EXTRAVERSION-INTROVERSION AND ROMANTIC LOVE

By

Ryan Ruiz

A Thesis Presented to
The Faculty of Humboldt State University
In Partial Fulfillment of the Requirements for the Degree
Master of Arts in Psychology: Counseling

Committee Membership
Dr. Gregg Gold, Committee Chair
Dr. Emily Sommerman, Committee Member
Dr. Beth Eckerd, Committee Member
Dr. Emily Sommerman, Graduate Coordinator

May 2013
Abstract

EXTRAVERSION-INTROVERSION AND ROMANTIC LOVE

Ryan Ruiz

This study tested the relationship between romantic love and extraversion, using the Eysenck Personality Questionnaire Brief Version (Sato, 2005) and the Dupree Romantic Love Questionnaire (Dupree, 1976). Relationships tested were between extraversion and the sexual attraction subscale, the relationship between gender and the sexual attraction subscale, as well as the relationship between gender and the mutual reward subscale.

This study consisted of 145 students from Humboldt State University. Students were sent emails with the Romantic Love Questionnaire and the Personality Questionnaire attached. It was hypothesized that there was going to be a positive correlation between extraversion and the sexual attraction subscale score but, no correlation was found. There was also no relationship found between gender and their sexual attraction score, nor was there a relationship found between gender and their mutual reward score. The location of the study, the medium under which the questionnaires were administered, the fact that the test did not need to be completed at one time, and the questionnaires themselves were discussed as possible explanations for no relationships being found in this study.
Acknowledgements

There were so many people that have helped me complete this study, either directly or indirectly. I would first like to thank my advisor Dr. Gold, who went the extra mile to help me finish my thesis. I would also like to thank Dr. Sommerman and Dr. Eckerd for their time and their availability.

My family and friends also played a crucial role in helping me complete my thesis. Thank you to my Mom for always being there for me and supporting me no matter what happens. Thank you to my sister for always listening to my problems with my thesis. To my friend Andre, for going through this process, in your own field, at the same time that I did. To my stepdad, Roy, for being an everyday hero and inspiring me to finish. Lastly I would like to thank Humboldt State University as a whole, for giving me the chance to pursue a higher education.
Table of Contents

Abstract.........................................................................................................................ii
Acknowledgments.........................................................................................................iii
Table of Contents.........................................................................................................v
Introduction..................................................................................................................1
Literature Review...........................................................................................................4
  The Freudians..............................................................................................................4
  The Non-Freudians......................................................................................................7
  Recent Studies of Romantic Love..............................................................................9
  More Recent Studies in Romantic Love.................................................................12
  Personality..................................................................................................................14
  Recent Studies Similar to the Proposed Study.......................................................20
  Overview of the Current Study...............................................................................21
Hypotheses....................................................................................................................23
Methods.......................................................................................................................24
  Participants...............................................................................................................24
  Dupree Love Questionnaire....................................................................................24
  Eysenck Personality Questionnaire Brief Version...............................................25
  Procedure...............................................................................................................26
Analysis of the Results...............................................................................................27
Results..........................................................................................................................28
Discussion

Summary and Discussion of Findings

General Limitations

Directions for Future Research

References

Appendix A Dupree Romantic Love Questionnaire

Appendix B Eysenck Personality Questionnaire-Brief Version

Appendix C Instructions to the Participants
Introduction

H. Eysenck and Eysenck (1963) found that people have a preference for how many other people they would prefer to be around. Some people prefer being around large groups of people, and are gregarious and assertive—these people are called extroverts. Other people prefer being around small groups of people, and are less sociable and passive—these people are called introverts. It is also important to understand that people are neither 100% extrovert nor 100% introvert; everyone exists on a continuum with extroversion on one side and introversion on the other side. These social preferences may affect many parts of one’s social life, including one’s romantic life.

Dupree (1976) created a questionnaire to understand how a person defines love. He derived this questionnaire from the writings of the theorists Carl Jung, Sigmund Freud, Alfred Adler, Sandor Ferenczi, Melanie Klein, Karen Horney, Theodor Reik, Erik Erikson, Harry Stack Sullivan, Eric Fromm, Rollo May, Abraham Maslow, Eric Berne, B.F. Skinner, T.M. Newcomb, H.F. Harlow, D. Byrne, and L. Festinger. Through these writings he found 5 different categories of love: ego need, mutual reward, mutual appreciation, sexual attraction, and magic union.

Out of these categories 40 questions were created, 8 items each. He gave the 40 item questionnaire to a committee of 5, they needed to all agree on the category of each question with .8 reliability, meaning that 4 out of the 5 people needed to agree. If, at least, 4 out of the 5 people agreed, the question would make the final draft of the survey,
if less than 4 out of 5 people agreed than the question was left out of the final draft. Out of this process a 20 item questionnaire as created. He briefly described the 5 love issues that were used in the questionnaire. The 5 love issues were sexual attraction, ego need, mutual reward, mutual appreciation, and magic union (Dupree, 1976).

Ego need is the belief that the person finds love so that the person finds solutions to their life problems. Mutual reward is defined as love that exists because of the reciprocation in the relationship, the person believes that what defines love is an exchange of goods or services. Mutual appreciation is defined as two people being happy in each other’s presence; there is nothing more expected from the partner than to exist in the other’s company. Sexual attraction is defined as love that is based on sexual enticement and sexual gratification. Magic union is defined as love that exists because a higher power wishes the connection to exist. When people use the term “soul mate” and that their relationship was “destiny” they are talking about magic union love.

This current study examined the degree to which extraversion-introversion levels are related to Dupree’s five romantic love styles. Extraversion-introversion is a very important part of people’s lives; how extraverted a person is shapes many choices that they make. For example, when an extraverted person looks for a job and has to choose from either a salesperson job or a filing job, the person may pick the salesperson job because there is more interaction with people. Finding a correlation between extraversion-introversion and romantic love may help therapists understand how the two
subjects are related. Finding a correlation may be the foundation of further research, research that may be able to aide therapists in helping clients with their love lives.

