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SEX ROLE ORIENTATION, SEX DIFFERENCES AND
CONCEPT OF SUCCESS

A Thesis Presented

by

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I N T R O D U C T I O N

This study begins where the research and theory on women and success leave off. Throughout the seventies, the notion that women "feared success" was popular, and numerous studies used Matina Horner's (1968) construct of Fear of Success as an independent variable, even as attempts to replicate her study showed mixed results and raised serious questions. At the same time, feminist psychological theory was going in two new directions. Constructivist and some psychoanalytic theorists were looking at ways in which women conceive of reality differently from men (Gilligan, 1977, 1979; Murphy and Gilligan, 1980; Chodorow, 1978; Dinnerstein, 1976). The question of morality, sense of self and why women mother were explored from these theoretical viewpoints. Other theorists (Bem, 1974; Spence and Helmreich, 1978; Kaplan, 1979; Kaplan and Sedney, 1980) were filling out the concept of psychological androgyny, and finding ways of measuring psychological sex which allowed an individual of either sex to be seen as psychologically feminine, masculine, or androgynous. Androgyny is defined as "the combined presence of socially valued, stereotypic, feminine and masculine characteristics" (Kaplan and Sedney, 1980, p. 6) with the result that the individual has a larger repertoire of behaviors to draw upon to meet the needs of various life situations. Although these two branches of feminist theory have been set up against each other under the labels "androgyny theory"

and "difference theory" (since the constructivists and analytic theorists saw women's worldview as innately different from men's), both are necessary for further consideration of the question of sex differences and success.

Constructivist theory allows us to ask a crucial question that was never raised in the debate about women's "fear" of success. That is, is women's concept of success the same as men's? Is it the same as the dominant American definition of success, which is highly competitive and which was the foundation for the studies that found women (and only women) feared to succeed? What is women's definition of success? What is men's?

That is the question this study originally set out to answer. But the existence of androgyny theory provides another way to ask this question. Work on androgyny has led to the development of personality measures such as the Bem Sex Role Inventory and the PRF ANDRO, which allow us to measure psychological sex -- to measure to what extent a man or a woman conforms to cultural stereotypes of what is "feminine" or "masculine". This study, in addition to seeking a sex difference in the way people conceive of success, sought a relationship between sex role orientation (SRO) and concept of success. The latter relationship was expected to add to the definition of feminine-typed, masculine-typed and androgynous sex role orientations.

In order to determine the relationship between gender and success-concept and between sex role orientation and

success-concept, a structured interview format, the Competitiveness of Success Concept (COSC) scale was developed. It was used in interviews with subjects of both genders who had first been screened for sex role orientation. Representatives of masculine-typed, feminine-typed, and androgynous SRO were interviewed to determine 1) the competitiveness of their success-concepts, 2) the differences in success-concept for the three sex role orientations, and 3) the differences in success-concepts of men and women. It was predicted that masculine SRO would correlate with a competitive concept of success and that men might have more competitive definitions of success than women, regardless of SRO. Interactions between gender and SRO were also measured.

The interview data were also assessed qualitatively. This allowed for amplification, with reference to the literature, of the sex differences in concept of success. It was also intended as a way to amplify the expected findings relating sex role orientation to concept of success, by attempting to answer questions such as these: Exactly how do feminine persons, masculine persons, and androgynous persons conceive of the idea of success? Where are the differences and where are the similarities? How do men and women conceive differently of success? Or is this difference subsumed under the differences in sex role orientation?

Does cooperation or caring characterize the women's or feminine persons' success-concept, as the literature on

women's reality-constructing suggests? Is the women's definition of success more "relational" than the men's, apart from the question of cooperation? Is Chodorow's concept of "relational potential" (1978) more apparent in the women's or the feminine persons' narrative than in the masculine persons' or the men's? What is the nature of an androgynous concept of success, if it is different from a masculine or feminine one? The literature (Kaplan and Sedney, 1980; Kelley and Worrell, 1977) suggests it might be drawn from a wide range of behaviors and reality-constructions, but might also involve some conflict. Is this borne out by the quantitative or qualitative findings?

The qualitative results also allowed for some initial hypotheses concerning the developmental differences which emerged from the data, suggesting further research into developmental differences in success-concept and the relationship between developmental differences and sex role orientation.

C H A P T E R I
REVIEW OF THE LITERATURE

Literature on Sex Differences and Fear of Success

In 1964 Matina Horner sought to resolve the difficulties achievement motivation theorists had encountered in trying to explain women's behavior (Alper, 1971, 1974; Atkinson & Feather, 1966) with the hypothesis that there was a "motive to avoid success" found predominantly in women. Her study, based on undergraduate responses to thematic apperception tests using the cue "At the end of first term finals, Anne is at the top of her medical school class," showed that 65 percent of the women showed anxiety over success, compared to 8 percent of the men. This led Horner to believe that women had a fear of success (FOS) which would explain the behavior that had not been explained by the theory of fear of failure. She concluded that FOS, or success anxiety, was directly related to women's fear that succeeding would mean a "loss of femininity" (1968, p. 125).

This notion gained such popularity that a plethora of studies, ranging from undergraduate theses (see Shaver, 1976) to published articles and invited addresses on the subject appeared throughout the seventies. For example, Psychological Abstracts lists twelve dissertations (as of June, 1979) which use the concept unquestioningly. At the same time,

many studies sought to replicate the original research, or raised theoretical questions about it. Zuckerman and Wheeler (1975) collected the results of fifteen studies, the majority of which showed no significant sex differences in FOS, using instruments similar to Horner's. Brown, Jennings and Vanik (1974) found marginally more FOS in college men than in college women, while Weinrich-Haste (1978) and Griffore (1977) found no significant differences when they tested undergraduate and graduate students, respectively.

The question of racial differences in FOS led to conclusions that black college women had significantly lower FOS than white college women (Mednick & Puryear, 1976; Weston & Mednick, 1970; Bright, 1970; Horner & Fleming, Note 1). Darity (Note 2), using a refined test for FOS, found no significant sex differences between black male and black female college students.

Among the other questions that arose was whether subjects were responding to the idea of "deviant" success implied by a cue in which a woman succeeds in a "man's field" (Olsen & Willemsen, 1974; Monahan, Kahn & Shaver, 1974; Lockheed, 1976). This question was not resolved by the results of these three studies.

Tresemmer, in a review of the literature on fear of success, first concluded that overall the research had shown there were no significant sex differences in the presence of

FOS, but then determined that the social context of the success was crucial, and that "incompatibility between gender role and success" was determined by this factor (1977, p. 47). Overall, the reserach raised serious questions but resolved very few.

Two studies, however, stand out from this literature and raise yet another important question: What kind of success are the subjects presented with? The "success" depicted by Horner's cue of Anne in medical school (changed to John for the male subjects) is a specific kind of success. It is competitive, showing Anne ahead of everyone else in a highly competitive situation. It shows Anne succeeding alone. In fact, in a later refinement of her scoring criteria Horner took as an additional indicator of fear of success "interpersonal engagement", which was scored whenever a TAT response showed two or more persons involved with each other. (Horner, Tresemer, Berens & Watson, Note 3). When this competitive success-definition was retained (and in fact the competitiveness was heightened), women were again found to have higher FOS than men. Zuckerman and Alison (1976) used a 27 item agree-disagree instrument containing such items as "the rewards of a successful competition are greater than those received from cooperation" and "I am happy only when I am doing better than others." Subjects who disagree with those statements were scored as fearing success. The study concluded that women are higher in success anxiety than men.

In contrast to these studies, research using another objective measure of FOS revealed no significant sex differences (Pappo, Note 4). Pappo developed an 83 item questionnaire which searches out self-doubt, preoccupation with competition, preoccupation with evaluation, self-sabotage and repudiation of competence, all of which are scored as indicators of fear of success. This measure tested for fear of any kind of success (and in fact the kind of preoccupation with competition which would have led subjects to agree with the above items from Zuckerman and Alison's scale was scored in the opposite direction on this measure) and showed that women and men exhibited this fear in roughly equal numbers.

This finding leads to the central theoretical question behind this study: Was it the competitive nature of the success cue used by Horner and her colleagues which lead to the finding of a sex difference in FOS, rather than the success itself? Zuckerman and Alison's (1976) and Pappo's (1972) results certainly support a hypothesis that women do not fear non-competitive success, but only competition.

Sassen (1980) has raised the concomitant question of whether it is actually fear that the women in Horner's studies were showing, or, instead, anxiety of a different nature. Horner (1968) used "fear" and "anxiety" interchangeably. Horner defined anxiety as a response "aroused when one expects that the consequences of the action will be negative" (Horner, 1968, p. 15). But another definition of anx-

iety emerges from the constructivist theory of Robert Kegan (Note 5) whose theory is grounded in the work of Piaget, Kohlberg, Fingarette and Erikson. He describes it as the sense of disintegration which occurs when a meaning-making organism finds itself unable to make meaning. Since meaning-making is an activity of great personal commitment (cf. Fingarette, 1963), there is much more to the anxiety experience than fear of what comes next. If we use Kegan's definition of anxiety, the women in Horner's and Zuckerman's samples are not simply afraid. They are unable to take competitive success and construct around it some sense of personal meaning.

Since women responding to Horner's and Zuckerman's competitive success-concepts showed this anxiety, but women responding to Pappo's noncompetitive success-concept did not, it is reasonable to ask whether competition might be the anxiety-producing factor.

The work of Gilligan and Chodorow is central to this alternative interpretation of what women's success-concept might be. Gilligan (1977, 1979; Murphy & Gilligan, 1980) showed that women's constructions of moral dilemmas tended to be more contextual than men's based on a morality of interpersonal responsibilities rather than a morality of rights. The women she interviewed referred repeatedly to relationships in explaining their moral reasoning: The "reciprocity of care" (1979, p. 503) of which she speaks

cannot exist unless more than one person is taken into account. But this construction of reality conflicts directly with Horner's revised scoring system, which considers the inclusion of these necessary others to indicate fear of success. Similarly, it conflicts with Zuckerman and Alison's assumption that a preference for cooperation indicates fear of success.

