.1729913579	-.1092533728	-.2409979097	-.0354402974	MOTHER MUSCLE
VAR063	-.0814401999	-.2570931337	-.3548357288	0.6328626819	0.0695078522	-.1445495170	0.2544984156	MOTHER BUILD
VAR065	-.0095522550	0.0300827409	-.0459575009	0.0402889694	0.2134757016	-.0069463027	-.2044701792	MOTHER HAIR
VAR067	0.1286756849	0.0101750350	0.0044196516	0.0702942995	-.0721210997	0.0866926588	0.0182173906	MOTHER EYE

CANONICAL CORRELATIONS  
 PARTNERS AND FATHERS  
 DATA COMPLETE FEMALES  
 FEMALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.526182803	0.279912547	0.082408501	0.3829	0.276868342	0.411891130	1.2831	49	329.34	0.1078
2	0.490924238	.	0.086495324	0.3175	0.241006608	0.569593553	1.0947	36	288.2	0.3335
3	0.355176049	0.155985972	0.099584447	0.1444	0.126150026	0.750459173	0.7927	25	246.68	0.7501
4	0.254712383	-0.053988686	0.106566997	0.0694	0.064878398	0.858796355	0.6556	16	205.33	0.8349
5	0.210351002	.	0.108918101	0.0463	0.044247544	0.918379335	0.6553	9	165.64	0.7482
6	0.169513301	.	0.110685947	0.0296	0.028734759	0.960896652	0.6950	4	138	0.5967
7	0.103321548	.	0.112744008	0.0108	0.010675342	0.989324658	0.7553	1	70	0.3878

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.4118911	1.283123	49	329.3396	0.1078185
PILLAI'S TRACE	0.792561	1.276792	49	490	0.1059897
HOTELLING-LAWLEY TRACE	1.000821	1.27218	49	436	0.1110116
ROY'S GREATEST ROOT	0.382874	3.82874	7	70	0.001410281

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	0.3694466123	-.0671941906	-.0183428054	-.0300621408	0.0286297933	-.3273995386	-.1008854388	PARTNER HEIGHT
VAR041	-.0505697822	0.0338308940	0.0112445167	-.0405343339	0.0196406627	0.0188089627	0.0336572645	PARTNER WEIGHT
VAR043	0.7043597778	0.0884952697	-.3692286802	0.0467454709	0.6064248383	0.0617637497	-.4516773692	PARTNER FAT
VAR045	-.2100189931	-.1813689697	0.2861328301	0.4297081035	0.3172005510	-.4037268480	0.1682593121	PARTNER MUSCLE
VAR047	0.3488419522	-.2867370638	0.2848929501	0.0919982834	-.3591158575	0.5616879661	0.0887367859	PARTNER BUILD
VAR049	0.0198142609	0.1399837996	0.0189952242	0.1684916832	-.0261946902	-.0127995835	0.1399024091	PARTNER HAIR
VAR051	-.0098225049	0.0535289063	0.0870155696	-.0228718019	-.0073829784	-.0130493299	-.1466274188	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR069	-.0623243414	-.0263725888	0.0364170235	-.2409755665	0.4147460321	0.1100922708	-.0331451374	FATHER HEIGHT
VAR071	0.0133059113	0.0635387931	-.0196683851	0.0594148087	-.0187092290	-.0076990585	0.0119380143	FATHER WEIGHT
VAR073	-.2241887506	-.6498670694	0.1677662389	0.1791478374	0.6639717605	-.1886051872	0.3371976919	FATHER FAT
VAR075	0.7627807494	-.0881244544	0.1525954518	0.1154234763	0.2976183985	0.0142206259	-.1703790983	FATHER MUSCLE
VAR077	-.3135005397	-.0041078145	0.5388287428	-.1948656320	-.7505488487	0.4472686968	-.1043714591	FATHER BUILD
VAR079	0.0726321836	0.0347547283	0.0298558535	-.1736218425	0.0068019525	-.0733162863	0.1716594192	FATHER HAIR
VAR081	-.0429224602	0.0203823723	0.0873047964	0.0128918393	0.0231159514	-.1120927104	-.0978279182	FATHER EYE

CANONICAL CORRELATIONS  
PARTNERS AND SUBJECTS  
DATA COMPLETE MALES  
MALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.703539893	0.468431103	0.071422256	0.9801	0.494968381	0.157988425	1.7198	49	192.27	0.0053
2	0.681383287	.	0.075761799	0.8667	0.464283184	0.312828779	1.4275	36	169.63	0.0700
3	0.545718795	0.424076026	0.099304803	0.4241	0.297809003	0.583944296	0.9124	25	146.38	0.5881
4	0.327017991	0.021367843	0.126297848	0.1197	0.106940766	0.831603222	0.4777	16	122.84	0.9538
5	0.251392991	.	0.132483748	0.0675	0.063198431	0.931184843	0.3301	9	99.934	0.9631
6	0.070648606	.	0.140715490	0.0050	0.004991226	0.994004359	0.0632	4	84	0.9925
7	0.031771904	.	0.141278598	0.0010	0.001009454	0.998990546	0.0435	1	43	0.8359

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.1579884	1.719793	49	192.2652	0.005258946
PILLAI'S TRACE	1.4332	1.581509	49	301	0.01164579
HOELLING-LAWLEY TRACE	2.464081	1.774426	49	247	0.002551258
ROY'S GREATEST ROOT	0.980074	6.020455	7	43	0.0000632999

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	0.2035457298	-.2534886177	-.0226344718	0.0811441820	0.1004067821	-.3470533609	-.0269424504	PARTNER HEIGHT
VAR041	-.0238096664	0.0470032289	0.0652662064	-.0415436748	-.0216936805	0.0136677528	-.0043749713	PARTNER WEIGHT
VAR043	0.2979471642	-.6261381813	0.3516995485	0.5987009513	0.1923209267	0.3555399311	0.2089491288	PARTNER FAT
VAR045	0.4769153329	-.1831373253	-.0282453039	-.6350193683	0.0417840000	0.1878204697	-.0248283517	PARTNER MUSCLE
VAR047	0.1645401976	0.6429737661	-.4444403638	0.5831545226	-.0306190915	-.1901822459	0.0254614968	PARTNER BUILD
VAR049	-.0373793729	0.0527017888	-.0536544844	0.0764577637	0.2519023516	0.0132212314	0.2105128710	PARTNER HAIR
VAR051	0.0596869302	-.0310812347	-.0673256103	-.0886225808	-.2284973443	-.0918513661	0.0318140133	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR093	0.2106881149	0.2532680361	-.0294031950	0.1983191412	0.2261923937	-.2686163019	0.1882841418	HEIGHT
VAR094	-.0525398680	-.0182916387	0.0060487696	0.0246749676	-.0396481682	0.0120885579	-.0238204672	WEIGHT
VAR032	0.0557578431	-.1486574307	0.0480954947	0.1270963838	0.7686245313	-.8536028307	0.1236441645	SUBJECT FAT
VAR033	-.0472928833	-.2538935663	-.7376786565	0.3376122443	0.0460585963	0.0301966935	0.2963134035	SUBJECT MUSCLE
VAR034	0.5502623454	0.1054956737	0.5574215154	-.1598510389	0.1143749052	0.6582888832	-.0877041396	SUBJECT BUILD
VAR098	0.0978298476	0.0514167139	-.0709414613	-.0360982761	0.0086410520	-.0403527202	-.2374092743	HAIR COLOR
VAR099	-.1163122392	0.0779033506	-.0057048434	0.0153045096	0.1408578865	0.0853409743	0.1050372301	EYE COLOR

