

AN ABSTRACT OF THE THESIS OF

I-Tung Joyce Chang for the degree of Master of Arts in Interdisciplinary Studies (Psychology, Women Studies and Statistics) presented on May 28, 1992.

Title: Reconsidering Openness: A Study of Relationships Between Personality Openness and Attitudinal Openness

-Redacted for Privacy

Abstract approved: _____

Frank J. Bernieri

This is an observational study concerning relationships between personality openness and attitudinal openness. 209 volunteers from two samples, participated in this study. The Ohio sample contained data from 36 self-identified feminists (age 18-65) at the Annual National Women Studies Conference in Akron, Ohio, 1990. The Oregon State university (OSU) sample contained data from 173 undergraduates (age 18-52). Personality openness was assessed by the short form of "Openness to experiences" sub-scale from NEO (Neurosis Extraversion Openness) Personality Inventory (Costa and McCrae, 1985); attitudinal openness was assessed by the Feminism scale (Dempewolff, 1974). The results suggested that the correlation between openness and feminism was significantly positive across all samples. Feminism attitudes were found to be correlated with course selection, gender, and class standings. On the other hand, personality openness was found to be fairly stable regardless of course selection, age, gender, or class standing. The findings are consistent with a personality construct of openness as a stable disposition, and with feminism as an accumulated attitude that is influenced by experiences, beliefs, and values.

© Copyright by I-Tung Joyce Chang
May 28, 1992
All Rights Reserved

**Reconsidering Openness:
A Study of Relationships Between
Personality Openness and
Attitudinal Openness
by
I-Tung Joyce Chang**

**A THESIS
submitted to
Oregon State University**

**in partial fulfillment of
the requirements for the degree of
Master of Arts in Interdisciplinary Studies**

**Completed May 28, 1992
Commencement June 1993**

APPROVED:

Redacted for Privacy

Assistant Professor of Psychology, in charge of major

Redacted for Privacy

**Assistant Professor of Statistics, Director of Survey and Research Center,
in charge of minor**

Redacted for Privacy

Associate Professor, Director of Women Studies, in charge of minor

Redacted for Privacy

Dean of Graduate School

Date thesis is presented May 28, 1992

Typed by Frank Tsay for I-Tung Joyce Chang

Acknowledgments

I appreciate very much the efforts of Dr. Frank Bernieri, who has inspired and guided me through out the process of my thesis. Without his patient guidance, strong support, and many inspiring suggestions and discussions, this work could not be possible.

I would like to recognize Dr. Helen Berg for her rich knowledge and her standing by me through all the trying times, Dr. Jeanne Dost for giving me many opportunities to explore feminism, Dr. Janet Lee for her kindness and generosity, and Dr. Leslie Burns who has provided me with time and support.

Finally I would like to thank my friends and family, especially my newly wed husband Frank Tsay for his encouragement, understanding and patience.

TABLE OF CONTENTS

	<u>page</u>
Chapter 1. INTRODUCTION	1
Openness	2
Chapter 2. PERSONALITY OPENNESS	4
History of the Personality Construct of Openness	4
Openness to Experiences	7
Chapter 3. RELATIONSHIPS BETWEEN PERSONALITY OPENNESS AND GENDER ROLE IDEOLOGY	11
Relationships Between Openness and Gender Role Ideology	11
Assessment of Feminism	14
Factors That Contribute To Attitudes Toward Feminism	15
Hypotheses	16
Chapter 4. METHOD	20
Overview	20
Group I-Ohio sample	20
Group II-OSU sample	21
Questionnaire	24
Procedure	25

Chapter 5.	RESULTS	26
Overall Relationships Between Personality Openness and Feminism		26
Attitudes Toward Feminism		29
Openness		32
Summary		34
Chapter 6	DISCUSSION	36
Validity of Feminism Survey		36
Overall Relationships Between Personality Openness and Attitudes Toward Feminism		36
Openness and Intelligence		38
Conclusion		39
References		41
Appendices		
Appendix A Questionnaire for Ohio Sample		46
Appendix B Questionnaire for OSU Sample		56

LIST OF TABLES

<u>Tables</u>	<u>Page</u>
1 Subject Characteristics in OSU sample	23
2 Means and Standard Deviations for Openness Scores and Feminism Scores for Ohio and OSU Participants	28
3 Means for OSU Men and Women on Openness and Feminism Scores	30
4 Means and Standard Deviations (SD) for Traditionally Masculine Orientated, Traditionally Feminine Orientated, Neutral, Feminism Orientated Classes and Library Group in OSU Sample	31
5 Means of the Variables for Freshmen, Sophomores, Juniors and Seniors in OSU sample	33
6 Correlation Matrix for All Subjects in OSU Sample: Openness (OP), Feminism (FM), Compliment (Com), Identity (ID) , Academic Performance (AP), and Class Standing (CS).	35

Reconsidering Openness: A Study of Relationships Between Personality Openness and Attitudinal Openness

CHAPTER 1 INTRODUCTION

Searching for answers to the problem of human nature has been one of the main tasks of philosophers, sociologists, and psychologists. Philosophers evaluate human nature in terms of good or bad, virtue or evil. Thomas Hobbes considered human nature to be selfish, self-centered, and evil (i.e., possessed of original sin). Therefore, he concluded that human behaviors should be controlled by society. In contrast, Rousseau proposed that humans are born with virtues, an intuitive sense of right and wrong (i.e., a reflection of innate purity). From yet a third position, Locke believed that human nature is like a blank slate (i.e., an empty book), and that human behaviors are subsequently determined by environment (Shaffer, 1988; 1989).

Whether nature or nurture (i.e., genetic influences or the environment) is predominant in the determination of personality, or whether the individual's role in his/her own development is active or passive, have been ongoing debates in the field of personality. While most psychologists believe that the truth falls between the two extremes, these issues continue to be important concerns in the field of personality (Bischof, 1964; Benner, 1985; Byrne & Kelly, 1981; Engler, 1985).

There are three approaches to the discussion of an individual's role in forming his/her own personality. One view is that individuals play passive roles in their own development. The developmental task is

to produce an internal copy of the external world. This approach suggests that individual development is fully dependent upon the environment. At the other extreme is the position that the structure and development of knowledge are determined by the biological makeup of the individual. The individual is born with knowledge or with the predisposition to structure knowledge in certain ways. Therefore, the individual's developmental task is to play out a biologically provided script. The plan of development is contained within the individual; and individuals are the servants of biology rather than the servants of the environment. In this approach, the individual does not determine the structure of his/her knowledge (Liben, 1981). The final view is the belief that individuals play active roles in their own development, creating their own conceptual world through individual activities. The environment thus has a different impact upon different individuals, dependent upon how "open" they are to outside influences.

Openness

The term "Openness" has been used broadly in different fields, such as counseling, communication and psychology. The terms "open-minded" or "close-minded" are frequently used to indicate individual personality or attitude characteristics. Personality is thus an integration of traits that can be investigated and described in order to render an account of the unique quality of the individual (Chaplin, 1985). Personality openness is one of the major dimensions in the field of personality, indicating a persisting and stable openness toward the environment.

Unlike personality, attitudes are not as stable. Attitudes are favorable or unfavorable evaluative reactions toward specific events, people, ideas, or objects, and are more likely to change through time and experience than personality (Myers, 1990).

Attitudinal openness indicates a liberal attitude toward a certain topic. For example, a person may have a very positive attitude toward Iraqi culture, but his/her attitude may change dramatically after he/she loses a sibling in the Gulf War.

A number of questions regarding attitudes remain unsolved, such as: Is there a difference between personality openness and attitudinal openness, and which is more important? Is it possible for an open personality type to reflect conservative or non-open attitudes? Is there a causal relationship between personality openness and liberal attitudes?

This study is concerned with discovering relationships between personality openness and attitudinal openness.

CHAPTER 2

PERSONALITY OPENNESS

History of the Personality Construct of Openness

The roots of the concept of openness can be traced back to the mid-years of this century. Openness was viewed as a reflection of high ego strength by psychoanalytic psychologists, who regarded this characteristic as an important human adaptive process. Individuals with high ego strength were thought to have less uneasiness when they face ambiguities or uncertainties (Schafer, 1958). In his study, *Psychoanalytic Exploration in Art*, Kris (1952) added creativity, artistic appreciation, humor, fantasy, and enjoyment of wisdom to the concept of ego. In subsequent psychological studies, these concepts have frequently been studied.