Chodorow (1974, 1978) provides another possible reason why women's concept of self, values and actions seems so often to be informed with the idea of relationships. She points out that women form their gender-identity and thus much of their self-concept in a relationship, with a person of the same sex--the mother--who is almost constantly present (in this culture). Men, on the other hand, form their gender identity with the father, who is absent most of their waking hours, and by individuating from their mothers. Thus the boy learns to identify himself as different from the person who relates most intensely to him, while the girl learns to identify with that person. In contrast to classical analytic theory, Chodorow argues that, rather than replacing the mother with the father as her love object, the girl adds her father to the relationship and thus lives with a triangle of relationships for the rest of her life. Especially in an individualistic, competitive culture such as this one, this experience gives rise to problems as the girl becomes a woman. Taking a constructivist view, however, we

could argue that in grappling with such problems a woman learns to make meaning in a particularly female way and develops a contextual rather than an individualistic structure of knowing.

Since Kegan's concept of anxiety sees it as an experience of clash between an individual's structure of knowing and the information provided by the environment, the relational, contextual structure of knowing described by Gilligan and Chodorow strengthens the hypothesis that it is a clash between feminine reasoning and competition which leads to apparent success-anxiety, since succeeding cooperatively is no threat to relationships and might even enhance them, while winning against others threatens a relational worldview in which those others' well-being is as important as one's own.

While this body of theory is extremely relevant to the question of women and success, there is no data dealing directly with women's personal concepts of success, as distinguished from men's. Data exists regarding women's reactions to competition, but it sheds little light on the question of whether women show less competitiveness in their view of reality than men do, and it does not connect competing with what it means to succeed.

Literature on Sex Differences in Competition

The literature on sex differences in competition pro-

vides few answers relevant to the questions raised here regarding women's success-concepts, largely because of the ways in which subjects have been tested in regard to competition. No pencil and paper measure exists which tests for competitive attitudes. The Competitive Attitude Scale (Lakie, 1964) relates only to questions of competition in sports. Helmreich and Spence (1978) include competitiveness in their Work and Family Orientation Questionnaire, but less than a quarter of the 23 items deal with this question. Ahlgren and Johnson (1979) tested school children in Minnesota for competition versus cooperation, but limited themselves to three questions on each topic. This is the closest anyone has come to tapping sex differences in this area, and the limited number of items raises clear difficulties.

But the major difficulty is raised by the overwhelmingly laboratory-limited nature of most of the work on competition. The Prisoner's Dilemma and experimental bargaining games are the two types of instruments one discovers repeatedly. Some of the researchers who use them have themselves commented on the inappropriateness of drawing conclusions regarding sex differences in cooperation and competition from these studies. Kahn, Hottes and Davis (1971) point out that cooperation, which in all of these studies is considered as a polar opposite of competition, is not the same thing when measured by the Prisoner's Dilemma as it is in every day life or in a bargaining game. They point out that it is

merely "a label for one of two possible responses" (p. 278); it can be a good or a bad strategy, and its frequency as a response will depend on whether it is an effective strategy and whether the subject is highly motivated to win the game. Since this last factor is related to competitiveness, a high rate of cooperative responses in the Prisoner's Dilemma can indicate a competitive attitude. Since this has been set up as a polar opposite of cooperation, it is clear that serious problems arise when research is based on this game.

Kahn, et al. were attempting to explain the conflict between results obtained by Vinacke, et al. using an experimental bargaining game, and research using the Prisoner's Dilemma results. Vinacke, et al. found significant sex differences in cooperation, with females forming alliances more frequently and bargaining less "ruthlessly" than males. (Vinacke, 1959; Amidjaja & Vinacke, 1965; Bond & Vinacke, 1961). But research using the Prisoner's Dilemma, according to Kahn, et al., has "often found females more competitive" (p. 267). After pointing out this interesting definitional (and perhaps ideological) problem with the Prisoner's Dilemma, however, Kahn, et al. go on to use the PD to determine that females are not more competitive than males, but respond more to the sex and "attractiveness" of their partner. While the literature on women's relational and contextual orientation makes this an interesting and believable finding, Kahn, et al.'s experimental method is questionable. They used the

"attractiveness" of partner and keyed it in various ways to the "attractiveness" of the subject without, apparently, determining whether the subject found his/her partner attractive, or whether "ugly" subjects considered themselves ugly, average, or reasonably attractive. Given the wide range of possibilities in this sphere, it seems that Kahn, et al. have only substituted one set of definitional problems for the others about which they were so perceptive.

In a more recent experimental bargaining study, Benton (1975) confirmed his expectation that females would behave less competitively than males, but only mildly supported his theory that this non-competitive behavior would be strengthened by the presence of observers. This undercuts the assumption that women's cooperative behavior is a function of need for approval or a "good girl" conception of morality (Kohlberg, 1969) and brings us back to the constructivist feminist theorists' conclusions that women attain a relational, contextual system of making meaning very early on and in adulthood retain this system independent of a need to please others (Chodorow, 1979; Gilligan, 1977; Sassen, 1980).

To return to some of the attempts to measure competitiveness outside the laboratory, most of these findings show females to behave or think more cooperatively than males. Crockenberg, et al. (1976) cite Cook and Stingle (1974) as concluding that females compete less than males but that the literature on children's competition is relatively inconclu-

sive. The 1976 study then goes on to report that when fourth grade children were given the opportunity to work cooperatively or competitively and then reward themselves with prizes, boys showed "more negative affect" when they either lost competitively or worked (successfully or otherwise) cooperatively than girls did in either of these situations. This "supports the common notion that boys have been more competitively socialized than girls. It suggests that for boys...doing well is not sufficient, one must be better than someone else." (p. 394). This is the first study to deal with the question of whether competing successfully is part of a male definition of success. "The data suggest that males may experience winning cooperatively similarly to failure, and certainly as unsatisfying," Crockenberg, et al. concluded (p. 394). It is interesting to note that the research team in this case alluded to the predominant definition of success in American society when they stated among their expectations that both boys and girls would reward themselves less for cooperative winning than for competitive success because "achievement without outdoing another is viewed as less of a success."

In another study of children, which in this case also included adolescents up to grade 12, Ahlgren and Johnson (1979) found females in grades 2-12 consistently higher in cooperation and lower in competition than males, with an increased difference in grades 8 and 10 on the competitive-

ness scale. They comment that the literature is inconclusive on the subject because studies have used different definitions of competition and cooperation and "situations used have usually been narrowly defined and lacking in complexity." This brings us back to the problem of the Prisoner's Dilemma definition of competition and also to the narrowness of the Competitive Attitudes Scale with its content limited to competitive sports.

Literature on Sex Role Orientation and Competition

All of the literature above has dealt with sex differences by looking at differences between genders--men and women or boys and girls. No published research exists concerning psychological sex (sex role orientation) and competition itself, nor on the question of sex role orientation and success. Related research has explored the relationship between sex role orientation and self-esteem, conformity, expressiveness and nurturance, social skills and assertiveness. Three studies of self-esteem (Spencer, Helmreich & Stapp, 1975; Bem, 1975; Wetter, Note 6) agree that androgynous individuals are highest on this measure, with two out of three studies finding that masculine-typed individuals had higher levels of self-esteem than feminine-typed individuals. By contrast, conformity correlated more highly with feminine-typed sex role orientation than with masculine or androgynous orientations (Bem, 1975).

Studies of nurturant behavior found that androgynous persons responded more to a kitten than did undifferentiated persons (Bem, 1977). This analysis raises questions about Bem's earlier conclusions based on the same data (Bem, 1975) in which, using a different scoring method, she found that feminine-typed subjects played with the kitten less than androgynous or masculine-typed individuals. Expressive behavior related to nurturance was studied by measuring student's responses to an infant (Bem, Maryna & Watson, 1976). Androgynous and feminine-typed males were found to be more responsive than masculine-typed males. Among females, however, there were no significant differences by sex role orientation, suggesting that social desirability or familiarity with the task may have affected the women's responses to the child more than it did the men's. In another part of the same study, Bem, et al. found that androgynous and feminine-typed persons of both sexes responded more empathically to a "lonely" confederate student than did the masculine-typed subjects.

Bem and Lenney (1976) found sex-typed subjects of both genders more stereotyped when offered sex-reversed and sex-appropriate tasks, even when the sex-reversed tasks were more highly rewarded. It is possible to question these results, however, since the tasks seem to differ in intrinsic interest for anyone: Subjects were allowed to choose whether to hammer a nail into a board or iron a napkin.

Social skills and assertiveness were measured by Kelly, et al. (reported in Kelly & Worrell, 1977) with the result that androgynous subjects were found more effective in all situations while sex-typed subjects were less effective, with undifferentiated subjects lowest in social skills and assertiveness. This data applied to both sexes.

Only one study (Baxter & Shepherd, 1978) studied behavior closely related to competition. Baxter and Shepherd studied choice of conflict-management style in relation to sex role orientation, sex of other and affective relationship. Using conceptualizations developed by Hall (1969) and Thomas and Killman (1974), they identified five types of conflict management: Competitive, conflict-avoiding, accommodating, compromising, and collaborative. They predicted that masculine-typed persons would exhibit competitive behavior, feminine-typed persons would behave in an accommodating manner, and androgynous persons would choose styles of compromise and collaboration.

