

Mating Intelligence, Machiavellianism, and Self-Monitoring
as Predictors of the Recognition of and Participation
in Behaviors Associated with Mental Fitness Indicators

A THESIS

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Abstract

Miller (2000) and Buss (2004) suggest that the human mind has evolved its complex qualities to make beneficial mating decisions for the individual and, more generally, to attract and retain mates. According to Miller (2000), mental fitness indicators are the outward displays of the complexity of a person's brain. Mental fitness indicators are expressed in the form of artistic, musical, communication, and altruistic behaviors. The present study examined mating intelligence, which is the ability of people to make adaptive mating choices (Geher, Murphy & Miller, 2007), Machiavellianism, and self-monitoring as possible predictors of an individual's ability to recognize potential fitness indicators that are valued by potential mates and his or her participation in behaviors associated with mental fitness indicators. It was hypothesized that mating intelligence, Machiavellianism and self-monitoring would be positively related to an individual's recognition and engagement in behaviors associated with mental fitness indicators. The results suggest that mating intelligence is related to an individual's ability to recognize the artistic, musical, communication, and altruistic behaviors that are desired by potential mates. Future studies should be conducted to examine the complex relationships between mental fitness indicators and personality constructs.

Mating Intelligence, Machiavellianism, and Self-Monitoring as Predictors of the Recognition of and Participation in Behaviors Associated with Mental Fitness Indicators

Some evolutionary psychologists suggest that the human mind has evolved the complex qualities it has to make mating decisions that will be beneficial for individuals' reproductive success (Miller, 2000; Buss, 2004). Specifically, Miller (2000) argues that the ability of the human mind to make mating decisions has taken precedence evolutionarily over the ability to solve other problems associated with general cognitive intelligence. Based on this theory, it is proposed that people have a discrete *mating intelligence* which allows them to make mating decisions, just as they have other types of intelligence (e.g., cognitive, social, musical). Geher, Murphy, and Miller (2007) suggest that mating intelligence is the ability of people to make adaptive mating choices and thereby increase their chances of reproductive success. According to Geher's (2007) theory of mating intelligence, people recognize and engage in varying levels of behaviors that determine their reproductive success, which is defined as the ability of an individual to attract mates and therefore have the opportunity to pass on his or her genes. For instance, a person with high mating intelligence is predicted to have more mating success based on this theory because he or she is able to accurately recognize the mating thoughts of potential mates.

Kanazawa (2004) provides support for mating intelligence being a distinct form of intelligence; Kanazawa theorizes that general cognitive intelligence is not useful in evolutionary-based problems, such as mating. Instead, Kanazawa (2004) argues that cognitive intelligence is important in today's society because of the abundance of "evolutionary novel" problems. However, in regard to mating, which is an evolutionary-

familiar problem, cognitive intelligence does not have a significant impact on an individual's success (Kanazawa, 2004). Therefore, another type of intelligence must exist that is useful in mating-related problems. This provides a framework for Geher, Murphy and Miller's (2007) suggestion that there is a distinct form of intelligence that relates to a person's ability to make judgments regarding mating issues.

In regard to our understanding of human mating and mating intelligence, a concept that needs further exploration is the notion of *fitness indicators*. Fitness indicators are behavioral phenotypes by which an organism outwardly expresses him or herself in order to attract potential mates (Miller, 2000). While most species rely on physical fitness indicators that display an organism's strength or some other characteristic that has been evolutionarily selected, humans are unique in that they also have *mental fitness indicators*. Mental fitness indicators include artistic, musical, communication, and moral behaviors that are outward displays of the complexity of a person's brain (Miller, 2000). According to Miller (2000), mental fitness evolved in humans as a mechanism to appeal to potential mates, and thereby increase the reproductive fitness of individuals. Miller (2000) theorized that the complexity of the brain makes a person more appealing to potential mates because more complex brains have been selected for despite their psychological and physiological costs. The variability in the displays of the complexity of individuals' brains serves as a discriminatory factor in mating decisions (Miller, 2000). Buss (2003) also suggested that complex brains, which enable better communication and social skills, increase the ability to attract desirable mates. Therefore, more complex brains have an evolutionary advantage in terms of mating success. Finally, while not focusing on brain complexity, Kaufman, Kozbelt, Bromley, and Miller (2007) further

examine the role of a specific mental fitness indicator, sense of humor, in attracting mates. Thus, researchers have recently been working to establish the concept of mental fitness indicators. The present study attempts to study this concept empirically.

Theoretically, there are multiple ways in which mental fitness indicators must be examined. For example, a person's knowledge of mental fitness indicators can be determined by measuring that individual's ability to recognize the preferences of potential mates (Mental Fitness Indicator Recognition). Moreover, the impact of mental fitness indicators on a person's behavior can be measured by examining the person's tendency to engage in the behaviors preferred by potential mates (Mental Fitness Indicators Exhibited). Additionally, in order to determine what behaviors are preferred by the opposite sex, it needs to be known what behaviors and skills are desired in potential mates (Mental Fitness Indicators Desired). These multiple judgments regarding mental fitness indicators and their relationship to three other variables, mating intelligence, Machiavellianism and self-monitoring, were the focus of the present study.

Mental Fitness Indicators and Mating Intelligence

Miller (2000) suggested that a person who is successful at mating should naturally have a more complex brain and therefore have abilities that make him or her more attractive to potential mates. However, a complex brain does not necessarily mean that a person has high mating intelligence. Without high mating intelligence, it is possible that a person may not recognize the specific behaviors that potential mates desire and thus not have as much mating success as the complexity of his or her brain would seemingly suggest. For instance, a person may have an innate talent for music, but may pursue this talent in a way that does not make him or her more attractive to potential mates.

Therefore, a person with high mating intelligence would be more likely to recognize the mental-fitness-relevant behaviors that are desired by the opposite sex. Subsequently, the individual who changes his or her behavior accordingly to develop these specific abilities will conceptually increase his or her chance of reproductive success. For example, the person with high mating intelligence and highly evolved mental fitness indicators would recognize the specific musical skills desired by potential mates and pursue those at the expense of other less evolutionary adaptable musical skills. The variability in ability to recognize fitness indicators and engage in these behaviors is hypothesized to predict reproductive success.

Mental Fitness Indicators and Machiavellianism

Machiavellianism is a person's ability and willingness to deceive others for his or her own benefit (Geis & Moon, 1981). According to Miller (1997, 2000), the Machiavellian intelligence theory speaks to the importance of mental fitness indicators. In the context of human mating, the Machiavellian intelligence theory states that people who are able to deceive others will be more successful at mating in the short-term than other people (Miller, 2000; Linton & Wiener, 2001). Miller (1997) argues that the Machiavellian intelligence theory is important in understanding mate selection and the subsequent impacts that mate selection has on evolution. Mate selection is a competitive process, and the ability to make oneself more appealing to others through deception presents a competitive advantage (Miller, 1997). Therefore, Machiavellianism may be a successful mating strategy that allows for increased reproductive success.

In support of the role of Machiavellianism on mate selection and reproductive success, McHoskey (2001) found that people higher in Machiavellianism had more

sexual partners in the previous year than people lower in Machiavellianism. Therefore, people who are able to recognize the mental fitness indicators that are attractive to potential mates and are high in Machiavellianism may falsely present themselves as having these traits. However, after the initial adoption of behaviors designed with the intention of attracting others, the behaviors may become internalized, and thus become an integral part of a person's identity.

Mental Fitness Indicators and Self-Monitoring

Self-monitoring refers to the way that a person behaves and presents him/herself to those around him or her. The behavior of low self monitors tends to be less influenced by their surroundings compared to the behavior of high self monitors (Snyder, 1974; Snyder & Gangestad, 1986). Thus, there are basic personality differences between low and high self monitors. For instance, Larkin (1991) found that high self monitors have better social and communication skills. Meanwhile, low self monitors were perceived to be more honest and ethical (Larkin, 1991). Therefore, in terms of relationships, it would be expected that high self monitors may attempt to deceive potential mates and are likely to have the social and communication skills to do so. This relates to the person's mental fitness indicators (i. e. communication skills) and level of Machiavellianism as well.

However, the increased use of deception by high self monitors may ultimately not be an effective long-term mating strategy. For example, Oner (2002) found that low self monitors were more likely to focus on the long-term potential of romantic relationships than high self monitors. In the context of the relationship between self-monitoring and mental fitness indicators and in conjunction with Larkin (1991), the findings of Oner (2002) suggest that high self monitors will behave in a way that will seemingly attract

mates in the present moment. Meanwhile, low self monitors may actually have more long-term relationship success, as they will identify and develop the skills that are conducive to and will promote long-lasting, secure relationships.

Nonetheless, there may be other factors that could mediate the relationship between self-monitoring and mating success. Schutte, Malouff, Bobik, Coston, Greeson, Jedlicka, Rhodes and Wendorf (2001) found that people higher in self-monitoring were more likely to be higher in emotional intelligence. Therefore, high self monitors are more likely to have the social skills to interpret the behavior of others and adjust accordingly (Schutte et al., 2001). In terms of mating and relationships, the ability to interpret the emotions of others and adjust one's own behavior accordingly would seemingly be a useful skill that would translate to success both in the present and long-term. It is conceivable that mating intelligence may have a similar impact on the relationship between self-monitoring and mating success. Specifically, high self monitors ability to identify the feelings of others perhaps could allow them to accurately identify and interpret the mating thoughts of others.