Davies (1996) is theoretically very similar to the present study. Davies (1996) looked for correlates of love styles using the Eysenck Personality Questionnaire and the Lee Love Style questionnaire, and extraversion was found to be positively correlated with eros and ludus. The higher a person scores in the eros category, the higher a person scores on the ludus category, and vice versa. Eros is defined as passionate love and ludus is defined as game-playing love. This thesis was hoping to find the correlations between the personality characteristic of extraversion-introversion and Dupree’s styles of love. While Davies used the Lee Love Style questionnaire, this study used the Dupree romantic love questionnaire measure.
The Freudians

Many theorists of modern psychology have written about romantic love (Erikson, 1968; Klein, 1937; Maslow, 1968; Sternberg, 1968). Freud was one of the earliest modern theorists to write about love; he wrote about sex as an integral part of being in love. Freud saw a romantic relationship consisting of two different parts: the first part is what he called “sexual overvaluation,” this term meant that, in the relationship, sex is the most important part of the relationship, that it plays a huge part in the relationship but that both people repress these feelings because they are shameful of sex being such an important part of their lives. When one represses these feelings, the repression can be expressed in terms of warm feelings or “tenderness” for the other person. The second part of this formula is the projection of the person’s ego ideal on the other person. The person has an idea of perfection for the self, and they project this ideal of the self onto the other person, giving the person an elevated position in one’s life. With these two parts his formula for a romantic relationship is complete (Freud, 1920/1959).

While Freud’s (1957), theories focused on sexuality being the foundation of love; Melanie Klein (1937) wrote about the foundation of love being the women’s breast. The breast, through feeding, becomes a symbol of love. Through the feeding and the warmth that the breast provides, the child experiences love for the first time, and this experience of love becomes the foundation for romantic love later on in life.

Not only does the breast contribute to the romantic love relationship but the actual
love acts of the mother also contributes to the child’s experience of romantic love later on in life. Through the love of the mother the child learns what love is first hand by the experience of the mother-child relationship. Later the child uses mother-love as an example of how to love a romantic partner. This love from the mother is seen as a sacrifice for the child, the child him/herself learns this sacrifice. The child learns to sacrifice and also becomes selective with his/her sacrificing. The child knows only to sacrifice in another when the self is seen in another, for that is what the mother does, for that is love (Klein, 1937).

Sandor Ferenczi (1938) did not emphasize the mother-parent relationship the way that Melanie Klein (1937) did, he did however emphasize sex. He believed that sex was so important to people because it is a partial realization of a man returning to the womb. Men seek sex often because they feel as if they are returning to the womb and women seek sex often because they feel as if they are giving birth when they are having sex. Ferenczi theorized the act of sex itself is incredibly unpleasurable and the only reason that one performs sex is partially the relief of ejaculation and partially the feeling of returning to the womb. Because these feelings are so strong in both sexes, the drive for sex is equally strong in both men and women.

Jung was also a Freudian but, his theory of romantic love was not as focused on the sexual aspect or the physical act of caring as much as the past theorists. His theory had more to do with how the parent and the child’s subconscious interacted with each other. Jung believed that children’s personalities are created out of the unconscious motivations of the parent. For example, if the parent abides the law very strictly, but
subconsciously wishes to be a rebel and to continuously break laws, the child will become a rebel because of the parent’s subconscious desire. If this understanding is applied to romantic love, than it can be said that the partner of the child depends on the unconscious relationship of the parent and child. In this theory, the child may look for a partner that is the opposite of what the parent is, as opposed to the child looking for what is best for him/her. For example, if the parent is a very serious, very sad person then the child may try to find a partner that is very joyous and very happy all the time (Jung, 1954/1970).

This understanding of love is only true if the relationship between the parent and the child remains in the subconscious. If the relationship between the parent and the child becomes conscious for whatever reason, than the child becomes free of the subconscious needs of the parent and free to pick whatever mate best suits him/her (Jung, 1954/1970).

Erikson also wrote about love, he wrote about love in more detail and appeared to value love a lot more than the Freudians before him, in fact he believed that “love is the greatest of all human virtues, and, in fact, the dominant virtue in the universe” (Erikson, 1964, p. 127). Through romantic love, he believed, a person can have a chance to find themselves, the romantic love connection can help both parties to understand and develop themselves more. Erikson also believed that true love means that each person must subdue their own differences, while accepting the other person’s differences. Erikson (1968) wrote: “… my whole being perceives in them a hospitality for the way in which my inner world is ordered and includes them, which makes me, in turn, hospitable in the
way they order their world and include me… I would restrict (coin) this term *mutuality*, which is the secret of love” (Erikson, 1968, p. 219).

**Non-Freudian Early Theorists**

The Freudians wrote significantly more about the sexual side of love than Abraham Maslow did. Maslow (1968) theorized that there were different kinds of love, based on the different ways of thinking that people may hold.

He concluded that people may either feel B-love (short for being love) and D-love (short for deficiency love) and that these terms were based on the concepts of D-cognition and B-cognition. D-cognition is seeing the world in a way that the person is always looking for the world to provide. The person is always blaming the world or blaming other people for the problems that they have in their lives. They are also always looking for other people to help to help them solve their own problems (Maslow, 1968).

B-cognition is considered the opposite of D-cognition, a person with B-cognition looks at the world in a more objective way, he/she see’s themselves as a person that is independent, a person that in control of their own life. This person takes personal responsibility for their actions and does not look at people in a controlling fashion, but looks at them as multi dimensional organisms, to be enjoyed and to some extent observed. B-love is similar to B-cognition; a person sees the partner and simply enjoys the other person, and has not need to control the other in any way (Maslow, 1971).

D-cognition is very similar to D-love; D-love is where the person is always looking for the other person in the relationship to help them with their life. This type of thinking also leads the person to want to control the other, to be able to shape the other to
fit the person’s needs. It is called deficiency love because the person feels they have a
deficiency with themselves, and they need another person in their life to fill up this
deficiency (Maslow, 1971).

Eric Berne wrote that “intimacy comes out transactionally in the direct expression
of meaningful emotions between two individuals, without ulterior motives or
reservations” (Berne, 1963, p. 148). This quote showed that Berne had a great admiration
and respect for feelings of romantic love. He also showed great respect for love when he
wrote that “Love is the most complete and noblest friendship of them all, and includes the
best of all others: respect, admiration, turn-on, friendship and intimacy, all in one, with its
own grace and charisma added” (Berne, 1970, p. 143). These two quotations relate a
deep sense of respect and admiration for romantic love. The first one expresses the
feeling that intimacy is about expressing and communicating with the goal being simply
to express oneself to another. In the second he talks about how the romantic love
relationship is the best of all the others, and how it carries with it all the components of
every other relationship. He also found that there is also a good amount of innocence in
romantic love, that love is the expression of the inner child, inner child defined as the part
of the person that is playful, youthful, and innocent. The ability to play and the ability to
have fun works with the intimacy to create a beautiful relationship (Berne, 1970).