An interesting aspect of Baxter and Shepherd's definitions of these various conflict management styles is the factor of concern for the relationship between the persons involved. This resonates with Gilligan and Chodorow's views of women's thinking as more relational than men's, since the feminine-typed conflict management choice, accommodation, is marked by a concern for the relationship above the content or issues of conflict. The collaborative mode, paired with

androgynous sex role orientation, is marked by a high concern for both the relationship and the issues under discussion. Compromise behavior differs from this only in intensity--it represents moderate concern for both the relationship and the issues. Thus the androgynous conflict management style unites a masculine concern for the issues with a feminine concern with relationship. It is important to point out that in this typology, concern with the issues is reflected by trying to win the conflict, thus the connection between competition and the masculine mode.

Baxter and Shepherd's results, however, did not support their hypotheses. Only one of the five dependent variables showed a significant difference due to sex role orientation. That variable was competition. The theory that androgyny would be represented by collaboration and compromise was not borne out. Not only was competitiveness the only variable that correlated with sex role orientation, masculine subjects were also less likely than the others to vary their response on the basis of how they felt about the person they found themselves in conflict with.

The authors provide various possible explanations for their findings. It was hard for the androgynous individuals to score highest on approval of a compromise or collaborative style, they point out, since this was the most popular mode with all three sex role groups. Since the students were enrolled in Interpersonal Communications

classes where this kind of behavior was often encouraged, they note, social desirability may have been operating. On the relationship between competition and masculinity, they comment, "Perhaps win-lose behavior in conflicts is one type of behavior where strong consensus still exists on the masculine nature of such behavior. In fact, competition may constitute such a clear masculine sex-typed behavior that it contributed to the Sex Role Identity by Affective Relationship interaction tendency" (p. 822).

The study proposed here should shed some light on this question. Certainly Baxter and Shepherd's failure to find relationships between collaboration and androgyny or accommodation and femininity, as compared to their significant findings on competitiveness, suggest that competitiveness is an appropriate variable to measure in a study of sex role orientation and concept of success. Their results bear less directly on the theory that femininity correlates with a more collaborative success-concept, since they expected collaboration to correlate with androgyny, not femininity. It would be interesting to see if Baxter and Shepherd's data, reanalyzed to correlate femininity with collaboration and compromise, rather than accommodation, would yield significant results.

C H A P T E R I I

METHOD

Subjects

Subjects were undergraduates at the University of Massachusetts who were recruited from psychology courses. They were given extra course credit for participating in the study. Two hundred sixty-nine subjects filled out the PRF ANDRO questionnaire to determine their sex role orientation. From this group, four subjects of each gender by sex role orientation category were chosen to be interviewed. (See Table 1.) These interviews assessed the subjects' concept of success.

When possible, subjects beyond the freshman year or over age 19 were chosen for the interview, on the assumption that they would be able to give more fully thought-out interview responses than freshmen or 17 to 18 year olds.

Instruments

The PRF ANDRO. To screen subjects for sex role orientation, the PRF ANDRO, administered as part of the Interpersonal Disposition Inventory (Berzins, Welling & Wetter, note 7) was administered to 269 subjects. The 85 item true-false inventory based on the PRF (Jackson, 1969) appears in Appendix I.

The scale contains 27 items on the femininity (FEMIN)

TABLE 1.

Interview Subjects by Gender and Sex Role.

	Feminine-typed	Masculine-typed	Androgynous
Male	n=4	n=4	n=4
Female	n=4	n=4	n=4

scale and 29 items on the masculinity (MASCUL) scale. Twenty self-esteem items, five Infrequency Scale items and four filler items make up the rest of the questionnaire. MASCUL and FEMIN are orthogonal scales and are scored separately. Difference scores may also be computed by subtracting MASCUL from FEMIN.

Reliability has been established for the PRF ANDRO, both in terms of internal consistency and temporal stability. The MASCUL and FEMIN scales were deliberately chosen for heterogeneity of contents, but still yield internal consistency (alpha) coefficients ranging from .68 to .79 for MASCUL and .65 to .70 for FEMIN with medians of .75 and .67, respectively. These results were based on seven different large samples. Temporal stability over a three week interval, using an N of 137 undergraduates, averaged .81 for both MASCUL and FEMIN (Berzins, Welling & Wetter, note 7).

The Competitiveness of Success-Concept
(COSC) Structured Interview

The Competitiveness of Success-Concept (COSC structured interview measures the competitiveness of each subject's personal view of success. It contains questions based on dilemmas the subject might face in his or her life and more abstract questions which allow the subject to give his or her opinions about what constitutes success and which kinds of success are more valued. It concludes with questions about the subject's academic achievement and motivation. The structured interview appears in Appendix II.

The interview contains nine questions, three of which had two parts. The two-part questions were scored as single items in the quantitative scoring, resulting in a nine-item scale. In addition to the quantifiable questions, three questions relating to social change were asked. All questions were scored qualitatively.

The quantifiable questions, forming the COSC scale, yielded Rater Reliability of (alpha) .96 and internal consistency of (alpha) .85. Face and ecological validity were established, in the absence of an instrument with which to validate the scale. These issues, and the development of the COSC interview and scale, are discussed in detail in Results.

Procedure

PRF ANDRO questionnaires were given to 269 subjects in psychology classes, to be filled out before or after class or in classrooms which were available when students picked up forms to fill out outside of class time. All subjects were instructed not to discuss the form with anyone.

These data were scored by Op-scan to yield scores for masculinity and femininity for each subject. A sub-sample was then chosen and analyzed to determine the median for masculinity (MASCUL) and femininity (FEMIN) scores. The median for MASCUL was 13.00, for FEMIN, 10.74. See Table 2. Subjects scoring above both medians were classified androgynous.

TABLE 2

Masculinity and Femininity Medians
of Sex-Balanced Sub-Sample

	n = 166
MASCUL	13.00
FEMIN	10.74

Subjects scoring above the FEMIN median but below the MASCUL median were classified as feminine-typed. Subjects scoring above the MASCUL but below the FEMIN median were classified as masculine-typed. Subjects scoring below both medians were considered undifferentiated (Berzins, Welling and Wetter, note 7). See Table 3 for the distribution of subjects by sex and sex role orientation.

The random drawing of a sub-sample for the determination of the medians was necessary for the following reasons. This sample had to be balanced as to biological sex. Since there is a high correlation between sex role orientation and biological sex, a strong skew on one variable would skew the other (Berzins, Welling and Wetter, note 7). The population of students taking psychology courses at the University of Massachusetts, however, includes more females than males, and the students who volunteered to take the questionnaire were about 75% female. This uneven distribution was heightened by the inclusion of a Psychology of Women course in the sample. It was reasonable to score all the forms presented by all of the women surveyed, however, even if they were not included in the sub-sample to be used to determine medians. Since this sub-sample was randomly drawn, those whose scores were not included in the computation of the medians were members of the same population.

Using the median split procedure described above, subjects were classified as masculine-typed, feminine-typed, or androgyn-

TABLE 3
Sex Role Orientation (SRO) by Sex

SRO	Women	Percent	Men	Percent
Feminine	39	21	32	38
Androgynous	52	28	22	26
Masculine	64	35	9	11
Undifferen- tiated	29	16	22	26
TOTAL	184	100	85	101

nous. Those that were sex-typed were then chosen to be interviewed if they had a high difference score -- for example, if a subject was feminine-typed and had a FEMIN score of 16 and a MASCUL score of 6, his or her difference score was 10, a relatively high difference score. Androgynous subjects were chosen for low difference scores, since a subject scoring just above the median on FEMIN but very high on MASCUL would be technically androgynous, but from a point of view of difference scores, close to masculine-typed. Thus, as far as possible, androgynous subjects were interviewed if they had low difference scores representing a "balance" of masculinity and femininity. MASCUL, FEMIN, and difference scores for each subject interviewed are given in Table 4.

Subjects were contacted by telephone for the interview. They were invited to be interviewed about what they think of as success and told the interview would take between half an hour and an hour. They were offered two experimental credits for participation. The interview questions shown in Appendix II were presented orally and interviews were tape recorded. Informed consent forms, as shown in Appendix III, were signed by each subject before the interview. After the interview, verbal and written feedback were given. (See Appendix III.)

Notes were taken during the interview. From the tape recordings, direct quotations were added and in many protocols,

TABLE 4.
Femininity, Masculinity and Difference Scores
of Interview Subjects

	FEMIN		MASCUL		DIF
	Raw score	Cell mean	Raw score	Cell mean	
Feminine women	16	17.00	7	7.25	9
	21		7		14
	17		11		6
	14		4		10
Feminine men	21	18.00	7	6.75	14
	15		0		15
	20		11		9
	16		9		7
Masculine women	4	7.00	23	19.25	19
	9		20		11
	8		17		9
	7		17		10
Masculine men	9	8.75	19	15.00	10
	9		13		4
	7		14		6
	9		14		5
Androgynous women	13	14.00	14	15.50	1
	18		17		1
	13		16		3
	12		15		3
Androgynous men	18	15.25	14	15.00	4
	14		15		1
	13		13		0
	16		18		2

complete transcripts were made. The interview data were then scored qualitatively and quantitatively. Most of the qualitative data were drawn from commonalities and differences which became apparent as the interview data were reviewed. Scoring the interviews for competitiveness of success-concept (COSC) proceeded according to specific scoring criteria, which were based on pilot interviews and the literature on competition and such literature as there is on sex differences in concept of success.

At the end of the interview, subjects were asked their age, grade point average, and the importance to them of achieving academically. They were also asked how hard they felt they had worked to achieve academically. The latter two questions were measured on a five point scale.

General scoring criteria. The following general guidelines were used in the qualitative evaluation of the material. They were also given to the outside raters, who scored protocols quantitatively, in order to guide the determination of an overall score for each dilemma.

Mention of other people. How are others mentioned? Are they means to an end, accoutrements of success, subordinates? Score as competitive.

Are they collaborators, persons with whom there is emotional involvement, persons who give or receive help and care? Score as noncompetitive.

Are others seen as a means to success? Score as competitive.