Purpose of Study

The present study will examine the relationship between mating intelligence, Machiavellianism, self-monitoring, and mental fitness indicators. The hypothesis is that mating intelligence, Machiavellianism, and self-monitoring will be significant predictors of a person's ability to recognize mental fitness indicators and of his or her engagement in behaviors associated with mental fitness indicators. Specifically, a person with lower discrepancy scores will be more likely to be score higher on scales of mating intelligence, Machiavellianism, and self-monitoring.

For the purposes of this study, the mental fitness indicator variables were operationally defined as follows:

Variable 1: The discrepancy between FI Recognized and FI Exhibited will represent the difference between a person's understanding of the desires of potential mates and his or her actual behavior. A higher discrepancy will suggest a difference in beliefs and actions regarding mental fitness indicators.

Variable 2: The discrepancy between FI Exhibited and FI Desire will represent the degree to which a person over/underestimates the importance of a particular behavior. A higher discrepancy will represent less overall knowledge of fitness indicators.

Variable 3: The discrepancy between FI Recognized and FI Desired will represent the degree to which a person over/underestimates the desirability of a particular behavior. A higher discrepancy will represent less overall knowledge of fitness indicators.

Methods

Participants

There were 645 participants in the present study. 516 females and 129 males participated. Participants ranged in age from 18 years old to over 55 years old, with the majority of participants being between 18 and 25 years old. Additionally, the levels of education of the participants ranged from high school or less to graduate or professional school.

Materials

Participants were provided with a list of twelve mental fitness indicator items that varied in theorized importance. The list of mental fitness indicators were based on examples presented by Miller (2000; 2007). Therefore, the major areas of fitness indicators from which the items were drawn were the creative arts, social and communication, and altruistic behaviors. Some items on the list, and the mental fitness indicators they represent, were “Playing a musical instrument well.” (music), “Telling entertaining stories.” (creative language), “Telling jokes well.” (sense of humor), “Interacting well with others in a social situation.” (social/communication), and “Doing volunteer/charitable work.” (altruism).

To provide a measure of Mental Fitness Indicators Recognized, participants were asked to rate the items on the list on a five point Likert-scale based on which behaviors/activities they believe potential mates in their culture would value most in a mate (Appendix A). Furthermore, to provide a measure of Mental Fitness Indicators Exhibited, participants were asked to report their own engagement in these activities (Appendix B). Finally, to provide a measure of Mental Fitness Indicators Desired, participants were asked to rate the desirability of behaviors in the opposite sex (Appendix C).

Additionally, the Self-Monitoring Scale (Snyder, 1986; Appendix D) was administered. Snyder’s (1986) Self-Monitoring Scale is a widely used measure of self-monitoring in which participants answer either true or false to 18 statements. Examples of items on Snyder’s Self-Monitoring Scale are “I find it hard to imitate the behavior of other people” and “In different situations and with different people, I often act like very

different persons.” The Self-Monitoring Scale has demonstrated high reliability and validity (Snyder, 1986).

Moreover, participants completed the Mach IV (Christie & Geis, 1970; Appendix E), a measure of Machiavellianism. The Mach IV asks participants to rate twenty statements on a five-point Likert scale, with one representing “strong disagreement” and five representing “strong agreement”. Examples of items on the Mach IV are “Honesty is the best policy in all cases” and “Most people are basically good and kind.” The Mach IV is widely used to measure Machiavellianism and has demonstrated reliability and validity (McHoskey, 2001).

Participants also completed selected subscales from the Geher Mating Intelligence Test (GMIT; in progress), which provides a measure of mating intelligence. The selected subscales included two personal ad scales and the jealousy scale of the GMIT. The personal ad scales ask participants to rate which one of three personal ads presented is most appealing for either a short-term or long-term relationship. Additionally, participants are asked to rate which personal ads they believe a potential mate would prefer. The jealousy scale determines which of a series of presented situations would invoke the most jealousy in an individual. Refer to Appendix F for the male version of the GMIT and Appendix G for the female version of the GMIT that were administered in the present study.

Finally, participants were given the Army Alpha Vocabulary Test, a measure of verbal cognitive intelligence (Yerkes, 1921; Appendix H).

Procedure

The participants were administered the battery of measures using an online survey website, Survey Monkey. Participants were asked to rate items on a list of behaviors conceptually related to mental fitness indicators. They were asked to rate the items on a Likert-scale ranging from one (“Not desired by potential mates”) to five (“Highly desired by potential mates”). Additionally, participants reported their own engagement in these behaviors on a five point Likert-scale, with one representing “Never engage in this behavior” and five representing “Always engage in this behavior.” The participants were also given the list of mental fitness indicators and asked to rate the items based on how desirable the traits are to them in a potential mate on a Likert-scale ranging from one (“Not desired in potential mates”) to five (“Highly desired in potential mates”). These ratings provided the ratings to which the other scales can be compared. Finally, participants were given selected items from Geher’s Mating Intelligence Test (in progress), the Self Monitoring Scale (Snyder, 1986), the 20-item Machiavellianism Scale (Allsopp, Eysenck & Eysenck, 1991) and the Army Alpha Vocabulary Test (Yerkes, 1921).

Results

Three discrepancy scores were calculated for each participant. The first discrepancy score was based on the participant’s responses to the Mental Fitness Indicator Recognition and Mental Fitness Indicators Exhibited scales. The second discrepancy score was based on the participant’s responses to the Mental Fitness Indicator Recognition and the actual Mental Fitness Indicators Desired scales. Finally, the third discrepancy score represents the person’s responses on the Mental Fitness

Indicators Exhibited and the Mental Fitness Indicators Desired scales. Male and female results were examined separately.

Male Correlations

The three predictor variables (Machiavellianism, self-monitoring, mating intelligence) were expected to covary with the discrepancy variables for both males and females. In order to test the hypotheses, zero-order correlations were conducted between the discrepancy scores and the predictor variables (Machiavellianism, self-monitoring, mating intelligence). Additionally, the measure of verbal intelligence was examined as a control and was found to not be significantly correlated to any of the discrepancy variables.

For males, it was found that Machiavellianism was positively correlated to two of the discrepancy scores: Mental Fitness Indicator Recognition and Mental Fitness Indicators Exhibited ($r(108) = .16, p < .05$) and Mental Fitness Indicators Exhibited and Mental Fitness Indicators Desired ($r(109) = .18, p < .05$). These results indicate that males scoring higher in Machiavellianism display less overall knowledge of fitness indicators and are contrary to the hypothesis that individuals higher in Machiavellianism would have lower discrepancy scores. Specifically, it appears that males who score higher in Machiavellianism tend to behave in ways that are not consistent with their views of what is desired by potential mates and also what is actually desired by potential mates. However, mating intelligence was shown to be negatively correlated with the Mental Fitness Indicator Recognition and the actual Mental Fitness Indicators Desired discrepancy score ($r(63) = -.24, p < .05$). This result is as hypothesized and suggests that males higher in mating intelligence are more likely to recognize what behaviors are

desired by potential mates. There were no other significant correlations found between the predictor variables and the discrepancy variables. Refer to Table A for complete zero-order correlations for the male sample.

Female Correlations

For females, it was found that mating intelligence was negatively correlated with the Mental Fitness Indicator Recognition and the actual Mental Fitness Indicators Desired discrepancy score ($r(302) = -.16, p < .05$). This result suggests that females higher in mating intelligence are more likely to recognize what behaviors are desired by potential mates. No other significant correlations were found between the predictor variables and the discrepancy variables. Refer to Table B for complete zero-order correlations for the female sample.

Male Regression Analysis

Hierarchical multiple regressions were conducted with each of the three discrepancy scores being the outcome variables and Machiavellianism, self-monitoring, and mating intelligence serving as the predictor variables. In the hierarchical multiple regressions, Machiavellianism and self-monitoring were entered first. These variables were entered on the same step because they were significantly correlated for both the male and female samples. Next, mating intelligence was entered to see if it adds significantly more predictive power than mating intelligence alone.

A hierarchical multiple regression was conducted to examine the Mental Fitness Indicator Recognition and Mental Fitness Indicators Desired discrepancy score for male participants. In the first step, Machiavellianism and self monitoring were not found to significantly contribute to the discrepancy ($F(2, 56) = .17, ns$). When entered in the next

step, mating intelligence also did not significantly contribute to the discrepancy ($F(3, 56) = .59, ns$).

Another hierarchical multiple regression was conducted to examine the Mental Fitness Indicator Recognition and Mental Fitness Indicators Exhibited discrepancy score for male participants. In the first step, Machiavellianism and self monitoring were not found to significantly contribute to the discrepancy ($F(2, 54) = .07, ns$). When entered in the next step, mating intelligence also did not significantly contribute to the discrepancy ($F(3, 54) = .23, ns$).

Finally, a hierarchical multiple regression was conducted to examine the Mental Fitness Indicators Exhibited and Mental Fitness Indicators Desired discrepancy score for male participants. In the first step, Machiavellianism and self monitoring were found to significantly account for the discrepancy ($F(2, 54) = 6.79, p < .01$). These variables accounted for 20.1% of the variance in the discrepancy variable. When entered in the next step, mating intelligence did not significantly account for more variance in the discrepancy score.