Berne did not talk just about the beauty of love but also talked about how one falls
into love. He believed that people had ideas in their mind about what each person is
looking for in a mate before they even look for one. Berne also found that the dating
process is simply trying to see if the one that the person is seeing matches the idea of
what an ideal mate looks like in one’s head (Berne, 1961).

Rollo May (1969) believed that people had a “powerful need” for “relationship, intimacy, acceptance and affiliation” (p. 311). He saw love not as a byproduct of sexual expression but as a drive in itself, which he called eros. He believed that eros pushes a person toward “union and truth”. He believed that romantic love made people whole, but, at the same time, asks the person to become totally and completely absorbed in the other. The one person only becomes whole when absorbed into another person. Without this love people would suffer “impoverishing formlessness,” and that a person’s greatest accomplishment for the self is to fall in love with another.

**Recent Studies in Romantic Love**

Rubin (1970) also studied love and studied the difference between loving and liking. He created a scale and the intent of the scale was to measure loving and liking with separate questions and to measure loving and liking as separate subjects. At the time, people were talking about love being just a degree of liking, Rubin was trying to show that liking and loving were different constructs.

Half of the items were based on psychological theories, while the other half were based on interpersonal studies. After this questionnaire was created two different panels of students and faculty (an undisclosed amount of people) were asked to sort the questions into liking and loving questions. An example of a love scale question is “I feel that I can confide in ____ about virtually everything,” and example of a liking scale question is “When I am with ____ , we are almost always in the same mood” (Rubin, 1970, p. 267). When answering the question, the blank is supposed to be filled in with
the name of a romantic partner, and the liking scale was supposed to be in reference to a
plutonic friend of the same sex or opposite sex, depending on what the study was looking
for. Also, each question was meant to be rated with a number between 1 and 9; with 1
symbolizing disagree completely and 9 symbolizing agree completely. Lee (1973) set
out to create a system of labels to describe different kinds of love. The first thing that he
did was to collect hundreds of statements about the nature of love from famous theorists
such as Freud. The next thing that he did was to sort them into six groups based on
similarity of themes of each statement. The first group was named mania, which was “an
ancient Greek term for a kind of loving which is irrational, extremely obsessive and
unhappy” (p. 15). Next was “ludus, that treats love as a game, agape, which is dutiful,
unsselfish, and self sacrificing; storge, which is a natural affection of the kind one may
feel toward a brother or sister; and pragma, which is a rational calculation love
relationship” (p. 16). And finally eros which is looked at as “a great appreciation of
beauty” (p. 34).

Lasswell and Lasswell (1976) was one of the first studies to utilize Lee (1973) to
create a questionnaire. They started by creating a 50 item questionnaire comprised of all
True/False questions. For example, “I believe that love at first sight is possible,” “
Sometimes I get so excited about love I can’t sleep,” (Laswell & Lasswell, 1976, p. 222)
and “the best part of love is living together, building a home together and rearing children
together” (Laswell & Lasswell, 1976, p. 223). The score on each subscale was tallied by
counting up the number of true responses.
Hendrick, Hendrick, Foote, and Slapion-Foote (1984) expanded on Lasswell & Lasswell (1976) by changing the format. Instead of using the true/false format they decided to use a Likert scale format, they believed that this would create a more accurate account of a person’s opinions about love. A Likert scale format is an answer to a question that is represented by a number. On the Hendrick et al. (1984) scale, the number 1 represented strongly agree, the number 2 represented moderately agree, the number 3 represented neutrality, the number 4 represented moderately disagree, and the number 5 represented strongly disagree. They named their questionnaire the Love Attitudes Scale (LAS). They gave the questionnaire to about 800 students, with an average age of 19. The study was aimed at observing the difference between males and females in beliefs about love. The study found that females tested as more manic, storgic, and pragmatic while males tested more ludic and erotic. On the subject of agape love, males and females did not show any difference. Hendrick & Hendrick (1986) replicated Hendrick et al. (1984) and found again that males were more ludic than females but, this time, females were more storgic, pragmatic, and manic than males; and again there was no difference in agape love.

Sternberg (1986) created a different way to measure and view love. He theorized that there were three components of love. The three components were intimacy, passion, and decision/commitment. He defined intimacy as “feelings of closeness, connectedness and bondedness in loving relationships” (p. 119)—this can also be seen as warmth. He defines passion as the “drives that lead to romance, physical attraction, sexual consummation and related phenomenon” (p.119). Lastly, in his definition of
decision/commitment, he breaks up decision and commitment in to two different parts: The decision element refers to the decision to be with a person in the short term, the commitment element refers to the dedication to maintain that love over a period of time.

Sternberg (1986) also had labels for the presence or absence of these factors in a love relationship. He believed that romantic love is intimacy and passion without the commitment component, that companionate love is intimacy and commitment without passion, fatuous love is passion and commitment without intimacy, infatuated love is passion without commitment or intimacy, empty love is commitment without intimacy or passion. Liking is intimacy without passion or commitment, and consummate love is the presence of all three components.

More Recent Studies on Love

Lester and Philbrick (1988) tested personality differences and beliefs about love using the Eysenck Personality Inventory and a 30 item form of the Sample Profile (SLI-30). The SLI-30 is a survey that measures storge, agape, mania, pragma, ludus, and eros, which were terms first coined by Lee (1973), and was developed using factor analytic procedures. The study found that those with higher neuroticism scores also obtained higher scores in the mania love style. This study also found that extraversion was positively correlated with the ludus and eros love style.

Arnold and Thompson (1996) used the Millon Clinical Multiaxial Inventory II (1990) which is a clinical test, measuring where the respondent falls in disorders according to the Diagnostic and Statistical Manual 4th Edition or DSM IV. The study found that the dependency personality category was positively correlated with ludus and
agape, that the antisocial category was positively correlated with ludus, and the avoidant score was positively correlated with ludus and mania. There were many other personality categories that correlated with love styles but, the personality categories were not related to the present study.

Lai, Luk, and Wan (2000) carried out a study that took place in Hong Kong. They gave the Hendrick and Hendrick (1986) Love Attitudes Scale and the NEO-PI short form to 211 university students. The NEO-PI is a 243 item survey that measures neuroticism, extraversion, and openness to experience, agreeableness and conscientiousness. They found that agreeableness correlated positively with agape and storge, and negatively with ludus and mania. They also found that conscientiousness correlated positively with eros but negatively with ludus and mania.