Or are they part of success? Score as noncompetitive.

Is caring for others or working with others or relating to others seen as conflicting with success? Include hindering success, being sacrificed to success? Score as competitive.

Is success seen as doing better than, having more than, being better known than others? Score as competitive.

Are no other persons mentioned in the responses? Score as competitive.

Other dimensions. Is success strictly a question of "content" (cf. Baxter and Shepherd, 1978)? Are relationships and "happiness" seen as distinctly separate from "success"? Score as competitive.

Is the concept of success flexible? Could it be varied to accommodate other people, in the work situation or the home? Score as noncompetitive.

In the subject's personal definition of success, does the relational outweigh the "content"? Score as collaborative.

Which seems more important, type of work (competitive) or relationships around it (cooperative)?

Scoring criteria for specific items. For each item, a score of +1 indicates competitiveness, a score of -1 indicates noncompetitiveness. A response containing neither competitive nor the indicated non-competitive material will be scored as 0.

Items 1a and b

You are in a course--a graded course--in which the professor gives you the option of working with a small group of students on your term paper, or working alone. If you work with a group, your grade will be the grade the group gets. If you work alone, your grade is based only on your own work. Which option do you choose?

Score +1: (competitive) S chooses to work alone because s/he can do a better job than others, is more intelligent, others are less capable, cooperation is not enjoyable.

-1: (noncompetitive) S chooses to work with group, values cooperation, being with others, working out differences in the group.

Items 2a and b

- a. If you did well, would you consider yourself successful on that project?
- b. If you had done it the other way and also done well, would you feel equally successful, or more, or less? Why?

Score +1: S sees working alone as more of a success, sees grade as only measure of success.

-1: S sees working with others as more successful, values interaction, cooperation, successful "group process".

Items 3a and b

- a. Do you see yourself losing anything or making any trade-offs by the choice you made? What are the pluses and minuses?
- b. Is there anything that would motivate you to make the other choice?

Score +1: S values grades over working with others, measures success comparatively, does not mention others but focuses entirely on grade.

-1: S values working with others over grade, shows positive affect toward group success, helping others succeed. S values experience of working with others, would change choice for needs of others, interest in working with others, being with other people.

Item 4a (applies only to students who choose to work alone)

Suppose someone in the group says, "We really wish you'd work with us." How would you feel and what would you do?

(Follow up on weighing of losses of affiliative satisfaction, cooperation, against advantages of working alone.)

Score +1: S makes decision based on likelihood of good grade; does not care; shows no affect; shows spiteful pleasure but refuses to join group.

-1: Disappointment, sadness, guilt. Comments showing S values working with others. S changes decision because someone asked.

Item 4b (applies only to students who choose to work with group)

Suppose there was something you were very interested in working on, but there was no group interested in working on that.

(Follow up on losses of group satisfaction, cooperation versus loss of autonomy, opportunity to pursue own interests.)

Score +1: working in area of interest, grades, achievement is more important than working with others.

-1: affect towards others is positive, working with others is more important, some compromise acceptable to everyone would be sought.

Items 5a and b

a. If it were not a question of writing a paper, but of working together, say, to start a business, what would you choose? Why?

Score +1: S chooses to work alone. Working with others is too much trouble.

-1: S chooses to work with others, unless motivation is strictly financial, profit, or competitive.

b. If your business was successful, would you consider it more of a personal success if you had built it up alone, rather than with others?

Score +1: Succeeding alone is more successful, more satisfying or in some way better. Comparative reasoning.

- 1: Succeeding with others is more successful or more satisfying or in some way better.

Item 6

In a research study on success, the following statement was made: "The rewards of successful competition are always greater than those received from cooperation." What do you think of this statement? Why?

Score +1: S agrees.

-1: S disagrees.

(Items 7a, b and c are not intended to be scored quantitatively.)

Item 8

How do you define success?

Score +1: if the following predominate: Competing, winning, "getting ahead", making money. Comparative language, comparative thinking.

-1: if the following predominate: Valuing relationships with colleagues, other people share in success, positive interactions are part of success, contributing to society or community.

Item 9

Do you consider yourself successful? In what ways would you say you are and in what ways would you say you aren't?

Score +1: S's successes (or failures) are largely competitive, or involve doing better than someone else, getting something that others want.

-1: S's successes (or failures) are predominantly collaborative, contribute to society or community, are not comparative or competitive, or do not mention having to do better than others.

Whether an item is listed as a success, failure, or "something to work on" is irrelevant to the scoring.

Hypotheses

1. It is predicted that Sex Role Orientation (SRO) will show a main effect on competitiveness of success-concept (COSC), as reflected in the COSC score. Specifically, masculine sex role orientation is expected to be associated with higher COSC scores, feminine SRO with lower COSC scores. Higher masculinity scores, as measured by the PRF ANDRO, are expected to correlate with higher COSC scores.
2. It is predicted that there will be a sex role orientation by gender interaction on COSC scores.
3. It is predicted that men's concept of success will be more competitive than women's; that is, that male subjects will have higher COSC scores than female subjects. This is expected to be reflected in a significant main effect of gender on COSC.

C H A P T E R I I I

RESULTS

Development of the COSC Structured Interview

Following the method used by Gilligan (1977; personal communication) in which interviews about subjects' experiences with abortions were used to develop dilemmas to be used in structured interviews, the Competitiveness of Success-Concept Scale was based on pilot interviews in which subjects were asked about their views of success and failure in their lives, ways in which they had felt successful or unsuccessful, and whether certain experiences were opportunities for them to seek success competitively or noncompetitively. The pilot interviews were conducted with the following subjects:

- 1) a male graduate student, age 28
- 2) a male graduate student, age 25
- 3) a female graduate student, age 21
- 4) a female undergraduate, age 25

These subjects were chosen to represent both sexes, the three sex-role orientations (although these were not assessed formally, since no median had been determined), and at least some reflection of the fact that the sample will be composed of undergraduates and the protocols and dilemmas had to be relevant and accessible to them.

The pilot interviews suggested that the dilemmas to be

used should be related to a common college experience; this led to the choice of term paper writing as the activity which could be done cooperatively or competitively and grades as the measure of achievement which could be approached competitively or noncompetitively. These interviews also suggested that some very open-ended questions should follow the dilemma-based questions: hence the inclusion of "how do you define success?" after the subject has had a chance to discuss success and competition in the narrow context of the dilemmas. The interviews also suggested that the second dilemma could be more abstract than the first, once the subjects had thought through some questions based on more concrete familiar situations. This would allow the second part of the interview to be more related to the subject's own conception of success and the context in which he/she finds it realistic to discuss succeeding. The factor leads directly to the question of validity.

Validity of the COSC Interview

One specific validity problem has plagued the entire body of research on attitudes toward success. That is the distinction between succeeding and competing to succeed (Sassen, 1980). In the past, most "achievement" was, on closer inspection, competitive achievement. In this study, it is important that what is described as competitive success-concept be different from achievement or success orientation in general.

Just as it was inappropriate to measure women's reactions to competitive success and conclude they were afraid to succeed, it would be inappropriate to measure desire to achieve and label it "competitive success-concept". Although the absence of an existing competitiveness scale makes this hard to conclusively avoid, the inclusion of measures of subjects' academic achievement motivation (by grade point average and self-report of effort) provide a separate measure of their desire to achieve. The results of these measures did not correlate significantly with competitiveness of success-concept score. (See Table 5.) This suggests that COSC is measuring something other than general need to achieve.

In addition, it would have been desirable to validate the COSC with an existing measure of competitiveness. A literature search for such a measure, however, revealed that there is no measure of competitiveness other than very narrowly defined questionnaires regarding varsity sports, and Prisoner's Dilemma-type laboratory measures, which have been shown to be narrowly defined and inconclusive as to an individual's actual level of competitiveness (see Literature on Sex Differences and Competition, above). However, two other concepts of validity were used.

Face validity, which has been relied upon by Gilligan, et al. (personal communication, 1977) is appropriate to this kind of protocol. In addition, the concept of ecological validity (Gibbs, 1979) is compelling in this context. Gibbs cites Bronfenbrenner (1977) as follows:

TABLE 5

Correlations of Academic Achievement Variables
with Competitiveness of Success-Concept
(COSC), Femininity and Masculinity

	Grade Point Average	Academic effort	Importance of Academic Success
COSC	-.17	.07	.25
Femininity	.06	-.31	-.23
Masculinity	-.16	.10	-.05

Especially in recent decades, research in human development has pursued a divided course, with each direction tangential to genuine scientific progress...The emphasis on rigor has led to experiments that are elegantly designed but often limited in scope. This limitation derives from the fact that many of these experiments involve situations that are unfamiliar, artificial, and short-lived, and that call for unusual behaviors that are difficult to generalize to other settings. [This applies very neatly to the problems cited above in the attempt to measure competition by using Prisoner's Dilemma and other games.]

Partially in reaction to such shortcomings, other workers have stressed the need for social relevance in research, but often with indifference to or open rejection of rigor. Expressions of this trend involve reliance on existential approaches in which "experience" takes the place of observation and analysis is foregone in favor of a more personalized "understanding" gained through intimate involvement in the field situation (p. 513, Bronfenbrenner; p. 128 Gibbs). The bracketed comments above are mine.

As a resolution to this problem, Gibbs suggests "ecological validity," the goal of which is "to resolve the tension between certainty and authenticity" (p. 127). Certainty, represented by internal validity, and authenticity, represented by external validity and a relevance to realistic situations and real behaviors, are both represented in an ecologically oriented inquiry.

This ecological concept best describes this inquiry. The two concerns, rigor and relevance, or rigor and reality, are represented in the type of interview format to be used. Gibbs (1979) cites Gilligan (1977) among others as an investigator who has succeeded in balancing these requirements. He

describes her interview format, upon which my methodology is based, as a "powerful exploratory tool...precisely because an equilibrium is achieved between adherence to uniformity to the questions (a certainty concern) and flexibility in the pursuit of individual subjects' spontaneous meanings (an authenticity concern)" (p. 129).