Female Regression Analysis

A hierarchical multiple regression was conducted to examine the Mental Fitness Indicator Recognition and Mental Fitness Indicators Desired discrepancy score for female participants. In the first step, Machiavellianism and self monitoring were not found to significantly contribute to the discrepancy ($F(2, 277) = .02, ns$). When entered in the next step, mating intelligence also did not significantly contribute to the discrepancy ($F(3, 277) = 1.6, ns$).

Another hierarchical multiple regression was conducted to examine the Mental Fitness Indicator Recognition and Mental Fitness Indicators Exhibited discrepancy score for female participants. In the first step, Machiavellianism and self monitoring were not found to significantly contribute to the discrepancy ($F(2, 269) = 1.52, ns$). When entered in the next step, mating intelligence also did not significantly contribute to the discrepancy ($F(3, 269) = 1.58, ns$).

Finally, a hierarchical multiple regression was conducted to examine the Mental Fitness Indicators Exhibited and Mental Fitness Indicators Desired discrepancy score for female participants. In the first step, Machiavellianism and self monitoring were not found to significantly contribute to the discrepancy ($F(2, 278) = 1.56, ns$). When entered in the next step, mating intelligence also did not significantly contribute to the discrepancy ($F(3, 278) = 1.90, ns$).

Age Difference Analysis

Additional analyses were conducted to examine for differences in the discrepancy variables and mating intelligence for different age groups. For this analysis, the participants were separated into two age groups: 18-25 years old (“younger participants”) and older than 25 years old (“older participants”). Then, independent sample t-tests were conducted to examine for age differences for males, females and both genders combined.

For the male participants, no significant differences were found between the younger and older participants on any of the three discrepancy variables or mating intelligence. Meanwhile, for the female participants, no significant differences were found between the younger and older participants on any of the three discrepancy variables; however, younger participants ($M = 11.14, SD = .83$) scored significantly

lower than older participants ($M = 11.41$, $SD = .92$; $t(310) = 2.10$, $p < .05$) on the mating intelligence measure.

For all of the participants, no significant age differences were observed for the Mental Fitness Indicator Recognized and Mental Fitness Indicator Desired discrepancy variable and the Mental Fitness Indicator Exhibited and Mental Fitness Indicator Desired discrepancy variable. However, on the Mental Fitness Indicator Recognized and Mental Fitness Indicator Exhibited discrepancy variable, the younger participants ($M = 9.20$, $SD = 3.52$) scored significantly higher than the older participants ($M = 8.64$, $SD = 2.81$; $t(584) = 1.68$, $p < .05$). This finding suggests that younger participants are more likely to behave in a way that is less congruous with what they believe potential mates desire than are older participants. Additionally, younger participants ($M = 11.23$, $SD = .89$) scored significantly lower than older participants ($M = 11.47$, $SD = .98$, $t(374) = 2.00$, $p < .05$) on the mating intelligence measure.

Discussion

Mental fitness indicators are artistic, musical, communication, and moral behaviors that are theorized to have evolved as outward displays of the complexity of a person's brain, and therefore one's genotype quality (Miller, 2000). The present study examined the relationships between Machiavellianism, self monitoring, mating intelligence, the recognition of mental fitness indicators that are desired and the participation in behaviors that are indicative of mental fitness indicators. It was hypothesized that individuals who recognize the mental fitness indicators desired by potential mates and adjust their behavior accordingly in order to attract potential mates would tend to be higher in Machiavellianism, self monitoring, and mating intelligence.

In order to fully examine the relationships between the variables, it was necessary to determine the discrepancy between a person's ability to recognize desired mental fitness indicators and his/her participation in the desired behaviors. Therefore, ultimately the relationships that were examined were between Machiavellianism, self monitoring, and mating intelligence and three discrepancy variables related to mental fitness indicators. The three discrepancy variables represented (a) the difference between a person's belief of what mental fitness indicators potential mates desire and what potential mates actually desire, (b) the difference between a person's participation in behaviors associated with mental fitness indicators and what behaviors potential mates actually desire, and (c) the difference between a person's belief of what mental fitness indicators potential mates desire and his/her actual participation in these behaviors.

The results of the study suggest a relationship between mating intelligence and the ability to identify behaviors associated with mental fitness indicators that are desired by potential mates. The present study found that mating intelligence was not related to verbal intelligence in males, although mating and verbal intelligence were significantly correlated in females. This suggests that mating intelligence is indeed a unique psychological construct, as proposed by Geher, Murphy and Miller (2007), but that gender differences may exist in the correlates of mating intelligence. For example, women may use more intellectual reasoning when choosing or attracting a mate, where males may base their choices more on traditional evolutionary factors. Kanazawa (2007) found that women with higher intelligence were more successful in short-term mating than less intelligent women, whereas intelligence did not translate to short-term mating success for males. Therefore, it appears that mating intelligence may be a more distinctly

observable construct in males than in females, as it is less likely to be correlated with general intelligence in males. Nonetheless, in the present study, both males and females higher in mating intelligence were found to be better judges of the behaviors associated with mental fitness indicators that are desired by potential mates. Based on these results, it appears that mating intelligence is intricately related to the ability of a person to identify what characteristics are desired by potential mates, particularly in regard to artistic, musical, communication, and moral behaviors; these findings support the hypothesis regarding the relationship between mating intelligence and mental fitness indicators.

However, some results were found that were contrary to the hypotheses. Males higher in Machiavellianism were found to not behave in ways that were consistent with what they believed potential mates desired as well as what potential mates actually desired. These results suggest that males with higher Machiavellianism might not alter their behavior in order to deceive potential mates as had been hypothesized. However, conclusions are difficult to draw from these results, as it is unclear whether males higher in Machiavellianism are simply less likely to recognize what behaviors potential mates desire or whether they do recognize the behaviors to an extent but do not alter their behavior accordingly due to some other factor. It is important to note that the male sample was much smaller than the female sample; future studies should further examine the relationship between Machiavellianism and mating behavior with larger male samples.

Additionally, the results of the study did not support the hypothesis that self monitoring would be positively related to the ability of a person to identify and

participate in behaviors desired by the opposite sex. These findings are not overly surprising, as Schutte et al. (2001) had previously found that other factors, such as a person's emotional intelligence, mediated the relationship between self monitoring and mating success. Therefore, there are probably other variables that should be examined in the future, such as emotional intelligence, which may be more related to a person's ability to recognize and engagement in mental fitness indicative behaviors than self monitoring.

Future studies need to be conducted to further examine gender differences in the recognition of and participation in behaviors associated with mental fitness indicators. Miller (2000) suggests that there are gender differences in the importance placed on specific fitness indicators, both mental and physical. Moreover, Kaufman et al. (2007) discuss the varying importance placed on sense of humor, an example of a mental fitness indicator, by males and females. Therefore, it is important to further explore which characteristics are desired by each gender and how this influences mate selection. The present study supports the further exploration of gender differences, as mating intelligence appears to be a distinct construct in males, but may be associated with general intelligence in females. These findings appear to mediate the current debate between the ideas of Miller, who believes general intelligence is related to mating success, and Kanazawa, who believes general intelligence is not related to mating success (Geher, Camargo, O'Rourke, 2007). Based on the results of this study, it is possible that both Miller and Kanazawa are partially correct but have simply not fully explored the role of gender, as general intelligence may be related to mating success in females, but not in males. Moreover, the present study looked at all mental fitness indicator behaviors (i.e. artistic, musical, communication, altruistic) as one homogeneous group; it may be

worthwhile to separate these behaviors in order to examine the importance of specific behaviors and look for possible gender differences.

While there may be gender differences in what is desired by potential mates, the present study found that higher mating intelligence was associated with a better ability to recognize desired behaviors in the areas of art, music, communication, and altruism, regardless of gender. Therefore, mating intelligence appears to be an important concept that may have an impact on behavior and development. Future research is needed to examine the role of mating intelligence in development, particularly in adolescence and young adulthood, when many interests may develop and mating concerns come to the forefront. Interestingly, the present study found that older participants had higher mating intelligence than younger participants, which suggests that mating intelligence may develop over time.

Additionally, as Geher, Camargo, and O'Rourke (2007) discuss, mating intelligence is a complex construct that draws from all areas of cognitive intelligence that deal with mating. Therefore, it will be important to examine alternative methods that can be used to measure mating intelligence in the future, as the present study only explored the ability of a person to determine a person's understanding of what potential mates desire. Many of the characteristics that make a person attractive to potential mates are dictated by society; therefore, it will be interesting to expand research about mating intelligence to other cultures to see if more evolutionary-based mating strategies can be observed (Geher, Camargo, and O'Rourke, 2007). For instance, the importance of mating intelligence in collectivist cultures in which family and friends are involved in mate selection (i.e. arranged marriages) needs to be studied. It is possible that in these

cultures, mating intelligence is not overly useful to the individual seeking a mate, but rather is more important to others who are assisting in the selection of the mate.

In conclusion, the results of the present study suggest that mating intelligence is a better predictor of an individual's ability to recognize the artistic, musical, communication, and altruistic behaviors that are desired by potential mates than Machiavellianism, self monitoring, or general intelligence. Therefore, mating intelligence, as defined by Geher, Murphy, and Miller (2007), appears to be an important new construct in evolutionary psychology that needs to be further examined in a variety of contexts.