CANONICAL CORRELATIONS  
 PARTNERS AND MOTHERS  
 DATA COMPLETE MALES  
 MALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.702131503	0.555341563	0.071702233	0.9723	0.492988647	0.173382739	1.6174	49	192.27	0.0119
2	0.603129824	0.439776901	0.089977134	0.5717	0.363765585	0.341970131	1.3043	36	169.63	0.1344
3	0.498994103	0.287562841	0.106208129	0.3315	0.240995115	0.537490779	1.0651	25	146.38	0.3901
4	0.438085712	.	0.114279898	0.2375	0.191919091	0.715695450	0.8884	16	122.84	0.5838
5	0.303923032	0.141729616	0.128358377	0.1018	0.092369209	0.885673008	0.5680	9	99.934	0.8204
6	0.135787010	.	0.138813813	0.0188	0.018438112	0.975807583	0.2587	4	84	0.9036
7	0.076566287	.	0.140592288	0.0059	0.005862396	0.994137604	0.2536	1	43	0.6171

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.1733827	1.617374	49	192.2652	0.01185529
PILLAI'S TRACE	1.414338	1.555425	49	301	0.01447693
HOELLING-LAWLEY TRACE	2.23959	1.612766	49	247	0.0101756
ROY'S GREATEST ROOT	0.9723424	5.972961	7	43	.00006823055

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	0.0593106513	0.0472743015	0.4190746904	0.0941547037	-.1004447611	0.2020934159	-.0535188179	PARTNER HEIGHT
VAR041	-.0067710664	-.0798554968	-.0420992470	-.0080427870	0.0308438725	-.0145711277	-.0038573325	PARTNER WEIGHT
VAR043	-.1092991873	0.2769658619	0.0304616800	0.9944555798	-.1595239543	0.1586427518	0.2021657766	PARTNER FAT
VAR045	-.4007679786	0.0706389550	0.2860961244	0.0291752292	0.6191407467	-.1033289817	-.2456717825	PARTNER MUSCLE
VAR047	0.7342847018	0.2990294150	0.0063725578	-.3335331602	-.0577185603	-.0843463184	0.5152833700	PARTNER BUILD
VAR049	0.1973288929	0.1585049964	-.1312734648	0.0705489017	0.0331105077	0.1356370936	-.1227942634	PARTNER HAIR
VAR051	-.1431165967	-.0286217278	0.0972022632	-.1529972057	0.0412464435	0.0832182809	0.1256605500	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR055	0.3650512415	0.0035105450	0.2084414602	0.0269429604	0.0139008916	-.0650316791	-.2080184759	MOTHER HEIGHT
VAR057	-.0291853749	-.0609095792	-.0150628532	0.0310348327	0.0087699166	-.0171330690	0.0309995159	MOTHER WEIGHT
VAR059	-.0318474028	0.4697879274	0.2548096405	-.4653359931	0.4701389485	-.0195167258	-.6957278393	MOTHER FAT
VAR061	-.4071971492	0.1489415307	0.2570522112	0.3934650607	-.1727981229	-.4248493071	-.0684347911	MOTHER MUSCLE
VAR063	0.1320458703	0.2352224937	-.0084676906	0.1756379991	0.1617121018	0.4438223653	0.9654112654	MOTHER BUILD
VAR065	-.0115669220	0.0062403958	-.1557600298	0.1607407760	0.0469304299	0.1181362433	-.1134113087	MOTHER HAIR
VAR067	0.0831218941	0.0041773114	-.0399351732	-.0281185146	0.0324904813	-.1778327371	0.1145886139	MOTHER EYE

CANONICAL CORRELATIONS  
 PARTNERS AND FATHERS  
 DATA COMPLETE MALES  
 MALES WITH PARTNERS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.645676097	0.477735754	0.082463129	0.7150	0.416897623	0.300616350	1.0481	49	192.27	0.4002
2	0.485894652	0.206400316	0.108032677	0.3091	0.236093613	0.515546432	0.7673	36	169.63	0.8243
3	0.398430252	0.091513703	0.118971187	0.1887	0.158746666	0.674881688	0.6538	25	146.38	0.8929
4	0.338493297	0.084003605	0.125217621	0.1294	0.114577712	0.802233597	0.5742	16	122.84	0.8980
5	0.297391281	.	0.128913829	0.0970	0.088441574	0.906046310	0.4594	9	99.934	0.8984
6	0.076734560	.	0.140588640	0.0059	0.005888193	0.993953085	0.0638	4	84	0.9924
7	0.012635763	.	0.141398777	0.0002	0.000159663	0.999840337	0.0069	1	43	0.9343

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.3006164	1.048119	49	192.2652	0.4001504
PILLAI'S TRACE	1.020805	1.048746	49	301	0.3929572
HOTELLING-LAWLEY TRACE	1.445238	1.04074	49	247	0.4089179
ROY'S GREATEST ROOT	0.7149647	4.391926	7	43	0.0009455646

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR039	-.0852721387	-.0602042462	-.0226360068	0.3184108761	-.1609927434	-.0816675730	-.3140930758	PARTNER HEIGHT
VAR041	-.0158599311	0.0771759981	0.0121422479	-.0221329823	0.0303235000	0.0192036181	0.0361255198	PARTNER WEIGHT
VAR043	-.3670057874	-.5226978870	0.3715314744	-.1621450887	0.3830222936	0.0201348711	-.6713182147	PARTNER FAT
VAR045	-.0052778572	0.0128586009	-.2434890203	0.2377724276	0.0350495273	0.7626574297	-.0615071896	PARTNER MUSCLE
VAR047	0.6990379490	-.1698688303	0.4685772810	0.1316032692	-.2034710200	-.4290246580	0.1896947612	PARTNER BUILD
VAR049	0.2191617360	-.0207755051	-.0787411242	-.1130535737	0.0898491270	-.0950208769	-.1905202299	PARTNER HAIR
VAR051	-.0507471919	-.0285315250	-.0467127332	0.2195386830	0.0332286709	0.0125162140	0.1534460014	PARTNER EYE

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR069	0.2183244983	0.0077844146	0.2248680927	0.0410750804	-.0501904020	-.2128294455	-.0168669754	FATHER HEIGHT
VAR071	-.0066772538	0.0267483424	-.0219319943	0.0044849658	0.0301400749	0.0123639703	0.0380668763	FATHER WEIGHT
VAR073	0.4714375386	-.5491873745	0.0520291693	0.4606554519	0.0590439484	0.0825276582	-.2184035119	FATHER FAT
VAR075	-.0398834187	-.1831786205	0.1989572325	-.7359053901	0.1724947104	0.2682193912	0.3343960275	FATHER MUSCLE
VAR077	-.5449657662	0.1846707656	0.3636512327	0.2742233251	-.4326252077	0.1725729989	-.3245054445	FATHER BUILD
VAR079	0.0897322085	0.1429264205	-.0316643606	-.0632067632	-.0584638378	0.0953194306	-.0221529185	FATHER HAIR
VAR081	0.0115241202	-.0617249598	0.0139203423	0.0613235017	-.1177475518	-.0219850850	0.1283984937	FATHER EYE