The inclusion of a dilemma which relates directly to undergraduates' lives (Question 1) speaks to this concern, as does the inclusion of a more open-ended protocol item (Question 7) which allows subjects to relate structured items to their own patterns of thinking. In addition, questions 8 and 9 ask the subject directly about his/her own values (How do you define success?) and his/her own experiences of success and failure (In what way would you say you are successful and in what ways would you say you aren't?). Questions 7a, b, and c also add to the authenticity of the interview format. Since these "social change" questions were appropriate only for subjects who had disagreed with the competitive definition of success put forward by Question 6, these were not included in the quantitative total score. They were scored qualitatively, however, and they asked directly whether the subjects thought this society functioned according to the competitive definition of success with which they disagreed and if so, how they thought this conflict would resolve itself in their own lives.

Reliability of the COSC Interview

Inter-rater reliability. Inter-rater reliability of the COSC interview formats was established by having transcripts of six randomly selected tape recordings rated for competitiveness by two raters in addition to the author. The outside raters remained blind to the sex role orientation and the biological sex of the subject. Transcripts were used, rather than actual tape recordings, so that the sex of the subject did not become apparent to the raters. This made it necessary, however, for the outside raters to review their ratings with the author, since in some cases it was not entirely clear whether part of a transcript was part of one question or another. Changes were made only for reasons such as this. The outside raters, one male and one female, were graduate students in developmental and cognitive psychology, respectively.

The Cronbach alpha for all three raters was .96. Reliability coefficients between each of the three raters are shown in Table 6.

Internal consistency. Initially a Cronbach alpha of .83 was obtained for the nine Quantitative items of the COSC interview, which make up the COSC scale. Correlations between individual items, however, showed that one item, Question 4, had much poorer reliability than any other item. With a 0 correlation with two other items and only one correlation above .29, its average correlation with other items was only .15.

TABLE 6

Inter-rater Reliability of Competitiveness
of Success-Concept (COSC) Scale Items

	Correlations		
	Rater 1	Rater 2	Rater 3
Rater 1	1.00		
Rater 2	.92	1.00	
Rater 3	.94	.88	1.00

Cronbach Alpha = .96

Its item-to-total scale correlation was .22, while all other items had item-to-total scale correlations ranging from .42 to .69 with a mean of .59 (see Table 7). ANOVAs of each item showed insignificant main effects for gender on competitiveness, except Question 4, which showed an insignificant main effect for gender on noncompetitiveness.

This reversal, and the poor item correlations mentioned above, could result from the nature of Question 4, which allows subjects who have answered competitively on Question 1 to score noncompetitively on this item by choosing to join a group if specifically asked. Subjects who answered noncompetitively on Question 1 do not have this opportunity but have the opportunity to score competitively if they would choose to work alone in order to work on something "very interesting" to them. Thus, the question pulls for answers which conflict with the subject's initial orientation about competition as a means to success and dilutes the total score.

For these reasons, item 4 was removed from the scale. This raised the overall Cronbach alpha for internal consistency to .85. All further correlations and ANOVAs were run on the adjusted scale.

Testing of Hypotheses

The hypotheses that masculine sex role orientation would be associated with competitive concept of success was not supported by the data. An ANOVA by sex role orientation

TABLE 7.
 Inter-Item and Item-to-Scale Correlations of the Competitiveness
 of Success-Concept (COSC) Scale

	Item								
	1	2	3	4	5	6	7	8	9
Item 1	1.00								
Item 2	.52	1.00							
Item 3	.79	.54	1.00						
Item 4	.15	.17	.36	1.00					
Item 5	.53	.48	.65	.16	1.00				
Item 6	.34	.38	.26	.00	.39	1.00			
Item 7	.31	.66	.35	.29	.59	.49	1.00		
Item 8	.35	.53	.19	.08	.13	.59	.35	1.00	
Item 9	.36	.27	.26	.00	.25	.34	.49	.35	1.00
Item to Scale	.63	.69	.65	.22	.62	.51	.69	.47	.42

Cronbach alpha = .83

and gender on COSC did not yield significant results at the .05 level. A trend ($F=3.48$, $p=.08$) was present for gender. When this analysis was repeated using only the 16 sex-typed subjects in the sample, that is, excluding androgynous subjects, the results were still not significant.

Pearson correlations of COSC with sex role orientation, in which masculinity was scored as 3, androgyny as 2, and femininity as 1, did not yield a significant result.

The second hypothesis that males would show a more competitive success-concept was supported by the data. A t test for the difference between the male and female COSC means was significant ($t=1.87$, $p=.04$). See Table 8. The slight difference between the trend level of significance shown by the ANOVA and the significance shown by the t test is ascribed to the presence of another independent variable, sex role orientation, in the ANOVA procedure.

The expected correlation between masculinity and competitiveness of success-concept (COSC) was not found. A correlation between masculinity score and noncompetitiveness of success approached significance ($p=.07$). This surprising trend is probably an artifact of the sex role orientation scale scores of the particular samples tested. Although it is common for college women to have higher masculinity scores than other women on the PRF ANDRO, it has never been the case that there are more masculine-typed women than masculine-typed men in the same sample, and more feminine-typed men than

TABLE 8

Means and Standard Deviations for Items on the
Competitiveness of Success Concept
Scale (COSC) by Gender

Item	Women		Men	
	Mean	SD	Mean	SD
1	2.25	.62	2.41	.67
2	1.83	.84	2.33	.79
3	1.83	.72	2.17	.84
4	2.25	.97	1.75	.87
5	1.92	.90	2.17	.84
6	2.00	.95	2.67	.65
7	1.67	.89	2.25	.97
8	1.33	.49	1.67	.65
9	1.67	.49	2.00	.74
10	1.67	.78	2.08	.79

masculine-typed men (Berzins, et al., note 7), but this was the case in this sample of 269 undergraduates. The possibility that social desirability was causing subjects to answer questions in cross-sex-typed ways is discussed in the Discussion chapter. The sample of 24 subjects interviewed, like the larger sample from which it was drawn, was similarly distributed: the women's mean MASCUL score of 14.00 was higher than the men's mean MASCUL score of 12.25 (see Table 9), even though both the men and the women were selected to equally represent all three SRO's. Thus the trend association between MASCUL and noncompetitive COSC ($p=.07$) may be an artifact of the significant correlation between femaleness and noncompetitive COSC: the female group carried with them a higher MASCUL score, which resulted in this trend. Since one result is significant and the other is a trend based on a distribution which has not been found in any previous work with the PRF ANDRO scale, it seems logical to interpret the significant figure as a meaningful result and the trend as an artifact.

The hypothesis that a subgroup of subjects who had a noncompetitive concept of success would differ according to SRO in their attitudes toward social change was not supported by the data. However, since SRO did not correlate significantly with concept of success, the appropriate subgroups for testing this hypothesis were not present. Five of the subjects with a noncompetitive concept of success were

TABLE 9
 Masculinity and Femininity
 Means and Standard Deviations
 for Interviewed Subjects by Gender

	Men n = 12	Women n = 12
Masculinity	$\bar{M} = 12.25$ SD = 5.10	$\bar{M} = 14.00$ SD = 5.69
Femininity	$\bar{M} = 14.00$ SD = 4.50	$\bar{M} = 12.67$ SD = 4.96

masculine-typed, five were androgynous and three were feminine-typed. Thus the hypothesis that this group would be composed largely of feminine-typed and androgynous subjects, and that the androgynous subjects would be motivated to work for social change, could not be supported in a group that contained as many masculine-typed as androgynous subjects, and fewer feminine-typed subjects. A finding which suggests that further research might be warranted is the fact that the two masculine-typed males in this subgroup said that they would have to compete or that they "didn't care" about society's definitions; neither one wanted to change society. All of the other subjects in the noncompetitive group wanted society to change, and most were motivated to work for this, although two were not sure how much change was possible. This sample is entirely too small and too uneven to manifest the expected differences, but further research might show some SRO effect on social change motivation.

To aid in the interpretation of hypothesized correlation between SRO and competitiveness of success-concept, data were gathered regarding subjects' level of academic achievement, importance to them of this achievement and how hard they worked to achieve in college. It was hypothesized that while feminine-typed subjects would show a less competitive success-concept than masculine-typed subjects, they would also be less motivated to achieve in general. Masculine-typed

subjects were expected to be more competitive and more achievement motivated. Androgynous subjects were expected to be the ones who were both cooperative and achievement motivated.

Since the SRO-COSC correlation was not significant, the achievement measures could not be used in the way they were intended to be used. These measures did not aid in interpreting the significant gender-COSC correlation either, however, since neither gender nor SRO correlated significantly with these variables. One trend was present, however: femininity correlated negatively with how hard students said they worked to achieve their college grades ($r = -.31, p = .07$). This trend supports the original hypothesis that feminine-typed persons would not be as motivated to achieve as masculine-typed persons (see Table 5).

There were no significant correlations between COSC and the academic achievement variables. This suggests that COSC is measuring competitiveness of success-concept, as intended, rather than achievement motivation or success-orientation in general.

C H A P T E R I V

DISCUSSION

Implications of Qualitative Findings

The primary hypothesis that masculine sex role orientation (SRO) would be associated with competitiveness of success-concept (COSC) was not supported by the data collected in this study. The second hypothesis, that males might have a more competitive success-concept regardless of SRO, was supported. There are various ways to interpret these two findings.

The findings can be said to conflict: since in most samples masculine-typed SRO is correlated with gender (Berzins, Welling and Wetter, note 7), a finding that male gender correlates with competitive COSC while masculine-typed SRO does not, is surprising. In this sample, however, the gender-SRO correlation did not follow the established norms. While it is difficult to definitively interpret this finding, certain speculative interpretations are suggested by the history of the PRF and recent findings about it. Most of Berzins, Welling and Wetter's data were collected prior to 1976. While attitudes may not have changed significantly in five years, it is possible that beliefs have: college-age men and women may now believe they should be less sex-typed.