References

- Allsopp, J., Eysenck, H. J. & Eysenck, S. B. (1991). Machiavellianism as a component in psychoticism and extraversion. *Personality and Individual Differences, 12*, 29-41.
- Buss, D. M. (2004). *The evolution of desire: Strategies of human mating*. New York: BasicBooks.
- Christie, R. & Geis, F. L. (1970). *Studies in Machiavellianism*. Academic Press: New York.
- Covey, M. K., Saladin, S. & Killen, P. J. (2001). Self-monitoring, surveillance, and incentive effects on cheating. *Journal of Social Psychology, 129*, 673-679.
- Geher, G. (in progress). Geher mating intelligence test.
- Geher, G., Camargo, M. A., & O'Rourke, S. D. (2007). Mating intelligence: An integrative model and future research directions. In G. Geher & G. F. Miller (Eds.), *Mating Intelligence: Sex, Relationships, and the Mind's Reproductive System*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Geher, G., Murphy, J. & Miller, G. F. (2007). Mating intelligence: Toward an evolutionarily informed construct. In G. Geher & G. F. Miller (Eds.), *Mating Intelligence: Sex, Relationships, and the Mind's Reproductive System*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Geis, F. L. & Moon, T. H. (1981). Machiavellianism and deception. *Journal of Personality and Social Psychology, 41*, 766-775.
- Kanazawa, S. (2004). General intelligence as a domain-specific adaptation. *Psychological Review, 111*, 512-523.

- Kanazawa, S. (2007). Mating intelligence and general intelligence as independent constructs. In G. Geher & G. F. Miller (Eds.), *Mating Intelligence: Sex, Relationships, and the Mind's Reproductive System*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kaufman, S. B., Kozbelt, A., Bromley, M. L. & Miller, G. L. (2007). The role of creativity and humor in human mate selection. G. Geher & G. F. Miller (Eds.), *Mating Intelligence: Sex, Relationships, and the Mind's Reproductive System*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Linton, D. K. & Wiener, N. I. (2001). Personality and potential conceptions: mating success in a modern Western male sample. *Personality and Individual Differences, 31*, 675-688.
- Mayer, J. D. & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence, 22*, 89-113.
- McHoskey, J. W. (2001). Machiavellianism and sexuality: on the moderating role of biological sex. *Personality and Individual Differences, 31*, 779-789.
- Miller, G. (1997). Protean primates: The evolution of adaptive unpredictability in competition and courtship. A. Whiten & R. W. Byrne (Eds.), *Machiavellian Intelligence II: Extensions and Evaluations*. New York, NY: Cambridge University Press.
- Miller, G. (2007). Sexual selection for moral virtues. *Quarterly Review of Biology, 82*, 97-125.
- Miller, G. (2000). *The mating mind: How sexual choice shaped the evolution of human nature*. New York: Doubleday.

- Norris, S. L. & Zweigenhaft, R. L. (1999). Self-monitoring, trust, and commitment in romantic relationships. *The Journal of Social Psychology, 139*, 215-220.
- Oner, B. (2002). Self-monitoring and future time orientation in romantic relationships. *The Journal of Psychology, 136*, 420-424.
- Prokosch, M. D., Yeo, R. A. & Miller, G. F. (2005). Intelligence tests with higher g-loadings show higher correlations with body symmetry: Evidence for a general fitness factor mediated by developmental stability. *Intelligence, 33*, 203-213.
- Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., Rhodes, E. & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *Journal of Social Psychology, 141*, 523-536.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*, 526-537.
- Snyder, M. & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity. *Journal of Personality and Social Psychology, 51*, 125-139.
- Snyder, M. & Simpson, J. A. (1984). Self-monitoring and dating relationships. *Journal of Personality and Social Psychology, 47*, 1281-1291.
- Wilson, D. S., Near, D. & Miller, R. R. (1996). Machiavellianism: A synthesis of the evolutionary and psychological literatures. *Psychological Bulletin, 119*, 285-299.
- Yerkes, R. M. (1921). Psychological examining in the United States. *Memoirs of the National Academy of Sciences, 15*.

Table A. Zero-order correlations for male participants.

	Discrepancy – Recognize & Desired	Discrepancy – Recognize & Exhibit	Discrepancy – Exhibit & Desired	Machiavellianism	Self Monitoring	Mating Intelligence	Verbal Intelligence
Discrepancy – Recognize & Desired	1	.31**	.21*	.09	-.10	-.24*	.00
Discrepancy – Recognize & Exhibit		1	.38**	.16*	-.07	.10	-.09
Discrepancy – Exhibit & Desire			1	.18*	-.14	.10	.03
Machiavellianism				1	.19*	.07	.10
Self Monitoring					1	-.22*	-.05
Mating Intelligence						1	-.03
Verbal Intelligence							1

** Correlation is significant at $p < .01$

* Correlation is significant at $p < .05$

Table B. *Zero-order correlations for female participants.*

	Discrepancy – Recognize & Desired	Discrepancy – Recognize & Exhibit	Discrepancy – Exhibit & Desired	Machiavellianism	Self Monitoring	Mating Intelligence	Verbal Intelligence
Discrepancy – Recognize & Desired	1	.32**	.33**	.04	.02	-.16**	-.07
Discrepancy – Recognize & Exhibit		1	.40**	.07	-.04	-.08	.03
Discrepancy – Exhibit & Desire			1	.02	.06	-.04	-.05
Machiavellianism				1	.23**	-.07	-.06
Self Monitoring					1	.05	-.01
Mating Intelligence						1	.10*
Verbal Intelligence							1

** Correlation is significant at $p < .01$

* Correlation is significant at $p < .05$

Appendix A. *Perception of potential mate's desires.*

Please indicate the degree to which you believe participation in the following activities is desired by potential mates.

For example, in Item 3, if you believe that your potential mates would find you keeping promises as extremely desirable, then you would rate this item a 5.

Not Desirable Slightly Desirable Moderately Desirable Highly Desirable Extremely Desirable

1. Playing a musical instrument					
2. Doing volunteer/charitable work.					
3. Keeping promises.					
4. Telling jokes well.					
5. Giving gifts to others.					
6. Telling entertaining stories.					
7. Singing well.					
8. Giving speeches well.					
9. Listening empathically.					
10. Interacting well with others in a social situation.					
11. Completing complex mathematical tasks well.					
12. Writing stories well.					

Appendix B. *Self ratings of actual behavior.*

Please indicate your degree of involvement/participation in the following activities.

For example, in Item 3, if you always keep promises, then you would rate this item a 5.

	Never	Rarely	Sometimes	Often	Always
1. Playing a musical instrument					
2. Doing volunteer/charitable work.					
3. Keeping promises.					
4. Telling jokes well.					
5. Giving gifts to others.					
6. Telling entertaining stories.					
7. Singing well.					
8. Giving speeches well.					
9. Listening empathically.					
10. Interacting well with others in a social situation.					
11. Completing complex mathematical tasks well.					
12. Writing stories well.					

Appendix C. *Ratings of preferences in potential mates.*

Please indicate the degree to which participation in the following activities is desired by you in potential mates.

For example, in Item 3, if you believe that keeping promises is an extremely desirable trait in potential mates, then you would rate this item a 5.

Not Slightly Moderately Highly Extremely
Desirable Desirable Desirable Desirable Desirable

1. Playing a musical instrument					
2. Doing volunteer/charitable work.					
3. Keeping promises.					
4. Telling jokes well.					
5. Giving gifts to others.					
6. Telling entertaining stories.					
7. Singing well.					
8. Giving speeches well.					
9. Listening empathically.					
10. Interacting well with others in a social situation.					
11. Completing complex mathematical tasks well.					
12. Writing stories well.					

Appendix D. *Snyder and Gangestad's (1986) Self-Monitoring Scale*

Please respond true or false to the following statements:

1. I find it hard to imitate the behavior of other people.
2. At parties and social gatherings, I do not attempt to do or say things that others will like.
3. I can only argue for ideas which I already believe.
4. I can make impromptu speeches even on topics about which I have almost no information.
5. I guess I put on a show to impress or entertain others.
6. I would probably make a good actor.
7. In a group of people I am rarely the center of attention.
8. In different situations and with different people, I often act like very different persons.
9. I am not particularly good at making other people like me.
10. I'm not always the person I appear to be.
11. I would not change my opinions (or the way I do things) in order to please someone or win their favor.
12. I have considered being an entertainer.
13. I have never been good at games like charades or improvisational acting.
14. I have trouble changing my behavior to suit different people and different situations.
15. At a party I let others keep the jokes and stories going.
16. I feel a bit awkward in public and do not show up quite as well as I should.
17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
18. I may deceive people by being friendly when I really dislike them.

Appendix E. *Christie's (1970) Mach IV Scale.*

	Strong Disagreement				Strong Agreement
1. The best way to handle people is to tell them what they want to hear.					
2. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight.					
3. Anyone who completely trusts anyone is asking for trouble.					
4. It is hard to get ahead without cutting corners here and there.					
5. Honesty is the best policy in all cases.					
6. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.					
7. Never tell anyone the real reason you did something unless it is useful to do so.					
8. One should take action only when sure it is morally right.					
9. It is wise to flatter important people.					
10. All in all, it is better to be humble and honest than important and dishonest.					
11. Barnum was very wrong when he said there's a sucker born every minute.					
12. People suffering for incurable diseases should have the choice of being put painlessly to death.					
13. It is possible to be good in all respects.					
14. Most people are basically good and kind.					
15. There is no excuse for lying to someone else.					
16. Most men forget more easily the death of their father than the loss of their property.					
17. Most people who get ahead in the world lead clean, moral lives.					
18. Generally speaking, men won't work hard unless they're forced to do so.					
19. The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.					
20. Most men are brave.					