CANONICAL CORRELATION EXPT AND SUBJ RELIAB MEAS  
ALL SUBJECTS

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CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.983689755	0.982575097	0.002110573	29.9076	0.967645534	0.000443856	82.5549	49	1131.5	0.0000
2	0.929826621	0.924995655	0.008833987	6.3843	0.864577545	0.013718549	45.1645	36	982.02	0.0000
3	0.886170627	0.881613265	0.014005589	3.6576	0.785298381	0.101301877	28.4153	25	833.62	0.0000
4	0.619687339	0.597179915	0.040182601	0.6234	0.384012399	0.471826330	11.9859	16	688.02	0.0000
5	0.467638411	0.446204991	0.050967326	0.2799	0.218685683	0.765967252	7.0774	9	550.18	0.0000
6	0.139589413		0.063961733	0.0199	0.019485204	0.980357374	1.1314	4	454	0.3410
7	0.012670852		0.065222334	0.0002	0.000160550	0.999839450	0.0366	1	228	0.8484

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.0004438563	82.55486	49	1131.479	0
PILLAI'S TRACE	3.239865	28.0647	49	1596	0
HOTELLING-LAWLEY TRACE	40.8729	183.7493	49	1542	0
ROY'S GREATEST ROOT	29.90763	974.1344	7	228	0

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR030	0.1659862385	-.2790041632	0.0489771477	-.0064433576	0.1279371480	0.0009619670	0.2998573737	SUBJECT HEIGHT
VAR031	0.0181485604	0.0404190983	-.0103339746	0.0027408735	-.0172108355	-.0289355733	-.0481031625	SUBJECT WEIGHT
VAR032	-.0201172839	0.0787343569	-.0184126855	0.1117226775	0.3852399266	-.3495194360	0.9677425234	SUBJECT FAT
VAR033	-.0045517414	0.0102005100	0.0320675786	-.0296958553	-.5961302481	0.1089492367	0.3173519383	SUBJECT MUSCLE
VAR034	0.0155064279	0.0316250467	-.0119997085	-.0058516356	0.3199426478	0.7935758143	-.1835022613	SUBJECT BUILD
VAR035	-.0000405501	0.0543338026	0.2344040926	-.1786051528	0.0116862127	-.0144404765	-.0003502331	SUBJECT HAIR COLOR
VAR036	0.0049684220	0.0041769580	0.0477361164	0.1929566325	0.0158933770	0.0007880822	-.0172745842	SUBJECT EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR091	0.1753430957	-.2753615130	0.0522450006	-.0421819881	0.1094625319	0.0403946396	0.4696819807	HEIGHT
VAR094	0.0172498500	0.0379013602	-.0112451813	0.0075976470	-.0029413021	-.0563260428	-.0468262006	WEIGHT
VAR095	-.0140863608	0.1621971207	-.0338052683	-.0370829294	0.3190537445	0.5802683886	1.4291172800	EXPT FAT
VAR096	0.0266445604	0.0407970376	0.0105777201	-.0258449144	-.6268338980	0.3466282286	0.0233331057	EXPT MUSCLE
VAR097	0.0108097071	-.0018337791	0.0080345070	0.0927209661	0.4032867638	0.7506424101	-.6713208706	EXPT BUILD
VAR098	-.0058735387	0.0549208611	0.2263793322	-.1727507865	-.0024348351	-.0183013779	0.0000900699	HAIR COLOR
VAR099	0.0054088224	0.0020597127	0.0402142188	0.2113052072	0.0088876621	0.0183886860	0.0326695345	EYE COLOR

## Canonical correlation: Experimenter vs. Subjects' Ratings, Females (28)

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.985778175	0.984064292	0.007439684	34.4090	0.971758610	0.000269319	51.1171	49	618.72	0.0000
2	0.948974788	0.943546226	0.008590900	9.0556	0.900553148	0.009536337	78.1959	36	538.5	0.0000
3	0.879647903	0.869377280	0.019542394	3.4205	0.773780433	0.095893807	16.1315	25	458.43	0.0000
4	0.701409945	0.677293578	0.043886597	0.9684	0.491975911	0.423897050	7.6928	16	379.46	0.0000
5	0.399454362	0.342460045	0.072802631	0.1899	0.159563787	0.834403445	2.6116	9	304.37	0.0064
6	0.080746568		0.085823600	0.0066	0.006520008	0.992821862	0.2273	4	252	0.9229
7	0.025738088		0.088329618	0.0007	0.000662449	0.999337551	0.0842	1	127	0.7722

### MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.0002693194	51.1171	49	618.7189	0
PILLAI'S TRACE	3.304814	16.22619	49	889	0
HOTELLING-LAWLEY TRACE	48.05062	116.9746	49	835	0
ROY'S GREATEST ROOT	34.40902	624.278	7	127	0

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

### RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR030	0.1601944239	-.3637761209	0.1053286815	-.0609082546	-.0326380372	-.1540038951	0.2371976402	SUBJECT HEIGHT
VAR031	0.0370960461	0.0471759412	-.0149532224	0.0158816484	0.0381619083	-.0206334201	-.0605071808	SUBJECT WEIGHT
VAR032	-.0031177236	0.0677454995	0.0077996129	0.0827700390	-.3760735882	-.6553471583	0.7455378232	SUBJECT FAT
VAR033	-.0174224827	0.0332307092	0.0418671953	0.0314672507	0.5603144248	0.0394743934	0.3343022641	SUBJECT MUSCLE
VAR034	0.0358654104	-.0330774993	-.0465043157	-.0273890211	-.4331219061	0.8109521073	0.1241421591	SUBJECT BUILD
VAR035	0.0169161782	0.0717454124	0.2655368016	-.1226781257	-.0011612880	-.0062987109	-.0183284999	SUBJECT HAIR COLOR
VAR036	0.0066037146	-.0040331359	0.0216818873	0.1898557818	-.0141870850	-.0069900378	-.0353669586	SUBJECT EYE COLOR

### RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR093	0.1610934914	-.3761388454	0.0828985474	-.0586128478	0.0980298521	-.5072207774	0.3523322523	HEIGHT
VAR094	0.0402631461	0.0448809658	-.0159614354	0.0032463307	0.0045367482	0.0253481097	-.0993280572	WEIGHT
VAR095	-.0614320061	0.1099636448	-.0517190780	0.1140393365	-.0174966779	-.9213738348	1.4471423313	EXPT FAT
VAR096	-.0012549276	0.0812358505	-.0142752378	0.0990825585	0.8107635185	0.2590065221	0.1531997672	EXPT MUSCLE
VAR097	0.0040745296	-.0732803715	-.0021773064	0.1612881478	-.6224971272	1.0120709682	0.3802456259	EXPT BUILD
VAR098	0.0078770890	0.0763018004	0.2557260737	-.1379995007	0.0115497862	0.0052789997	0.0280857636	HAIR COLOR
VAR099	0.0028168841	0.0014797784	0.0156824748	0.2061238812	-.0040801199	-.0267053211	-.0010668287	EYE COLOR

CANONICAL CORRELATION EXPT AND SUBJ RELIAB MEAS  
MALES

(29)

CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATIONS AND TESTS OF H0: THE CANONICAL CORRELATION IN THE CURRENT ROW AND ALL THAT FOLLOW ARE ZERO

	CANONICAL CORRELATION	ADJUSTED CAN CORR	APPROX STD ERROR	VARIANCE RATIO	CANONICAL R-SQUARED	LIKELIHOOD RATIO	F STATISTIC	NUM DF	DEN DF	PROB>F
1	0.955625440	0.946729775	0.008678002	10.5234	0.913219982	0.001276900	24.7219	49	446.11	0.0000
2	0.927777558	0.915638926	0.013922880	6.1824	0.860771198	0.014714214	17.4452	36	389.2	0.0000
3	0.905827707	0.901611337	0.017947616	4.5718	0.820523835	0.105683693	11.0420	25	332.12	0.0000
4	0.541779324	0.470344416	0.070647516	0.4155	0.293524836	0.588845281	3.2603	16	275.59	0.0000
5	0.395829535	0.330016890	0.084331898	0.1858	0.156681021	0.833497498	1.9134	9	221.62	0.0512
6	0.107242670		0.098849901	0.0116	0.011500990	0.988353777	0.2702	4	184	0.8969
7	0.012121169		0.099985308	0.0001	0.000146923	0.999853077	0.0137	1	93	0.9072

MULTIVARIATE TEST STATISTICS AND F APPROXIMATIONS

STATISTIC	VALUE	F	NUM DF	DEN DF	PROB>F
WILKS' LAMBDA	0.0012769	24.72194	49	446.1067	0
PILLAI'S TRACE	3.056369	10.29661	49	651	6.15299E-54
HOELLING-LAWLEY TRACE	21.89063	38.10119	49	597	0
ROY'S GREATEST ROOT	10.52339	139.8108	7	93	1.68731E-46

NOTE: F STATISTIC FOR ROY'S GREATEST ROOT IS AN UPPER BOUND

RAW CANONICAL COEFFICIENTS FOR THE 'VAR' VARIABLES

	V1	V2	V3	V4	V5	V6	V7	
VAR030	0.2393610745	-0.2212499363	0.0547837892	-0.0207395556	0.0061373728	-0.0643055785	0.3562365817	SUBJECT HEIGHT
VAR031	0.0221621161	0.0306495935	-0.0075228999	-0.0041304604	-0.0158933553	-0.0052975299	-0.0601907987	SUBJECT WEIGHT
VAR032	-0.0425930956	0.0924697373	-0.0719367469	-0.2957820127	-0.3424892377	-0.3379706998	1.0526868231	SUBJECT FAT
VAR033	-0.0130853572	-0.0000734827	0.0089277850	0.2687865912	0.4084417326	-0.6922101336	-0.0577831732	SUBJECT MUSCLE
VAR034	0.0154794277	0.0617746514	0.0057986759	0.2199579609	0.3997357185	0.8388698239	0.2154396032	SUBJECT BUILD
VAR035	-0.0118431737	0.0569399848	0.1926199624	0.2000742478	-0.1167934356	-0.0135730821	0.0009100307	SUBJECT HAIR COLOR
VAR036	0.0005379231	0.0155353481	0.0678520614	-0.1850057512	0.0931128340	0.0277203905	0.0226137518	SUBJECT EYE COLOR

RAW CANONICAL COEFFICIENTS FOR THE 'WITH' VARIABLES

	W1	W2	W3	W4	W5	W6	W7	
VAR093	0.265137746	-0.223695849	0.095911181	0.007227476	0.048285703	0.303254791	0.323859472	HEIGHT
VAR094	0.017496061	0.026470555	-0.010055569	-0.014753920	0.008238318	-0.063446131	0.005015889	WEIGHT
VAR095	0.040103104	0.246402256	0.001922117	-0.127892207	-0.472724775	1.501682346	0.735602952	EXPT FAT
VAR096	0.042932947	-0.004294476	-0.001962393	0.490483377	0.816378897	-0.008136386	0.042083456	EXPT MUSCLE
VAR097	0.032102611	0.052361998	0.001856631	0.084108422	-0.355832970	0.200628266	-1.027649665	EXPT BUILD
VAR098	-0.022564181	0.057066230	0.195481266	0.150231680	-0.075293452	-0.057727373	0.078740039	HAIR COLOR
VAR099	0.010880927	0.001320222	0.055219603	-0.187173104	0.095708791	0.070122807	-0.067449021	EYE COLOR

## APPENDIX E: Identification of Commonly Held Preferences

The frequency distributions of subjects' preferences for physical characteristics and subjects' characteristics were compared to determine whether patterns of preferences reflected the distributions of characteristics in the subject sample. For some variables, certain values of a characteristic were preferred over others by a majority of subjects, although a wide range for the characteristic was found in the subject sample. Physically 'ideal' features were defined as a single value, or narrow range of values, of a characteristic which was preferred by the greater proportion of males or females.

Comparisons of Frequency Distributions. Frequency distributions were obtained for subjects' 'first' preferences for physical characteristics in a mate and for all self-reported and experimenter-measured male and female characteristics. Tests of agreement between appropriate frequency distributions were made in order to compare: 1) male and female preferences for a physical characteristic, 2) same-sex preferences and sample distributions for a physical characteristic, and 3) cross-sex preferences and sample distributions for a physical characteristic. The Kolmogorov-Smirnoff two-sample test, a test of agreement between two cumulative distributions, was used to test

whether two distributions were drawn from the same population. According to Siegel (1956), the Kolmogorov-Smirnoff test has approximately 95% of the power of a t-test, and seems to be more powerful than the chi-square test in all cases.

To determine whether the data supported the existence of commonly held preferences for attractiveness, or cultural 'ideals', preference distributions were examined and the distribution of one sexes' preferences for a characteristic was compared with the opposite-sex sample distribution for the characteristic, using the Kolmogorov-Smirnoff two-sample test. The existence of a cultural 'ideal' was suspected if there was marked unimodal clustering (or bimodal for hair and eye colors) in the preference distribution for a characteristic. Two additional co-occurrent conditions were considered to provide clearer evidence of a cultural 'ideal', a significant difference between the preferences for a characteristic and the opposite-sex sample distribution for the characteristic, and an absence of significant correlations between preferences and familial characteristics. When these conditions held, subjects were preferring a level, or levels, of a physical characteristic with a greater frequency than the level occurred in the opposite-sex population. In addition, the distribution of preferences was not accounted for by selection for familial

characteristics.

## Results:

### Height:

The descriptive statistics for subjects' heights and preferences for height in the opposite sex are presented in Table 27.

Using the Kolmogorov-Smirnoff test, the distributions of male and female heights were found to be significantly different ( $D(101, 146)=0.5616, p<.001$ ) (men were generally taller), as were the distributions of male preferences and male heights ( $D(101,101)=0.5545, p<.001$ ), the distributions of female preferences and female heights ( $D(147,146)=0.6995, p<.001$ ), and the distributions of male and female preferences ( $D(101,147)=0.6925, p<.001$ ).

The distribution of males' preferences for female heights was not found to be significantly different from the distribution of heights in the female sample. On average, males tended to prefer women in the moderate height range, between 5'4" to 5'8", although there was considerable variability. Females' preferences, however, were significantly different from the distribution of heights in the male sample ( $D(101,147)=0.1779, p<.05$ ). Women tended to prefer tallness to a greater extent than it was found in the male sample. Whereas approximately 40% of women preferred male heights of 6' or greater, only 25% of

Table 27.