Piaget's concept of adaptation was related to personality openness. Adaptation is a state of equilibrium; a balance between schemes and the environments (Buttom-Smith, 1973; Piaget, 1975). There are two processes of adaptation: assimilation and accommodation. Assimilation is a process through which individuals integrate new environments into existing schemes. People change the outside environment to fit their internal world. Accommodation is the process which modifies existing schemes to satisfy the requirement of a new experience. Accommodation means to change self to understand the new experience (Harrie & Lamb, 1983; Salkind, 1985). From this point, personality openness is related the processes of assimilation and accommodation.

Gorden Allport (1937) believed that conscious thoughts and present lives of individuals were more important than either their childhood experiences or their unconscious beliefs. Allport recognized the importance of biology and the study of traits. The human personality was thus a system, or a unique method of perceiving the environment and self. An individual with an open system has a dynamic growth potential, which may contribute to qualitative changes through development. The development of a person with an open system is discontinuous and qualitatively changes through the interaction between the external environment and internal self. In contrast, a person who reflects a closed system is seldom influenced by the external environment. The development of a person with a closed system is a process of continuous and quantitative change (Allport, 1960; Evans, 1970; Byrne & Kelly, 1981).

From the Rogerian point of view, openness to experience is the "willingness to accept any and all experience into awareness, without distortion; the converse of defense" (Ewen, 1990). Rogers (1959; 1961) stated that a self-actualized person is open to experiences and can face novelty without fear.

Authoritarianism has been described in terms of attitudinal rigidity. As such, it is the conceptual opposite to the construct of openness. American social psychologists have revealed that certain individuals are rigid in attitudes, tend to avoid self-criticism, and to seek out power rather than love and affection. The concept of the "authoritarian personality" was first presented following World War II by Adorno and his colleagues (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950). Adorno assumed that there were certain personality

characteristics of the "authoritarian personality" that people in Germany and other fascist-countries had shared in common. A fascism scale (F-scale) was designed to measure conservative beliefs and submissive attitudes, as well as strong agreement or disagreement without consideration of opposing views. The results of the administration of the scale indicated that the authoritarian personalities (i.e., those who were potentially fascist) could be found within all cultures. However, individuals with authoritarian personalities may be rigid and close-minded, but are not necessarily violent. Rather, they tended to be ethnocentric, think in stereotypes, and to dislike foreigners.

Rokeach (1960) classified people as either open- or closed-minded in accordance with their response to challenges to their own beliefs, based upon the theory that a non-dogmatic or open-minded individual is more likely to consider beliefs which are contradictory to his/her own. Closed-mindedness (i.e., dogmatism) can be manifested by individuals of either conservative or liberal persuasion, suggesting that the condition is not to be equated with attitudinal constructs. Dogmatic cognition has been shown to be related to prejudice, range of attitude changes, and abnormal behaviors, as well as with difficulty in trying new approaches or in encountering new ideas. Thus, individuals can be open-minded to some issues, but closed-minded to others. People are less open-minded when they cope with their own core beliefs (Rokeach, 1936 ; 1960).

Recent studies on dogmatism have been related to prejudice, authoritarianism, open-mindedness, and rigid or flexible thinking. A study by Wilderom and Cryns (1985) suggested that as people age,

thinking becomes more rigid and inflexible (i.e., dogmatic), but not necessarily authoritarian. A strong negative correlation was found between dogmatism and self-esteem (Goldsmith & Goldsmith, 1982).

Openness to Experience

Fitzgerald (1966) related "openness to experience" as a capacity to face unusual experiences without producing anxiety. In addition to this concept, the concept of ego strength was drawn from psychoanalytic theory to test the hypothesis that open-minded people exhibited higher ego strength, demonstrating less anxiety when encountering conceptual inconsistencies. Fitzgerald found that: 1) There was no anxiety difference between people with high ego strength and those with low ego strength; 2) individuals with high openness scores were less likely to be anxious when faced with adversity; 3) men with high openness scores were more likely to describe themselves as internally open-minded, complicated, artistic, lonely, moody, restless, individualistic and rebellious, whereas women with higher openness scores were more likely to be externally open, describing themselves as extraverted, spiritual, and actively involved in physical and social events.

The sex differences in self-description that Fitzgerald proposed was interpreted as a result of sex role stereotype by the researcher. Open people were much more free from the traditional norm. The reason why self-description was externally orientated for open women is due to the different sex roles. Traditional women in the society are not as outgoing and are not as involved in physical and social events as men do; this is why open women see themselves being actively involved in the outer world as an outstanding characteristic. It is possible that

openness frees people from sex stereotype, so open people are less likely to have the traditional view of sex roles. Research by Hong and Rust (1989) found some evidence to support this hypothesis. They found that androgynous people are more open than their sex typed counterparts (Hong & Rust, 1989). Further investigation of openness and sex roles will be discussed in Chapter 3.

Costa and McCrae (1985) have provided the most conclusive definition of openness. There are six facet scales of "openness to experience" in this definition, including fantasy, aesthetics, feelings, actions, ideas, and values.

- **Fantasy.** People who score high on this scale have an energetic and vigorous fantasy life. Their vivid imaginations and daydreams are the way they create the interesting inner world of themselves. They use fantasy to produce a rich and creative life.
- **Aesthetics.** Aesthetic people have a deep appreciation for beauty and art. Art, including music and poetry has an appeal regardless of their own art talents and tastes. Their sensitivity directs them to develop a greater knowledge and appreciation for art and beauty.
- **Feelings.** Emotions are notably valued by people who score high on this scale. A high score implies a wider and deeper range of emotional feelings on both ends of a happiness to unhappiness scale.
- **Actions.** Openness to action is the behavioral readiness to experience various and novel activities, such as going new places and eating uncommon foods. High scorers prefer

novelty and diversity to acquaintance and routine. They are more likely to dig into a variety of hobbies over the long run.

- Ideas. Openness to ideas is an aspect of intellectual curiosity, open-mindedness, and willingness to consider new ideas. Openness to ideas indicates a potential for intellectual development, but does not guarantee high intelligence.
- Values. Openness to values is the opposite of dogmatism. It implies the willingness to reevaluate social, political, and religious values. Closed individuals (low scorers) tend to be conservative, elevate tradition, and to accept authority.

These six facets of openness represent different aspects of novelty, which can be either thoughts, events, or objects. A person with a higher openness score may be expected to be more comfortable and appreciative of external novelty and diversity.

The convergent validity of openness is given by correlation with the Guilford-Zimmerman Temperament Survey Thoughtfulness scale" (Guilford, Zimmerman, & Guilford, 1976). Total Openness scores correlated positively with the Theoretical and Aesthetic Values scale, whereas consistently negative correlations were found between the Openness score and the Economic Values on the Allport-Vernon-Lindzey scale of values and the Traditional Family Ideology scale (Costa & McCrae, 1985; Levinson & Huffman, 1955). One study indicated that openness to action declined with age (McCrae & Costa, 1988c). Finkel and Yesavage (1989) found that openness was also related to improvement in computer-aided instruction.

Although the construct of personality openness has been explored for different measures, the Costa and McCrae (1985) Openness to Experiences sub-scale (which was based on a national sample) would appear to provide the the most broadly based definition of personality openness. This definition represents the most inclusive approach to personality openness by offering the largest domain for novelty.

CHAPTER 3

RELATIONSHIPS BETWEEN PERSONALITY OPENNESS AND GENDER ROLE IDEOLOGY

According to the definition of openness established by Costa and McCrae (1985), one aspect is the willingness to reevaluate existential issues (i.e., such as the ideology of gender roles) and to confront them. Sexual inequality, or sexism, is one of the existential issues that is deeply rooted in our society. An open mind is required to perceive the inequality and to confront the existing norms of society. There are many different ways to assess individual attitudes toward gender roles, including tolerance for non-traditional gender roles and support of the women's movement.

Relationships Between Openness and Gender Role Ideology

One way to assess individuals' attitudes toward gender role ideology is to examine tolerance of non-traditional gender roles. Research has suggested that sex-typed people who follow traditional gender roles showed the least tolerance of non-traditional gender roles than others (Bayer, 1975; Lapp & Pihl, 1985; Browning, 1985; 1987). Studies have established a linkage between openness and less stereotypical attitudes about gender roles. Stereotypical attitudes regarding gender roles have been associated with authoritarianism as well (Rigby ,1988; Rigby & Rump, 1981; Phillips, 1979).