Appendix F. *Male Version of the Geher Mating Intelligence Test (in progress).*

For each of the following items, please select the letter (A, B, or C) of the personal ad that corresponds with the **woman** that **you** would most like to **marry**. Please answer all items and choose only **one** answer for each item.

1.
 - a) I am a country girl, but I can dress up and be sexy as well. I am a very loving and affectionate person. I am a "touchy, feely" type of person. I like to go to the movies in my spare time. I also like to dance and have fun with friends. I'm looking for that "special someone".
 - b) They say "you can't cross the same river twice". It's amazing how every time I take to the same road, I find that it has a different feel to it. I love traveling, hiking, reading, and listening to music. I also enjoy movies as well as horseback riding. I can't stand routine and I love all that's new and challenging.
 - c) My hobbies are movies, shopping, sports and anything fun. I'm very outgoing and I have a mind of my own. I'm looking for someone nice to have a relationship with. I've never been serious with anyone before because it's kind of hard finding the right guy.
2.
 - a) I am ready to laugh, have fun, be spontaneous, and simply enjoy life. I am well educated and have worked hard, so now I am ready to see what else is out there for me. I have a great sense of humor, and I'm compassionate, hard working, and genuine.
 - b) I am an intelligent, literary woman who enjoys sharing films, plays, long walks, deep conversation, muffins, laughter, and tenderness. I have a deep and sensitive character, which involves me in meaningful creative and humanistic interests.
 - c) I like almost anything; movies, fishing, dining out, or just sitting back watching TV. I'm a loving, caring, generous, kindhearted, and down to earth person. Being alone is only half a life when there's no one to share it with.
3.
 - a) Radiant and sassy, with infectious enthusiasm. I have a passion for art and photography. I am a gracious, confident, romantic realist, an independent thinker, and a great traveling companion, with no hidden agendas. Alluring dichotomy: I'm sophisticated and low-key, urban and outdoorsy, and I enjoy hiking and indulging in fine dining.
 - b) I am well educated, romantic, and I have a good sense of humor. I am compassionate, sensitive, kind, and ready for a mutually supportive relationship. I am intelligent, honest, sincere, caring and beautiful (both inside and out). I'm an honest, healthy person with a lot of time on her hands and a lot of love in her heart.
 - c) Such a wonderful woman: poised, sensual, and warm-spirited with a certain shy grace that lights up a room. I'm fun, humorous, and not artificial. I am easygoing, good company, and a dazzling cook. I'm drawn to beauty in nature, art, theatre, and music. I delight in generating and exchanging ideas, playing the piano, hiking, and traveling to unexplored places.

- 4.
- a) I have a warm, embracing smile. I am sincere, upbeat, caring, and accomplished. I am cultured, communicative, and I enjoy good friends, museums, movies, theater, travel, and beginners golf. I am well-traveled, active woman who dabbles in gourmet cooking and the arts.
 - b) I am a shy and quiet person by nature, but I can be quite the talker when in the mood. I love all types of music, dancing, swimming, reading, sports, romance, and good conversation. I love to surround myself with folks who believe in living right in mind, body and soul.
 - c) I have high moral standards. I would describe myself as an ambitious, hard working, self-motivated, responsible, honest, trustworthy, and persistent. I like to meet new friends, go to movies, and travel. I like to practice different types of martial arts, do housework, play sports (tennis, basketball, baseball, swimming, soccer), and learn new things (a new language or skill).
- 5.
- a) I'm a woman who can and wants to make my man the happiest one on this planet! I'm the one who will dance erotic dances (only for you), I'm the one who will cook sweet cake, and I'm the one who will kiss you tender when we sleep.
 - b) With an explorer's soul, I am a connoisseur of travel, literature, music and art. I am active, curious, interesting, vibrant and intelligent. I am quick to smile and I enjoy a good laugh. I am warm and versatile, attractive, intuitive, a good listener, with a creative spark.
 - c) I think people have told me that I am bubbly. I love the quiet life. A relaxing evening to me would be sitting on the porch listening to the crickets and frogs, and then going to watch a movie. I love children, animals, and books.
- 6.
- a) I am a sweet, elegant, and fun woman, who is into music, theater, & dining. I also enjoy working out, traveling, tennis, biking, boating, and skiing. I am beautiful inside and out, smart, adventurous, and fun. I love life; I'm sincere, warm, kind and giving.
 - b) The love of one special man makes life extraordinary. A brainy mind, an outrageous persona, an easy laugh, being talkative, and a perky personality are what others see in me. I am full of warm affection, and have a whimsy and agile mind.
 - c) A short description of myself.... I would say I'm optimistic, high spirited and broadminded. I love nature, and freedom and I am very much future oriented. While I am about action and getting things started fast, I also like to take the time to relax.

- 7.
- a) I am passionate, smart, witty, cuddly, funny, sarcastic, loud, cocky, shy, sweet, and lovable. I'm easily amused. I'm also easy to please; I'm a total sucker for anything romantic and sweet. I like a plethora of music and movies. I also crave adventure, scary movies, cuddling, pulling all-nighters, cartoons, flowers, sleeping in, going to restaurants, summer, traveling, and people watching.
 - b) I'm very outgoing and spontaneous. But I can also be sweet, shy, and innocent. I have different sides to me: I'm funny, know how to have a good time and I love a good night out. I'm classy, compassionate, kind, and loving. I enjoy creative endeavors, movies, music, cooking, reading, and home. I'm neat, caring, honest, giving, and happy.
 - c) I'm sexy, classy, intelligent, trustworthy, kind, understanding, sincere, and loveable. I make dreams come true. I am independent, and enjoy intimacy, sharing, culture, and a good laugh. I also enjoy movies, humor, and philosophy. I am levelheaded and conservative, but love taking risks and am open to other people's opinions.
- 8.
- a) I am an ambitious and intelligent person. I enjoy playing board games and traveling. I believe in honesty and expressing yourself. I am selfless most times and I try to be understanding and open minded at all times. I would go anywhere to meet the man of my dreams.
 - b) I am independent and I love walking, golf, camping, movies, and excitement. I am quiet, protective, sensitive, serious, intelligent, and mature. I enjoy simple pleasures, music, and movies. I am outgoing, and I like going out to dinner, with great conversation and friendship. I want the things that money can't buy.
 - c) I love meeting new people and studying, working, having fun on weekends and of course shopping. So I'm still looking for that perfect person for me, because there's someone for everyone. What can I say; I'm a hopeless romantic.
- 9.
- a) I am an intelligent, honest, spontaneous, adventurous, and fun loving person who believes in living each day to it's fullest. I love to laugh, hold hands, and cuddle. I'm a hopeless romantic, and I have a great sense of humor. I enjoy going out to a fancy dinner as much as just sitting at home eating popcorn in front of the fireplace.
 - b) I have a nice personality. I am quiet and easy to get along with. I have a big heart and I love to help people ... that is part of my nature. I don't like to be the center of attention or create attention towards myself. I am a bit on the shy side. I like to think of myself as 'one of a kind'.
 - c) If I had to express my personality I'd say its chameleon like. I deal with each situation as it is deemed. I'm passionate about life and those that are dear to me. I'd like to also say that I'm secure within me and reliable. I enjoy quite times with loved ones. I enjoy trying new things.

- 10.
- a) I'm blunt (and very well known for sticking my foot in my mouth), sweet, spiritual, confident, outgoing, laid back, funny, fun, and very passionate about music. I'm tired of the dating scene, as there are too many wackos out there. Tough guys with a heart of gold make me melt!
 - b) I am down to earth, and I am rather bull headed about not settling in life or relationships. I would rather be alone for the right reasons than with someone for the wrong ones. I love drive-in movies, music that stirs the soul, and holding hands. I am passionate about my beliefs, and open to new ones.
 - c) I am looking for someone to spend some time with. I like honesty and I am honest to the core. I will always tell you the truth. I feel like if you are in a meaningful relationship then you have to have honesty and always be faithful to your partner. I am easy going and fun loving.

For each of the following items, please select the letter (A, B, or C) of the personal ad that corresponds to the **woman** that **you** would most like to have **sex** with. Please answer all items and choose only **one** answer for each item.

- 1.
- a) I'm human and I take responsibility for what is mine. I can really relate to little and some big people. I am a master of communication. I am funnier than shit. I want to try new things.
 - b) I am a person who gives as much as they get. Someone who knows how to laugh, cry, yell, smile and live with conviction, and someone cuter than hell. I like to think outside the box, party, and try new things.
 - c) I am fun to hang out with and I like to go out, be spontaneous, and try different things. I am open-minded and willing to try new things. I'm smart, sexy, quick witted, silly, and I am passionate about all that I love.
- 2.
- a) I am challenging, in a good way. I love to travel and feel that spontaneous road trips are a must. I am someone who is intelligent, passionate about life, value my friends and family, respectful of others, and can make people laugh.
 - b) I hold an appreciation for the good things in life, desire to travel, and the willingness to try new things. I come across as sweet and wide-eyed at first, but I can be devastatingly sarcastic. I'm a poet who secretly wants to become a comedy writer.
 - c) I know the first five lines of Ginsburg's "Howl," and all the words to the Golden Girls theme song, and am not afraid to admit it. I use words like "quotidian" and then laugh about how pretentious I sound. I'm not a snob, but I like to talk about things in the abstract.