Description of subjects' characteristics\* and preferences for opposite-sex characteristics, by sex.

<u>Variable</u>	<u>Range</u>	<u>Mean</u>	<u>S.D.</u>
Height (in.)			
Female subjects	60.0-72.5	65.737	2.603
Male subjects	64.0-78.8	70.391	2.782
Female preferences	64.0-76.0	71.830	2.573
Male preferences	62.0-74.0	67.049	2.325
Slimness			
Female subjects	2.0-8.0	4.986	1.342
Male subjects	1.5-8.5	4.657	1.407
Female preferences	3.0-6.0	4.500	0.733
Male preferences	2.0-6.0	4.098	0.850
Muscle development			
Female subjects	1.0-8.0	4.226	1.656
Male subjects	2.0-9.0	5.412	1.476
Female preferences	3.0-8.5	5.966	1.146
Male preferences	2.0-8.0	5.309	1.375
Size of build			
Female subjects	1.0-8.0	4.578	1.707
Male subjects	1.0-8.5	5.152	1.568
Female preferences	3.5-7.5	5.663	1.017
Male preferences	2.0-7.0	4.206	1.142

\* Subjects' heights were measured by the experimenter. Preferences for height were expressed by subjects in two-inch intervals. The means of the preferred intervals were used to calculate the overall means. Subjects' slimness, muscle development and size of build (and preferences for these variables) were rated by subjects on 9-point scales from '1', 'very thin' / 'minimal muscle development' / 'very small build', to '9', 'very fat' / 'very muscular' / 'very large build'.

males had heights in that range.

Slimness:

The descriptive statistics for subjects' slimness and preferences for slimness in the opposite sex are presented in Table 27.

According to both experimenter and self-reported ratings, the distribution of slimness in the male sample was not significantly different from that of the female sample.

The distribution of males' preferences for female slimness was found to be significantly different from the self-reported and experimenter-estimated distributions of slimness in both the male and female samples (self-reported: males,  $D(102,102)=0.2549$ ,  $p<.005$  and females,  $D(102,144)=0.3505$ ,  $p<.001$ ; experimenter-estimated: males,  $D(102,102)=0.2745$ ,  $p<.001$  and females,  $D(102,147)=0.3377$ ,  $p<.001$ ). Males preferred slimness to a greater extent than it was represented in either the male or female samples, and they indicated no preference for fatness. The distribution of males' preferences was also significantly different from the distribution of female preferences ( $D(102,146)=0.2135$ ,  $p<.01$ ); males preferred slimness in women to a greater extent than women did in men.

The distribution of female preferences was

significantly different from the self-reported distribution of slimness in the male sample ( $D(102,146)=0.2021$ ,  $p<.025$ ), but was similar to the distribution of the experimenter's estimations of slimness in the male sample. Whereas males of average or heavier weights tended to view themselves as slightly heavier than the experimenter viewed them, females tended to prefer men of average weights. The distribution of female preferences was also significantly different from the distributions of experimenter and self-reported ratings of female slimness (experimenter-estimated:  $D(147,146)=0.2174$ ,  $p<.005$ ); self-reported:  $D(146,144)=0.2993$ ,  $p<.001$ ). Females showed a strong preference for average weights in males, but their own weights tended to be more dispersed over the measurement scale.

#### Muscle Development:

The descriptive statistics for subjects' muscle development and preferences for muscle development in the opposite sex are presented in Table 27.

The distributions of muscle development in the male and female samples were significantly different (self-reported:  $D(102,146)=0.2846$ ,  $p<.001$ ; experimenter rated:  $D(102,146)=0.6643$ ,  $p<.001$ ); males tended to be more muscled.

Subjects indicated a broad range of preferences for

muscle development. The distribution of male preferences for muscle development was not significantly different from the distribution of muscle development in the male sample (according to experimenter and self-reported ratings), but was significantly different from the distribution of the female sample (self-reported:  $D(102,146)=0.2846$ ,  $p<.001$ ; experimenter rated:  $D(102,146)=0.6251$ ,  $p<.001$ ). Males tended to prefer moderate muscle development in women to a greater extent than it was found in the female sample which had a sizable proportion of women with low muscle development.

A question to be considered, however, is whether males and females used the same criteria to judge muscle development in both sexes. Males may have preferred 'average muscle development in a women' rather than similar muscle development to themselves. Unfortunately, an objective test comparing criteria by sex was not built into the questionnaire.

The distribution of female preferences for male muscle development was significantly different from the distribution of male preferences for female muscle development ( $D(102,147)=0.2421$ ,  $p<.005$ ). Women tended to prefer greater muscle development in men than men did in women.

The distribution of female preferences was also significantly different from the distributions of muscle

development in the male and female samples (self reported:  $D(147,146)=0.4406$ ,  $p<.001$ , experimenter rated:  $D(147,146)=0.7057$ ,  $p<.001$ ). Women tended to prefer moderate to larger muscle development to a greater extent than it was observed in both males and females. Females, however, showed little preference for 'musclemen'.

#### Size of Build:

The descriptive statistics for subjects' size of build and preferences for size of build in the opposite sex are presented in Table 27.

The distributions of size of build in the male and female samples were significantly different when experimenter ratings were used ( $D(102,147)=0.2027$ ,  $p<.025$ ) but not significantly different according to self-reported ratings.

Males' preferences for female size of build were significantly different from the distributions of builds in both the male sample (self reported:  $D(102,102)=0.2942$ ,  $p<.001$ ; experimenter-rated:  $D(102,102)=0.3824$ ,  $p<.001$ ), and the female sample (self-reported:  $D(102,147)=0.1930$ ,  $p<.025$ ; experimenter-rated:  $D(102,147)=0.2168$ ,  $p<.01$ ). Males tended to prefer moderate to small builds to a greater extent than they were found in males or females.

Females' preferences for male size of build were significantly different from males' preferences for female