Further, the reliability of the PRF ANDRO, unlike the Bem Sex Role Inventory (BSRI), is not based largely on testing

of college samples. Thus, it is possible that the fact that this sample was drawn from college psychology classes affected the results. It is possible that a level of sophistication exists that is different from an older, less educated population. It is possible that the students in the sample were able to "see through" the PRF ANDRO questionnaire used to measure SRO. They may have been able both to see that it related to sex roles and that it is more acceptable to be more androgynous. Thus, males would answer more questions in a manner that would be identified as feminine and females would answer more questions in ways that would be scored as masculine. This impression was confirmed by a debriefing session with the one subject who appeared for the announced session. He said he thought the questionnaire had something to do with sex differences and he tried to balance his answers, so that if he felt he said something "too macho" on one question, he would answer subsequent questions in gentler ways. This social desirability effect may have skewed the results of this scale.

Very recent findings also suggest that the PRF ANDRO does not correlate as closely with the other widely used sex role inventory, the BSRI. In work conducted at the same time as this study, Gartner (note 9) found that Pearson correlations of the masculinity scales of the BSRI and the PRF ANDRO yielded an r of .62, while the femininity scales

of the two measures yielded a correlation of .39 in a sample of women with a mean age of 25, n=133. These are noticeably lower than the correlations reported in the literature up to 1979. Thus it is possible that something about the PRF ANDRO is causing it to give different results than those suggested by the literature and reported by its originators (note 7). This factor may have made it impossible, in this study, to measure true sex role orientation and, therefore, impossible to conclusively test for a relationship between SRO and COSC.

One possible solution to this problem for future research would be to include a defensiveness scale with the PRF ANDRO or some other measure of SRO. This would allow the experimenter to "weed out" the more defensive subjects who might be expected to answer SRO items with more attention to social desirability than to their actual behavior. Another resolution of this problem might be to use a less psychologically-sophisticated sample such as one drawn at random from the telephone directory, for example.

The age of the scale deserves one more comment. A scale developed in 1975-77 does not seem "old" by comparison to other scales currently in use. But the amount of change that has taken place and been brought to the general public since that date is unusually great in the area of sex roles. While much of the change caused by the women's movement occurred prior

to the establishment of norms for this scale in 1975-77, changes in sex role beliefs as reflected on television, in advertising, and in financial and employment policy did not occur until the late seventies. In addition, the college population tested here is the first "generation" that was probably not exposed to rigid sex role stereotyping during early adolescence, having gone through that phase in the late seventies.

Another line of reasoning explains the presence of a sex difference and the absence of a sex role difference in these data by returning to the theory upon which the original hypotheses were based. Chodorow and Gilligan, whose work on sex differences is the basis for the proposition that women would have a more relational, less competitive definition of success, were not working with the sex role orientation construct. Their observations were based on differences in the sex of their subjects. While it is easy to equate femininity with female gender on a theoretical level, the results of this study may indicate that this is not possible on an empirical level. That is, in some samples feminine-typed persons are more likely to appear in male bodies than in female bodies. If this is not a result of a faulty sex role orientation measure, it strengthens the proposition that it is not necessary to be male to have a masculine SRO. It also strengthens the proposition that it will be gender, not sex role orientation, that will predict attitudes toward

such things as competitiveness. Thus, it is almost as though the study was constructed to control sex role orientation-- there were equal numbers of each SRO in each gender group interviewed--and still found a sex difference in competitiveness of concept of success. This makes a case for sex differences as predictors, above and beyond sex role orientation.

It also suggests that it will be difficult, if not impossible, to unify the two lines of research referred to in the introduction to this study: the areas of difference theory and androgyny theory. While this study does not imply that they are mutually exclusive, it does suggest that they may be describing different things. Difference theory appears to be concerned with the kinds of differences having developmental beginnings (Chodorow, 1974, 1978; Dinnerstein, 1976) and resulting in differences in conceptions of what constitutes success. Androgyny theory, if the PRF ANDRO is an appropriate representative of it, is concerned with ways people perceive themselves, and this now appears unrelated to how they conceive of success. All of this interpretation, however, depends on the assumption that the PRF ANDRO is a functioning measure -- a proposition we cannot assume with confidence, for the reasons stated above.

The connection between gender and concept of success, however, was supported regardless of the quality of the sex role orientation measure. This finding supports the theory proposed here, that the sex difference in earlier work on

fear of success (Horner, 1970, 1972; Tresemer, 1976; Zuckerman and Alison, 1976) was actually a sex difference in how people define success for themselves. It supports the contention that men define success competitively (Sassen, 1980) as Horner, those who replicated Horner's research, and Zuckerman and Alison (1976) did. The results also support the writer's suggestion that Pappo's (note 4) measure of fear of success found no sex differences in college samples because it used a noncompetitive (although not necessarily cooperative) definition of success. The findings shed no light on the studies which found no sex differences in FOS despite their use of a competitively defined success-concept in their instruments.

This study also suggests a new direction for the programs which attempt to ameliorate women's "fear of success" or make women ready for the business world. (Note 8) Most of these programs assume that women must "unlearn" their fear of success and learn new ways of behaving and constructing reality, so that they will fit into the ways of the corporate world. An alternative view would be that there is no fear for women to unlearn (or, in any case, women do not have a monopoly on this fear) but there is often a difference in the way men and women conceive of success. A program based on these ideas would begin by assessing the participants' success-concept before training them in how to succeed.

The COSC interview could be a useful tool for this kind of intervention, as well as for further research on success-concept or fear of success. Used as an interview format, or as a take-home exercise after a first session of the program, it could give trainers a sense of how participants conceived of success. Their extent to which they saw winning in competition as part of success, the importance of cooperation and affiliation in their view of success, the extent to which they believed themselves to be in harmony with social definitions of success, would all be useful information that could be gathered by administering the COSC.

For research, the COSC would allow future experimenters to interview a subsample in a large survey study of success, thus filling out qualitatively their findings on fear of success, sex differences in attribution of success, or whatever aspect of success was being investigated. One interesting question would concern the data that suggests women attribute success more often to luck or "outside forces" and failure more often to themselves. Is it possible that women's idea that succeeding should be done in cooperation with others is related to their readiness to ascribe success to others' influence?

Implications of Qualitative Findings

Sex differences. In general, the qualitative data failed to define an androgynous concept of success that would be different from other success-concepts. This supports the quantitative finding that SRO did not predict competitiveness of success-concept. However, the qualitative evaluation of the interview responses did reveal several male-female differences reflective of the work of other difference theorists (Chodorow, 1974, 1978; Gilligan, 1977, 1979) on whose work the hypotheses were based.

These differences were most explicit in the questions which came later in the interview and which were more abstract than the earlier questions. Question 7 was the first question which was asked on an abstract level: "In a research study on success, the following statement was made: The rewards of successful competition are always greater than those of cooperation. What do you think of this statement?"

The abstract nature of this question -- the fact that it did not bring in the question of working with other people, but allowed the subject to decide whether to talk about people or not -- makes it a useful variable to study qualitatively. It is possible here to ask whether, following the findings of Gilligan (1977, 1979), women spoke more of responsibility toward others, of feelings, caring and relationships than did the men. It is also possible to see

whether these themes varied according to sex role orientation.

All of the masculine-typed women in the sample disagreed with the competitive statement. Of the feminine-typed women, two disagreed and two agreed, but both of those who agreed expressed substantial ambivalence about the question. Of the androgynous women, one was so relativistic as to be unable to answer the question definitively, and one disagreed.

One theme which stands out in the women's varied responses is the reference to how people feel in a competitive situation. One woman disagreed because in competition "there is always a loser". One feminine-typed woman agreed with the statement, but was confused by her own experience. She said her satisfaction from competition was only "momentary" and that perhaps she should try cooperation, "and then maybe I would get rewards the whole time. I guess when I do something alone I'm looking for rewards from other people and if I was workin- with a group, maybe then everyone gives you a pat on the back". This response was scored as competitive, because the subject had agreed with the statement, reflecting "That's how I think...yeah, I would say the rewards, positive feelings about myself are greater" from competing successfully. And her concern for feelings was mainly an egocentric concern for her own feelings -- nevertheless, she evaluated competition and cooperation as ways to get "a pat on the back" from others, something she found too little of in her academic achievement experiences.

Other women's responses reflected the concern for feelings in a more empathic way. Competition "gets a lot of people on edge and is, therefore, not a good choice", said one masculine-typed woman. "One loses and one wins, somebody's hurt" according to a feminine-typed subject.

"There's always a loser, many losers and flunk-outs in competition and the rewards of successful cooperation are that no one feels like that. It builds up people's self-esteem to feel they're part of a group and they are successful. I think there are no losers in cooperation", a feminine-typed woman commented. "I think in competition there are many losers and just a few winners and those winners seem very vain, and attribute their success to the failures of other people".

One feminine-typed woman was extremely relativistic. "It depends on the situation and the individual, that's all I can say". But when asked "What's your thinking on that?", she answered, "It depends on what the competition is in and who it's with. If you don't like the people you are cooperating with you can't cooperate. If you hate the people you compete against, it's easier to compete against them". Because she had chosen the illustrations in which competition was possible and cooperation was impossible, this was scored as competitive. If the measure were one of relational thinking, however, the salient fact would be the fact that it is the type of relationship with other people that determines

which route to success the subject would take. Despite her competitive orientation, her thinking follows the lines Gilligan describes by which women make moral decisions.