Day and Maltzby (2000) observed the link between personality and love in a different way than previously cited theorists. They used the Eysenck Personality Questionnaire and a list of 14 romantic acts created by Neto (1997). Neto (1997) created this list of romantic acts by surveying 103 university students in Portugal; he simply asked them to list acts that they believed were romantic, the acts were vague categories such as buying a person a gift or holding a person’s hand. In Day and Maltzby (2000) each person was supposed to rate a romantic act on a 1 to 5 Likert scale with 5 symbolizing important and 1 symbolizing not important. This makes Day and Maltzby (2000) more of a study of correlations between personality characteristics and attitudes about romantic acts, rather than attitudes about the kind of love the person believes in. Among men, high endorsement of romantic acts was negatively correlated with
neuroticism and positively correlated with extraversion scores. Among women, high endorsement of romantic acts was positively correlated with neuroticism, and negatively correlated with extraversion.

Carey, Heaven, Hole, and Silva (2004) researched the correlation between Big 5 personality characteristics and the short form of the love attitudes scale (Hendrick, Hendrick, & Dicke, 1998). The short form of the love attitudes scale is just a shorter version of the Hendrick and Hendrick (1986) love attitude scale. They found many results but the results most relevant to this paper were the findings that extraversion was positively correlated to eros.

**Personality**

So far love has been the main focus of this paper so far, this section will explore the personality aspects of this study. Eysenck (1953) defines personality as a “more or less stable and enduring organization of a person’s character, temperament, intellect and physique, which determines his unique adjustment to the environment” (p. 3).

In 1936, Allport, G.W. and Odbert, H.S. set out to create a list of words that pertain to personality, and with this list of words, marks the beginning of modern models of trait psychology (Digman 1990). The first action they took was to find all the words that appeared to pertain to personality in the dictionary, specifically the 1925 Webster’s New International Dictionary. There were approximately 400,000 words, of the 400,000 words they chose 17,953 words to be on their list. Their criterion for this list was that the term had to “distinguish the behavior of one human being from that of another” (p. 24). The 17,953 words were split up into 4 columns. The subjects of the four columns were
“consistent and stable modes of an individual’s environment,” “temporary states of mind and mood,” “character evaluations,” (p. 26) and a miscellaneous column. Examples from column 1 include “introverted, aggressive and sociable;” examples from column 2 include “abashed, rejoicing and frantic;” examples from column 3 include “insignificant, acceptable, and worthy;” and examples from column 4 include lean and angered.

Cattell (1943) was one of the first studies to attempt to organize personality into traits (Digman 1990). Cattell (1943) started his study with the list created by Allport & Odbert (1936). Specifically Cattell (1943) used only column 1, which contained 4,504 words, from Allport & Odbert (1936); with this list he planned to find “universal traits,” a small number of traits that can be used to describe a large number of concepts. One of the first things he did to shorten the list is eliminate many of the synonyms on the list. He found the words that have similar meanings and placed them in the same category.

Another action that he took, in order to make the list complete, was to assign polar opposites to many of the words. For example, one of the words he used was assertive, and he assigned the word submissive to assertive, and he effectively created a continuum with assertive on one side and submissive on the other side. Through this whole process he found 171 separate variables. The next step in the process was to find correlations between variables.

Cattell (1943) found 100 participants and asked the each to rate a person they were intimate with using all 171 variables. The rater was asked to judge if the person they knew was below average or above average on a trait. Through this technique he
found correlations between the variables on multiple subjects, Cattell was able to narrow the list of variables down to 60.

Freud (1957), wrote about personality as well as sexuality. In one theory of he said there are 3 parts to a person’s personality: a conscious, a preconscious, and an unconscious. In a person’s conscious is all the information that the person is thinking of at the moment such as the person’s age or name. In a person’s preconscious is information that is not readily available but can become available with other outside help or self-reflection. For example, Person A was tapping their toes due to nervousness and were not aware of it, then Person B points out to Person A that they were tapping their toes and Person A acknowledges the tapping. Freud would say that the information moved from the preconscious to the conscious. The unconscious is information that a person cannot be easily aware of; psychotherapy is needed to bring the knowledge from the unconscious into the preconscious and ultimately the conscious. This theory finds that personality is complex, that there is a lot more to one’s personality than what the person understands.

Another theory that Freud (1957) wrote about was the theory of the id, ego, and superego. Unlike the conscious, subconscious, and preconscious, these three concepts do not focus primarily on what the person is aware of but, with the satisfaction of drives that people have. The id is a person’s “passions”, the core of who they are and what they want. The ego “represents reason and sanity,” The id has drives that it desperately wants to satisfy while the ego keeps the id from directly satisfying those drives through communicating the restrictions of reality. The ego ideal, or superego communicates more
restrictions, in the form of morality. The id, ego, and superego are concepts describing a person’s drives, a restriction of those drives based on reality, and a restriction of those drives based on morality respectively. This theory of Freud’s describes the complexity of personality.

Kluckhohn & Murray (1948/1954) were also Freudian psychologists but, they saw much more than just the Freudian concepts mentioned in the former paragraph. They had many different conceptions of personality, and many different ways to study personality. Kluckhohn & Murray found that a person cannot be studied away from their culture, their culture is just as important as the person alone. Outside their culture, the person is not the same, just as without the person, the culture is not the same. The two theorists also theorized that personality is not fixed, it changes through the lifetime of a person. People go through stages or “periods of personality” (p.12). For example, one “period of personality” is adolescence, another example is infancy.

Hans J. Eysenck wrote about personality over the span of many decades (Barrett, Petrides, Eysenck, & Eysenck, 1998; Eysenck, 1983; Eaves & Eysenck, 1976). One of the papers that is the most relevant to this study was Eysenck (1953). In Eysenck (1953) he explained that they found that extraversion, neuroticism, and psychoticism were type concepts, that the person’s score on all these subjects will stay the same over time. In Eysenck and Eysenck (1985) they expanded upon their theory, writing that the traits involved in psychoticism are aggression, coldness, egocentricity, impersonality, impulsiveness, anti-sociality, apathy, creativity, and tough mindedness. The traits involved in neuroticism are anxiety, depression, guilt, low self esteem, tension,
irrationality, shyness, moodiness, and emotionality. Eysenck and Eysenck (1985) also saw these traits as hereditary, he cites a study that found that identical twins were more likely to have similar scores in neuroticism than fraternal twins. This means that since the two people that are more genetically similar score the most similar on a neuroticism test, he concluded, that neuroticism has a strong genetic influence.