3.
 - a) I see the forest through the trees. I like to play word games. I studied literature and philosophy and have all the minor neuroses that come with that pursuit, but none of the major ones. I am smart, creative, and happy. I rock.
 - b) When I was 17 I was dark, and jaded, and tragic. Ten years later, I've gained some perspective on myself, have gained a dark sense of humor, and a caustic wit. I'm clever with words. I am anti-corporate, but not sanctimonious.
 - c) I've read the "quarter-life crisis" article in the Utne reader. Hey—I don't expect guys to have it all figured out. Perspective and humor help. Because I'm fun and entertaining. And because life is short and I have made a conscious decision to enjoy every minute.
4.
 - a) I have to warn you I am very sarcastic, honest, and direct. I'm a genuine person looking for my equal to share good times and laughter. I like a man who knows when it is appropriate to be a boy and who is down to earth.
 - b) I am someone who wants to have dance parties all the time, someone who knows they probably won't be able to stay in the here forever because they understand the silence of the woods is far better than the noise in the city.
 - c) Because...I am passionate, awake, and alive. I have treaded the landscape of my emotions; I'm not afraid to feel. I am vibrant, strong, and sensual. I believe truth is essential. I am generous of heart and spirit.
5.
 - a) I'm searching for that divine spark—that undeniable something...Pleasure, trust, and a million other beautiful things that I can't put into words. A friend. A lover. A gentle, gentle man.
 - b) I'm fairly at peace with who I am. I am equally turned on by the realms of art and science. I'm silly. I am a wanderluster, a sensualist, and an aesthetician. I like words. I have a robust nurturing instinct. I have a huge heart.
 - c) I am someone bursting with kindness, affection, eccentricity, intelligence, curiosity, passion and wisdom. Someone with a delicious sense of adventure and wonder. I will dance for you and share my dreams.
6.
 - a) IQ tests are biased anyway and I am probably smarter than your last girlfriend, unless she got into MENSA, in that case, I take it back. I am someone goofy, sexy, confident, someone with a HUGE...sense of humor. Someone who is a kinky karaoke queen.
 - b) I want someone who likes to rock out with his cock out. Someone who can dance like both James Brown and Fred Astaire. I want someone who likes his girls drunk, flirty and dancing till dawn.
 - c) I put people at ease. I am inquisitive when it comes to people and what makes them tick. I wear flip-flops in the rain and splash in the puddles. I am a dancer and not a wallflower. I'm not too shabby at pool.

- 7.
- a) I am someone who would rather take a bicycle than the subway. I am an independent, passionate person. I care deeply about issues like the environment and animal welfare. Someone who loves jam bands and can smoke her share.
 - b) What I am is complicated, easy-going, bitchy, sweet, fun, serious, supportive, demanding, and other absolute contradictions. I'm an animal lover and am definitely into trying new things.
 - c) I am a cheeky monkey. I like setting food on fire...I'm not that picky—an interesting person (that is, intelligent and capable of sharing some interests). I love skiing and would rather ski all the time than do anything else.
- 8.
- a) I am zany and interesting and I would rather confuse you than kiss your ass. I am not a complicated person, but I like to have some fun in my life. I collect stuffed pigs and camel cash, which papers my bathroom walls.
 - b) I love animals, sunrises, and sunsets. I like to travel to foreign countries but love even more to stay home and rent movies. I like dining out and Chinese takeout and I think I am the most amazing women in the world.
 - c) When you call me, please don't hang up if the voicemail picks up—I love getting messages. Take me to the movies, take me out to dinner, but when I offer to pay do not argue with me. I am independent and strong, and am looking only for a companion, not a ball and chain.
- 9.
- a) I am a long-time supporter of women's rights. I am known to stand up for what I believe in and also to dance on tables when I have too much to drink---but I am not a vapid party girl. My goals are my life, and nothing at all will stand in my way. That said, I want someone to be there after work to meet me with a glass of wine and a bubble bath.
 - b) I am fun, smart, loving, caring, independent, a sister, a daughter, a voter, a lover, a fighter, a spitfire, a teddy bear, and a friend. I am someone who you can have fun with --- yay for flings.
 - c) My interests are vast and complicated. I love debating, watching hockey, picking pumpkins, old school jams, sleeping late, watching cartoons, drinking whiskey, making love, and having intelligent conversations.
- 10.
- a) Who said chivalry was dead? Open doors for me, and I will be your mate. I will rub your back when you throw up and listen to you complain about your boss. I will make your favorite sandwich when you wake up hungry in the night.
 - b) I am searching for a fling of epic proportions, someone to caress my face as we kiss and who will write me love notes and leave them under my door—but will not get upset with me if I decide to kiss another man. Human beings are not meant to be paired for life, like lobsters.
 - c) I am the kind of girl who loves to sing. I know all the words to Grease and I think that love can be a musical. I love to break out into song on a daily basis. I am looking for someone that can make my heart sing.

For each of the following scenarios, please choose the one that would make **you** most jealous in a relationship (A, B, or C). Please answer all items and choose only **one** answer for each item

1.
 - a) Your partner tells you that she has been spending time alone with another man and that she has become emotionally close to him. She reassures you that she would never have sex with this man. Your partner has always been honest with you.
 - b) Your partner tells you that she had a one-time sexual encounter with another male she met on a business trip. She refers to it as a meaningless sexual encounter in which she did not even get his name.
 - c) Your partner constantly talks about her male classmate and how much they have in common with each other. They spend a lot of time at school together and have all these inside jokes that you are left out of.
2.
 - a) You are cleaning out your closet and you find a box full of old pictures of your partner's ex-boyfriend. All the pictures are from before she met you.
 - b) You are logged onto the computer and find out your partner has been sending e-mails back and forth to her ex-boyfriend. It is apparent from the e-mails that there has been no sexual contact between them.
 - c) You are out on a date with your girlfriend; she sees an attractive man walk by. She jokes to you that the man that walked by is so physically attractive that she would sleep with him one time if given the chance.
3.
 - a) You find out that your partner engaged in a one-night stand with her male acquaintance.
 - b) Your partner sends birthday/holiday cards and small gifts back and forth to her ex-boyfriend and has been doing this for years. She has always been up front about this activity and has been doing it since before you and she got together.
 - c) You find out that your partner has developed a close personal relationship with a new male co-worker. You know that she has never cheated on you sexually with this co-worker.
4.
 - a) You find out that your partner had vaginal intercourse with a complete stranger on one occasion. You are sure that she has never cheated on you sexually before.
 - b) You find out that your partner has engaged in oral sex with a male prostitute on one occasion because she was bored with your current sex life.
 - c) You find out that your wife has been disclosing information about your sex life to a male coworker.

5.
 - a) You find out that your partner had a one-time sexual encounter with her male boss after she got drunk at a Christmas party.
 - b) You find out that your partner has had several dinners with another man she has been friends with for years because she knew him from high school. She never had sex with the other man but always talked about how close friends they were.
 - c) You find out that your girlfriend's male co-worker has been writing her poetry. Your girlfriend admits to you that she does not find this other man attractive sexually but that the other man is charming and understands what women need.
6.
 - a) You know that your partner has engaged in numerous one-night stands with other men, while in a prior committed relationship.
 - b) You know that your partner has built an intense emotional attachment with another man while in a prior committed relationship.
 - c) You know that your partner engaged in a single one-night stand while in a prior committed relationship. As a result she became pregnant and had a baby.
7.
 - a) You find out that your partner has been spending a great deal of time alone with another man. You know that the other man has a crush on your partner. You trust your partner completely.
 - b) You find out that your partner has been spending time alone with another man. Your partner's parents constantly tell her how much better off she would be with the other man.
 - c) Your partner asks you to watch pornography with her during sex with the hopes that it will make sex more enjoyable to her.
8.
 - a) Your partner suggests that you should engage in partner swapping for a night to spice up the relationship. Your partner insists that she is emotionally connected to you and that this activity will make sex more enjoyable.
 - b) Your partner insists that she is a better lover than you are because she has had sexual relations with more partners in her history than you have.
 - c) You find out that your mate lied to you and used to pose in a pornographic magazine. You are sure that your mate stopped engaging in this activity long before you met her.
9.
 - a) You are out to a restaurant with your partner. She jokes with the waiter and touches him on the arm. When the waiter walks away, she refers to the waiter as a sexy young thing. Every time the waiter comes over she stares at him lustfully.
 - b) You are out at a dance club with your partner. When you come out of the bathroom, you see your partner talking with an attractive male stranger. She buys the attractive man a drink. She insists that she was just having fun and that she values your relationship.
 - c) You are in a restaurant with your girlfriend and some friends. Your girlfriend sees a male co-worker sitting at another table. She proceeds to tell you how much she has in common with that male co-worker. She remarks that she has been friends with this male co-worker for years.

10.

- a) You find out that your wife had sex with a male co-worker on one occasion. She tells you that it was purely sexual and that the other man is about as deep as a teaspoon. She tells you that she regrets the fact that she had sex with her co-worker.
- b) You find out that your partner has been placing personal ads. When you confront your partner, she admits that she was placing the ads because she does not feel emotionally close to you and had no intention of having sexual relations with anyone she might meet via the ads.
- c) You and your partner are living in the same town (and different residences) and you find out that she had a one-night stand with a member of the opposite sex who she does not know too well. When you approach her about this she admits that the encounter was purely sexual and that she does not want to see the other man again.