In one study, Stevens, Pfost and Potts (1990) discovered a relationship between one's gender role ideology and the willingness to reevaluate the traditional gender roles. Eighty-eight undergraduates

(half males and half females) between 17 and 31 years old completed the Bem's Sex Role Inventory (BSRI; Bem, 1974) and the "Avoidance of Existential Confrontation Scale" (AEC) by Thauberger, Ruznisky and Cleveland (1981).

Sex-typed people (masculine typed men and feminine typed women) behaved most rigidly and they showed the least openness to existential issues (high AEC score). People with opposite sex type characteristics or the relative absence of same sex characteristics (androgynous men and women, feminine typed men and masculine typed women) appeared more willing to confront existential issues. The results confirmed the hypothesis that the willingness to confront existential issues is associated with the rise of opposite sex characteristics and the relative absence of same sex characteristics.

Attitudes toward the women's movement (i.e., feminism) has been one of the indicators of individual beliefs about gender role ideology. According to the Oxford English Dictionary (2nd edition), the word "feminism" was first used in 1851 to indicate "the quality of female". Currently, feminism is defined as "advocacy of the rights of women" (i.e., based on the theory of the equality of the sexes). Jeanne Dost defined feminism more broadly, as "attitudes, beliefs, behaviors and roles based on the assumption that no gender, class, or race is inherently superior or inferior to any other" (Dost, 1990). Thus, feminists are the supporters of feminism.

Modern feminism approaches the treatment of each individual as a person, regardless of the labels of gender, race, age, marital status, disability, sexual orientation, sexual orientation, appearance, or age. The central component is **equality** in rights, values, and powers. In

other words, there should be no such concept as inherent superiority or inferiority. Feminism started with the advocacy of the rights of women and has thus developed into a new way for thinking for all humans.

Individuals who support equality between the sexes often hide their feminist identity (i.e., the closet feminist syndrome), or do not identify themselves as feminists (i.e., attitudinal feminists). A study by Carroll (1984) found that the feminist ideology held by female candidates for public office or political office holders remained hidden. The reasons she gave were: a) the "I am not a women's libber, but I believe that both sexes should be equal" syndrome; b) the fear of being stereotyped as concerned only for women's rights; and c) the fear of negative side effects that arise from being labeled as a "feminist". Identifying oneself as a feminist can be a threat to people since feminists are perceived as unattractive, overbearing, and radical.

It has been argued that women in the 1980s were not as supportive of the women's movement as those of the 1970s. American women in the 70's displayed strong support for the women's movement by collective protesting, writing etc.. Unlike women in the 1970s, young American women in the 1980s did not show such strong support for the women's movement. The conservatism of American women has drawn great attention from researchers. There are two different explanations for the lack of support for the women's movements by college women. The first perceives the problem as a second wave of feminism. Friedan (1981) and Kramer (1984) viewed this phenomenon not as opposition to feminism, but as the awareness by college women that the women's movement could be redirected. Komarovsky (1985) explained that college women adopt feminist ideals, but do not accept the

collective efforts of the women's movements as a means to achieve their goals.

In contrast, this phenomenon has also been explained by a new wave of conservatism throughout the United States in the early 1980s (Bolotin, 1982). The phenomenon was perceived as a response to a predominating conservative attitude in the United States, expressed in lack of support for feminism and other women's issues such as abortion. In any event researchers measuring feminist attitudes would do well to assess an individual's identification with feminism as well as their relevant attitudinal positions.

Assessment of Feminism

Researchers have attempted to develop scales for the assessment of the qualities of feminism. Dempewolff (1972; 1974a) constructed studies to develop a feminism scale based on a sample survey of 225 undergraduates at the University of Cincinnati. Questions were chosen from the Kirkpatrick' (1936) Belief-Pattern Scale for Measuring Attitudes toward Feminism, the Mafeer Inventory of Feminine Values (Steinmann, Fox, & Levi, 1964), and from several study-originated questions. Selected examples are included below:

Form A: A woman could be just as competent as a man in a high political office (positive wording);

Form B: In general, women should stay out of political positions (negative wording);

Form A: Women should feel free to compete with men in every sphere of economic activity (positive wording);

Form B: The influx of women into the business world, in direct competition with men, should be discouraged (negative wording).

Factors That Contribute To Attitudes Toward Feminism

In a second study, Dempewolff (1974b) found that supporters of feminism were more likely to be atheists, agnostic, Jewish, or Unitarian and were less ethnocentric. Opponents of feminism were more likely to be Protestant or Roman Catholic and were more ethnocentric. In addition, it has been shown that feminist attitudes were more pronounced among women students pursuing traditional feminine majors (Dempewolff, 1974a; Renzetti, 1987). It has also been suggested that college experiences seem more likely to result in liberal attitudes toward gender issues. To examine college women's attitudes toward feminism more closely, a 24-item attitudinal inventory was administered to 398 full-time female undergraduates at St. Joseph's University (Renzetti, 1987). The study revealed three major results. First, the respondents were aware of gender inequality, were supportive of the women's movement, and did not have negative images of feminists. Surprisingly, respondents were reluctant to identify themselves as feminists, regardless of their high levels of awareness and support (i.e., only 27% identified themselves as feminists). Second, women in the traditionally feminine-orientated majors (e.g., education, English) displayed more feminist attitudes toward gender roles than those in traditionally masculine-orientated majors (e.g., physics,

chemistry). Third, upper class students appeared more supportive of the women's movement than the under class students. It was concluded that personal experience of sexual discrimination was the main factor for the awareness of sexual discrimination and support of the women's movement. However, this study was based on a group of women who attended a private Catholic college on the east coast, whose attitudes cannot be generalized as an overall reaction toward feminism.

Hypotheses

It would seem likely that those individuals who are more open-minded reflect greater percentages of non-traditional types (i.e., masculine women, feminine men, and androgynous women and men) due to their personal experiences. In contrast, those who are more rigid and less open tend toward traditional typologies (i.e., masculine men and feminine women). One aspect of this issue remains unclear: "Does open mindedness necessarily lead to non-traditional attitudes (feminism) or does a non-traditional attitude (feminism) lead to open-mindedness?"

The purpose of the present study is to discover relationships between personality openness and attitudinal openness. Do they correlate with the same variables, such as gender, major, or class standing? Personality openness, which was expected to be more stable than attitudinal openness, was measured by the Openness to Experiences scale (Costa & McCrae, 1985). Attitudinal openness was determined by the Dempewolff (1974a) Feminism scale. Specifically, the hypotheses of this study are as follows:

A) Relationships between personality openness and feminism:

- 1) Openness and feminism scores are expected to have positive correlations across whole samples.
- 2) Compliment (tendency to accept the term "feminist" as a compliment) and Identity (likelihood of identifying oneself as a feminist) will be positively correlated feminism scores. The reason is that these two variables are predicted to be components of attitudes toward feminism.

B) Feminism:

- 1) Participants in the Ohio sample who are active feminists, will have higher feminism scores than Oregon State University (OSU) students.
- 2) Women will have higher feminism scores than men. The reason is that women are expected to be more supportive of feminism because of their gender and awareness.
- 3) Upper class students (juniors and seniors) will have higher feminism scores than under class students (freshmen and sophomores). Because of the college experiences introduces people to new information, college education is expected to have a positive impact on people's attitudes toward feminism.
- 4) Students from the masculine orientated majors (i.e., mechanical engineering) will have lower feminism scores than people from other majors. The traditional masculine orientated majors are expected to be the least aware of feminism. People who major in the traditional sex typed fields are expected to be more rigid about gender role

stereotypes.

- 5) Students from the feminism orientated major (i.e., women studies) will have higher feminism scores than people from other majors. People who major in feminism-oriented fields are more likely to provide stronger support for feminism.
- 6) OSU students who are less than 25 years old will have higher feminism scores than those students 25 years old or older. This hypothesis is based on the assumption that the younger age cohorts are exposed to more liberal attitudes than the older age cohorts.