 Traits that make up extraversion are found to be intercorrelated. For example, sociability, liveliness, activity, assertiveness, sensation-seeking, care-freeness, dominance, and the drive to look for adventure were all found to be correlated, which is why these traits make up extraversion (Eysenck and Eysenck, 1985)

 Eysenck and Eysenck (1985) also wrote a list of hypotheses that were widely held by trait psychologists, this list is the framework for Eysenck and Eysenck’s (1985) study of traits:

 1. Individuals differ with the respect to their location on important semi-permanent personality dispositions known as traits.
 2. Personality traits can be identified by means of correlational studies.
 3. Personality traits are importantly determined by hereditary factors.
 4. Personality traits are measurable by means of questionnaire data, ratings, objective psychological tests, and psychophysiological measures.
 5. The interactive influence of traits and situations produces transient internal conditions known as states.
 6. Personality states are measurable by means of questionnaire data, psychophysiological measures and lab tests.
7. Traits and states are intervening variables or mediating variables that are useful in exploring individual differences in behavior to the extent that they are incorporated into an appropriate theoretical framework.

8. The relationship between traits or states and behavior is typically indirect, being affected or moderated by the interactions that exist among traits, states and other salient factors. (p. 33)

There are many opinions about introversion-extroversion but, the most interesting opinion on the subject is one by Conklin (1923). He believed that a big part of the extraversion introversion continuum is external stimulation; “the extraverted condition must have external stimulation, and is lost or unhappy without it” (p. 375). He also believed that an extraverted person is more interested in objectivity, they are not interested in opinions or feelings of a person, only what is there for everyone to see. Another trait of an extraverted person is that much of their mind is concerned with action, there is no need for introspection or reflective thought in the extraverted mind. To sum up his meaning of extraversion he wrote that he saw extraversion “as a more or less prolonged condition in which attention is controlled by the objective conditions of attention more than by the subjective and in which the content of the subjective is most closely related to the objective” (p. 377).

The introvert, on the other hand is a person that is more reflective, more interested in the subjective. The introvert is “not much interested in business, sports, or that in which physical activity is primary” (Conklin, 1923, p. 375). In fact the introvert is very much interested in expression of self such as writing, painting, debating, and activities of
that nature. Conklin found that “introversion can be defined as a more or less prolonged condition in which attention is controlled more by the subjective than by the objective conditions and in which the content of the subjective conditions is of more abstract nature and not so intimately related to the objective conditions” (p. 376).

Essentially Conklin (1923) is trying to say that an introverted person will be more focused on the self, feeling, thoughts etc. While, on the other hand, an extraverted person will be more focused on events and activities outside of the self.

Recent Studies Similar to the Proposed Study

Davies (1996) is similar to the research proposed here except that instead of Dupree’s Scale he uses the Hendrick and Hendrick (1986) Love Attitude Scale or LAS. In Davies (1996) the respondents had an average age of 23.67 and a range of 18-46. The results between the Eysenck Personality Questionnaire and the LAS found that males score higher than females on agape and eros.

Dupree (1976) created a questionnaire to understand how a person defines love. He derived this questionnaire from the writings the theorists Carl Jung, Sigmund Freud, Alfred Adler, Sandor Ferenczi, Melanie Klein, Karen Horney, Theodor Reik, Erik Erikson, Harry Stack Sullivan, Eric Fromm, Rollo May, Abraham Maslow, Eric Berne, B.F. Skinner, T.M. Newcomb, H.F. Harlow, D. Byrne, and L. Festinger. Through these writings he found 5 different categories of love: ego need, mutual reward, mutual appreciation, sexual attraction, and magic union. He gave the Questionnaire to 150 people in Humboldt County, California. He found that love is seen mostly as mutual reward, he also found that females score higher in the mutual reward category than males.
Eubanks (2008) used the Dupree (1976) questionnaire but he studied the questionnaire’s score’s correlation to gender and sexual orientation. He found no correlation between sexual orientation and scores on Dupree’s questionnaire. He did find that mutual appreciation was the most endorsed by the respondents, and that there is a negative correlation between age and magic union scores. There was also found to be a negative correlation between number of times in love and magic union scores.

Overview of the Current Study

The current study was intended to add to an extensive body of research on romantic love and personality separately, as well as look for correlations between romantic love and personality. This research theoretically replicates many of the past studies discussed in this paper (Lester and Philbrick, 1988; Davies, 1996; Arnold, 1996; Lai et al. 2000; Day & Maltzby, 2000; Carey et al. 2004) but, this study is using instruments that were not used by the past studies; the Dupree romantic love questionnaire and the EPQ-BV. This study also creates a chance to find if the results of the Eubanks (2008) study are able to be replicated, the results of the Eubanks study were that mutual appreciation love was the most endorsed by the respondents. This study also presents a chance to find if Dupree’s (1976) results can be duplicated, he found that mutual reward love was the most endorsed by the respondents.

These specific questionnaires, the Eysenck Personality Questionnaire-Brief Version (Sato, 2005) or EPQ-BV and the Dupree romantic love questionnaire (1976) are being used because they are testing these variables in different ways than the studies of the past. Neither of these questionnaires have been used often, the Dupree romantic love
questionnaire (1976) has only been used a few times because it is unpublished, and the
EPQ-BV has not been used very much because it as created in 2005, only five years ago.
This study presents a chance for both these questionnaires to measure romantic love and
extraversion in different ways than past studies (Lester and Philbrick, 1988; Davies,
Hypotheses

1. Extraversion scores on the Eysenck Personality Questionnaire-Brief Version are expected, as noted above, to be positively correlated with sexual attraction scores on the Dupree questionnaire. Lester and Philbrick (1988) found that extraversion is positively correlated with eros, the definition of eros is similar to the definition of sexual attraction.

2. Scores for males are expected to be higher, on the Dupree questionnaire, in the sexual attraction subject than females. Davies (1996) looked for a relationship between the Eysenck Personality Questionnaire and the Lee Love Style Questionnaire and he found that males scored higher on eros than females, the definition of eros is similar to the definition of sexual attraction.

3. Females are expected to score higher in mutual reward, on the Dupree questionnaire, than males. In the Dupree (1976) study, he gave the Dupree (1976) questionnaire out to 150 people in the Humboldt County area and found that females scored higher than males in the mutual reward category.
Methods

Participants

This study had 145 participants, all students at Humboldt State University. 104 of the participants were female and 41 of the participants were male. Also, 101 of the participants were between the ages of 18 and 23, 28 of the participants were between 24 and 29, 2 of the participants were between 36 and 41, 1 participant was between 48 and 53, and 3 participants were over 54. 11 of the participants were disqualified due to incomplete tests.

Materials/Apparatus

Questionnaire packets included: the unpublished Dupree (1976) Romantic Love questionnaire, the Eysenck Personality Questionnaire-Brief Version (2005), and a demographic questionnaire.