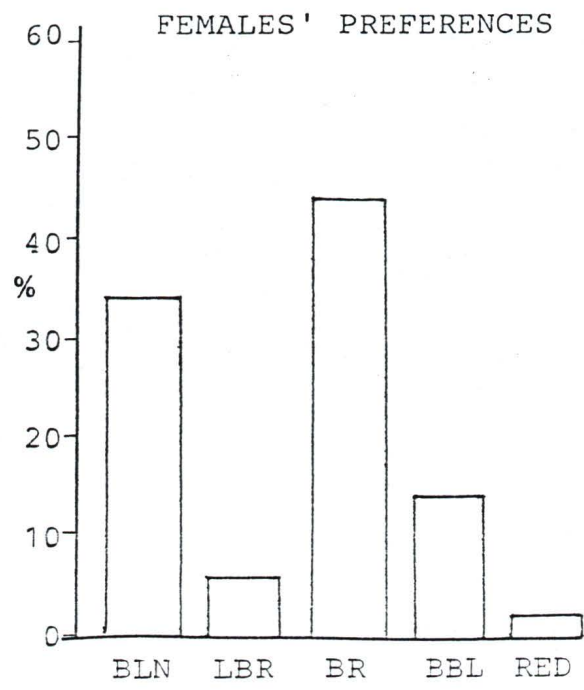
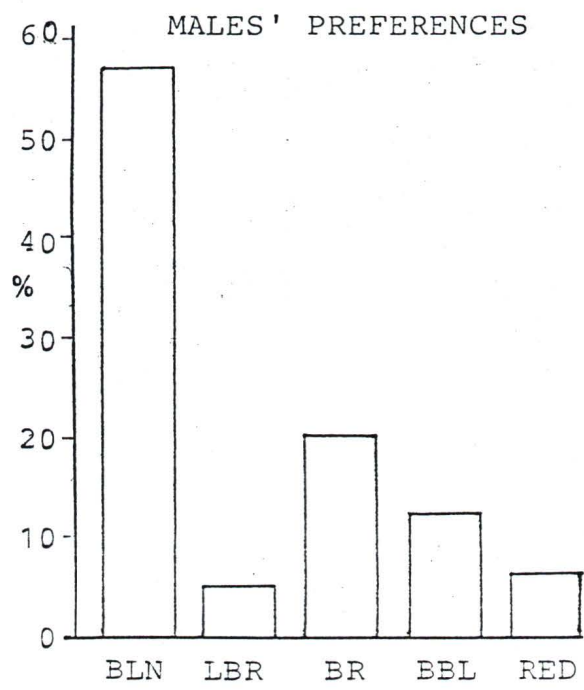
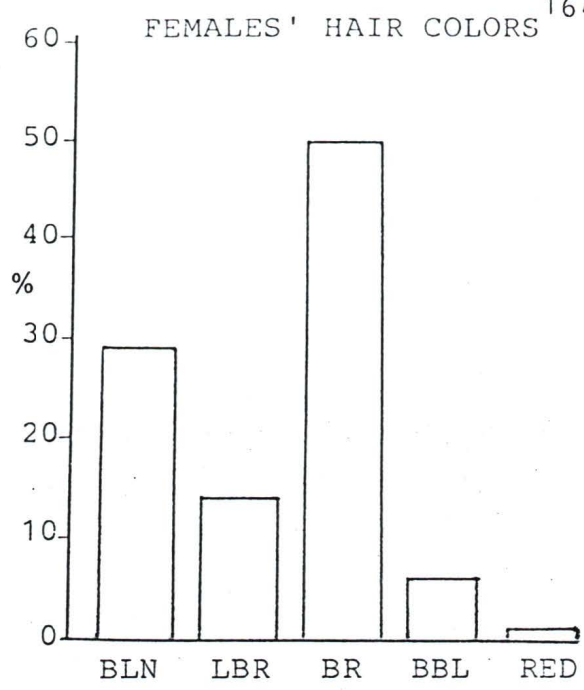
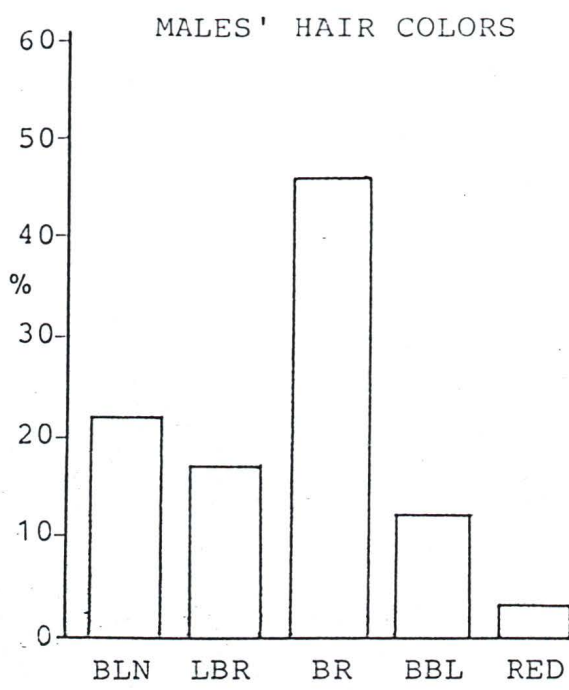
size of build ( $D(102,147)=0.4634$ ,  $p<.001$ ) and females' builds (self-reported:  $D(147,147)=0.3265$ ,  $p<.001$ ); experimenter-rated:  $D(147,147)=0.3061$ ,  $p<.001$ ). Females' preferences were also significantly different from males' self-reported builds ( $D(147,102)=0.1893$ ,  $p<.05$ ). Females showed no preference for small builds whereas approximately 20% of males reported small builds.

#### Hair Color:

The frequency distributions for male and female preferences for hair color, and the experimenter's ratings of males' and females' hair colors are illustrated in Figure 1. The distribution of hair colors in the male and female samples were similar. The majority of males and females had medium to dark brown hair: only 22.55% of males and 28.57% of females could be considered blond.

The distribution of males' preferences was significantly different from the distributions of females' hair colors (experimenter rated:  $D(101,147)=0.2717$ ,  $p<.001$ ; self-reported:  $D(101,145)=0.1999$ ,  $p<.025$ ) and males' hair colors (experimenter-rated:  $D(101,102)=0.3488$ ,  $p<.001$ ; self-reported:  $D(101,102)=0.2504$ ,  $p<.005$ ). Males tended to prefer blond hair to a greater extent than it was found in the male and female samples. Over half the males in the sample (53.47%) preferred shades of blond.

The distribution of females' preferences, on the other



Legend: BLN = Blond LBR = Light Brown BR = Brown  
BBL = Brown/Black RED = Red

Figure 1. Frequency distributions of subjects' preferences for hair color and subjects' hair colors, by sex.

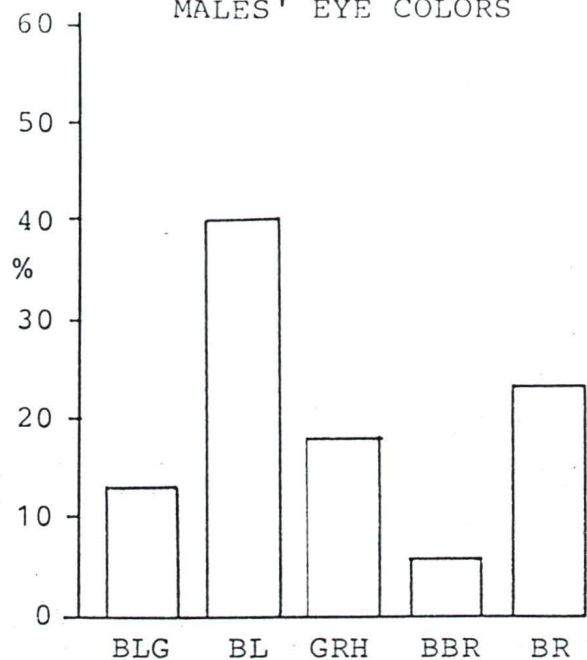
hand, was not significantly different from the distributions of males' and females' hair colors. Females' preferences were significantly different from males' preferences ( $D(101,144)=0.3120$ ,  $p<.001$ ). Females, unlike males, tended to prefer medium to dark brown hair (58%), although a sizable proportion (34%) preferred blond hair.