Appendix G. *Female Version of the Geher Mating Intelligence Test (in progress).*

For each of the following items, please select the letter (A, B, or C) of the personal ad that corresponds to the **man** that **you** would most like to **marry**. Please answer all items and choose only **one** answer for each item.

1.
 - a) I like weekend getaways, the beach, and the mountains. I'm not into the bar scene; I would much rather be cuddled up inside by the fire or at the beach relaxing with someone special. I love to be outside doing anything: hiking, volleyball or just strolling around.
 - b) I am a very passionate person and a sucker for romance. I love the little things, when it comes to someone that I care for. I'm someone that friends can always depend on, and I enjoy being with family more than anything else. Open-minded and easygoing, I love to put a smile on people's faces.
 - c) I'm a sincere, energetic, and athletic individual who treats people the way I wish to be treated. I don't play games and my word is my bond. I have a dry sense of humor and love the outdoors, playing golf, skiing, hiking, going to the beach, and riding my bike.
2.
 - a) I have fun doing almost anything. I like doing wild and crazy things, making people laugh, having long conversations, dancing, singing and oh, I can't wait for the summer because I love the beach. I'm open-minded and I like to do new things.
 - b) I am a laid back, jeans and t-shirt type of guy. I'm a hardworking man who enjoys good music and good company. I have a strange sense of humor. I'm a realistic, down to earth guy who likes to laugh. I will accept you for who you are and I won't try to change you.
 - c) I'm successful and truly believe that working hard yields results. I approach relationships seriously. I am easy going, love to laugh, and I don't take myself too seriously. I allow people to get to know me easily. I'm straight with them and hope they are with me.
3.
 - a) I believe strongly in monogamy and trust, and I am a slight bit shy. I'm a hopeless romantic and I do admit that I like to stay home and cuddle watching movies more than going out playing pool, bowling, or swimming. I'm a photography nut at times.
 - b) I am a great guy looking to find my soul mate. I am fun to be with and enjoy going out on the town or just sitting home with someone special. I am athletic, have great aspirations, and I'm very handy around the house.
 - c) Basically, I am very down to earth and looking for my partner in crime. I like to go out and have fun and party like everyone else, but know when its time to focus on work. My motto is work hard and play harder.

- 4.
- a) I love the beach and I love traveling. I'm a big romantic and I love passion to the max. I enjoy fine dining, the theater, or just lying around at home sharing a bottle of wine with a significant other, while sensual music is playing in the background. I hope our chemistry is right.
 - b) I'm a former jock; I still play basketball and some football. I also like to dance, sing, and have fun. I'm looking for someone to talk to about anything and share feelings and goals. I like to spend cozy nights just us two, and loud nights with whomever else. I want someone to help me when I need it, and who will let me help her too.
 - c) My values include (but are not limited to) attentiveness, honesty, affection, sincerity and more. I'm the sort of person that you are looking for. I also give great massages. I love to play tennis and winter sports. I will bring to our connection attentiveness, loyalty, passion, and compassion in large amounts.
- 5.
- a) I like hanging with friends and meeting new ones. I like movies, theater, skiing, camping, working out, partying, and dancing, although I'm horrible at it. But I also like just staying home and relaxing. I'm a laid back type of guy.
 - b) I'm an easygoing person. I like to think that I'm honest and up front. I like walking in the park, and I like to write my own music. I'm sincere with a great sense of humor.
 - c) I'm sociable, sweet, warm-hearted, loving, caring, and very energetic. I'm not embedded in romance but I sure can hold my own. My major concerns are making my partner happy and ensuring that she is very secure. I believe in treating my woman right and giving her the queen treatment that she deserves.
- 6.
- a) I'm rough around the edges but inside I'm a sweetheart and a bit of a softy. I would love to say I'm perfect, but alas I am a man. I want to make you happy; is that a crime?
 - b) I'm very easy going. I love to laugh and have fun. I like dancing, outdoor activities, and new adventures. I'll try just about anything once. I have a passion for muscle cars and hot rods, and I'm very good with my hands.
 - c) I am a very outgoing person looking for someone to go out on the town and have a great time with, and someone I can spoil and treat like a queen. I'm always up for talking.

- 7.
- a) I love the water, even the rain. I like being outside and playing sports such as roller hockey. I'm looking for someone to hang out with. I'm not into drama or stress. I'm happy, confident, and truthful.
 - b) I have multiple interests and hobbies; I enjoy music and reading, long drives, walks, or just a quiet afternoon or evening with someone special. I am someone who knows and can express what I want. I'm someone who enjoys variety and spontaneity, not just the same old routine. A little adventure never hurts, does it?
 - c) I'm very sociable and outgoing. I love fishing, boating, being at the beach, and sports- such as football, hockey, lacrosse, NASCAR, and volleyball. I love to socialize. I'm a very affectionate and romantic guy who likes to watch movies at home and cuddle by the fireplace.
- 8.
- a) I may not be the man of your dreams, but I'm someone who you will want to be a part of your life. I'm very caring, wise, open-minded, and I'm a good listener. I'm extremely honest. I have a very good sense of humor and a free spirit.
 - b) I'm easygoing, faithful, sensitive, and romantic. I'm looking for someone to share my time with. I am also passionate, and have a good sense of humor. I consider myself to be a person who is open and honest. I like to have fun and make people laugh. I love talking, hugging, and showing the girl I'm with how special she is.
 - c) I'm intelligent and funny. I enjoy traveling, hiking with my dog, photography, music, movies, reading (fiction and history), sports, and winery and brewery tours. I can't dance with these two left feet but I can cook.
- 9.
- a) I'm pretty shy but after a while I open up. I love movies and music. I'm a laid back guy who doesn't let many things bother me. I like hanging out and relaxing at home. Also, I wouldn't mind going out for a few drinks and hanging out with some friends.
 - b) I'm the proverbial good guy with an alternative view of the world. I'm seeking the person whose personality and person creates chemistry between us that fosters a reaction like none other. A pairing that creates an unbridled, nurturing, safe, loving and communicative environment that enables us each to grow and become better than the sum of the parts.
 - c) I'm just a down to earth guy who's tired of the bar and club scene. I'm tired of games. I'm sweet yet rugged... the last of the nice guys. I'm humorous, romantic, a good listener, honest, and caring.

- 10.
- a) I have many interests, and I am up for just about anything indoors or outdoors. I love skiing (both water and snow), movies, and classic rock. I am loyal, honest, caring, and I will make you my main priority.
 - b) Well, I am a good man with a great heart. I will do anything for the people I love and even for strangers. Sometimes I give too much of myself. I love to try anything once. I'm very talented and funny, and sometimes I can be very laid back and reserved.
 - c) I'm a nice guy. I'm probably one of the easiest guys to get along with in the world, and I love to have a good time. I like to have intelligent conversations. In my spare time, I compose music and read a lot.

For each of the following items, please select the letter (A, B, or C) of the personal ad that corresponds to the **man** that **you** would most like to have **sex** with. Please answer all items and choose only **one** answer for each item.

- 1.
- a) I love to just go out and have fun, whether that is roaming aimlessly around the city in search of quirky bookstores or hanging in on a rainy night watching a good movie. I am starting a workout regimen-a gym buddy would be nice to have, come to think of it.
 - b) I love to get out and enjoy everything that nature has to offer. I probably have tested fate a couple of times and, thus far, have escaped with only a couple minor bruises and scratches-but great memories.
 - c) When I am not testing my luck, I so enjoy taking in the finer things in life, a nice dinner, a Broadway show, a walk in the park. But sometimes a movie at home is considered finer. I can spend an hour or two on a mountain bike and then a couple of hours later taking in a good dinner.
- 2.
- a) I'm pretty busy working all week, but that doesn't stop me from having fun, usually out and about a couple nights during the week and always doing something fun and exciting on the weekend.
 - b) I've been described as a very energetic individual. I like to think of myself as someone with a lot of positive energy. I'm new to the area, looking to meet new people. I'm a man in a uniform looking for some fun.
 - c) I'm spontaneous and I like to try new things. I enjoy diversity, cultures, art, science, nature, good food and intelligent conversation. I'm happy in the city or the country. I like to draw strange portraits. I believe there is an order to the chaos and vice versa.