Dupree Love Questionnaire.

Dupree (1976) created a questionnaire to understand how a person defines love. He derived this questionnaire from the writings of the theorists Carl Jung, Sigmund Freud, Alfred Adler, Sandor Ferenczi, Melanie Klein, Karen Horney, Theodor Reik, Erik Erikson, Harry Stack Sullivan, Eric Fromm, Rollo May, Abraham Maslow, Eric Berne, B.F. Skinner, T.M. Newcomb, H.F. Harlow, D. Byrne, and L. Festinger. Through these writings he found 5 different categories of love: ego need, mutual reward, mutual appreciation, sexual attraction, and magic union.

Out of these categories 40 questions were created, 8 items each. He gave the 40 item questionnaire to a committee of 5, they needed to all agree on the category of each
question with .8 reliability, meaning that 4 out of the 5 people needed to agree. If, at 
least, 4 out of the 5 people agreed, the question would make the final draft of the survey, 
if less than 4 out of 5 people agreed than the question was left out of the final draft. Out 
of this process a 20 item questionnaire as created. He briefly described the 5 love issues 
that were used in the questionnaire. The 5 love issues were sexual attraction, ego need, 
mutual reward, mutual appreciation, and magic union.

Sexual attraction was an issue that was found in many psychodynamic writings. 
The sexual attraction issue is defined as sexual gratification being the only element of 
love. Ego need is the belief that the person finds love so that the person finds solutions to 
their life problems. Mutual reward in romantic love relationships is an exchange where 
both people receive goods and/or services. Mutual appreciation is defined as 
unconditionally giving without seeking anything in return. Magic union is the belief that 
two people come together for reasons that are unable to be understood by both parties.

**Eysenck Personality Questionnaire Brief Version**

In 2005, Toru Sato created a version of revised Eysenck Personality 
Questionnaire Short form, which is simply a shorter version of the Eysenck Personality 
Questionnaire, that was aimed to be shorter but just as accurate. The Original EPQ is 100 
questions, the EPQ short form is 48 questions. The first thing he did was to take out the 
psychoticism and lie scales, only leaving extraversion and neuroticism. This left the test 
only 24 questions long; 12 extraversion and 12 neuroticism questions. He changed the 
questions from yes/no format to Likert scale format. In this Likert scale format 1 
represents “not at all”, 2 represents “slightly”, 3 represents “moderately”, 4 represents
“very much”, and 5 represents “extremely.”

During the first meeting in the experiment 150 people took the EPQR-S and the other 150 people took EPQ-BV. On the second meeting, the 150 people that took the EPQR-S took the EPQ-BV and vice versa, and on the third meeting all 300 people took the EPQ-BV. The experiment showed that the EPQ-BV and the EPQR-S were highly correlated with their corresponding measures, and the test-retest reliability was found to be .92 for extraversion and neuroticism. The correlation between extraversion in the EPQ-BV and the EPQ-S was .89, and for neuroticism it was .88.

**Procedure**

Upon approval by the Internal Review Board, the Dupree (1976) romantic love questionnaire and the EPQ-BV (2005) were posted on the internet. The questionnaire was posted on the internet site Surveymonkey.com. Surveymonkey.com can collect responses in three ways; by creating 1) a web link, 2) an email invitation, and 3) popup invitation. A web link was attached to the solicitation for the study. The web link or survey link opens the questionnaire to collect responses. Participants were recruited mainly from the Humboldt State University emailing list. The Humboldt State emailing list is a public directory of every student at Humboldt State University. Most of the email addresses started with three letters and then a number. The researcher sent out emails starting with aaa and then went to aab, then aac and so forth and so on, ignoring the numbers at the end. The researcher did this until 156 applicants had answered the questionnaires. Participants were told that this is a study of romantic attitudes towards love. To protect the anonymity of the participant, the researcher asked that there please
be no identifying information applied to the questionnaire. In addition, the website (Surveymonkey.com) ensures anonymity by not having any place on the online questionnaire to put additional information. Participants were asked to answer all the questions to the best of their abilities. The participants were told that the questionnaire should take approximately fifteen to twenty minutes. After the survey a short statement appeared on the screen, stating appreciation for their completion, and giving them the email address and phone number of the primary researcher in case any problems arise from taking the test or if they wish to receive the results of the study.

**Analysis of Results**

Hypothesis 1 was analyzed using a Pearson's correlation between extraversion scores on the Eysenck Personality Questionnaire-Brief Version (Sato, 2005) and sexual attraction scores on the Dupree(1976) questionnaire.

Hypothesis 2 was analyzed with an independent means t test between men and women on the Dupree (1976) sexual attraction subscale on the questionnaire.

Hypothesis 3 was analyzed with a independent means t test between men and women on the Dupree (1976) mutual reward subscale.
Results

A Pearson’s correlation analysis was used to test hypothesis #1, that the subjects’ scores on the extraversion section of the EPQ-BV (Sato, 2005) would be positively correlated with the sexual attraction scores on the Dupree (1976) questionnaire. The results found that $r = .084$, $p = .312$. The analysis revealed that there was no relationship between extraversion scores and sexual attraction scores.

An independent means $T$-test was used to test hypothesis #2, that the difference between the average score on the sexual attraction subscale for males and the sexual attraction subscale score for females is statistically significant, $t = -.36$, $p = .72$. The average sexual attraction score for males was $M = 7.46$, $sd = 1.96$. The average sexual attraction score for females was $M = 7.61$, $sd = 2.2$. The endpoints of the scale are 4 and 14, meaning that the lowest score on the subscale was 4 and the highest was 14. The study hypothesized that males would score higher on the sexual attraction subscale but, no significant difference between the mean of the groups was found.