C) Openness:

- 1) Participants in the Ohio sample will have higher openness scores than OSU students. If personality openness leads to feminism attitudes, then active self-identified feminists who attend national conferences are expected to have higher openness scores.
- 2) Women will have higher openness scores than men. Using a variety of instruments to assess openness previous studies found that women scored higher on openness than men (Costa & McCrae, 1985; Fitzgerald, 1966).
- 3) Upper class students (juniors and seniors) will have higher openness scores than under class students (freshmen and sophomore). College experience is expected to correlate positively with personality openness.
- 4) Students from the masculine orientated majors will have lower openness scores than students from other majors. This

hypothesis is designed to test for parallel findings between openness and feminism.

- 5) Students from feminist-orientated majors will have higher openness scores than people from other majors. This hypothesis is designed to test for parallel findings between openness and feminism.
- 6) OSU students who are less than 25 years old will have higher openness scores students than those 25 years old and older. According to McCrae and Costa (1988c), age is expected to have a slightly negative correlation with openness.
- 7) Openness scores will correlate positively with academic performance. This hypothesis intends to discover the relationship between personality openness and academic performance.

CHAPTER 4

METHOD

Overview

Data were collected from two groups. Subjects in Group I (the Ohio sample) were self-identified feminists who participated in the National Women Studies Association Conference in Akron, Ohio, 1990. Subjects in Group II (the OSU sample) were undergraduates at Oregon State University. All subjects participated on a voluntary basis. The instruments used in this study were: a) a questionnaire containing a personality based measurement of openness, b) an attitudes-toward-feminism survey, and c) a brief questionnaire covering demographic information (see Appendix).

Group I, Ohio Sample

Thirty-six self-identified feminists (ages 18-65 years), who attended the annual National Women Studies Conference in Akron, Ohio, 1990, participated in the study. It was a five-day conference which included hundreds of different workshops on a variety of topics relating to women studies. The sign "are you a feminist?" was posted beside the registration table. Subjects who were interested would come to the researcher for more information. Subjects participated in this study after they read the informed consent form and were given a brief introduction to the study and a questionnaire by the researcher. The purpose of the study was stated as "an attitudinal survey of feminists." There were approximately 1,200 people at the conference. One hundred

questionnaires were distributed and 36 were collected for data evaluation. The mean age of the participants was 31 years and 78 percent of the respondents had more than a college education.

Group II, OSU Sample

One hundred seventy-three OSU undergraduate volunteers (ages 18-52 years) from four introductory level classes and one all-male library sample participated in this study. There were 62 males and 108 females (three respondents did not identify their sex). The four introductory classes were preselected as traditional-masculine, traditional-feminine, neutral, and feminist-orientated classes. These four classes were selected in terms of gender stereotypes associated with the course content syllabi and the gender ratio in each particular class. For instance, classes in Home Economics were considered as traditionally feminine orientated classes, whereas classes from the Engineering Department were considered as traditionally masculine orientated classes. Feminism-orientated classes were those offered through the Women Studies Department. Neutral classes were those from the Department of Geography.

Data were collected during the first and last weeks of the 1990 winter term with the consent of the class instructors. All subjects participated in this study on a voluntary basis, with the exception of the students in the feminism-orientated class, who were offered course credit for participation. The participation rate for all undergraduates was approximately 32 percent (i.e., 36% for the masculine-orientated class, 35% for the feminine-oriented class, 18% for the neutral class, and 65% for the feminist-oriented class.).

The library sample included 16 OSU undergraduate males (ages 18-22 years). Subjects were approached randomly by the researcher in Kerr library at Oregon State University. After reading the informed consent form and after being provided with a brief introduction to the study and the questionnaire by the researcher, subjects voluntarily participated in this study. Table 1 shows the number of participants, and the sex, age, class standing, and academic performance of subjects classified by the different class orientations.

Table 1

Subject Characteristics in OSU sample

Classes	Masculine	Neutral	Feminine	Feminism	Library
Subjects (number) ¹	25	36	53	43	16
Male	22	12	8	4	16
Female	3	21	45	39	0
% of feminists ²	18%	23%	13%	60%	0%
Mean Age	20.13 (3.90)	21.03 (5.48)	22.11 (7.89)	20.83 (1.96)	21.6 (0.6)
Class Standing ³	1.32 (0.67)	1.77 (0.82)	2.11 (0.97)	3.12 (0.84)	2.9 (0.8)
Estimated GPA	3.03 (0.9)	3.12 (1.1)	2.76 (0.9)	2.89 (0.8)	3.15 (0.5)

Standard deviations are reported in parenthesis.

Note

1. Three people in the neutral-orientated class did not give any information that could be used in this table.
2. Identity: % of self-identified feminists
3. Class Standing: (1) Freshmen (2) Sophomore (3) Junior (4) Senior.

Questionnaire

The first section of the questionnaire shown in the Appendix contains the informed consent form, instructions and a summary of the purpose of the study.

The second section contains the short version of the Openness scale. The Openness scale is a sub-scale of the NEO-PI (Neurosis Extraversion Openness Personality Inventory) developed by Costa and McCrae (1985), in which higher scores denote greater openness.

The third section contains the Feminism scale developed by Dempewolff (1974a). In the questionnaire there are 56 five-point Likert-type questions (28 questions in form A, 28 questions in form B). Equal numbers of items were worded positively and negatively. The Ohio sample was given both forms (Appendix A). The alternative forms reliability was found to be high for the Ohio sample ($r = 0.78$, $p < 0.0001$). Therefore, one form was deemed sufficient. The OSU sample was given only form A (Appendix B).

The final section of the questionnaire addressed information that was expected to be related to openness and feminism: a) attitudes toward the label "feminist", b) self-identification as feminists, c) class standings, d) academic performance, and e) other characteristics, such as gender and age.

Procedure

Administration procedures were similar for both samples. After a brief introduction to the study, subjects were asked to complete the questionnaire and return it to the researcher. The purpose of the study was introduced as an attitudinal survey. Anonymity and confidentiality were assured. The researcher's name, telephone number, and address were given for further information and for purposes of debriefing.

All data analyses were completed by application of the SAS program.

CHAPTER 5

RESULTS

Overall Relationship Between Openness and Feminism

Table 2 contains the means and standard deviations for openness, feminism, the likelihood of identifying one self as a feminist (Identity), and the tendency to accept the term "feminist" as a compliment (Compliment) for the two samples. The Ohio sample scored higher on both the openness scale ($t(207) = 8.42, p < 0.0001$) and the feminism scale, form A ($t(207) = 5.50, p < 0.0001$), than the OSU sample.

Positive correlations were found between Openness and Feminism scores within all samples. The correlation between Openness and Feminism scores within the Ohio sample was $r = 0.15$ (n.s.), and within the OSU sample was 0.37 ($p < 0.001$). As hypothesized, the overall correlation between Openness and Feminism scores was significant ($r = 0.46, p < 0.001, N=209$).

Feminism scores correlated significantly with the tendency to accept the label "feminist" as a compliment ($r = 0.4, p < 0.001$) and the likelihood to identify oneself as a feminist ($r = 0.38, p < 0.001$). The tendency to accept the label "feminist" as a compliment increased with the likelihood to identify oneself as a feminist ($r = 0.49, p < 0.001$). Thus, all three measures can be taken as an attitudes-toward-feminism measure.

Openness correlated significantly with the tendency to accept the term "feminist" as a compliment ($r = 0.21, p < 0.01$), and the likelihood to identify oneself as a feminist ($r = 0.24, p < 0.01$). These results clearly

indicate that feminist attitudes are strongly associated with the personality disposition of openness.

Table 2

Means and Standard Deviations for Openness Scores and Feminism Scores for Ohio and OSU Participants

	Overall N=209	Ohio N=36	OSU N=173
Openness	43.45 (6.79)	50.94 (4.48)	41.89 (6.12)
Feminism ²	117.01 (14.67)	128.47 ⁵ (7.16)	114.62 (14.72)
Compliment ³	2.73 (1.02)	NA ⁶	2.73 (1.02)
Identity ⁴ (% of self-identified feminists)	41 %	100 %	28 %

Note

1. Openness: openness sub-scale (Costa & McCrae, 1985).
2. Feminism: feminism scale . (Dempewolf, 1972)
3. Compliment: Refers to the extent of agreement with the statement "Calling someone a feminist is a compliment." (1) disagree (2) slightly disagree (3) neutral (4) slightly agree (5) agree
4. Identity 1 for self-identified feminist , 0 otherwise
5. Feminism score-Form A
6. NA: This item was not collected from Ohio sample.