#### Eye Color:

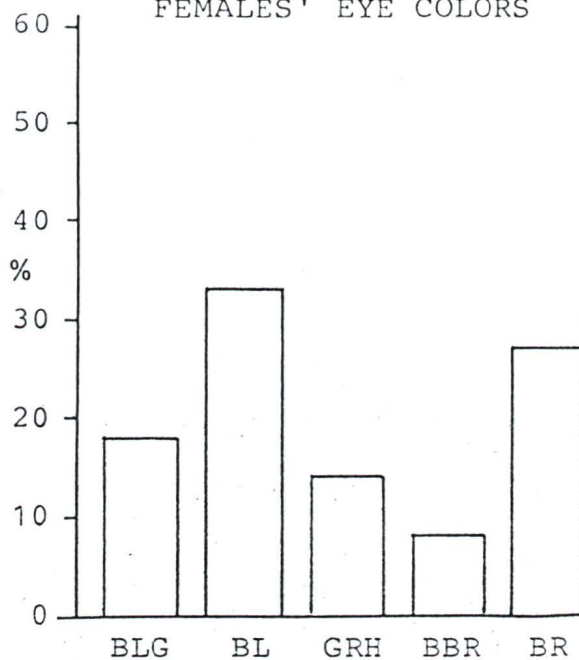
The frequency distributions for male and female preferences for eye color and for experimenter ratings of subjects' eye colors are illustrated in Figure 2. The eye colors of males and females were well-distributed over the range of blue-greens, blues, hazels, and browns. The distributions for the two sexes were not significantly different.

Males and females shared similar preferences. Both sexes showed a strong preference for blue eyes (57% of males, 47% of females). Females also indicated some preference for dark brown eyes (23% of females). The distribution of males' preferences for eye color was significantly different from the distributions of male eye colors ( $D(101,102)=0.1934$ ,  $p<.05$ ) and female eye colors ( $D(101,147)=0.2126$ ,  $p<.01$ ). The distribution of female preferences was not significantly different from the distributions of eye colors in the male and female samples.

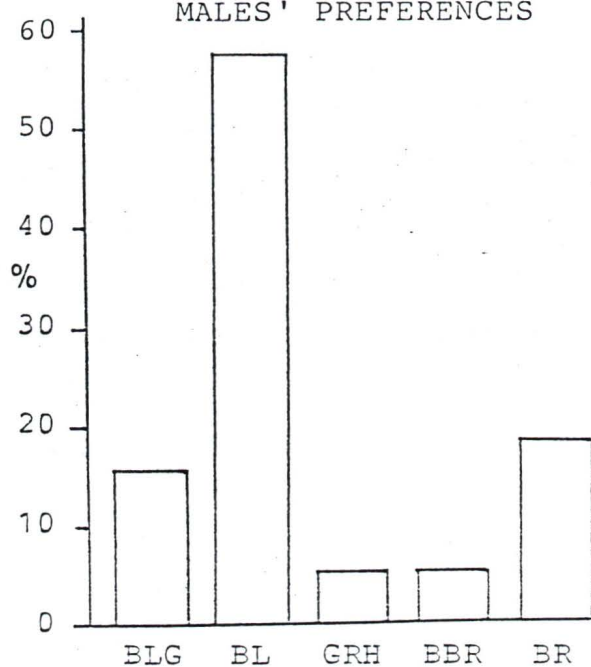
MALES' EYE COLORS



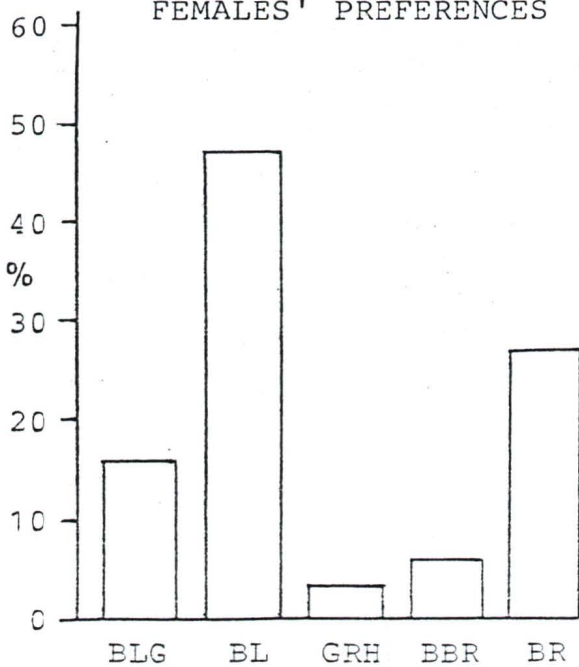
FEMALES' EYE COLORS



MALES' PREFERENCES



FEMALES' PREFERENCES



Legend: BLG = Blue-Green BL = Blue GRH = Green-Hazel  
 BBR = Blue-Brown BR = Brown

Figure 2. Frequency distributions of subjects' preferences for eye color and subjects' eye colors, by sex.

APPENDIX F: Ratings of the Importance of the Variables  
in Evaluations of Physical Attractiveness

Ratings of the importances of the variables in the evaluation of opposite-sex physical attractiveness are presented in Table 28. Overall, subjects rated the examined variables as low to moderate in importance in their evaluations of opposite-sex physical attractiveness. Both males and females attached the greatest importance to weight/slimness. Moderate importance was attached to height, muscle development, and size of build. Hair color and eye color were rated low in importance.

Compared to males, females placed significantly more importance on height ( $t(247)=2.48$ ,  $p=.0138$ ). Males, on the other hand, placed significantly more emphasis on weight ( $t(247)=2.14$ ,  $p=.0330$ ) and hair color ( $t(247)=2.42$ ,  $p=.0164$ ) than did females.

Males' ratings of the importance of hair color and eye color tended to decline with age (correlations with age were  $r=-0.2534$  and  $r=-0.2117$ , respectively).

There were no significant differences in the importances attached to the variables for males with and without partners. Females with partners attached more importance to weight than females without partners ( $X's = 5.87$  and  $4.89$ , respectively,  $t(147)=3.02$ ,  $p=.0032$ ).

Table 28.  
Mean ratings of the importance of variables in the  
evaluation of opposite-sex physical attractiveness (s.d.).

<u>Variables</u>	<u>Males</u> n=102	<u>Females</u> n=147	<u>Overall</u> n=249
Height	4.426 (2.053)	5.126 (2.276)	4.839 (2.210)
Slimness	6.025 (1.939)	5.490 (1.932)	5.709 (1.949)
Muscle development	4.039 (1.822)	4.228 (1.897)	4.151 (1.866)
Size of build	4.363 (1.795)	4.187 (1.938)	4.259 (1.879)
Hair color	3.137 (2.156)	2.507 (1.928)	2.765 (2.045)
Eye color	2.123 (1.683)	2.337 (1.948)	2.249 (1.844)

Importance was rated on 9-point scales from '1', 'not at all important', to '9', 'very important'.