For hypothesis #3, independent means $T$-test using gender and scores on the mutual reward subscale of the Dupree (1976) questionnaire were used to test the hypothesis that women would believe more in mutual reward love than men, $t = .68$, $p = .49$. The mean mutual reward score for men was 11.37, while the standard deviation was 2.40; while for women the mean was 11.09, and the standard deviation was 2.15. The analysis revealed that, for this study, there was no significant relationship between gender and the scores on the mutual reward subscale.
Discussion

Summary and Discussion of the Findings

The purpose of this study was to better understand the relationship between gender and romantic love concepts, as well as extraversion and romantic love concepts. Specifically this study was hypothesizing that males would score higher on the sexual attraction subscale of the Dupree (1976) Romantic Love questionnaire. Finding this connection would have added support to the findings of Davies (1996). Davies (1996) found that males were more likely to score higher in eros than females were. Eros is very similar to sexual attraction in the Dupree (1976) Romantic Love Questionnaire. Conversely, another part of the study hypothesized that women would score higher on the mutual reward subscale of the Dupree (1976) Romantic Love Questionnaire. This part of the study was testing the findings that Dupree (1976) had discovered. He had found, using the test that he created, that females scored higher on the mutual reward subscale than males did. The final part of this study set to find a connection between the extraversion score on the EPQ-BV (Sato, 2005) and sexual attraction score on the Dupree (1976) Romantic Love Questionnaire. This part of the study looked to theoretically replicate the findings of Lester and Phillbrick (1988). They had found that scores on the extraversion subscale on the Eysenck Personality Questionnaire (Eysenck, 1985) had positively correlated with scores of eros on the Sample Profile (Lee, 1973). Eros is similar to the sexual attraction subscale on the Dupree Romantic Love Questionnaire (1976).
The present study also found that the gender of the participant and the score on the sexual attraction subscale are not correlated. If this finding is indeed an accurate reflection of human nature than it would be safe to assume that how much a person values sex is not based on the sex of the person. Another conclusion that can be drawn from this finding is the possibility that a person’s value of sexual attraction may be held in their subconscious. Freud (1957) believed that the sexual impulses that drive human beings are buried in the subconscious of a person, that these desires are kept in a part of the mind that a human cannot easily get to. This survey was not created to measure the person’s subconscious, this survey was simply made to measure the participants conscious belief in their feelings about romantic love. This finding does, however, coincide with Sandor Ferenczi’s (1938) theory. What he wrote is that the act of sex is equally important for males and females. He wrote that the act of sex makes men feel as if they are returning to the womb, and that sex makes women feel as if they are giving birth. According to Sandor Ferenczi the urge for men to go to the womb and the urge for women to give birth are equal. Therefore, to find no difference in the value of sexual intercourse for the two sexes is consistent in Sandor Ferenczi’s theory.

The difference in findings between the original Dupree (1976) study and the present study are very different, especially with the findings in the relationship between gender and sexual attraction. The difference in these findings may have to do with how the culture in America has changed since then. If these findings truly represent the culture of the time, then 1976 was very much a time where men found greater value in sex in a relationship than women. On the other hand, if this study’s findings were
generalized to 2010, than 2010 was a time of equality, at least in terms of valuing sexual attraction in a romantic relationship. This may have to do with how society has changed, how men and women now are truly embracing sex in general. That it has become acceptable for men and women to value sex, to make it a priority in the relationship. As opposed to 1976, when people, though socially liberal, were still in traditional sexual roles, to some extent.

Hendrick, Hendrick, Foote and Slapion-Foote (1984) found that men were more likely to value eros, or sexual attraction, more than females. The present study found no such result. Hendrick et al. (1984) was conducted very differently than the present study. Hendrick et al. was conducted in a different region, used different questions to measure similar constructs, and gave the questionnaire to 800 students (as opposed to the present study, which gave the questionnaire to 145 students). These differences in procedure may account for the differences in results.

Davies (1996) found that males scored higher than females on eros, or sexual attraction. On reason for the difference in findings between the present study and Davies (1996) is the difference in the date each study was conducted, the Davies study was conducted in 1996 and the present study was conducted in 2011. In the 15 years in between studies society changed, the economy changed, men and women changed, any of these factors may the reason for the difference in findings between the Davies study and the present study.

This study also found that there is no relationship between the extraversion score and the sexual attraction subscale score. If a relationship would have been found, than it
may have implicated that extraversion is related to sexual attraction. With no relationship found, this result shows that extraversion and sexual attraction may not be related. This finding may implicate that sexual attraction is not a social construct, that sex is not a social activity. An example of this finding may be pointed out in a young couple. According to this finding a man’s ability to socialize with a woman is not connected to how much he values having sex with her, and vice versa.

Arnold and Thompson (1996) found that avoidant personality disorder is positively correlated with eros. Avoidant personality disorder is a term for one that is dramatically introverted in a mentally ill way. Therefore, in a way, this study found a correlation between extraversion and sexual attraction. One reason that the present study’s findings differ from Arnold and Thompson (1996) may be that Arnold and Thompson (1996) used a test that was used to measure clinical psychological constructs, as opposed to the present study, which used a test that measured social psychological constructs. In other words, Arnold and Thompson (1996) used a test for the mentally ill, as opposed to the present study which used a test for those that are non mentally ill.

Lai, Luk, and Wan (2000) was a similar study to the present study and found similar results; that there was no relationship between romantic love and extraversion. The key difference between Lai, Luk, and Wan (2000) and the present study was that Lai, Luk and Wan (2000) took place in Hong Kong, China. Due to the difference in culture and geographic location, a different result may have been expected. Due to the different location and different culture of the Lai, Luk, and Wan (2000) study, and the similar result found, one conclusion that may be drawn from this comparison between studies is
that the lack of relationship between extraversion and sexual attraction is evident in different cultures. On the other hand, Kluckohn & Murray (1948/1954) found that a person cannot be studied away from their culture. Therefore, looking at the comparison of the studies through the point of view of Kluckohn & Murray (1948/1954), no extrapolation of results to the rest of the culture can accurately describe the personality of that culture.

Dupree (1976) was the first study to use the Dupree Romantic Love Questionnaire in a piece of research. In his inaugural study Dupree found that females score higher than males on the mutual reward category. Though the Dupree study and the present study used the Dupree Romantic Love Questionnaire, a difference in administration of the study may be a key factor in the different outcome. The Dupree study administered his tests in person. The present study, however, administered the test via the internet. This may contribute to the difference in findings.

Unfortunately, there was no relationship found for any of the three hypotheses stated above. The present data did not support any relationship between extraversion and sexual attraction scores, sex and sexual attraction scores, nor sex and mutual reward scores. This may have happened because there might actually not be a relationship between any of the factors listed above. If these results accurately measure the constructs they were meant to than there is no connection between sex and sexual attraction, sex and mutual reward, nor between extraversion and sexual attraction. This may mean that each of these constructs are separate and not related.
**General Limitations**

One of the limitations of this study was the medium under which it was taken. The fact that the study was administered over the internet may have created different answers to the questions than if it were administered in person. First of all, there is no real way of knowing if the answers that were given solely by the person that the test was supposed to be given to. The person could have opened up the test and had somebody else take the test, or opened up the test and asked somebody else for help taking the test. By internet, there is no real way to guarantee that one person had taken the questionnaire.