Attitudes Toward Feminism

In studies by Fitzgerald (1966), Falbo and Shepperd (1986), and Renzetti (1987), each of which employed a different set of instruments, women scored higher than men on openness and feminism. Means and standard deviations for the participants at OSU, classified by sex, are presented in Table 3. Women scored significantly higher than men on feminism ($F(1,168) = 27.61, p < 0.0001$). Women were also more likely to accept the label "feminist" as a compliment ($F(1,162) = 10.07, p < 0.001$) and to identify themselves as feminists ($F(1,158) = 5.46, p < 0.05$).

Means and standard deviations for participants at OSU are presented in Table 4. The traditionally feminism-orientated class scored the highest and the traditionally masculine-orientated class scored the lowest. A general linear model testing the significance of a positive relationship between the feminism-orientated class with feminism scores was significant, masculine (-3), neutral (-1), feminine (+1), and feminism (+3) ($F(1, 156) = 19.02, p < 0.0001$).

Consistent with the feminism attitude results, participants from the feminism-orientated class were more likely to accept the label "feminist" as a compliment ($t(162) = 4.87, p < 0.0001$) and to identify themselves as feminists ($t(158) = 5.99, p < 0.0001$).

Table 3

Means for OSU Men and Women on Openness and Feminism Scores

Variables	GENDER	
	MEN (N=62)	WOMEN (N=108)
OPENNESS ¹ SCORE	41.38 (6.05)	42.20 (6.22)
FEMINISM ² SCORE	107.49 (16.17)	118.99 (12.12)
COMPLIMENT ³	2.4 (0.94)	2.91 (1.02)
IDENTITY ⁴ (% of self-identified feminists)	0.18 (0.38)	0.34 (0.45)

Note

Three subjects do not indicate their gender.

1. OPENNESS SCORE: openness sub-scale (Costa & McCrae, 1985).

2. FEMINISM: feminism scale (Dempewolf, 1972)

3. Compliment: Refer to the extent of agreement with the statement "Calling someone a feminist is a compliment." (1) disagree (2) slightly disagree (3) neutral (4) slightly agree (5) agree

4. Identity: 1 for self-identified feminist, 0 otherwise

5. All scores of the subjects who have taken the questionnaire twice were averaged.

Table 4

Means and Standard Deviations (SD) for Traditionally Masculine Orientated, Traditionally Feminine Orientated, Neutral, Feminism Orientated Classes and Library Group in OSU Sample.

	GROUPS				
	MASCULINE CLASS N=25	FEMININE CLASS N=53	NEUTRAL CLASS N=36	FEMINISM CLASS N=43	LIBRARY N=16
OP ¹	40.46 (6.21)	42.56 (6.17)	41.17 (6.02)	42.38 (6.22)	42.25 (5.9)
FM ²	107.54 (16.47)	116.86 (12.76)	110.03 (17.19)	121.26 (10.62)	110.81 (13.63)
COM ³	2.46 (0.87)	2.37 (1.01)	2.74 (0.94)	3.34 (0.90)	2.58 (1.08)
ID ⁴ % of self-identified feminists	0.18 (0.38)	0.13 (0.34)	0.23 (0.42)	0.60 (0.45)	0.0 (0.0)

Note

1. OP (OPENNESS SCORE): openness sub-scale (Costa & McCrae, 1985).
2. FM FEMINISM: feminism scale . (Dempewolf, 1972)
3. COM (Compliment): Refers to the extent of agreement with the statement "Calling someone a feminist is a compliment." (1) disagree (2) slightly disagree (3) neutral (4) slightly agree (5) agree
4. ID (Identity): 1 for self-identified feminist, 0 otherwise

Class standing was found to be related to feminism scores. Seniors and juniors appeared to score higher on feminism. The means and standard deviations of the openness and feminism scores for participants at OSU classified by class standing are displayed in Table 5. Upper class students (seniors and juniors) showed significantly stronger feminist attitudes than did freshmen and sophomores ($F(1,155) = 9.9, p < 0.0001$). Upper class students were more likely to accept the label "feminist" as a compliment ($F(1,151) = 8.33, p < 0.005$) and to identify themselves as feminists ($F(1,147) = 12.01, p < 0.0001$).

Openness

In contrast to the results regarding feminist attitudes, personality openness did not differ significantly by gender, class standing, or the feminism orientations of academic classes.

Table 5

Means of the Variables for Freshmen, Sophomores, Juniors and Seniors in OSU sample

	CLASS STANDING			
	Freshman N=47	Sophomore N=39	Junior N=41	Senior N=32
OP ¹ SCORE	41.22 (6.05)	41.30 (5.8)	42.21 (5.56)	42.97 (7.56)
FM ² SCORE	109.77 (16.95)	113.15 (15.67)	119.40 (12.01)	117.70 (13.02)
COM ³	2.56 (1.02)	2.40 (1.05)	3.06 (0.77)	2.82 (1.22)
ID ⁴ (% of self- identified feminists)	0.19 (0.37)	0.18 (0.36)	0.42 (0.48)	0.6 (0.49)

Note

Fourteen people did not respond.

1. OP SCORE: openness sub-scale (Costa & McCrae, 1985).

2. FM: feminism scale (Dempewolf, 1972)

3. COM (Compliment): Refers to the extent of agreement with the statement "Calling someone a feminist is a compliment." (1) disagree (2) slightly disagree (3) neutral (4) slightly agree (5) agree

4. ID (Identity): 1 for self-identified feminist, 0 otherwise

Summary

Table 6 summarizes relationships between personality openness and attitudes toward feminism in terms of correlation coefficients. Feminism attitudes correlated significantly with the tendency to accept the label "feminist" as a compliment ($r = 0.4, p < 0.001$), the likelihood to identify oneself as a feminist ($r = 0.38, p < 0.001$), and class standing ($r = 0.23, p < 0.01$).

Personality openness correlated significantly with feminism attitude ($r = 0.37, p < 0.01$) and the two remaining variables that were related to feminism attitude (e.g. the tendency to accept the label "feminist" as a compliment ($r=0.21, p < 0.01$) and the likelihood to identify oneself as a feminist ($r=0.24, p < 0.01$)).

Although personality openness was significantly correlated with the feminist attitude measures, the data clearly discriminated between them as different psychological constructs. For example, the correlation matrix displayed in Table 6 shows that while personality openness was positively associated with academic performance ($r = 0.16, p < 0.05$), this was not true of any of the feminism attitude measures. Likewise, whereas all three of the feminism attitude measures correlated positively with college experience (i.e., class standing), personality openness did not. Finally, the feminism-orientation of the particular class was associated with the feminism attitudes, but not with the more stable and central personality construct of openness.

Table 6

Correlation Matrix for All Subjects in OSU Sample: Openness (OP), Feminism (FM), Compliment (Com), Identity (ID), Academic Performance (AP), and Class Standing (CS).

VAR	OP N=173	FM N=173	COM N=164	ID N=160	AP N=150	CS N=159	SEX N=170
OP	1						
FM	0.37**	1					
COM	0.21**	0.40**	1				
ID	0.24**	0.38**	0.49**	1			
AP	0.16*	0.01	0.06	0.08	1		
CS	0.11	0.23**	0.16*	0.26*	0.12	1	
SEX	0.06	0.38**	0.24*	0.18	-0.09	-0.01	1

Note:

* indicates $p \leq 0.05$. ** indicates $p \leq 0.01$.

CHAPTER 6

DISCUSSION

Validity of Feminism Survey

It is important to revalidate the feminism survey used in the current study since the scale was developed in the 1970s. The validity of the feminism scale was checked by comparing highly educated self-identified feminists at a national conference (i.e., the Ohio sample) to college students (i.e., the OSU sample). As predicted, the results indicated that the Ohio sample scores were significantly higher than the OSU sample scores ($t(207) = 5.5, p < 0.001$). Therefore, the feminism scale demonstrated clear criterion validity.

Overall Relationships Between Personality Openness and Attitudes Toward Feminism

As hypothesized, the correlation between openness and feminism was significantly positive across all samples. Therefore, personality openness is clearly associated with feminist attitudes. However, openness and feminism cannot be considered one and the same because they showed distinct relationships with key experiential variables.

Feminism attitudes were found to be correlated with course selection, gender, and class standings. On the other hand, personality openness was found to be fairly stable across course selection, age, gender, and class standing. The correlations were consistent with the construct of openness as a stable personality disposition, and with feminism as an accumulated attitude influenced by experiences, beliefs, and values.