The men's responses to this question were on the whole more competitive than the women's. Even more pronounced was the sex difference in the amount of relational thinking that was expressed. One androgynous man had the lowest total competitiveness score in the study -- the lowest score it was possible to obtain. His response to the question on the rewards of successful competition was definite disagreement. His reasoning was clear and decisive. But while he described cooperation as "everyone pulling together for the same goal", this was the most relational comment he made. "Competition implies a conflict in the situation," he said. He disagreed with the statement because "I don't know that I can see too many rewards to competition. It seems almost contradictory".

Interviewer: "What makes you say that?"

Subject: "I guess I'm geared up into my economics background, that's my major. Competition, it's two parties achieving the most for themselves no matter what the expense to the other party."

One feminine-typed man who agreed with the competitive statement said, "I suppose it's true, because it's something you would think you were better than someone else at, instead of getting helped along...It seems like there's something to

beat in competition." One man began by talking about how he felt in competitive situations. "I like to compete -- it's always fun to do better...come out on top." But at this point he abandoned this personal view for a different, even less relational one: "But if you look at it from a realistic point of view of profit...if you can do better by cooperating, there's nothing wrong there and it's easier." Although he had two views of the situation, this was not a relativistic statement: his values included the satisfaction of competing, and the profit motive. If he had to sacrifice one to the other, he would. Relations with other people were not mentioned in this answer at all. In his answer to the first question, concerning working with a group on a paper, the subject would have evaluated the group members before deciding. "I wouldn't want to put up with people [the group] if they weren't any good."

Interviewer: Suppose they were people you're already friends with. Does that change things?

Subject: "Not really. My overriding view would be how good they are -- if they're slough-offs, it's no fun getting stuck with all the work." Here relational concerns, even when they are suggested by the interviewer, are subsumed under the question of "how good" the people are at the job. This reasoning, in which the deciding factor is the achievement potential of group members, was reflected in another male response. Both these men were feminine typed.

Developmental differences. One advantage of an interview-based methodology is that it allows for the initial exploration of areas in which formal hypotheses have not been posited. In interviewing college students, developmental changes can be both a nuisance and a source of further hypotheses. In certain cases, subjects did not have any clear thoughts on the questions they were asked and rambled on, figuring out how they would answer, changing their minds as they went.

Only a few of these cases led to serious scoring problems; in most of the ambivalent cases the subjects knew what they thought, but commented along the way on their own thought processes. Thus, they provided data on their developmental stage.

Perry (1969) provides a useful schema for understanding the developmental transitions these subjects appeared to exemplify. Perry describes a progression from dualism, in which adolescents believe there is a right and wrong and nothing in between, to a mature stage of commitment to what the emerging adult believes and will act upon. In between, college students go through "positions" in which they believe there are right answers, but we have yet to find them, there are no right answers but some are more right than others, and the crucial turning point, Relativism, in which "everyone has a right to his own

opinion" and no one view is more satisfactory than any other.

Here the late adolescent could go on forever, and one subject in this study pointed out that an academic community encourages this by encouraging students to "see both sides" and be able to argue for each. But, according to Perry, the drawback of this position is that with no opinions and no commitments, the student soon finds she or he has no self. The struggle to emerge from this state is, therefore, felt as a very important if a very confusing and disruptive one (Sassen, note 10).

Several subjects in this study represented aspects of this particular position which is common among college students.

One woman, whose sex role orientation was masculine, would fit into the Perry schema at the point of "Commitment foreseen". Still relativistic, but with an increasing determination to know what she believes and act on it, she first explored both sides of the question:

Interviewer: In a research study on success, the following statement was made: "The rewards of successful competition are always greater than the rewards of cooperation." What do you think of this statement?

Subject: "I don't think that's true at all. Well, the reward of competition is more or less 'you did better than someone else'. That's good if that's your criteria..."

If you're competing against someone in a race, the rewards of beating that person are great for you, but a better runner than the person you beat wouldn't think that was a great achievement. Competition has rewards but it's all relative. Cooperation is more on a general scale because it's harder to cooperate and achieve what you set out to do than it is to just go one against one in a competitive setting".

Here the young woman (age 22) finds that her initial preference for competition is plagued by the hallmark of the developmental stage she is attempting to leave behind: relativistic thinking, which turns on itself and defeats each conclusion it comes to. In listing her successes and failures, she mentioned that she feels she knows herself better now, understands her reactions and can control them, has control over her body and succeeds in keeping in good condition. But "I don't think I'm where I should be in breaking away from my parents. I'm 22 and there's a definite parent-daughter relationship... It's hard. All of a sudden you're a person with opinions and biases of your own."

In addition, commitment to her own decisions was one of the areas in which she wished to make progress. "Making decisions and sticking with them. I've got to stick with them more."

Another masculine-typed woman commented on her own inconsistency. Although she spoke clearly of her belief

in a society working together "because we are together, we have to live together" and her commitment to working for an organization that has "some moral backbone to it", she noted that she represented two different positions on the question of competition versus cooperation: "I noticed at the end I switched positions from what I would do on the term paper and what I think society should do. Lately I've realized I have to make myself an example for what I believe."

At the same time, this student was still in transition regarding her self-evaluation. She was aware of having lost certain cognitive maps that had served her well throughout childhood and early adolescence.

Interviewer: Do you consider yourself successful?

Subject: "I've been having trouble with that. Up until junior year in high school success was getting an A. Then things changed. My ideas changed. I don't know how to judge now."

In contrast to this, an eighteen-year-old feminine-typed male simply judged himself the way his parents would have.

Interviewer: In what ways would you say you are successful and in what ways would you say you aren't?

Subject: "I think...um...my father's afforded me the opportunity to do a lot that other people haven't been able to do -- hobbies, schooling -- that I couldn't do myself. My accomplishments of what I've done stand up

for that. My accomplishments people envy and stuff."

Here it is probably the age difference of three years which is more the cause of the difference in developmental level than anything else. However, it is worth noting that both of the women who were commenting on their own, now unsatisfactory, relativism were masculine typed. The untroubled, externally evaluated son was feminine typed. This suggests possibilities for studying the interplay between development and sex role orientation.

Implications for Further Research

Developmental research. The developmental questions raised above lend themselves to exploration through a longitudinal study. This would allow for later assessment of the subjects' sex role orientation, coupled with a developmentally oriented interview of the sort employed by Gilligan (1977) or the more open-ended interview used by Perry (1969).

Since no published work has yet brought together developmental concerns with sex role orientation concerns, this would provide useful baseline data, as well as providing a vehicle through which to explore the question of whether sex role orientations change with age. Another rationale for this type of study is found in the normative data on the PRF ANDRO. Age difference is one explanation

for the counterintuitive finding that members of the Veterans of Foreign Wars scored higher on femininity than male dentists, accountants, newlyweds or college students -- in fact, higher than any male group except gay men.

(Berzins, Welling and Wetter, note 7). The VFW group had a considerable higher mean age than any of the other groups.

Further testing of the COSC scale. Further testing of the COSC structured interview is required if it is to be useful in further research. Test-retest reliability could be established by testing the same sample again or by testing a larger sample and retesting those subjects. Testing a non-college population with the COSC would determine its usefulness with a more mature, less academically oriented group. A new dilemma would have to replace the term paper writing dilemma for this population. This would necessitate reliability testing of the new dilemma.

To further test the construct-validity of the COSC, a behavioral measure would have to be found which would test the subject's behavior in relation to competitive and cooperative ways of achieving success. Since the pitfalls of laboratory testing of competitiveness have been well established (see Chapter I), it seems that a longitudinal study which follows the subject's career behavior, community participation and other life choices would be appropriate. This would also preserve the ecological validity (see Chapter

III) of the current study.

Refining the testing of sex role orientation. Since the results of the screening for SRO were anomalous in this sample, with more cross-sex-typed subjects than same-sex-typed subjects, future research could be designed to explain whether this was a result of the age of the PRF ANDRO scale: do all college samples now see through the questions, and answer according to their beliefs about androgyny? Testing on other college samples, testing on adult samples, and testing with a social desirability scale would shed light on this question. Determining the validity and reliability of the SRO scores obtained in this study would provide further insight into whether the weak correlation between femininity and competitive COSC scores was an artifact of the PRF ANDRO or the PRF ANDRO and this sample.

Testing for sex differences in other populations. The significant finding of sex differences in competitiveness of concept of success may not be replicated in groups of different ages or socio-economic status from the sample tested here. Or, alternatively, the difference may be more pronounced in a non-college sample which had not already selected achievement-oriented men and women. The influence of working mothers, or mothers with professional jobs, could also lead to differences in daughter's concepts of success. The more interesting variable would be the competitiveness

of the mother's success-concept, since a working mother is not necessarily more competitive than one who remains at home. Testing mother-daughter pairs with the COSC would yield interesting data on this question.

The relationship of COSC score to other measures of attitudes toward success would also add to the existing literature on success. This study leads to the hypothesis that women with a competitive COSC score would be lower than other women in Fear of Success as measured by the competitively oriented instruments developed by Horner (1969) and Zuckerman and Alison (1976). But a neutral measure such as Pappo's (note 4) should not correlate significantly with COSC if, as this author suggests, it measures fear of any kind of success, rather than fear of competitive success.

This brings us back to the question this study sought to resolve: does the literature on fear of success suggest that women fear success more than men do, or, rather, that women define success differently from the way men define it? The results of this study suggest that women define success less competitively and more relationally, indicating that the sex difference in fear of competitiveness should be seen in a new light: Women's "success anxiety" may be a reflection of their essentially female way of constructing reality, which clashes with a competitive societal definition of success.

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APPENDIX I
THE PRF ANDRO
(Internal Disposition Inventory)

The PRF ANDRO

Internal Disposition InventoryForm D

Instructions:

On the following pages you will find a series of statements which a person might use to describe himself or herself. Read each statement and decide whether or not it describes you. Then indicate your answer on the separate answer sheet.