Another way in which the internet distribution of the questionnaire may have led to results that differed from past studies is that the study may not have to be taken at one time. The distribution of the test allowed for the subject to take the test at their own pace, though the introduction to the test informed them it would take between 10-15 minutes, there was no expiration time on the test itself. Previous research used tests that were administered in person, which does limit a subject to finishing the test in one session. This difference may give the subject more time to think about each question.

The third limitation to this study may be the tests themselves. The Dupree (1976) Questionnaire is rarely used and for that reason has not been thoroughly validated with more prominent and popular tests used today. Also, two of the hypotheses that were stated in this study used the term eros in their precedent. This study stated that eros and sexual attraction were similar but not the same. Though found to be similar they are not exactly the same and therefore, the difference between eros in the studies cited and sexual
attraction in the present study may account for the results in the present study being different than past studies.

The fourth limitation of this study is the sample that the questionnaire was administered to. Dupree (1976) administered his questionnaire to members of the community as well as students at Humboldt State University. The Lester and Phillbrick (1988) and the Davies (1996) studies were both administered to subjects at schools that were in different parts of the country than Humboldt State University. This study was not only limited to the Humboldt County area but, limited to the students at Humboldt State University. These facts may have been one reason why this study did not theoretically replicate similar past studies.

Directions for Future Research

One direction for further research is continued use of the Dupree Romantic Love Questionnaire. With an expanded use of the Dupree Romantic Love Questionnaire, there would be an expanded selection of results that are directly comparable to this study.

One more direction that a further study could go is to have an expanded sample. With the invention of the internet the amount of people that one study could reach is significantly more than the amount before the internet was invented. Also, this study is very simple and easy to take, therefore, I hypothesize that there would be a large completion rate if the survey was sent out to a large amount of people. Using the internet to its fullest capabilities would help create a larger sample, and therefore create data that may be more representative to the population that it is being generalized to.
References


Appendix A

The Dupree Romantic Love Questionnaire
ROMANTIC LOVE QUESTIONNAIRE

This is a survey of some general attitudes about love in a romantic relationship. Please fill out the personal data and questionnaire as completely as possible. All answers will remain anonymous. Thank you for participating.

Demographics

Age: _______  Gender:  Male_______  Female______

------------------------------------------------------------------------------------------------------------

Questionnaire

Please read carefully each of the following statements. Rate each statement on a five point scale. Circle the number that represents your opinion according to the scale below:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

1. There is nothing mysterious about love—it is mutual back scratching.
   5  4  3  2  1

2. When a person is not in love, life becomes a matter of "just passing time."
   5  4  3  2  1

3. When we really love we don’t need to be loved in return
   5  4  3  2  1

4. Being in love is the solution to personal misery.
   5  4  3  2  1

5. Love is mysterious and not understandable.
   5  4  3  2  1

6. When we love someone we don’t criticize or compare them—just enjoy them.
   5  4  3  2  1
7. There is no such thing as love—just good sex
And bad sex.
8. We all have a special “soul-mate”; it’s just a
matter of meeting the person
9. Physical attraction is the main element in love.
10. A love relationship is primarily a matter of
“giving and getting.”
11. We don’t FALL in love; we LEARN to love.
12. Love may best be seen as a mystical bond.
13. We need love the most when we feel bad.
14. Tenderness is just a “quiet” form of sex.
15. Life is boring and difficult when one is not
in love.
16. Love is a matter of mutual appreciation—not
giving or getting.
17. In love we retain our own individuality and
simply delight in the other.
18. Love occurs when the positive aspects of
another far outweigh the negative.
19. To fall in love you have to be willing to give up
your individuality to a larger force.
20. Love is sex—the rest of “love” is fantasy and
Illusion.
Appendix B

The Eysenck Personality Questionnaire- Brief Version
Research # ____________________________ Sex M F Age ___

INSTRUCTIONS

Please indicate your characteristics by circling one of the letters on the left of each of the items.

not at all slightly moderately very much extremely

A  B  C  D  E  A  B  C  D  E

1. Are you a talkative person?
2. Does your mood often go up and down?
3. Are you rather lively?
4. Do you ever feel miserable for no reason?
5. Do you enjoy meeting new people?
6. Are you an irritable person?
7. Can you usually let yourself go and enjoy yourself at a lively party?
8. Are your feelings easily hurt?
9. Do you usually take the initiative in making new friends?
10. Do you often feel "fed-up"?
11. Can you easily get some life into a rather dull party?
12. Would you call yourself a nervous person?
13. Do you tend to keep in the background on social occasions?
14. Are you a worrier?
15. Do you like mixing with people?
16. Would you call yourself "highly-strung"?
17. Do you like parties and excitement?
18. Do you worry too long after an embarrassing experience?
19. Are you mostly quiet when you are with other people?
20. Do you suffer from nerves?
21. Do other people think of you as being very lively?
22. Do you often feel lonely?
23. Can you get a party going?
24. Are you often troubled about feelings of guilt?

Thank you very much for your cooperation!
Appendix C

Implied Consent/Instructions to the Participants
My name is Ryan Ruiz and I am a graduate student in the Counseling Psychology program at Humboldt State University. I am conducting a study to learn whether feelings of romantic love is correlated with how social a person is. This research is being supervised by Dr. Gregg Gold, Associate Professor of Psychology at Humboldt State University. This study will take place on the website www.surveymonkey.com where results will be collected between February 1, 2011 and April 30, 2011.

Your participation in this study is completely voluntary and you have to be 18 years old to participate. If you would like to participate then you will be asked to fill out a survey packet containing two questionnaire. The study should take between 10-20 minutes to complete. It is expected that approximately 100 individuals will take part in this study. The surveys will ask you thoughts and feelings, as well as age and gender. You may decline to answer any question at any time. If at any time you feel uncomfortable and no longer participate, you can withdraw from the study with no penalty.

I understand that he/she will answer any questions I may have concerning the investigation or the procedures at any time. I also understand that my participation in any study is entirely voluntary and that I may decline to enter this study or may withdraw from it at any time without jeopardy. I understand that the investigator may terminate my participation in the study at any time.

There is a very small chance that these questionnaire make you feel uncomfortable. If any of the questions make you feel uncomfortable don’t hesitate to contact Ryan Ruiz at shaygiven@gmail.com or 562-818-5852, or you can contact the faculty advisor, Dr. Gold at gregg.gold@humboldt.edu or 707-826-3740.

All the information that is collected here will be stored in a locked facility at Humboldt State University. The questionnaires will not have any identifying marks or names on them. And all questionnaires will be destroyed after no longer required by professional ethics codes.

Thank you for your time and considering participating in this study. We hope that this study adds greater understanding to romantic love and social attitudes.