The openness and feminism scores of the OSU sample appeared to be higher than the norm. The mean openness score for the OSU sample was 42, whereas the mean openness score for undergraduates was within the range of 24 to 31 according to Costa and McCrae (1985). The results from the present study also suggest increased liberal attitudes toward feminism during the 1990s. Joesting and Whitehead (1976) administered the Feminism scale to 101 undergraduates (men and women) at Eastern Shore College in 1976. While the average feminism score for the OSU sample was 115, the average feminism score for Eastern Shore College was 81. The high scores for openness and feminism of the OSU sample may be the result of self-selection bias and a cohort effect.

Self-selection bias was one of the difficulties encountered in this study. Studies have shown that volunteers are more likely to be women, and women are generally less dogmatic than men (Rosenthal & Rosnow, 1991). This study was performed on a voluntary basis and was announced as an attitudinal study. Therefore, the motivations of the volunteers in this study were based upon individual interests, time availability, and altruism. Participants in this study were mainly female, and the findings demonstrated higher than average openness and feminism when compared to earlier studies. Self-selection bias could have resulted in a truncated range, which in turn would have restricted correlations between the variables. The correlations between openness and feminism were expected to be even stronger among a random sample.

Previous studies of openness have shown that environmental factors have no impact upon openness. Openness was found to be very stable regardless of parent-child relations (McCrae & Costa, 1988a) and

stressful life events, such as the loss of a spouse (McCrae & Costa, 1988b). Thus, openness was found to be very stable according to previously conducted research and the present study is consistent with earlier findings.

Previous studies have shown that people with a high degree of openness are more likely to be engaged in unconventional occupations such as author, free lance writer, or anthropologist (Costa, McCrae, & Holland ,1984). In the present study, course selection, which presumably leads to a future occupational choice, was not found to be a correlate of openness. There were no differences in openness among the five groups in the OSU sample.

The results strongly support the hypotheses that openness is an indicator of a permanent and firm personality disposition, upon which experience has little measurable effect.

Openness and Intelligence

The positive relationship between openness and academic performance was another interesting finding. Academic performance, which is a composition of many factors, is often considered as an indicator of intelligence. However, definitions of intelligence have been controversial (Murphy & Davidshofer, 1988). There are basically two approaches concerning intelligence: crystallized intelligence and fluid intelligence. Crystallized intelligence refers to the skills and knowledge that individuals acquire through learning and experiences (Hooyman & Kiyak, 1991). According to the definition, crystallized intelligence is related more closely to academic performance. On the other hand, fluid intelligence is biologically determined. It is the ability to grasp

relationships in novel situations and to make correct deductions from them. Fluid intelligence is relatively culture-free and inherent within individuals (Chaplin, 1985), and is possibly more closely associated with openness.

Openness may contribute to academic performance in various ways. For example, openness is more likely to contribute to an individual's grades in a field which encourages openness, such as philosophy, than in fields that value more absolute answers, such as accounting. In the present study, this can be tested by examining the correlations between openness and academic performance within the five OSU groups. The strongest correlation between openness and academic performance was found in the feminism-orientated class ($r = 0.43$, $p < 0.05$). Although the positive correlation between openness and academic performance in this study provided support for relationships between openness and intelligence, further research will be required to fully demonstrate and validate this effect.

Conclusion

The purpose of the present study was to investigate relationships between personality openness and attitudinal feminism, and correlations between the two concepts for a number of variables. Personality openness was found to be stable without experiential influences. On the other hand, attitudes (e.g., attitudes toward feminism) varied according to the specific issue and were mainly associated with individual explorations of the world. Many participants were concerned with the label "feminist." An interesting discrepancy was found in the data concerning students in traditionally feminine

orientated class. Although their feminism scores indicated a strong support for feminism, they were least likely to identify themselves as feminists. Some respondents even indicated that "feminist" is a sexist label. Alternative terms such as "humanists" and "equalists" were suggested to be more acceptable for both women and men.

Further research is recommended with regard to openness.

The following issues remain to be unsolved:

- a) What are the origins of personality openness?
- b) Are there developmental stages of personality openness that can be assessed throughout life course?
- c) What roles do temperament, attachment, and learning play in the development of personality openness?
- d) What relationships exist between personality openness and other attitudinal existential issues?
- e) What relationships exist between self-esteem, personality openness, and attitudinal openness? and
- f) Are there cross cultural differences in studies of personality openness?

REFERENCES

- Adorno, T. W. , Frenkel-Brunswik, E. , Levinson, D . J. , & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper.
- Allport, G. W. (1960). The open system in personality theory. *Journal of Abnormal and Social Psychology*, 60 , 301-310.
- Allport, G. W. (1937). *Pattern and growth in psychology*. New York: Holt Rinehart & Winston Inc.
- Bayer, A. (1975). Sexist students in American colleges: A descriptive note. *Journal of Marriage and the Family*, 37, 391-97.
- Benner, D. G. (Ed.). (1985). *Baker's encyclopedia of psychology*. Michigan: Baker Book House Comp.
- Bischof, I. J. (1964). *Interpreting personality theories*. New York:Harper & Row.
- Browning, D. L. (1987). Ego development, authoritarianism, and social status: An investigation of the incremental validity of Loevinger's Sentence Completion Test (short form). *Journal of Personality and Social Psychology*, 53, 113-118.
- Browning, D. L. (1985). Developmental aspects of authoritarian attitudes and sex role conceptions in men and women. *The High School Journal*, 68, 177-182.
- Buttom-Smith, B. , (1973). *Child psychology*. New York: Appleton-Century Crofts.
- Byrne, D., & Kelly, K. (1981). *An Introduction to personality* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Carroll, S. J. (1984). Woman Candidates and support for feminist concerns: The closet feminist syndrome. *Western Political Quarterly*, 37, 307-323.

- Chaplin, J. P. (1985). *Dictionary of psychology* (2nd ed.). New York: A Laurel Book.
- Costa, P. T., & McCrae, R. R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P.T., McCrae, R. R., & Holland, J. L. (1984). Personality and vocational interests in an adult sample. *Journal of Applied Psychology*, 69, 390-400.
- Dempewolff, J. (1972). *Feminism and its correlates*. (Doctoral dissertation, University of Cincinnati). Ann Arbor, MI: University, Microfilms (No. 73-3829).
- Dempewolff, J. (1974a). Development and validation of a feminism scale. *Psychological Reports*, 34, 651-657.
- Dempewolff, J. (1974b). Some correlates of feminism. *Psychological Reports*, 34, 671-676.
- Dost, J. (1990). *Women studies: A beginner's guide special edition of volume II*. New York: Idyll Press.
- Engler, B. (1985). *Personality theories: An introduction* (2nd ed.). Boston: Houghton Mifflin Company.
- Evans, R. I. (1970). *Gordon Allport: The man and his ideas*. New York: E.P. Dutton & Co., Inc.
- Ewen, R. B. (1980). *An Introduction to theories of personality*. New York: Academic Press.
- Eysenck, H.J., & Arnold, W. (Eds). (1983). *Encyclopedia of psychology*. New York: Herder and Herder.
- Falbo, T., & Shepperd, J. A. (1986). Self-righteousness: cognitive power and religious characteristics. *Journal of Research in Personality*, 20, 145-157.
- Fitzgerald, E. T. (1966). Measurement of openness to experiences: A

- study of regression in the service of the ego. *Journal of Personality and Social Psychology*, 4, 655-663.
- Goldsmith, R. E., & Goldsmith, E. B. (1982). Dogmatism and self-esteem: Further evidence. *Psychological Reports*, 51, 289-290.
- Harrie, R., & Lamb R. (1983). *The encyclopedic dictionary of psychology*. Cambridge, MA: MIT Press.
- Hong, I., & Rust, J. (1989). Androgyny and openness to experience in a Chinese population. *Social Behavior and Personality*, 17, 215-218.
- Hooyman, N. R., & Kiyak, R. (1991). *Social gerontology: A multi-disciplinary perspective* (2nd ed.). Boston, MA: Allyn and Bacon.
- Joesting, J., & Whitehead, G. I. (1976). Equalitarianism, curiosity, and creativity: Partial replication. *Psychological Reports*, 38, 369-370.
- Kirkpatrick, C. (1936). The construction of a belief-pattern scale for measuring attitudes toward feminism. *Journal of Social Psychology*, 7, 421-437.
- Komarovsky, A.C. (1985). *Women in college*. New York: Basic Books.
- Krame, B. (1984). In R. Rowland (Ed.), *Women who do and women do not join the women's movement*. London: Routledge & Kegan Paul.
- Kris, E. (1952). *Psychoanalytic explorations in art*. New York: International University Press.
- Lapp, J., & Pihl, R. (1985). Sex typing and the perception of disturbance. *International Journal of Women's Studies*, 8, 149-157.
- McCrae, R. R., & Costa, P.T. (1988a). Psychological resilience among widowed men and women: A 10-year follow-up of a national sample. *Journal of Social Issue*, 44, 129-142.
- McCrae, R. R., & Costa, P.T. (1988b). Recalled parent-child relations