- 3.
- a) I enjoy laughing and spending time with good people. I'd like to travel and explore the world. Max Weber called it Verstehen. I love cats and dogs equally for who they are.
 - b) I am a great guy with a great sense of humor. Not "pull my finger" humor but "isn't the world funny" humor. I love to cook but really do it for just me—hate doing the dishes alone.
 - c) Here it is...the raw unadulterated truth. I am compassionate, sensitive, intelligent, quirky, witty and ...very modest! I am open to doing anything and experiencing anything. I will do anything but see Gigli with you...I draw the line somewhere.
- 4.
- a) I am a man who enjoys being a man, and knows what he believes and what he wants in life. I have an IQ in the top two percent. Too bad there isn't a WQ-wisdom quotient, as I've grown a lot in that area over the past decade or so.
 - b) I don't fit neatly into any system of politics, spirituality, or art, and I enjoy discussions on any of those topics. I appreciate European and Asian cultures, and I love New York City. I believe in equality of women, and am rather fond of women who enjoy their femininity.
 - c) I am in awe of beauty and nature and women (who, when you think about it, are both nature and beauty). I am primarily interested in play right now, because we all know that work is a major commitment.
- 5.
- a) I love sex, generally, and giving women pleasure orally in particular. No strings, no reciprocation necessary (although I wouldn't be adverse to it!). You call the shots as much or as little as you wish. I've explored the Kinky.
 - b) I grow more humble but no less passionate about life every waking day. I laugh at myself, care about a lot, and strive to transform the ordinary into the extraordinary. I'm pretty simple, but have many talents: play several instruments, and I'm a decent gardener.
 - c) I fully recognize that succeeding means drawing on multiple talents, the best that everyone has to offer—so it seems with relationships. I enjoy many of life's fine refinements, but I also realize that the best things in life are free.
- 6.
- a) I have a knowledge of terms, but try to use them only when appropriate. Most of the time I talk like a trucker. I have a Catahoula leopard hound with two different color eyes who just happens to be the sweetest little baby boy in the universe!
 - b) I'm courteous. I hold the door open for everyone, not just pretty girls—although I do smile at the pretty girls and pinch their asses. No, I don't really pinch their asses, but I will when I am an old man because they get away with it ... muhahahahah!
 - c) I'm a mad whistler (for what it is worth). I can whistle most of Fur Elise. I also incessantly tap my finger and hands on stuff, preferably my cheap bongos. I used to play drums with my musician friends.

- 7.
- a) I love to talk, and I enjoy the intimacy of good conversation. Interesting conversation will never run dry because I can talk about the most ridiculous things. I scream and curse at my favorite sports team.
 - b) I have trouble relating to rich people. I have humble roots. I keep up with important goings-on in the world and I keep my soapbox close by should I need it. I like myself, and I like other people being themselves.
 - c) I am open to all kinds of art, music, food, etc. I like expression, and genuine expression of emotion, ideas, and creativity through any medium excites me. I like genuine people, too. I hate being manipulated for profit, and I hate being sold as a product.
- 8.
- a) I'd rather spend a few hours running chasing a ball or out in the woods hiking than in a gym working out. Just bought a mountain bike a few weeks ago, which I've taken to and am beginning to enjoy.
 - b) Why not? I treat everyday as something relevant, even if I am having a bad one. Therefore, each one is never alike. I believe in treating people with respect. Simplicity and comfort with one's existence is cool also.
 - c) I value people (everyone knows something that I don't know and should be listened to), getting away to the woods and water, bicycling, canoeing, crafts, hiking, and working where form and function overlap is one goal.
- 9.
- a) I am shy, funny, and great to have a conversation with. I like going out to dinner and just being relaxed. I am a gentleman. I do not ask for much. I am new at this so no idea what else to say but to find out. I would love to meet someone sweet.
 - b) I'm a pragmatic, hard-working, hard-playing man. I'm in excellent shape (work out three times a week), I enjoy numerous outdoor and indoor activities such as museums, hiking, and scuba diving, and I am always open to new experiences.
 - c) I am rare, not long lived, much like a precious savory vintage. I am a long, slow draught of precious wine. I am tall, well-groomed, a quite decent looking man (I think) with a studied appearance (think Clark Kent). I know how to dance.
- 10.
- a) I am easy-going. I work hard. I like to try new things and am not afraid of change as long as it is two ways. If we don't need to see each other for two weeks fine, so be it. I am not one that wants or needs that special someone around 24/7.
 - b) Well, I am hard-working and like to have fun. I travel all summer racing motorcycles at various racetracks. It would be really nice to have someone who would like to come along and keep me company.
 - c) I'm smart and funny. I love New York City so much I still stare up at the buildings, even though I have been visiting my entire life. My eyes and ears are always open because I need to know where I am going and I want to hear what you are saying.

Please choose which of the following would make **you** the most jealous (A, B, C). Please answer all items and select only **one** answer for each item.

1.
 - a) Your partner tells you that he is in love with a close friend of yours.
 - b) Your partner tells you that he is in love with an ex-girlfriend.
 - c) Your partner tells you that he had a one-night stand with a coworker. You trust that he has never done anything like this before and you are sure that he was only attracted to his female coworker sexually.
2.
 - a) Your partner has been engaging in online chat with a member of the opposite sex, confessing to you that he wants to feel close to someone. You know that he has never had sex with the other person.
 - b) You found out that your partner gave out his phone number to a member of the opposite sex in the hopes of having a one-night stand.
 - c) You discover that your partner is answering personal ads in an attempt to have casual sex with another woman.
3.
 - a) Your partner has been downloading pornographic material off the internet.
 - b) Your partner has been calling a phone-sex hotline.
 - c) Your partner takes an old female friend of his out to dinner. You are sure that he has never had sex with this other woman but has known her for years and they are very close.
4.
 - a) Your partner confesses to you that he allowed a female stranger to give him oral sex and did not use protection.
 - b) Your partner confesses to you that he has been talking to another woman about the problems he is having with your relationship.
 - c) Your partner confesses to you that he engaged in vaginal intercourse with a female he met at the bar.
5.
 - a) Your partner gave oral sex to a member of the opposite sex on one occasion while you and he were involved.
 - b) Your partner was digitally stimulated by a member of the opposite sex on one occasion while you and he were involved.
 - c) Your partner confesses to you that he feels emotionally closer to a female co-worker than he does to you.
6.
 - a) You find out that your partner asked someone of the opposite sex out to the movies. You trust your partner completely and know for certain that he would never have sex with another woman.
 - b) Your partner goes out to dinner with a friend of his, who is a member of the opposite sex. He is honest and tells you that it is because he has a lot in common with this other woman. You know that he would never cheat on you sexually.
 - c) You and your partner are living in separate parts of the country and you find out that he had a one-night stand with a member of the opposite sex.

7.
 - a) You just found out that your partner has had sex with a member of the opposite sex one time while you and he have been together.
 - b) You just found out that your partner has built an emotional attachment with a member of the opposite sex while you and he have been together; but you are sure there was no sexual contact involved.
 - c) You find out that your partner was married before you got together; he had never disclosed this point prior and you have been together for a while.
8.
 - a) Your partner constantly talks about how great his coworker of the opposite gender is. The coworker is about the same age as your partner; you are sure that your partner does not find his coworker attractive but he talks to her on the phone a lot.
 - b) Your partner confesses to you that he finds one of his coworkers of the opposite sex to be extremely physically attractive but admits that his female co-worker is as dumb as toast and that he has never had one meaningful conversation with her.
 - c) Your partner receives a small gift from an attractive coworker of the opposite sex. Your partner and his coworker have been working together since before you got together and have been close personal friends for years.
9.
 - a) You find out that before you got together, your partner has had numerous one-night stands with different members of the opposite sex. You are sure that he stopped engaging in this behavior before the two of you got together.
 - b) You find out that your partner currently has numerous close friends of the opposite gender, but you are sure that your partner was never involved sexually with any of them.
 - c) Your partner has ongoing contact with a person he dated several years ago before the two of you started your relationship. You are positive that there has been no sexual contact between your partner and his ex-girlfriend since you and your partner began your relationship.
10.
 - a) You are out at a restaurant with your partner and see him giggle and smile at the waitress. When the waitress walks away he turns to you and proceeds to tell you how sexy the waitress is.
 - b) You are out at a bar with your partner and you see him staring at an attractive member of the opposite sex lustfully.
 - c) Your partner tells you that he and his old girlfriend have a lot more in common (in terms of shared values) than you and he do.

Appendix H. *Army Alpha Verbal Intelligence Test (Yerkes, 1921).*

In this test, you need to select the alternative that most closely matches a given word. Select one of the four alternatives that best matches or defines each target word. If you are unsure of the best answer, make your best guess. Please answer all questions.

1. Reply	Make	Do	Answer	Come
2. Foolishness	Wisdom	Nonsense	Mischief	Dread
3. Boulder	Rock	Field	Fire	Wall
4. Indecision	Doubt	Courage	Fancy	Assertion
5. Age	Person	School	Bread	Time
6. Stave	Thread	Wood	Jelly	Grass
7. Squabble	Flout	Sing	Dispute	Speak
8. Punctual	Late	Tardy	Prompt	Slow
9. Contradict	Deny	Admit	Reveal	Respect
10. Dilapidated	Ruined	Finished	Retained	Carved
11. Swirl	Upset	Copy	Whirl	Disappear
12. Concurrent	Rebellious	Simultaneous	Capable	Conscientious
13. Spurt	Talk	Reduce	Live	Gush
14. Repose	Die	Trot	Interest	Rest
15. Convey	Leave	Carry	Credit	Direct
16. Lieu	Harvest	Stead	Money	Brew
17. Probity	Fraudulency	Honestly	Tenacity	Charity
18. Quandary	Predicament	Quirk	Consolidation	Granary
19. Torpor	Terror	Activity	Laxative	Sluggishness
20. Plenary	Complete	Candid	Culpable	Cloying
21. Tyro	Locomotive	Beginner	Weakling	Tyrant
22. Ambient	Surrounding	Ill	Essential	Barbaric
23. Abjure	Confer	Renounce	Embezzle	Venerate
24. Vestige	Cloak	Loss	Plague	Trace
25. Salvatory	Seasoned	Bowing	Tasty	Leaping
26. Valance	Drapery	Radical	Chemical	Date
27. Recondite	Secret	Exposed	Explosive	Known
28. Egregious	Appropriate	Congregational	Designed	Flagrant
29. Torsion	Bending	Pulling	Compressing	Twisting
30. Schism	Descendant	Spectrum	Party	Division