If you agree with a statement or decide that it does describe you, answer TRUE. If you disagree with a statement or feel that it is not descriptive of you, answer FALSE.

Indicate your answers by placing a heavy black pencil mark in the A column if you wish to answer "true" and in the E column if you wish to answer "false".

Answer every statement either true or false, even if you are not completely sure of your answer.

Use a soft-lead pencil (#2½) to mark the answer sheet -- do not use pen or ball-point. Be sure your mark fills in the entire circle of the response you wish to make. If you change your mind or make a mistake, be sure that you erase completely. Do not make any other stray marks on the answer sheet.

On the answer sheet, fill in your name (this will be kept confidential), your sex, student number and date of birth. Then answer the 85 items. The answer sheet has more spaces than you need.

Notice: The majority of the items on this questionnaire have been reproduced by permission from the Personality Research Form (Form AA), published by Research Psychologists Press, Inc. Copyright (1965) by Douglas N. Jackson, Ph.D.

1. Self-control is not a big problem to me.
2. I like to be with people who assume a protective attitude toward me.
3. I try to control others rather than permit them to control me.
4. Surf-board riding would be too dangerous for me.
5. Often I don't trust my emotions.
6. If I have a problem, I like to work it out alone.
6. I seldom go out of my way to do something just to make others happy.
8. Adventures where I am on my own are a little frightening to me.
9. I usually know what to say to people.
10. I feel confident when directing the activities of others.
11. I will keep working on a problem after others have given up.
12. I would not like to be married to a protective person.
13. There are many things I would change about myself if I could.
14. I usually try to share my problems with someone who can help me.
15. I don't care if my clothes are unstylish, as long as I like them.
16. When I see a new invention, I attempt to find out how it works.
17. I can make up my mind and stick to it.

18. People like to tell me their troubles because they know I will do everything I can to help them.
19. Sometimes I let people push me around so they can feel important.
20. I am only very rarely in a position where I feel a need to actively argue for a point of view I hold.
21. I am usually disorganized.
22. I dislike people who are always asking me for advice.
23. I seek out positions of authority.
24. I believe in giving friends lots of help and advice.
25. I am poised most of the time.
26. If someone finds fault with me I either listen quietly or just ignore the whole thing.
27. I get little satisfaction from serving others.
28. I make certain that I speak softly when I am in a public place.
29. I am afraid of what other people think about me.
30. I am usually the first to offer a helping hand when it is needed.
31. When I see someone I know from a distance, I don't go out of my way to say "Hello".
32. I would prefer to care for a sick child myself rather than hire someone to nurse him or her.
33. I am in control of what happens to me in my life.
34. I prefer not being dependent on anyone for assistance.
35. When I am with someone else I do most of the decision-making.
36. I try to get at least some sleep every night.
37. I don't mind being conspicuous.

38. I am afraid of a full-fledged disagreement with a person.
39. I would never pass up something that sounded like fun just because it was a little hazardous.
40. I get a kick out of seeing someone I dislike appear foolish in front of others.
41. When someone opposes me on an issue, I usually find myself taking an even stronger stand than I did at first.
42. I feel adequate more often than not.
43. When two persons are arguing, I often settle the argument for them.
44. I will not go out of my way to behave in an approved way.
45. I am quite independent of the people I know.
46. I frequently doubt my sexual attractiveness.
47. I make all my clothes and shoes.
48. If I were in politics, I would probably be seen as one of the forceful leaders of my party.
49. I prefer a quiet, secure life to an adventurous one.
50. I prefer to face my problems by myself.
51. I'm pretty sure of myself.
52. I try to get others to notice the way I dress.
53. When I see someone who looks confused, I usually ask if I can be of any assistance.
54. It is unrealistic for me to expect to do my best all the time.
55. I often kick myself for the things I do.
56. The good opinion of one's friends is one of the chief rewards for living a good life.
57. If I get tired while playing a game, I generally stop playing.
58. I could easily count from one to twenty-five.

59. When I see a baby, I often ask to hold him or her.
60. I have a good deal of initiative.
61. I am quite good at keeping others in line.
62. I feel uncomfortable when people are paying attention to me.
63. I am quite soft-spoken.
64. I usually have the feeling that I am just not facing things.
65. I like to be with people who are less dependent than I.
66. I would resist anyone who tried to bully me.
67. I don't want to be away from my family too much.
68. I am sexually attractive.
69. I can run a mile in less than four minutes.
70. Once in a while I enjoy acting as if I were tipsy.
71. I feel incapable of handling many situations.
72. I delight in feeling unattached.
73. I often feel inferior.
74. I would make a poor judge because I dislike telling others what to do.
75. Seeing a helpless person makes me feel that I would like to take care of him or her.
76. I usually make decisions without consulting others.
77. I feel emotionally mature.
78. It doesn't affect me one way or another to see a child being spanked.
79. My goal is to do at least a little bit more than anyone else has done before.
80. I usually wear something warm when I go outside on a cold day.

81. To love and to be loved is of greatest importance to me.
82. I take a positive attitude toward myself.
83. I avoid some hobbies and sports because of their dangerous nature.
84. One of the things which spurs me on to do my best is the realization that I will be praised for my work.
85. People's tears tend to irritate me more than to arouse my sympathy.

APPENDIX II

(The Competitive of Success-Concept
Structured Interview)

The Competitiveness of Success-Concept

Structured Interview

1. You are in a course -- a graded course -- in which the professor gives you the option of working with a small group of students on your term paper, or working alone. If you work with the group, your grade will be the grade the group gets. If you work alone, your grade will be based only on your own work. Which option do you choose? Why?

(If S asks "how well do I expect to do by myself?", answer "You think you would get an A by yourself.")

If S asks, "Who are the other people in the class?", answer "There are people in the class you are already friends with.")

2. a. If you did well, would you consider yourself successful on that project?

b. If you had done it the other way and had also done well, would you feel equally successful, or more, or less so? Why or why not?

Follow up to find out in what way one result is more successful than the other.

3. a. Do you see yourself losing anything or making any trade-offs by making the choice you made? What are the pluses and minuses?

b. Is there anything that would motivate you to make the other choice? What would that be?

Follow up to find out more about what motivates this particular aspect of success-satisfaction seeking.

4. a. If S chooses not to work with the group, ask "suppose someone in the group says, 'We really wish you'd work with us'." How would you feel? What would you do?

Follow up on weighing of losses of affiliative satisfaction against advantages of working alone.

b. If S chose to work with the group, ask "suppose there was something you were very interested in working on, but there was no group interested in working on that?"

Follow up on losses of autonomy, chance to succeed by "standing out" as against advantages of working with others.

5. If it were not a question of writing a paper, but of working together, say, to start a business, what would you choose? Why?

If your business was successful, would you consider it more of a personal success if you had built it up alone, rather than with others? Why?

6. In a research study on success, the following statement was made: "The rewards of successful competition are always greater than those received from cooperation." What do you think of this statement?

7. (Ask only if S disagrees with the statement)

a. Do you think this statement reflects the way this society runs?

b. Do you think in this society you have to compete to be successful?

c. There seems to be a difference between the way you define success and the definition the society runs by. How do you think that conflict will resolve itself?

8. How do you define success?

9. Do you consider yourself successful?

In what ways would you say you are and in what ways would you say you aren't?

APPENDIX III

(Informed Consent and Feedback Forms)

Informed Consent and Feedback FormsInformed Consent Form

You will be presented with a hypothetical situation and some questions to which there are no "right answers". These questions have to do with how you prefer to work, and what work and "success" mean to you. The interview will be somewhat structured by these questions. These questions are not disturbing nor extremely personal, but you may refuse to answer any of them. You may withdraw from the study at any time without loss of credit.

At the end of the interview I have allowed time to answer as many of your questions as I can. At the end of the semester I will hold a meeting for all interested participants in this study, at which time I will be able to answer more of your questions and tell you about the results of the research. I will also mail each of you a one-page summary of the results at that point, whether or not you decide to come to the meeting.

All your responses will remain unidentified (as to who made them) in any report of this study, to protect your privacy.

Signature

Date

Immediate Written Feedback

The purpose of this interview was to determine what your own concept of success is and to see if it relates to your score on the personality measure you filled out earlier.

The dilemma and the follow-up questions allow me to see how you think about issues related to success. This kind of interview is neither as structured as a questionnaire nor as free-flowing as a journalistic interview. The dilemma acts as a thought-provoker to get things started. If you are interested in this kind of data-gathering, I can suggest some references.

End of Semester Written Feedback

The purpose of this study was to determine whether your score on the PRF ANDRO, which indicates your sex role orientation, relates to the level of competitiveness of your personal definition of success. Sex role orientation is determined by the number of "masculine" or "feminine" traits you have as measured by a sex role orientation scale. The PRF ANDRO which you took is one of these. You can score high on either masculinity (M), femininity (F), or both. Scoring high on both implies you are "androgynous" -- having a large repertoire of both M and F behaviors to draw on.

My expectations at the beginning of this study were that students who scored high on M would have a more competitive personal definition of success than those low on M, and that those who scored high on F would have less competitive definitions of success than those low on F. I expected men to have more competitive concepts of success than women. I expected androgynous subjects to have varied concepts of success, but when this concept was non-competitive I expected them to see this in a different light from feminine-typed students (high F, low M). I expected the androgynous subjects to see the society's definition of success as something which needs to be changed, while feminine-typed subjects would

see their own definition as one which precludes their succeeding in a competitive society.

The results showed that sex role orientation was not related to concept of success. Sex, however, was significantly related: men had a more competitive concept of success than women did. While there was much variation in the way students saw the question of social change, there was not enough data to find a sex role orientation difference or a sex difference in this area. (Only students who disagreed with the statement about competitive success being more rewarding were asked the questions about social change.)

If you want to know more about this, contact me in Tobin 610.

Thank you for your help. It is much appreciated.