- and adult personality. *Journal of Personality*, 56, 417-433.
- McCrae, R. R., & Costa, P.T. (1988c). Personality in adulthood: A six year longitudinal study of self-reports and spouse rating on the NEO personality inventory. *Journal of Personality and Social Psychology*, 54, 853-863.
- Meade, R. D. (1985). Experimental studies of authoritarian and democratic leadership in four cultures: American, Indian, Chinese, and Chinese-American. *High School Journal*, 68, 293-295.
- Murphy, K. R., & Davidshofer, C. O. (1988). *Psychological testing: Principles & applications*. Englewood Cliffs, NJ: Prentice-Hall.
- Myers, D. G. (1990). *Social Psychology* (3rd ed.). New York: McGraw-Hill Publishing Company.
- Piaget, J. (1975). *The development of thought: Equilibration of cognitive structures*. New York, NY: The Viking Press.
- Phillips, S. (1979). Authoritarianism: Factors structure of a middle childhood scale. *Child Study Journal*, 9, 21-35.
- Renzetti, C. M. (1987). Attitudes of colleges women toward feminism. *Sex Role*, 16, 265-277.
- Rigby, K. (1988). Sexist attitudes and authoritarian personality characteristics among Australian adolescents. *Journal of Research in Personality*, 22, 465-473.
- Rigby, K. , & Rump, E. E. (1981). Attitudes toward parents and institutional authorities during adolescence. *Journal of Psychology*, 109, 109-118.
- Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relations. In S. Koch (Ed.), *Psychology: A study of science* (Vol. 3). New York, NY: McGraw-Hill.

- Rogers, C. R. (1961). *On becoming a person*. Boston, MA: Houghton Mifflin Co.
- Rokeach, M. (1936). Political and religious dogmatism: An alternative to the authoritative personality. *Psychological Monographs*, 70, (18, whole No. 425).
- Rokeach, M. (1960). *Open and closed mind*. New York: Basic Books.
- Salkind, N. J. (1985). *Theories of human development*. New York: John Wiley & Sons.
- Schafer, R. (1958). Regression in the service of ego: The relevance of a psychoanalytic concept for personality assessment. In G. Lindzey (Ed.), *Assessment of human motives*. New York: Holt, Rinehart and Winston.
- Schaffer D. R. (1989). *Developmental psychology: Children and adolescence*. Pacific Grove, CA: Brooks/Cole Publishing.
- Shaffer, D. R. (1988). *Social and personality development*. Pacific Grove, CA: Brooks/Cole Publishing Com.
- Steinmann, A., Fox, D., & Levi, J. (1964). Self-concept of college women as compared to their concept of ideal women and man's ideal woman. *Journal of Counseling Psychology*, 11, 370-374.
- Stevens, M. J., Pfof, K. S., & Potts, M. K. (1990). Sex-role orientation and the willingness to confront existential issues. *Journal of Counseling and Development*, 68, 414-415.
- Wilderom, C. P., & Cryns, A. G. (1985). Authoritarianism, dogmatism as a function of age: A relevant yet forgotten area of research. *High School Journal*, 68, 424-428.
- Zick, R., & McNeil, E. (1985). *Psychology: Being human*. New York: Harper & Row.

APPENDICES

APPENDIX A
Questionnaire for Ohio Sample

ATTITUDE SURVEY**Informed consent**

This study is for a Master's thesis. There are three sections in this questionnaire. The first two sections are designed to obtain information about personal attitudes. The third section concerns optional information important for the data analysis and interpretation of results. It will take approximately 15-20 minutes to complete. There are no right or wrong answers. The results will be confidential. You can stop any time and there is no obligation to complete this questionnaire if you decide not to.

Thank you.

Researcher

Joyce Chang

Department of Psychology

Oregon State University

Tel: (503) 758-5675

QUESTIONNAIRE

PART ONE

1. I don't like to waste my time day dreaming.
2. Once I find the right way to do something, I stick to it.
3. I am intrigued by the patterns I find in art and nature.
4. I believe letting students hear controversial speakers can only confuse and mislead them.
5. Poetry has little or no effect on me.
6. I often try new and foreign foods.
7. I seldom notice the moods or feelings that different environments produce.
8. I believe we should look to our religious authorities for decisions on moral issues.
9. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
10. I have little interest in speculating on the nature of the universe or the human condition.
11. I have a lot of intellectual curiosity.
12. I often enjoy playing with theories or abstract ideas.

PART TWO

1. Women should feel free to compete with men in every sphere of economic activity.
2. It is better to have a man as a boss or supervisor than a woman.
3. Management of property and income, acquired by either husband or wife, should rest with both husband and wife.
4. If a woman with an infant continues to work outside the home, she is neglecting her maternal duty.
5. A woman could be just as competent as a man in a high political office.
6. A woman should take her husband's last name at marriage.
7. Both husband and wife should be equally responsible for the care of young children.
8. Women should not compete in football or baseball even against other women.
9. Sex is no indication of fitness or lack of fitness to enter any type of occupation.
10. The intellectual leadership of a community should be mostly in the hands of men.
11. Society should be prepared to provide day care centers so any women who wants to hold a job can do so.
12. It is only fair for a school which offers professional training to limit the number of female students in favor of males.
13. Objections which one might have to the use of obscene language should bear no relation to the sex of the speaker.
14. Men should usually help a woman with her coat and open the door for her.

15. Men should have an equal chance for custody of children in a divorce.
16. It should usually be the duty of the husband to support his wife and family.
17. Women workers have abilities equal to those of men workers for most jobs.
18. Women should be happier in the long run if they could adjust to their role as housewives.
19. Women can control their emotions enough to be successful in any occupation.
20. Police duty is a job that should usually be done by men.
21. A woman should have the same freedom and the same restrictions as a man.
22. The husband should usually initiate sexual relations with his wife.
23. It is natural if a woman's career is as important to her as husband and children.
24. For her own safety, parents should keep a daughter under closer supervision than a son.
25. Women should feel free to enter occupations requiring aggressiveness rather than remaining in jobs calling for compliance.
26. A woman should almost always let her date pay for whatever they do together.
27. Women should ask men out for dates if they feel like it.
28. Women should accept the intellectual limitations of their sex.
29. The influx of women into the business world, in direct competition with men, should be discouraged.

30. The sex of a boss or supervisor is unimportant provided he or she is competent.
31. The husband should be favored by law in the disposal of family property or income, provided he is the sole wage earner.
32. Married women with very young children should work outside the home, if they wish.
33. In general, women should stay out of political positions.
34. A woman should be able to officially retain her own last name after marriage.
35. Parental responsibility for care of young children should usually be in the hand of the wife.
36. A woman should be allowed to play major league baseball if she can compete.
37. Because of their physical imitations, women should be advised to choose less strenuous types of occupations.
38. Women should take more responsibility for solving the intellectual and social problems of the day.
39. Society should not be expected to provide day care center for working women.
40. There should be many more women in graduate school even if it means keeping some men out.
41. The use of obscene language is more unbecoming for a woman than a man.
42. When on a date, the woman should usually open doors by herself rather than letting the man do it for her.
43. A woman should usually have custody of the children after a divorce.