## APPENDIX G: Raw Data

FILE: ATTRACT SAS A1 CMS VM/SP3 - UNIVERSITY OF VICTORIA

```
TITLE STUDY ONE DATA SET CREATION;
DATA ATTRACT.ONE;
MISSING -1;
INPUT VAR001-VAR100;
LABEL VAR001=SUBJECT;
LABEL VAR002=AGE;
LABEL VAR003=SEX;
LABEL VAR004=MARITAL STATUS;
LABEL VAR005=PREF HEIGHT;
LABEL VAR006=PREF WEIGHT;
LABEL VAR007=PREF FAT;
LABEL VAR008=PREF MUSCLE;
LABEL VAR009=PREF BUILD;
LABEL VAR010=PREF HAIR;
LABEL VAR011=PREF EYE;
LABEL VAR012=LOW HEIGHT;
LABEL VAR013=HIGH HEIGHT;
LABEL VAR014=LOW WEIGHT;
LABEL VAR015=HIGH WEIGHT;
LABEL VAR016=LOW FAT;
LABEL VAR017=HIGH FAT;
LABEL VAR018=LOW MUSCLE;
LABEL VAR019=HIGH MUSCLE;
LABEL VAR020=LOW BUILD;
LABEL VAR021=HIGH BUILD;
LABEL VAR022=UNACCEPT HAIR COLOR;
LABEL VAR023=UNACCEPT EYE COLOR;
LABEL VAR024=IMPORTANCE HEIGHT;
LABEL VAR025=IMPORTANCE WEIGHT;
LABEL VAR026=IMPORTANCE MUSCLE;
LABEL VAR027=IMPORTANCE BUILD;
LABEL VAR028=IMPORTANCE HAIR;
LABEL VAR029=IMPORTANCE EYE;
LABEL VAR030=SUBJECT HEIGHT;
LABEL VAR031=SUBJECT WEIGHT;
LABEL VAR032=SUBJECT FAT;
LABEL VAR033=SUBJECT MUSCLE;
LABEL VAR034=SUBJECT BUILD;
LABEL VAR035=SUBJECT HAIR COLOR;
LABEL VAR036=SUBJECT EYE COLOR;
LABEL VAR037=PARTNER;
LABEL VAR038=TIME;
LABEL VAR039=PARTNER HEIGHT;
LABEL VAR040=PARTNER HEIGHT NOW;
LABEL VAR041=PARTNER WEIGHT;
LABEL VAR042=PARTNER WEIGHT NOW;
LABEL VAR043=PARTNER FAT;
LABEL VAR044=PARTNER FAT NOW;
LABEL VAR045=PARTNER MUSCLE;
LABEL VAR046=PARTNER MUSCLE NOW;
LABEL VAR047=PARTNER BUILD;
LABEL VAR048=PARTNER BUILD NOW;
LABEL VAR049=PARTNER HAIR;
LABEL VAR050=PARTNER HAIR NOW;
LABEL VAR051=PARTNER EYE;
```

FILE: ATTRACT SAS A1 CMS VM/SP3 - UNIVERSITY OF VICTORIA

LABEL VAR052=PARTNER EYE NOW;  
LABEL VAR053=FEMALE CARETAKER;  
LABEL VAR054=MALE CARETAKER;  
LABEL VAR055=MOTHER HEIGHT;  
LABEL VAR056=MOTHER HEIGHT NOW;  
LABEL VAR057=MOTHER WEIGHT;  
LABEL VAR058=MOTHER WEIGHT NOW;  
LABEL VAR059=MOTHER FAT;  
LABEL VAR060=MOTHER FAT NOW;  
LABEL VAR061=MOTHER MUSCLE;  
LABEL VAR062=MOTHER MUSCLE NOW;  
LABEL VAR063=MOTHER BUILD;  
LABEL VAR064=MOTHER BUILD NOW;  
LABEL VAR065=MOTHER HAIR;  
LABEL VAR066=MOTHER HAIR NOW;  
LABEL VAR067=MOTHER EYE;  
LABEL VAR068=MOTHER EYE NOW;  
LABEL VAR069=FATHER HEIGHT;  
LABEL VAR070=FATHER HEIGHT NOW;  
LABEL VAR071=FATHER WEIGHT;  
LABEL VAR072=FATHER WEIGHT NOW;  
LABEL VAR073=FATHER FAT;  
LABEL VAR074=FATHER FAT NOW;  
LABEL VAR075=FATHER MUSCLE;  
LABEL VAR076=FATHER MUSCLE NOW;  
LABEL VAR077=FATHER BUILD;  
LABEL VAR078=FATHER BUILD NOW;  
LABEL VAR079=FATHER HAIR;  
LABEL VAR080=FATHER HAIR NOW;  
LABEL VAR081=FATHER EYE;  
LABEL VAR082=FATHER EYE NOW;  
LABEL VAR083=MOTHER RELATIONSHIP;  
LABEL VAR084=MOTHER CLOSENESS;  
LABEL VAR085=MOTHER FRIENDLINESS;  
LABEL VAR086=MOTHER COMPATIBILITY;  
LABEL VAR087=FATHER RELATIONSHIP;  
LABEL VAR088=FATHER CLOSENESS;  
LABEL VAR089=FATHER FRIENDLINESS;  
LABEL VAR090=FATHER COMPATIBILITY;  
LABEL VAR091=KNOWLEDGE;  
LABEL VAR092=RACE;  
LABEL VAR093=HEIGHT;  
LABEL VAR094=WEIGHT;  
LABEL VAR095=EXPT FAT;  
LABEL VAR096=EXPT MUSCLE;  
LABEL VAR097=EXPT BUILD;  
LABEL VAR098=HAIR COLOR;  
LABEL VAR099=EYE COLOR;  
LABEL VAR100=COMMENTS,;  
CARDS;  
PROC FORMAT;  
VALUE SEX 1=MALE 2=FEMALE;  
VALUE STATUS 1=SINGLE 2=DIVORCED 3=MARRIED;  
VALUE PART 0=NONE 1=FRIEND 2=MARRIED;  
PROC SORT;

## APPENDIX G continued: Raw Data

FILE: PREFEREN DATA A1 CMS VM/SP3 - UNIVERSITY OF VICTORIA

```

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9 8 9 8 9 8 9 9 0 1 62.5 130 5 5 4 8 10 0
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-1 -1 -1 -1 -1 -1 -1 -1 1 1 68 66 122 167 4 7 4 3 5 5 9 20 13 13
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033 25 1 1 66 112 3 7 4 11 9 62 76 92 177 2 7 3 9 2 7 0 0
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FILE: PREFEREN DATA      A1    CMS VM/SP3 - UNIVERSITY OF VICTORIA

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 74 72 212 242 4.5 7 6 9 9 9 13 13 18 18  
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 035 18 2 1 68 167 5 6 5 6.5 9 66 74 142 197 3.5 6 4 7 5 6.5 1 0  
 2 6 4 5 1 1 66 117 5 4 4 7 2 -1 -1 -1 -1 -1 -1 -1  
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FILE: PREFEREN DATA A1 CMS VM/SP3 - UNIVERSITY OF VICTORIA

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FILE: PREFEREN DATA      A1 CMS VM/SP3 - UNIVERSITY OF VICTORIA

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FILE: PREFEREN DATA A1 CMS VM/SP3 - UNIVERSITY OF VICTORIA

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Beauchamp, E.G., Gale, C., and Yeomans, J.C. (1980). Organic matter availability for denitrification in soils of different textures and drainage classes. Communications in Soil Science and Plant Analyses, 11(12), 1221-1233.

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Preferences for Physical Characteristics in a Mate: A Test of Similarity, Imprinting and Psychodynamic Paradigms

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CATHERINE GALE

December 31, 1985