44. Husband and wife should share responsibility for economic support of themselves and their children.
45. Generally speaking, men are more fit to run business and industrial enterprises than are women.
46. Many women need fulfillment which they don't obtain from being a wife and mother.
47. Many women are too sensitive to be good at certain occupations.
48. Every police department should have policewomen with equal authority and responsibility to that of the men on the force.
49. A woman should not expect to go the same places or to have the same freedom of action as a man.
50. A wife should take the lead and suggest sexual intercourse if she wishes it.
51. The needs of a family should come before a woman's personal ambitions.
52. A daughter in a family should have the same privileges as a son.
53. It is foolish for a woman to enter certain occupations that detract from her femininity.
54. A woman earning as much as her escort should bear equally the expense to common entertainment.
55. The initiative in courtship should usually come from the man.
56. Women have equal intelligence with men.

Attitude Survey-Answer Sheet

Instructions: Please read each carefully. For each statement circle the number that best represents your opinion on your answer sheet. This is a measure of personal attitude. There are no right or wrong answers. The result will be confidential. Please respond to all items.

ANSWER SHEET

Strongly Disagree

<1 2

Neutral

3

Strongly Agree

4 5>

PART ONE

1) 1 2 3 4 5

2) 1 2 3 4 5

3) 1 2 3 4 5

4) 1 2 3 4 5

5) 1 2 3 4 5

6) 1 2 3 4 5

7) 1 2 3 4 5

8) 1 2 3 4 5

9) 1 2 3 4 5

10) 1 2 3 4 5

11) 1 2 3 4 5

12) 1 2 3 4 5

PART TWO

1) 1 2 3 4 5

2) 1 2 3 4 5

3) 1 2 3 4 5

4) 1 2 3 4 5

5) 1 2 3 4 5

6) 1 2 3 4 5

7) 1 2 3 4 5

8) 1 2 3 4 5

9) 1 2 3 4 5

10) 1 2 3 4 5

11) 1 2 3 4 5

12) 1 2 3 4 5

13) 1 2 3 4 5

14) 1 2 3 4 5

15) 1 2 3 4 5

16) 1 2 3 4 5

17) 1 2 3 4 5

18) 1 2 3 4 5

19) 1 2 3 4 5

20) 1 2 3 4 5

21) 1 2 3 4 5

22) 1 2 3 4 5

23) 1 2 3 4 5

24) 1 2 3 4 5

25) 1 2 3 4 5

26) 1 2 3 4 5

27) 1 2 3 4 5

28) 1 2 3 4 5

next page

Strongly Disagree		Neutral	Strongly Agree		
<u><1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5></u>	
29)	1 2 3 4 5	39)	1 2 3 4 5	49)	1 2 3 4 5
30)	1 2 3 4 5	40)	1 2 3 4 5	50)	1 2 3 4 5
31)	1 2 3 4 5	41)	1 2 3 4 5	51)	1 2 3 4 5
32)	1 2 3 4 5	42)	1 2 3 4 5	52)	1 2 3 4 5
33)	1 2 3 4 5	43)	1 2 3 4 5	53)	1 2 3 4 5
34)	1 2 3 4 5	44)	1 2 3 4 5	54)	1 2 3 4 5
35)	1 2 3 4 5	45)	1 2 3 4 5	55)	1 2 3 4 5
36)	1 2 3 4 5	46)	1 2 3 4 5	56)	1 2 3 4 5
37)	1 2 3 4 5	47)	1 2 3 4 5		
38)	1 2 3 4 5	48)	1 2 3 4 5		

*Are you a feminist? Yes No

*You consider yourself as a (please choose one or mark the order, 1 for the highest rank.)

Liberal Feminist

Marxist Feminist

Radical Feminist

Social Feminist

Eco Feminist

Others Pleas Indicate_____

*How valid do you think this 56 item scale (part 2) is as a measure of feminism? (please circle one)

1	2	3	4	5
Not at all valid				Very valid

PART THREE: Basic Information**1. Age:** Under 21 21-34 35-50 51-65 other**2. Education:** High School College Graduate School Others _____**3. Please define feminist or feminism?****4. Other comments:**

Thank you very much

APPENDIX B
Questionnaire for OSU Sample

ATTITUDE SURVEY

Informed consent

This study is for a Master's thesis. There are three sections in this questionnaire. The first two sections are designed to obtain information about personal attitudes. The third section concerns optional information important for the data analysis and interpretation of results. It will take approximately 15-20 minutes to complete. There are no right or wrong answers. The results will be confidential. You can stop any time and there is no obligation to complete this questionnaire if you decide not to.

Thank you.

Researcher

Joyce Chang

Department of Psychology

Oregon State University

Tel: (503) 758-5675

QUESTIONNAIRE

PART ONE

1. I don't like to waste my time day dreaming.
2. Once I find the right way to do something, I stick to it.
3. I am intrigued by the patterns I find in art and nature.
4. I believe letting students hear controversial speakers can only confuse and mislead them.
5. Poetry has little or no effect on me.
6. I often try new and foreign foods.
7. I seldom notice the moods or feelings that different environments produce.
8. I believe we should look to our religious authorities for decisions on moral issues.
9. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
10. I have little interest in speculating on the nature of the universe or the human condition.
11. I have a lot of intellectual curiosity.
12. I often enjoy playing with theories or abstract ideas.

PART TWO

1. Women should feel free to compete with men in every sphere of economic activity.
2. It is better to have a man as a boss or supervisor than a woman.
3. Management of property and income, acquired by either husband or wife, should rest with both husband and wife.

4. If a woman with an infant continues to work outside the home, she is neglecting her maternal duty.
5. A woman could be just as competent as a man in a high political office.
6. A woman should take her husband's last name at marriage.
7. Both husband and wife should be equally responsible for the care of young children.
8. Women should not compete in football or baseball even against other women.
9. Sex is no indication of fitness or lack of fitness to enter any type of occupation.
10. The intellectual leadership of a community should be mostly in the hands of men.
11. Society should be prepared to provide day care centers so any women who wants to hold a job can do so.
12. It is only fair for a school which offers professional training to limit the number of female students in favor of males.
13. Objections which one might have to the use of obscene language should bear no relation to the sex of the speaker.
14. Men should usually help a woman with her coat and open the door for her.
15. Men should have an equal chance for custody of children in a divorce.
16. It should usually be the duty of the husband to support his wife and family.
17. Women workers have abilities equal to those of men workers for most jobs.

18. Women should be happier in the long run if they could adjust to their role as housewives.
19. Women can control their emotions enough to be successful in any occupation.
20. Police duty is a job that should usually be done by men.
21. A woman should have the same freedom and the same restrictions as a man.
22. The husband should usually initiate sexual relations with his wife.
23. It is natural if a woman's career is as important to her as husband and children.
24. For her own safety, parents should keep a daughter under closer supervision than a son.
25. Women should feel free to enter occupations requiring aggressiveness rather than remaining in jobs calling for compliance.
26. A woman should almost always let her date pay for whatever they do together.
27. Women should ask men out for dates if they feel like it.
28. Women should accept the intellectual limitations of their sex.

Attitude Survey-Answer Sheet

Instructions: Please read each carefully. For each statement circle the number that best represents your opinion on your answer sheet. This is a measure of personal attitude. There are no right or wrong answers. The result will be confidential. Please respond to all items.

ANSWER SHEET

Strongly Disagree

<1 2

Neutral

3

4

Strongly Agree

5>

PART ONE

1) 1 2 3 4 5

2) 1 2 3 4 5

3) 1 2 3 4 5

4) 1 2 3 4 5

5) 1 2 3 4 5

6) 1 2 3 4 5

7) 1 2 3 4 5

8) 1 2 3 4 5

9) 1 2 3 4 5

10) 1 2 3 4 5

11) 1 2 3 4 5

12) 1 2 3 4 5

PART TWO

1) 1 2 3 4 5

2) 1 2 3 4 5

3) 1 2 3 4 5

4) 1 2 3 4 5

5) 1 2 3 4 5

6) 1 2 3 4 5

7) 1 2 3 4 5

8) 1 2 3 4 5

9) 1 2 3 4 5

10) 1 2 3 4 5

11) 1 2 3 4 5

12) 1 2 3 4 5

13) 1 2 3 4 5

14) 1 2 3 4 5

15) 1 2 3 4 5

16) 1 2 3 4 5

17) 1 2 3 4 5

18) 1 2 3 4 5

19) 1 2 3 4 5

20) 1 2 3 4 5

21) 1 2 3 4 5

22) 1 2 3 4 5

23) 1 2 3 4 5

24) 1 2 3 4 5

25) 1 2 3 4 5

26) 1 2 3 4 5

27) 1 2 3 4 5

28) 1 2 3 4 5

next page

